

AVX Corporation

FEASIBILITY STUDY

Operable Unit 1

Myrtle Beach, South Carolina

April 2019

FEASIBILITY STUDY

Operable Unit 1
Myrtle Beach, South Carolina



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ACRONYMS AND ABBREVIATIONS

| | |
|-----------|--|
| 1,1,1-TCA | 1,1,1-trichloroethane |
| Arcadis | Arcadis U.S., Inc. |
| ARAR | applicable or relevant and appropriate requirement |
| AST | aboveground storage tank |
| AVX | AVX Corporation |
| bgs | below ground surface |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act |
| CFR | Code of Federal Regulations |
| COPC | constituents of potential concern |
| CPT | cone penetrometer testing |
| CSM | conceptual site model |
| CVOC | chlorinated volatile organic compound |
| ELCR | excess lifetime cancer risk |
| ERD | enhanced reductive dichlorination |
| ERH | electrical resistance heating |
| EVS | Environmental Visualization Software |
| FS | Feasibility Study |
| FS-OU1 | <i>Feasibility Study for Operable Unit 1</i> |
| FSI | Feasibility Study Investigation |
| FSIR | <i>Feasibility Study Investigation Report</i> |
| FSWP | <i>Feasibility Study Work Plan</i> |
| HHRA | Human Health Risk Assessment |
| HI | hazard index |
| HPT | hydraulic profiling tool |
| HQ | hazard quotient |
| MCL | maximum contaminant level |
| mg/kg | milligrams per kilogram |
| MNA | monitored natural attenuation |
| NCP | National Contingency Plan |

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| | |
|--------|---|
| NFA | no further action |
| NPDES | National Pollutant Discharge Elimination System |
| O&M | operation and maintenance |
| OU-1 | Operable Unit 1 |
| OU-2 | Operable Unit 2 |
| PELCCR | potential excess lifetime cancer risk |
| PID | photoionization detector |
| RAO | remedial action objective |
| RSL | Regional Screening Level |
| SCDHEC | South Carolina Department of Health and Environmental Control |
| SEE | steam enhanced extraction |
| site | the portion of the AVX facility referred to as AVX MB1 and located on 17 th Avenue South in the City of Myrtle Beach, Horry County, South Carolina |
| SVE | soil vapor extraction |
| TBC | to be considered |
| TCE | trichloroethene |
| USEPA | United States Environmental Protection Agency |
| UST | underground storage tank |
| VAP | vertical aquifer profiling |
| VOC | volatile organic compound |
| WCSS | whole core soil sampling |

1 INTRODUCTION

On behalf of AVX Corporation (AVX), Arcadis U.S., Inc. (Arcadis) has prepared this *Feasibility Study for Operable Unit 1* (FS-OU1) to document the evaluation of remedial alternatives for soil and groundwater within the footprint of the AVX facility (sometimes referred to as AVX MB1 or the “site”), located at 2200 AVX (formerly 801 17th Avenue South) located in Myrtle Beach, South Carolina (**Figures 1-1 and 1-2**). Following October 2010 discussions with representatives from the South Carolina Department of Health and Environmental Control (SCDHEC), the onsite and offsite areas were split into two operable units, including Operable Unit 1 (OU-1) for onsite media and Operable Unit 2 (OU-2) for offsite media. The onsite area specifically included the older portion of the operations and surrounding land, which has historically been referred to as the “site”. OU-2 represents the offsite areas northeast of 17th Avenue South between OU-1 and Withers Swash. This split into two operable units was performed because:

- Anticipated changes in the OU-1 building use/configuration was expected to allow for evaluation and potential selection of other remedial alternatives that were not feasible in 2010. Demolition of buildings over the past 8 years has provided an opportunity evaluate additional remediation options.
- Evaluation, selection, and implementation of remedial alternatives for OU-2 were able to proceed without delay. Remediation of groundwater in OU-2 has proceeded with great success since, as documented in numerous progress reports submitted to the SCDHEC, with pilot testing being initiated in OU-2 in 2009 and remediation in OU-2 initiated in August 2012 in accordance with the June 2012 Record of Decision.

The Feasibility Study (FS) for OU-1 was performed in accordance with the July 2015 *Feasibility Study Work Plan* (FSWP; Arcadis 2015b) approved by the SCDHEC on October 20, 2015, and designed to evaluate remedial technologies, that when implemented, will address the constituents of potential concern (COPCs) in soil and groundwater within OU-1. This FS-OU1 builds on information developed from completion of a Feasibility Study Investigation (FSI) following demolition of key buildings in 2014 and 2015 that made key areas of OU-1 accessible to critical investigations. The FSI data and results were provided in the *Feasibility Study Investigation Report – Operable Unit 1* (FSIR; Arcadis 2016b), submitted on December 1, 2016. All data collected during implementation of the FSI was used to update the existing conceptual site model (CSM), as presented in the FSIR. The updated CSM provides the key underpinning for evaluating remedial technologies included in this FS-OU1.

In addition to the above, a human health risk assessment (HHRA) was also performed to characterize potential risks to human health based on existing conditions and presumed future land-use conditions using reasonable assumptions, including that groundwater will not be used as a potable water supply, given that city water is available. The results of the HHRA calculated risks are below or within the conservative federal and state risk-based levels. Therefore, there is no expectation of harm to public health with respect to the COPCs present in soil, soil gas, surface water, groundwater, and irrigation water.

As a measure of onsite control, the existing onsite groundwater extraction and treatment system has continued to operate and provide proven capture for chlorinated volatile organic compounds (CVOCs) in groundwater beneath the area of OU-1, while remediation efforts were focused primarily on OU-2.

1.1 Purpose

This FS-OU1 evaluates remedial alternatives for the groundwater and soil within OU-1 that are appropriately protective of human health and the environment.

1.2 Report Organization

This FS-OU1 follows the *Guidance for Conducting RIs and FSs Under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)* (EPA/540/G-89/004, Office of Solid Waste and Emergency Response [OSWER] Directive 9355.3-01, October 1988).

Together with this introductory section, this FS-OU1 is organized as follows:

- *Section 2 – Current Conditions*: Provides some historical perspective, current conditions, and provides a summary of the nature and extent of contamination and the baseline risk assessment.
- *Section 3 – Basis for Remediation*: Includes descriptions of applicable or relevant and appropriate requirements (ARARs) and operable unit-specific remedial action objectives (RAOs).
- *Section 4 – Identification and Screening of Applicable Technologies*: Identifies the potentially applicable technology types and process options for each impacted medium within OU-1.
- *Section 5 – Development of Remedial Action Alternatives*: Provides an evaluation of the potential technologies for remediating groundwater and surface water within OU-1 that were retained from the initial screening.
- *Section 6 – Remedial Action Alternatives Screening Process*: Describes the screening of the entire assembled alternatives on the basis of effectiveness, implementability, and cost.
- *Section 7 – Detailed Evaluation of Remedial Action Alternatives*: Describes the detailed evaluation of the remedial action alternatives that passed the alternatives screening process described in Section 6. The detailed evaluation includes evaluation of two threshold criteria and five primary balancing criteria.
- *Section 8 – Comparative Analysis of Operable Unit 1 Alternatives*: This section compares each alternative against the others based on the two threshold criteria and five primary balancing criteria.
- *Section 9 – References*: This section lists the sources of information cited in this FS-OU1.

2 CURRENT CONDITIONS

This section describes the current conditions, including relevant background and history, the current CSM that provides the setting upon which the FS is based, and a baseline risk assessment.

2.1 Background

2.1.1 Operable Unit 1 Description

As referenced above, the onsite and offsite portions of the AVX facility have been separated into two adjacent operable units, as shown on **Figures 1-1 and 1-2**. The operable units are defined as follows:

- OU-1 is the older manufacturing portion of the facility that contained several buildings, most which have been demolished (**Figure 1-3**), including the main manufacturing building (referred to as the MB-1 Building), which was approximately 300,000 square feet.
- OU-2 comprises an area of undeveloped, residential, and commercial properties located immediately northeast of OU-1 and extending to the stormwater control pond on Withers Swash. The largest single property in OU-2 is an undeveloped and partially wooded parcel located on 17th Avenue South owned by AVX. A portion of the AVX property is open space, formerly used as a parking lot. The remaining land in OU-2 comprises residential properties and a few undeveloped parcels.

The areas north and south of OU-1 are primarily residential or commercial properties, with a few undeveloped properties intermixed. A parcel immediately south of OU-1 belongs to the City of Myrtle Beach and contains an unused deep water supply well and large water storage tank. AVX owns additional property to the south and west, including a parcel referred to as AVX-2 or MB-2 (currently active manufacturing operations) and a vacant parcel formerly occupied by a Carmike Theater. OU-1 is bordered directly to the west by a golf course and directly to the east by primarily vacant land, most of which is part of OU-2 and much of that owned by AVX.

2.1.2 Environmental History

The Aerovox Corporation, predecessor to AVX, began operations at the site in 1953 on land formerly part of the Myrtle Beach Air Force Base. CVOCs were used at the facility up until 1993 in the manufacturing of ceramic capacitors. In 1981, AVX discovered that shallow groundwater beneath the site contained CVOCs, notably the solvents trichloroethene (TCE) and 1,1,1-trichloroethane (1,1,1-TCA).

Virgin and spent TCE had been stored in underground storage tanks (USTs) on the western side of the facility until 1983 (**Figure 1-2**). Removal of the USTs occurred in 1983 prior to construction of an addition to the main building that covered that area. After the USTs were removed, TCE was stored in aboveground storage tanks (ASTs) adjacent to the western side of the building (**Figure 1-2**). In 1986, AVX transitioned from using TCE to 1,1,1-TCA, continuing to use the former ASTs for storage of 1,1,1-TCA. Use of 1,1,1-TCA was discontinued in 1993.

In 1981, AVX began investigation and remediation of what later became designated as the OU-1 portion of the site (**Figures 1-1 and 1-2**). The following provides details for some of the activities:

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- Installation and regular sampling of groundwater monitoring wells, from 1981 to present. This was initiated on the OU-1 portion of the site and expanded to the OU-2 portion of the site in 2007.
- Removal of USTs in 1983.
- In 1985, installed pumping wells to provide water for use as non-contact cooling water, and soon after, began operating these pumping wells to remediate groundwater.
- Discontinuation of TCE use in 1986.
- Installed nine pumping and production wells (identified with a prefix of PW or DPW) from 1985 through 1987 (**Figure 1-2**). Six pumping wells (PW-1S, PW-2S, PW-3S, PW-4S, PW-5S, and PW-6S) were screened in the Upper Terrace Deposits aquifer, one production well (DPW-1D) was screened in the Lower Terrace Deposits aquifer, and two pumping wells (DPW-2SD and DPW-3SD) were screened in the Upper and Lower Terrace Deposits aquifer.
- Completed soil sampling and analysis on the western side of the main building in 1984 and 1989.
- Completed an enhanced in-situ bioremediation pilot study in 1989 that focused on the western side of the main building.
- Found volatile organic compound- (VOC-) containing soils during excavation for the building expansion in 1992. Two abandoned pipes were found to contain a viscous liquid with elevated concentrations of TCE, 1,1,1-TCA, tetrachloroethene, methylene chloride, and toluene. Approximately 66 cubic yards of soils were removed from the excavation. Soil analyses indicated that TCE concentrations in the soil were between 500 milligrams per kilogram (mg/kg) and 10,000 mg/kg. These soils were removed from the site and transported to an offsite treatment, storage, and disposal facility for final disposal.
- Completed a soil-gas investigation in 1992.
- Discontinued 1,1,1-TCA use in 1993.
- AVX and the SCDHEC entered into an agreement [Consent Order (96-43-HW and 96-71-DWP)] in 1996.
- Installed a soil vapor extraction (SVE) well (SVE-1) in June 1997 as part of a pilot test to evaluate the feasibility of remediation by a dual-phase extraction system. Due to high groundwater levels in the area, high groundwater recovery rates, and limited vadose zone soils available for the system, a dual-phase extraction system was not installed (Geraghty & Miller, Inc. 1997b). SVE well SVE-1 is presently used as a monitoring well.
- Sampled direct-push boring and temporary well groundwater throughout the site in 1997.
- Installed two induced draft air stripper systems in 1997 for the treatment of groundwater produced by pumping wells PW-1 and PW-7 (Area 1) and DPW-4 (Area 2). Both air stripping units were designed to achieve removal efficiencies for all constituents of 99% prior to discharge via gravity to the City of Myrtle Beach Water Treatment Facility, a publicly owned treatment works. This discharge was permitted under National Pollutant Discharge Elimination System (NPDES) Permit No. SC0039039 (Geraghty & Miller, Inc. 1997a).

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- Performed an analysis in 1998 to assess the zone of capture for pumping well DPW-4. Conclusions of that analysis indicated that capture likely extended at least to 17th Avenue South and likely across 17th Avenue South (to the northeast).
- Completed direct-push boring and temporary well groundwater sampling within the southern portion of the site in 1999.
- Directed discharge of treated groundwater from the DPW-4 system to a surface-water outfall in accordance with a NPDES permit issued in September 1999.
- Completed five phases of offsite investigation in 2007, including investigation of groundwater, surface water, and soil vapor.
- Performed ongoing evaluation and reporting of field investigations in late 2007 and developed plans for additional field investigations in 2008.
- Demolished the drum storage pad adjacent to the Reclaim Building in 2008. Following demolition, the soil was screened using a photoionization detector (PID) and sampled to evaluate soil quality beneath the former slab (Arcadis 2008a). No impacts were observed that warranted further actions.
- Met with the SCDHEC in September 2010 to have a pre-submission discussion regarding the draft FS for the entire AVX site (both onsite and offsite portions). During that meeting, it was discussed that there were tentative plans for demolition of additional onsite buildings. At that time, the SCDHEC and AVX agreed to split the FS into an offsite groundwater portion (OU-2) that would be finalized soon after that meeting, and delay preparation of the FS for the onsite portion of the site (OU-1) until after additional onsite buildings were demolished. This would allow access to investigate beneath the footprint of demolished buildings, which, in turn, would provide for improved information in the preparation of an FS for OU-1.
- Completed a data gap investigation within OU-1 and OU-2 that included using a membrane interface probe, cone penetrometer testing (CPT), soil borings, and groundwater sampling to evaluate the current conditions. Results from this investigation were summarized in the data *Feasibility Study Data Gap Investigation Report* (Arcadis 2010a). The OU-1 portion of this investigation only included areas outside the footprint of buildings still standing and operational.
- Demolished the PDG Building and removed the concrete slab in 2010. Following demolition, the soil was screened using a PID and sampled to evaluate soil quality beneath the former building (Arcadis 2010b). No impacts were observed that warranted further actions.
- Demolished the eastern portion of the primary manufacturing building and removed the slab within OU-1 (commonly referred to as the MB-1 Building) in 2012 (**Figure 1-3**). Following demolition, the soil was screened using a PID and sampled to evaluate soil quality beneath the building (Arcadis 2012a). Based on this soil characterization work, two small areas containing VOCs were identified. As a result, these areas were removed and confirmation samples were collected (Arcadis 2012b).
- Brought pumping well DPW-5SD online in February 2013, as part of an expansion of the OU-1 groundwater containment system. Similar to existing pumping well DPW-4SD, this well was screened across both the Upper and Lower Terrace Deposits and was designed to expand the area of hydraulic capture within OU-1. Currently, groundwater is being pumped from the Upper and Lower

Terrace Deposits at DPW-4SD and DPW-5SD. The operation of these wells is maintaining groundwater capture across OU-1, operating at a combined pumping rate of approximately 43 gallons per minute.

- Initiated demolition activities to remove four buildings in OU-1, including the corporate building, M&E, MIS, and the remainder of the MB-1 Building (**Figure 1-3**) in late 2014. Demolition activities continued through June 2015 and included removal of all aboveground structures and concrete pads.
- Following removal of the pads, completed post-demolition subslab sampling in accordance with the February 24, 2015 *Post-Demolition Soil Sampling Work Plan* (Arcadis 2015a), which was patterned after similar assessment activities performed in 2012 beneath previously demolished buildings. The more recent post-demolition sampling work was performed in May through July 2015 as reported in the August 8, 2015 *Post-Demolition Soil Investigation Report and Vadose Zone Subsurface Soil Sampling Work Plan* (Arcadis 2015c). Subsequent deeper vadose zone soil sampling, soil excavation and offsite disposal, and post-excavation sampling are reported in the April 6, 2016 *Soil Removal Report – Trimethylbenzene Area* (Arcadis 2016a).
- Completed the FSI in 2016, as the fundamental supporting investigation for this FS-OU1. The FSIR was submitted to the SCDHEC on December 1, 2016 as approved by SCDHEC on April 21, 2017.
- Completed demolition activities in 2018 to remove the Reclaim and RMM Buildings (**Figure 1-3**). Demolition included removal of all aboveground structures and concrete pads. After the building slabs were removed, a round of subslab sampling was completed in August 2018 to characterize the newly exposed soil. Additional follow-up sampling was performed at the Reclaim Building in October 2018. The results are reported in the *Post Demolition Soil Investigation Report – Reclaim and RMM Buildings* (Arcadis 2019)

2.2 Current Conceptual Site Model

The data collected as part of the FSI provided a robust dataset that was used to supplement the existing dataset available for OU-1. This data provided the basis for updating the CSM, which in turn, provides the fundamental basis for evaluating the remedial technologies that are included in this FS-OU1. Details on the CSM provided in the FSIR (Arcadis 2016b) are summarized in the following sections, with new data from the recent post-demolition characterization activities incorporated, where appropriate. In addition, figures from the FSIR are reproduced in **Appendix A** for reference.

2.2.1 Topography and Drainage

The OU-1 and OU-2 area is relatively flat, with a grade elevation of approximately 20 feet above mean sea level (**Figure 1-1**), with a gentle slope to the northeast. A small stream (Withers Swash) lies adjacent to the northern end of OU-1 (**Figure 1-2**). Withers Swash flows northeast, approximately parallel to the beach, passing through several flood control ponds before ultimately discharging to the ocean.

A golf course to the west includes several artificial ponds as water hazards. The nearest is immediately west of OU-1 in an upgradient direction. Construction and surface elevation of this pond is unknown.

2.2.2 Hydrostratigraphic Framework

Myrtle Beach is within the Atlantic Coastal Plain physiographic province. Bedrock is approximately 1,400 to 1,500 feet below sea level (Zack 1977). Most overlying thickness of unconsolidated sediments is Cretaceous age and older marine deposits, typically alternating beds of sand and clay. Thin beds of calcite-cemented siltstone of fine-grained sandstone are common throughout the section, interbedded with the unconsolidated sediments. The two uppermost units relevant to OU-1 are:

- Terrace Deposits (0 to 45 feet below ground surface [bgs]) – A Quaternary-aged sequence of marine terraces consisting of stratified sand, silt, and clay beds reflecting a beach and lagoon depositional environment.
- Peedee Formation (45 to 300 feet bgs) – A Cretaceous-aged marginal marine unit formed generally of stratified sand and clay (similar to the terrace deposits but much older), with thin beds of calcite-cemented siltstone or fine-grained sandstone.

The uppermost Peedee Formation has historically been encountered in borings in OU-1 and is described as a calcite-cemented siltstone. The depth to the top of the Peedee Formation varies from 40 to 45 feet from west to east in OU-1. This lithified zone is interpreted to strongly inhibit vertical flow of groundwater between the Peedee Formation and the terrace deposits. Therefore, site investigations in OU-1 have largely focused on the terrace deposits.

The sequence of sand, silt, and clay beds within the terrace deposits is complex. The cross-sections generated from the hydraulic profiling tool (HPT) results included within the Section 3 figures of the FSIR (reproduced in **Appendix A**) (Arcadis 2016b) and the Environmental Visualization Software (EVS) model included in the FSIR that illustrate the current understanding of the hydrostratigraphic framework. The surficial soil in OU-1 includes a mix of sand and silt that transition into a lower-permeability unit composed of clay at approximately 10 feet bgs. This unit is largely unsaturated and acts to confine the water present in the more permeable layers beneath the clay. The surficial unit is truncated on the cross-sections (see **Appendix A**) because no HPT data were collected in the vadose zone. As a result, the composition of the surficial unit was largely verified by soil borings.

Beneath the surficial clay unit, the soil grades from silt and sand at approximately 10 feet bgs, to a coarser, highly permeable sand. The thickness of the sand increases from west to east. The HPT data in the FSIR (Arcadis 2016b) indicates the presence of lower-permeability intervals (i.e., having a higher percentage of silt) throughout this section, but the higher-permeability sands are commonly present in the lower portion of the interval.

A clay unit is present across OU-1 beneath the shallow sand unit. The thickness of this unit is highly variable and varies from approximately 1 to 8 feet thick. While the clay unit appears to be present at all locations, the highly variable nature of this unit suggests it may not be providing a connection between the Upper and Lower Terrace Deposits.

The lithology below the clay is composed of an interbedded sequence of sands and clay that varies in all directions across OU-1. The sand units present beneath the clay are commonly lower in permeability compared to the shallower sands; however, localized zones have hydraulic conductivity values in the 100-foot per day range. These more permeable zones will act as groundwater transport pathways and ultimately control the mass flux through the system.

The terrace deposits have previously been divided into an upper and lower section for purposes of defining vertical resolution for the monitoring well network. The Upper Terrace Deposits have been defined as the shallow permeable zone to approximately 25 feet bgs. Based on the data collected as part of the FSI, this unit is found to be present across the investigated portions of OU-1. The base of the unit varies from approximately 23 to 30 feet bgs, which is consistent with historical observations. Contact between the Upper and Lower Terrace Deposits is marked by the presence of the clay unit. Historically, the Lower Terrace Deposits have been depicted as a more uniform sand unit beneath the clay, which changes in composition from the interbedded sand silt and clay historically observed in OU-1, to the more uniform sand present in OU-2. The data collected during the investigation has provided additional resolution on the composition and permeability of this unit in OU-1. These data have helped focus the FS evaluation of potential remedial technologies that are applicable in this unit. The Lower Terrace Deposits in OU-1 are highly variable in lithology across OU-1.

2.2.3 Groundwater Flow

Within OU-1, the water table is commonly encountered at an average depth of approximately 5 feet bgs. Potentiometric surfaces for the Upper Terrace Deposits (**Appendix A, Figure 5-1**) and Lower Terrace Deposits (**Appendix A, Figure 5-2**) indicate a predominantly easterly groundwater flow direction converging into the capture zone created by the groundwater extraction system that includes pumping wells DPW-4SD and DPW-5SD. This pair of pumping wells exerts a strong hydraulic influence on water levels in OU-1. In combination, these two pumping wells are interpreted to capture all groundwater flowing through VOC-containing areas of OU-1. Groundwater extraction has operated at the site since 1985; however, prior to that, the flow from OU-1 was to the east towards OU-2.

Groundwater flow in the terrace deposits is influenced by local-scale heterogeneity and anisotropy. The dominant flow paths are in the intervals of highest permeability (i.e., medium- to coarse-grained sand), which are interbedded throughout the stratigraphic section. Under ambient flow conditions, the alignment of the flow paths is parallel to the coast following the long axis of individual beds, but the current operation of pumping wells DPW-4SD and DPW-5SD has altered these flow paths as groundwater is captured within OU-1 and the western portion of OU-2. Interbedded fines are interpreted to inhibit vertical migration of VOCs to a varying degree depending on the continuity and percentage of fines in such beds. The upper contact of the Peedee Formation is the uppermost laterally continuous confining layer below the terrace deposits.

2.2.4 Mass Distribution

The identified constituents in soil and groundwater are primarily TCE and its breakdown products. The data collected historically provide a high-resolution picture of the mass present within OU-1. A summary of the identified sources present in the vadose zone and in groundwater and the dissolved-phase area are summarized below and depicted on **Figures 2-1 and 2-2**. For the purposes of this FS-OU1, Arcadis has defined the targeted areas, including sources and downgradient areas, as follows:

- **Source Area Vadose Zone** – The vadose zone source areas are those areas containing distinctly elevated concentrations of VOCs in the upper 10 feet of soil (approximate depth to soil saturation). More specifically, these areas are defined as those that, if removed, would decrease the estimated site-wide human health excess lifetime cancer risk (ELCR) to 1×10^{-6} and total hazard quotient (HQ) to less

than 1 for a non-residential exposure scenario. These areas commonly align with areas of past operations where solvents were known to be handled, including in former storage tanks and along conveyance piping that connected those tanks with other areas along the western side of the former MB-1 Building and former Reclaim Building.

- **Source Area Saturated Zone Source** – The saturated zone source area is defined as a broader area that underlies the identified vadose zone sources, defined above, but broadened to the north and south to cover the area most likely sourcing VOCs to the downgradient dissolved-phase area. This area also closely coincides with a broader area of vadose zone soil if considering soil cleanup to meet a site-wide average estimated ECLR of 1×10^{-6} and an HQ of 1 based on a residential exposure scenario.
- **Dissolved-Phase Area (Downgradient)** – The dissolved-phase area is that which is defined by the approximate extent of dissolved VOCs that are at concentrations that exceed the maximum contaminant levels (MCLs) in OU-1.

Additional detail about these areas are discussed in the following sections.

2.2.4.1 Source Area – Vadose Zone

Over the past 10 years, AVX has continued to consolidate operations, which has, in turn, led to the termination of activities within and eventual demolition of several buildings within OU-1. After each building demolition phase within OU-1, subslab soil characterization was completed across the footprint of the respective demolition areas. The initial demolition of the eastern portion of the former MB-1 Building provided access to two areas, where post-demolition investigation activities identified elevated concentrations of TCE and other CVOCs in soil. These two areas containing elevated concentrations of VOCs in the vadose zone were excavated and disposed offsite following completion of characterization. A summary of the analytical results and excavation extents are provided in the *Soil Removal Report – Operable Unit 1* (Arcadis 2012b).

Investigations following demolition of the western portion of the former MB-1 Building identified additional areas containing relatively elevated concentrations of CVOCs along the western side of the western portion of the former MB-1 Building. In addition, relatively high concentrations of trimethylbenzene near to and apparently associated with relatively lower concentrations of CVOCs were also identified nearer to the eastern side of the western portion of the former MB-1 Building footprint. These areas of impacted soil near the western portion of the former MB-1 Building were further investigated, and the area containing trimethylbenzene was targeted for excavation-based remediation. Details regarding the soil remediation activities within the trimethylbenzene area are included in the *Soil Removal Report – Trimethylbenzene Area* (Arcadis 2016a). No immediate actions were proposed or taken to remediate the areas of CVOCs in soil because additional investigation of those areas was planned as part of the FSI.

The whole core soil sampling (WCSS) portion of the FSI improved Arcadis' understanding of the locations of vadose zone source areas as described in the FSIR (2016b). In addition, more recent post-demolition soil investigation in the area of the former Reclaim Building (2018) have identified and delineated another vadose zone source area. **Figure 2-1** shows the locations of the former and current sources of CVOCs in soil, including:

- The two areas beneath the eastern portion of the former MB-1 Building that were remediated in 2012

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- The area of relatively low CVOC concentrations beneath the western portion of the former MB-1 Building near the former trimethylbenzene area
- East of the former TCE UST
- Near the former TCE AST
- Near the former Cold Storage Building
- Near the former southwestern building addition to the MB-1 Building
- Near the southwestern corner of the former MB-1 Building
- Near the northeastern corner of the former Reclaim Building

The HHRA (**Appendix B, Figure 5-3 and Table 1**) summarizes historical soil sampling conducted during several prior investigations (spanning 1989 to 2010). These data reflect soil conditions outside the footprint of the former MB-1 Building prior to demolition. Note that the displayed data include some samples collected below where saturated conditions are first encountered within a sandier and more permeable unit. These data indicate:

- Soil samples collected from locations outside the vicinity of the western area of the former MB-1 and associated buildings and the Reclaim Building most commonly show there are no detectable VOCs in the vadose zone, with obvious exceptions to this broad observation, which are discussed in further detail herein and in the HHRA (**Appendix B**). Moreover, no samples collected from the vadose zone outside these areas contained TCE at concentrations above the United States Environmental Protection Agency (USEPA) Industrial Soil Regional Screening Level (RSL).
- Samples containing the highest concentrations of TCE were commonly collected at the water table or deeper. These sample results (i.e., CPT-02 and CPT-08) confirm the presence of elevated VOC concentrations near the bottom of the vadose zone soil column and extending into shallow groundwater on the western side of the former MB-1 Building footprint.

2.2.4.2 Source Area – Saturated Zone

The distribution of VOCs in groundwater in OU-1 had historically been interpreted through the data collected from sampling groundwater from the monitoring wells. A summary of the VOC distribution in groundwater within OU-1 is provided below, and a summary of tabulated groundwater data is provided in the HHRA (**Appendix B, Table 2**).

Only a limited amount of groundwater data has been collected near the historical sources during FSIR vertical aquifer profile (VAP) sampling because WCSS was instead used as the predominant investigation method to define the extent of the potential sources. While the WCSS data collected represents the total mass present in the mobile and immobile fractions in the Upper Terrace Deposits, the concentrations with respect to lithology can be used to infer groundwater quality conditions. The elevated concentrations observed in the WCSS results in the higher-permeability units, which are more representative of the mobile mass of VOCs (**Appendix A, Figures 3-1 through 3-6**), as these VOCs migrate from the clay into the groundwater system. The observed concentrations of VOCs in the saturated soil matrix within the clay unit at the base of the Upper Terrace Deposits represents VOC mass stored in the system that will, if not remediated, continue to diffuse back into groundwater. Additional VAP samples collected along Transect

4 (**Appendix A, Figure 3-10**) show that the mass of VOCs in groundwater is present primarily in the Upper Terrace Deposits; however, the VAP sampling was limited along Transect 4 to reduce the potential interconnection between the Upper and Lower Terrace Deposits that could be caused by drilling. As a result, only select locations were evaluated with HPT and VAP after the WCSS had been completed. Based on all sources of information described above, the approximate location of the saturated source zone is depicted on **Figures 2-1 and 2-2**.

2.2.4.3 Dissolved-Phase Area (Downgradient)

The dissolved-phase area within OU-1 is well defined through sampling of existing groundwater monitoring wells and from the FSI VAP sampling along Transects 1, 2, and 3. Along the most downgradient transect, Transect 1 (**Appendix A, Figure 3-7**), the highest TCE concentrations are observed along the central portion of the transect, consistent with the identified source zones discussed in the previous section. The highest concentrations are found in the lower portion of the Upper Terrace Deposits in the intervals with higher-permeability. In the Lower Terrace Deposits, elevated concentrations are present, but are commonly one to two orders of magnitude lower than those observed in the Upper Terrace Deposits. Laterally, the extent of dissolved TCE is bounded by the extent of Transect 1 in the Upper Terrace Deposits. In the Lower Terrace Deposits, the lateral extent is defined to the south. To the north, elevated concentrations are still present at the northern edge of Transect 1; however, this extent was previously defined during the 2008 data gap investigation and does not represent an additional data gap (Arcadis 2010a). Additional lateral delineation is discussed in the description of subsequent transects.

Along Transect 2 (**Appendix A, Figure 3-8**), the dissolved VOCs in groundwater are present throughout the terrace deposits, but most of the mass observed has migrated deeper and is present in the Lower Terrace Deposits. The transect defines the lateral extent in both the Upper and Lower Terrace Deposits.

Along downgradient Transect 3 (**Appendix A, Figure 3-9**), the distribution of VOCs between the Upper and Lower Terrace Deposits are noticeably different compared with the VOC distribution in Transects 1 and 2. While elevated concentrations of VOCs and associated mass are still present in the Lower Terrace Deposits (HPT-23 and HPT-24), elevated concentrations are present in the Upper Terrace Deposits (HPT-21 to HPT-24). These concentrations in groundwater are likely derived from the previously excavated source zones removed following demolition of the eastern portion of MB-1, but within the capture zone of DPW-4SD. Near the northern end of Transect 3, the concentrations of TCE are below detection at most locations. This portion of the transect is downgradient of DPW-5SD, but within the capture zone. While TCE is not present, the total VOCs included in the EVS model of the FSIR (Arcadis 2016b) indicate elevated concentrations of daughter products along the transect. This distribution suggests that the enhanced reductive dechlorination (ERD) implementation in OU-2 is potentially influencing OU-1, as water treated by the ERD system is captured and pulled back to OU-1. Based on all sources of information described above, the approximate location of the dissolved-phase area is depicted on **Figures 2-2 and 2-3**.

2.3 Summary of Human Health Risk Assessment

An HHRA was performed to evaluate whether constituent concentrations in soil and groundwater and predicted concentrations in vapors pose a risk and/or hazard to human health that exceeds regulatory

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thresholds based on existing conditions and hypothetical future redevelopment. The data were compared to USEPA RSLs and USEPA vapor intrusion screening levels to identify COPCs. The potential exposure scenarios quantitatively evaluated included the following (by medium):

- Surface and Combined Surface and Subsurface Soil: Exposure of current and hypothetical future site workers, hypothetical future construction workers, and hypothetical future residents.
- Groundwater: Exposure of hypothetical future construction workers.
- Vapors: Hypothetical exposure, within buildings, of current and hypothetical future site workers and hypothetical future residents.

Site-specific exposure assumptions were used in conjunction with agency-derived toxicity values to characterize ELCRs and non-cancer hazards. For cancer endpoints, the USEPA target risk range, which is protective of health, is 1×10^{-6} to 1×10^{-4} . For non-cancer endpoints, the USEPA uses a benchmark of 1.

For each receptor, the risks and hazards from each of the exposure scenarios were calculated. The exposure scenarios and results are summarized below by potential receptor:

- Current and Hypothetical Future Site Worker: Site workers were assumed to contact surface and combined surface and subsurface soil and inhale COPCs migrating from the subsurface into buildings. Direct contact with either surface or combined surface and subsurface soil resulted in an ELCR calculated to be within the USEPA target risk range. The non-cancer hazard was above the USEPA benchmark of 1. The presence of TCE in soil was the main risk and hazard driver.
- Hypothetical Future Construction Worker: Hypothetical future construction workers were assumed to contact surface and combined surface and subsurface soil and/or inhale vapors migrating from groundwater during excavation activities. The groundwater at the site is first encountered at approximately 10 feet bgs. Direct contact with either surface or combined surface and subsurface soil resulted in an ELCR calculated to be within the USEPA target risk range, while the non-cancer hazard was above the USEPA benchmark of 1. Incidental inhalation of vapors from groundwater beneath a utility trench resulted in an ELCR below the USEPA target risk range, while the non-cancer hazard was above the regulatory benchmark. The presence of TCE in soil and groundwater was the main risk and hazard driver.
- Hypothetical Future Resident: A future resident could contact surface soil if the redevelopment project did not redistribute the soil. In this case, the risks and hazards were at the high end of the target risk range or above the non-cancer benchmark. If the soil is redistributed or a building is constructed and vapors migrate from the subsurface into a building, the risks and hazards were above the regulatory benchmarks. This was due to the presence of TCE in soil and TCE and vinyl chloride in groundwater.

Note that if redevelopment were to occur, protective measures could be undertaken to reduce the potential for exposure during construction activities or following redevelopment. To assist in the remedial activities at the site, health-based goals were calculated for each potential receptor for COPCs with an ELCR above 1×10^{-6} or an HQ above 1 in combined surface and subsurface soil and groundwater. These goals can be used to support remedial decision-making for the site.

A few additional assumptions have been made in preparing the HHRA, including:

- Groundwater will not be used as a potable water supply.

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- Leaching of residual concentrations of COPCs in soil, following vadose source remediation, are expected to be inconsequential in light of all the other aggressive remedial components that ultimately will be included in the final comprehensive remedy. These measures will include:
 - Significant volume of soil that will be remediated in those areas containing the highest concentrations of COPCs
 - Long-term flushing and natural attenuation of the relatively low residual concentration of VOCs within the soil column in and adjacent to the vadose zone source area.
 - Aggressive saturated zone source and downgradient dissolved-phase area remediation that will be performed, regardless of the remedial alternative selected. The comprehensive remedy will further promote COPC removal/destruction of residual COPCs that may migrate from the vadose zone source area to the saturated zone.
 - Long-term natural attenuation within a large area beneath and downgradient of the vadose zone source area. This natural attenuation is already being enhanced by relatively high carbon influx through the soil column and into groundwater due to all the seeding, sodding, mulching, and fertilizing of acres of land that was once covered by buildings. This has led to elevated organic carbon concentrations in the groundwater shortly after demolition and land restoration activities began starting with the demolition of the PDG Building in 2009.

Furthermore, groundwater performance monitoring will also be implemented as part of the final remedy to provide information regarding the need for any other source zone remedy enhancements.

3 BASIS FOR REMEDIATION

3.1 Applicable or Relevant and Appropriate Requirements

This section describes the ARARs and to be considered (TBC) guidance that may be applied to actions at OU-1. ARARs are defined as cleanup standards; standards of control; and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that specifically address a hazardous substance, pollutant, contaminant, removal action, location, or circumstance at a site. The ARARs are used to develop quantitative RAOs, determine the appropriate extent of site cleanup, and govern the implementation and operation of the selected remedial action. The TBC guidance is composed of non-promulgated advisories or guidance issued by federal or state governments that are not legally binding (USEPA 1988).

Because of their site-specific nature, identification of ARARs requires evaluation of federal, state, and local environmental and health regulations regarding COPCs, characteristics of a site, and proposed remedial alternatives. The USEPA provides guidance on three categories, or ARARs, specific to the COPCs, location, or action. ARARs are classified as follows:

- *Chemical-specific* requirements are usually health- or risk-based numerical values or methods that, when applied to site-specific conditions, result in the establishment of numerical values for the acceptable loading or concentration of a hazardous substance that may be found in, or discharged to, the environment.
- *Location-specific* requirements are restrictions placed on the concentrations of hazardous substance or the conduct of activities solely because they occur in specific locations.
- *Action- (or remedy-) specific* are usually technology- or activity-based and may include limitations on actions taken with respect to hazardous constituents.

ARARs apply to activities that include the geographical area of the COPCs to be remediated and all suitable areas in close proximity that are necessary for implementation of the remedial action. For offsite activities, no analysis of ARARs is required under CERCLA, but these activities are still subject to applicable laws.

Tables 3-1 through 3-3 identify potential ARARs and TBCs, including the regulatory citation and a brief description.

3.1.1 Chemical-Specific Applicable or Relevant and Appropriate Requirements

Chemical-specific ARARs have been organized by relevant media for OU-1. These include soil and groundwater. **Table 3-1** summarizes the chemical-specific ARARs for OU-1.

3.1.2 Location-Specific Applicable or Relevant and Appropriate Requirements

Location-specific ARARs are those that commonly restrict certain activities or limit concentrations of hazardous substances solely because of geographical or land use concerns. The primary location-

specific ARARs are related to the location of portions of OU-1 within a coastal zone, the 100-year floodplain, and areas that may be designated as wetlands. **Table 3-2** summarizes the location-specific ARARs for OU-1.

3.1.3 Action-Specific Applicable or Relevant and Appropriate Requirements

Action-specific ARARs are those that may place restrictions on the performance of remediation activities or the use of certain technologies. Action-specific ARARs for OU-1 would primarily be related to air emissions from remedial actions, waste disposal, and groundwater treatment or discharge. **Table 3-3** summarizes the action-specific ARARs for OU-1.

3.2 Development of Remedial Action Objectives

RAOs are site-specific cleanup objectives established for protecting human health and the environment. RAOs specify contaminants and media of concern, potential exposure pathways and receptors, and RSLs [40 Code of Federal Regulations (CFR) 300.430 (e)(2)(i)]. RAOs indicate a contaminant level and an exposure route, rather than a contaminant level alone, because protection of human and ecological receptors may be achieved by reducing or eliminating exposure pathways, as well as by reducing COPC concentrations (USEPA 1988). RAOs may be qualitative (e.g., to prevent exposure to contaminated groundwater) or quantitative (e.g., to specify the maximum contaminant concentration in groundwater).

CERCLA Section 121(d)(2)(A) requires that remedial actions meet any federal standards, requirements, criteria, or limitations that are determined to be legally applicable or relevant and appropriate. CERCLA Section 121(d)(2)(A)(ii) requires that state ARARs be met if they are more stringent than federal requirements. In addition, the National Contingency Plan (NCP), published in 40 CFR Part 300, requires that local ordinances, unpromulgated criteria, advisories, or guidance that do not meet the definition of ARARs but that may assist in the development of remedial objectives be listed as TBC. The key ARARs are presented in Section 3.1.

RAOs were developed based on a review of the characterization data, conclusions of the HHRA, applicable ARARs, and the FSWP (Arcadis 2015b) and are discussed in the following sections. Numerical remediation goals are a subset of the RAOs and provide the measurable goals that drive remedial actions for each medium.

For each COPC in soil and groundwater, the overall remediation goal was selected after a comparison of risk-based RSLs (based on the USEPA RSLs) and applicable ARARs. ARARs dictated the determination of the remediation goal, and in the absence of ARARs, the lowest of the risk-based RSLs was selected as the overall remediation goal. The resultant remediation goals for soil and groundwater are presented in **Table 3-4**.

3.2.1 Soil (Source Area Vadose Zone)

The identified source area for soil is presented on **Figure 2-1**. The soil RAOs for OU-1 include:

- Minimize, contain, and/or eliminate site-related COPCs from soils at OU-1 that may be leaching into the groundwater and creating a human health risk.

- Minimize and/or eliminate the potential for human exposure to site-related COPCs via direct contact with soil containing COPCs.

Remediation goals for soil are presented in **Table 3-4**.

3.2.2 Groundwater (Source Area Saturated Zone and Dissolved-Phase Area)

Groundwater sampling data for OU-1 is presented in the HHRA (**Appendix B**). The risk assessment performed on potential residential exposure to volatile COPCs in groundwater migrating to indoor air via soil vapor resulted in a conclusion by Arcadis and the SCDHEC that there is no unacceptable human health risk via the indoor air pathway (Arcadis 2008b, 2009). Should future construction occur on OU-1, the potential for vapor migration and the need, if any, for mitigation will be considered on a case-by-case basis.

The identified source area for groundwater and the downgradient dissolved-phase area are presented on **Figures 2-1 and 2-2**. The RAOs for groundwater within OU-1 include the following:

- Prevent ingestion and dermal contact with groundwater containing COPCs above MCLs for drinking water, unless the SCDHEC Water Standards (drinking water standards) are more restrictive.
- Minimize, contain, and/or eliminate the potential for COPCs in groundwater to migrate offsite.

Remediation goals for groundwater are presented in **Table 3-4**.

3.3 General Response Actions

General response actions have been developed for each medium of interest to define the actions that may be taken, either individually or in combination, to achieve the RAOs.

3.3.1 Source Area Vadose Zone

The extent of COPC historical soil source areas is defined in Section 2.2.4.1 and shown on **Figure 2-1**. Potential general response actions for remediation of COPCs in the source area vadose zone include:

- No Action
- Institutional Controls
- Containment
- Removal
- Ex-Situ Treatment
- In-Situ Treatment

3.3.2 Source Area Saturated Zone

The source area saturated zone is defined in Section 2.2.4.2 and shown on **Figures 2-1 and 2-2**. Potential general response actions for remediation of COPCs in the source area saturated zone include:

- No Action

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- Institutional Controls
- Containment
- Ex-Situ Treatment
- In-Situ Treatment

3.3.3 Dissolved-Phase Area (Downgradient)

The extent of COPCs in groundwater at OU-1 follows a northeasterly groundwater flow direction (during non-pumping conditions) from OU-1 to the surface-water discharge point of Withers Swash. The dissolved-phase area within OU-1 is contained within the property with the extent shown on **Figures 2-2 and 2-3**. Potential general response actions for remediation of COPCs in groundwater within OU-1 include:

- No Action
- Institutional Controls
- Containment
- Ex-Situ Treatment
- In-Situ Treatment

4 IDENTIFICATION AND SCREENING OF APPLICABLE TECHNOLOGIES

This section identifies the potentially applicable technology types and process options for each impacted medium within OU-1. Potentially applicable technology types and process options were developed for soil and groundwater. These technologies and options were derived from professional experience with the COPCs, technologies identified in other Records of Decision, and the Federal Remediation Technologies Roundtable Remediation Technologies Screening Matrix (www.frtr.gov).

An initial screening of the technical implementability of each process option and technology type was performed to reduce the number of technologies potentially applicable to a manageable number before performing a more rigorous screening and evaluation process. Technical implementability refers to the ability of a remedial action or process to meet an RAO or RSL. The initial screening process also eliminates those technologies or process options that are not applicable based on the COPCs and site-specific characteristics. Consequently, remedial technology types and process options that cannot be effectively implemented were eliminated from further consideration.

The potential remedial technology types and process options are described in **Tables 4-1 to 4-3** for the source area vadose zone, source area saturated zone, and dissolved-phase area (downgradient), respectively. The potential remedial technology type is a general category of technologies, while the process options are specific methods within each remedial technology type. Technologies and process options that were eliminated from further consideration based on implementability are shaded within the tables for clarity.

5 DEVELOPMENT OF REMEDIAL ACTION ALTERNATIVES

This section evaluates the potential remedial technology types/process options retained from the initial screening process referenced above for remediating specific targeted zones, including the following:

- Source area vadose zone
- Source area saturated zone
- Downgradient dissolved-phase area

These technologies are evaluated based on effectiveness, implementability, and cost. The remaining technologies are then assembled into remedial alternatives for specific target zones. Those target zone alternatives are then assembled into a set of comprehensive site-wide remedial alternatives for subsequent evaluation in later sections of this FS-OU1.

5.1 Source Area Vadose Zone

5.1.1 Remedial Action Alternative Process Options/Technologies

Table 5-1 summarizes and compares the source area vadose zone remedial action process options/technologies retained in Section 4 for secondary screening. Soil remedial action process options/technologies were compared based on relative effectiveness, implementability, and cost. Process options/technologies that were retained after this comparison were assembled into remedial alternatives that are discussed in Section 5.1.2.

5.1.2 Remedial Action Alternatives for Source Area Vadose Zone

Source area vadose zone remedial alternatives were developed based on those process options/technologies that were carried forward from Section 4. In assembling source area vadose zone alternatives, the general response actions and technologies chosen to represent the various process options for the source area vadose zone were combined to form alternatives for this zone within OU-1. The following source area vadose zone alternatives have been assembled and will be discussed further in Section 6.

Remedial Action Process Options/Technologies and Alternatives for Source Area Vadose Zone

| Process Options/Technologies | Alternatives | | |
|--|--------------|------------|---------------------------|
| | No Action | Excavation | In-Situ Thermal Treatment |
| No Further Action (NFA) | X | | |
| Deed Restrictions/Environmental Covenant | | X | |
| Excavation with Offsite Disposal | | X | |
| In-Situ Thermal Treatment | | X | X |

5.2 Source Area Saturated Zone

5.2.1 Remedial Action Process Options/Technologies

Table 5-2 summarizes and compares the source area saturated zone remedial action process options/technologies retained in Section 4 for secondary screening. Groundwater remedial action process options/technologies were compared based on relative effectiveness, implementability, and cost. Process options/technologies that were retained after this comparison were assembled into remedial alternatives that are discussed in Section 5.2.2.

5.2.2 Remedial Action Alternatives for Source Area Saturated Zone

Source area saturated zone remedial alternatives were developed based on those remedial action process options/technologies that were carried forward from Section 4. In assembling source area saturated zone alternatives, the general response actions and the process options/technologies chosen to represent the various process options for the source area saturated zone were combined to form alternatives for this zone within OU-1. The following source area saturated zone alternatives have been assembled and will be discussed further in Section 6.

Remedial Action Process Options/Technologies and Alternatives for Source Area Saturated Zone

| Process Options/Technologies | Alternatives | | | | |
|--|--------------|-----------------------|-----|-----------------------------------|---------------------------|
| | No Action | Pumping and Treatment | ERD | Dynamic Groundwater Recirculation | In-Situ Thermal Treatment |
| NFA | X | | | | |
| Deed Notifications/Restrictions | | X | X | X | X |
| Monitored Natural Attenuation (MNA) | | X | X | X | X |
| In-Situ Heating | | | | | X |
| Off-Gas Collection/Treatment | | | | | X |
| Enhanced Anaerobic Bioremediation | | | X | | |
| Groundwater Pumping-Based Flushing and Containment | | X | | | |
| Air Stripping/Treatment | | X | | X | |
| Treated Groundwater ReInjection | | | | X | |

5.3 Downgradient Dissolved-Phase Area

5.3.1 Remedial Action Process Options/Technologies

Table 5-3 summarizes and compares the downgradient dissolved-phase area remedial action process options/technologies retained in Section 4 for secondary screening. Groundwater remedial action process options/technologies were compared based on relative effectiveness, implementability, and cost. Process options/technologies that were retained after this comparison were assembled into remedial alternatives that are discussed in Section 5.3.2.

5.3.2 Remedial Action Alternatives for Downgradient Dissolved-Phase Area

Downgradient dissolved-phase area remedial alternatives were developed based on those remedial action process options/technologies that were carried forward from Section 4. In assembling the downgradient dissolved-phase area alternatives, the remedial action process options/technologies for the downgradient dissolved-phase area were combined to form alternatives for this zone within OU-1. The following downgradient dissolved-phase area alternatives have been assembled and will be discussed further in Section 6.

Remedial Action Process Options/Technologies and Alternatives for Dissolved-Phase Area (Downgradient)

| Process Options/Technologies | No Action | Pumping and Treatment | ERD | Dynamic Groundwater Recirculation |
|--|-----------|-----------------------|-----|-----------------------------------|
| NFA | X | | | |
| Deed Notifications/Restrictions | | X | X | X |
| MNA | | X | X | X |
| Groundwater Pumping-Based Flushing and Containment | | X | | X |
| Air Stripping/Treatment | | X | | X |
| Treated Groundwater Reinjection | | | | X |
| Enhanced Anaerobic Bioremediation | | | X | |

6 REMEDIAL ACTION ALTERNATIVES SCREENING PROCESS

This section screens the remedial action alternatives that were assembled in Section 5. The entire assembled alternatives were screened based on effectiveness, implementability, and cost. The comparison between alternatives in this screening step is generally made between similar alternatives. Each alternative includes a description and incorporates information regarding the different remedial components, as appropriate. The screening criteria are defined as follows.

| Effectiveness | Implementability | Cost |
|---|--|---------------------------------|
| Overall protectiveness of human health and the environment | Technical feasibility | Equipment/construction |
| Compliance with remediation goals | Demonstrated performance | Operation and maintenance (O&M) |
| Reduction of toxicity, mobility, or volume of contaminants | Availability of equipment, space, and services | |
| Adverse short- and long-term effects caused by implementation | Administrative feasibility | |

Alternative screening for soil and groundwater are included below.

6.1 Additional Screening of Remedial Action Alternatives

The remedial action process options/technologies specific to each of the three target zones have been assembled into a set of remedial alternatives designed to comprehensively remediate the site. A summary of the alternatives applicable to each target zone are listed below:

- Vadose Zone
 - Excavation
 - In-Situ Thermal Treatment
- Source Area Saturated Zone
 - In-Situ Thermal Treatment
 - ERD
 - Pumping and Treatment
 - Dynamic Groundwater Recirculation
- Dissolved-Phase Area – Downgradient
 - ERD
 - Pumping and Treatment

- Dynamic Groundwater Recirculation

Figure 6-1 depicts the remedial action process options/technologies for each of the three targeted zones assembled into a matrix of all the possible theoretical site-wide comprehensive remedial alternative combinations. The matrix presented on **Figure 6-1** provides the rationale for focusing down the alternatives to the No Further Action Alternative, plus a set of five additional alternatives that are logical combinations applicable to site conditions.

The remedial alternatives that come out of the screening matrix depicted on **Figure 6-1** are listed below:

- Alternative 1 – No Further Action
- Alternative 2 – Excavation + ERD
 - Vadose Zone – Excavation
 - Saturated Zone Source – ERD
 - Dissolved-Phase Area (Downgradient) – ERD
- Alternative 3 – Excavation + Pumping and Treatment
 - Vadose Zone – Excavation
 - Saturated Zone Source – Hydraulic Control
 - Dissolved-Phase Area (Downgradient) – Pumping and Treatment
- Alternative 4 – Excavation + Dynamic Groundwater Recirculation
 - Vadose Zone – Excavation
 - Saturated Zone Source – Dynamic Groundwater Recirculation
 - Dissolved-Phase Area (Downgradient) – Dynamic Groundwater Recirculation
- Alternative 5 – In-Situ Thermal Treatment + ERD
 - Vadose Zone – In-Situ Thermal Treatment
 - Saturated Zone Source – In-Situ Thermal Treatment
 - Dissolved-Phase Area (Downgradient) – ERD
- Alternative 6 – In-Situ Thermal Treatment + Dynamic Groundwater Recirculation
 - Vadose Zone – In-Situ Thermal Treatment
 - Saturated Zone Source – In-Situ Thermal Treatment
 - Dissolved-Phase Area (Downgradient) – Dynamic Groundwater Recirculation

6.2 Remedial Alternative Descriptions

Each of these remedial alternatives are described in greater detail below.

6.2.1 Alternative 1: No Further Action

This alternative consists of no remedial activities beyond those that have already been conducted within OU-1. It is the minimum proposed remedial action.

Table 6-1 presents the evaluation of the effectiveness, implementability, and cost associated with the No Further Action Alternative. The evaluation concludes that the No Further Action Alternative would not be acceptable. However, this alternative is retained for detailed analysis as required by the NCP as a baseline for evaluating the remaining alternatives.

6.2.2 Alternative 2: Excavation + Enhanced Reductive Dechlorination

This alternative would include the following:

- Excavation of targeted vadose zone soils and offsite disposal at a permitted facility that would reduce the site-wide non-residential potential excess lifetime cancer risk (PELCR) to less than or equal to 1×10^{-6} and the hazard index (HI) to less than or equal to 1.
- Destruction of COPCs by ERD in the saturated source and in the downgradient dissolved-phase area, within the bounds of OU-1, to meet groundwater cleanup goals.

The soil excavation and disposal component of this alternative would provide protection to human health by preventing or controlling potential exposure to COPCs in vadose zone soil through removal of targeted soil containing elevated concentrations of COPCs and offsite disposal of that soil at a permitted facility. After removing the targeted vadose zone soil, the site-wide upper confidence level concentration would be reduced to less than 6.93 mg/kg, which in turn, would reduce the estimated risk to below the targeted levels outlined above. The ERD component of this alternative would destroy COPCs via enhanced anaerobic bioremediation, accelerating the groundwater remediation process, and preventing the potential future offsite migration of dissolved COPCs in groundwater at concentrations above their cleanup goals. Natural attenuation, by natural subsurface processes, would also reduce remaining COPC concentrations in groundwater after the active portion of the enhanced anaerobic bioremediation phase of this remedial alternative is complete. Monitoring would be performed to evaluate the performance of the remedy and to track the reduction in COPC concentrations within groundwater. Potential receptor exposure would be further limited through deed notifications/restrictions on soil and groundwater, including: 1) implementation of a material management plan to address remaining residual COPCs in soil and 2) implementation of groundwater use restrictions to prevent potential future site groundwater withdrawal, except for the purposes of the remedy.

Table 6-2 presents the evaluation of the effectiveness, implementability, and cost associated with the excavation for the source area vadose zone and ERD for the saturated source area and downgradient dissolved-phase area. The evaluation concludes that this alternative would be protective of receptors by limiting exposure and is, therefore, retained for detailed analysis.

6.2.3 Alternative 3: Excavation + Pumping and Treatment

This alternative would include the following:

- Excavation of targeted vadose zone soils and offsite disposal at a permitted facility that would reduce the site-wide non-residential PELCR to less than or equal to 1×10^{-6} and the HI to less than or equal to 1.
- Groundwater pumping-based hydraulic control, via pumping, that would provide both onsite containment and flushing of COPCs in the saturated source and the downgradient dissolved-phase area. Extracted groundwater would then be treated, removing recovered COPC mass, and discharged to a permitted outfall.

The soil excavation and disposal component of this alternative would provide protection to human health by preventing or controlling potential exposure to COPCs in vadose zone soil through removal of targeted soil containing elevated concentrations of COPCs and offsite disposal of that soil at a permitted facility. After removing the targeted vadose zone soil, the site-wide upper confidence level concentration would be reduced to less than 6.93 mg/kg, which in turn, would reduce the estimated risk to below the targeted levels outlined above. The pumping-based hydraulic control component of this remedial alternative would rely on a long-term containment and flushing strategy for the saturated source and downgradient dissolved-phase area. The COPC mass, dissolved in groundwater, would travel to the pumping wells where that water would be captured and treated, thereby removing this mass. Potential receptor exposure would be further limited through deed notifications/restrictions on soil and groundwater, including: 1) implementation of a material management plan to address remaining residual COPCs in soil and 2) implementation of groundwater use restrictions to prevent potential future site groundwater withdrawal, except for the purposes of the remedy.

Table 6-3 presents the evaluation of the effectiveness, implementability, and cost associated with excavation for the vadose zone source area and pumping and treatment for the saturated source and downgradient dissolved-phase area groundwater. This evaluation concludes that this alternative would be protective of receptors by limiting exposure and is, therefore, retained for detailed analysis.

6.2.4 Alternative 4: Excavation + Dynamic Groundwater Recirculation

This alternative would include the following:

- Excavation of targeted vadose zone soils and offsite disposal at a permitted facility that would reduce the site-wide non-residential PELCR to less than or equal to 1×10^{-6} and the HI to less than or equal to 1.
- Dynamic groundwater recirculation that would provide enhanced containment and flushing of COPCs in the saturated source and the downgradient dissolved-phase area by groundwater extraction and treatment with the treated water reinjected and strategic locations to enhance flushing.

The soil excavation and disposal component of this alternative would provide protection to human health by preventing or controlling potential exposure to COPCs in vadose zone soil through removal of targeted soil containing elevated concentrations of COPCs and offsite disposal of that soil at a permitted facility. After removing the targeted vadose zone soil, the site-wide upper confidence level concentration would be reduced to less than 6.93 mg/kg, which in turn, would reduce the estimated risk to below the targeted levels outlined above. The COPC concentrations in groundwater would be reduced through dynamically enhancing advective flushing through the impacted portions of the aquifer, focusing that flushing through both preferential and less preferential flow paths. This method would be designed to consider the complexity of flow in natural aquifer systems and would be better tailored to those complexities than more conventional purely groundwater extraction methods only. As with the pumping and treatment alternative,

the COPCs in captured groundwater would be removed to reduce the mass in the targeted areas. Also, after extraction and treatment, the groundwater would be strategically reinjected to increase the amount of flushing of COPCs, subsequently leading to a faster rate of removal of COPCs from the saturated source and downgradient dissolved-phase area. The injection and pumping would be dynamically modified during the lifespan of the remedy to optimize mass flushing and removal.

As with the other potential remedial alternatives, natural attenuation from natural subsurface processes would further reduce remaining COPC concentrations in groundwater after eventual shutdown of the dynamic groundwater recirculation system. Monitoring would also be performed to evaluate/document the performance of the systems. Also, similar to the other potential remedial alternatives, potential receptor exposure would be further limited through deed notifications/restrictions.

Table 6-4 presents the evaluation of the effectiveness, implementability, and cost associated with excavation for the vadose zone source area and dynamic groundwater recirculation of the saturated source area and the downgradient dissolved-phase area. This evaluation concludes that this alternative would be protective of receptors by limiting exposure and is, therefore, retained for detailed analysis.

6.2.5 Alternative 5: In-Situ Thermal Treatment + Enhanced Reductive Dechlorination

This alternative would include the following:

- Destruction of COPCs by in-situ thermal heating and capture of COPCs liberated from the vadose zone and saturated zone sources.
- Destruction of COPCs by ERD in the saturated source and in the downgradient dissolved-phase area within the bounds of OU-1.

The in-situ thermal portion of this remedy in the vadose zone of this alternative would provide protection to human health by reducing COPC concentrations via volatilization and capture. After removing the targeted vadose zone soil, implementing the in-situ thermal remedy, the site-wide upper confidence level concentration would be reduced to less than 6.93 mg/kg, which in turn, would reduce the estimated risk to below the targeted levels outlined above. The in-situ thermal approach at this site would employ a combination of electrical resistance heating (ERH) and steam enhanced extraction (SEE). The ERH component of the method would deliver an electrical current between metal rods installed in the ground. The heat generated as movement of the current meets resistance from soil would convert COPCs and water/groundwater into steam, vaporizing contaminants. The SEE component would rely on injecting steam underground by pumping it through wells drilled within the footprint of the vadose and saturated zone source areas. The steam would heat the area, evaporating the COPCs to increase their mobility so that they could be captured by a series of vapor and multiphase extraction wells. The ERD component of this alternative would destroy COPCs via enhanced anaerobic bioremediation, accelerating the groundwater remediation process, and preventing the potential future offsite migration of dissolved COPCs in groundwater at concentrations above their cleanup goals. Natural attenuation, by natural subsurface processes, would also reduce remaining COPC concentrations in groundwater after the active portion of the enhanced anaerobic bioremediation phase of this remedial alternative is complete. Monitoring would be performed to evaluate the performance of the remedy and to track the reduction in

COPC concentrations within groundwater. Also, similar to the other potential remedial alternatives, potential receptor exposure would be further limited through deed notifications/restrictions.

Table 6-5 presents the evaluation of the effectiveness, implementability, and cost associated with in-situ thermal treatment of the vadose and saturated zone sources and ERD of the downgradient dissolved-phase area. This evaluation concludes that this alternative would be protective of receptors by limiting exposure and is, therefore, retained for detailed analysis.

6.2.6 Alternative 6: In-Situ Thermal Treatment + Dynamic Groundwater Recirculation

This alternative would include the following:

- Mobilization of COPCs by in-situ thermal heating and capture by vapor and multiphase extraction of those COPCs that would be liberated from the vadose and saturated zone sources through volatilization.
- Dynamic groundwater recirculation that would provide enhanced containment and flushing of COPCs in the downgradient dissolved-phase area by groundwater extraction and treatment. The treated water would be reinjected to promote enhanced flushing of COPCs toward the extraction wells.

The in-situ thermal portion of this remedial alternative would provide protection to human health by reducing COPC concentrations in the vadose zone soil via volatilization and capture. After implementing the in-situ thermal remedy, the site-wide upper confidence level concentration in the vadose zone would be reduced to less than 6.93 mg/kg, which in turn, would reduce the estimated risk to below the targeted levels outlined above. The saturated zone in-situ thermal component of this remedy would also remove COPCs as a component of the remedial alternative designed to achieve the groundwater cleanup goals.

The in-situ thermal approach at this site would employ a combination of ERH and SEE. The ERH component of the method would deliver an electrical current between metal rods installed in the ground. The heat generated as movement of the current meets resistance from soil would convert COPCs and water/groundwater into steam, vaporizing contaminants. The SEE component would rely on injecting steam underground by pumping it through wells drilled within the footprint of the vadose and saturated zone source areas. The steam would heat the area, evaporating the COPCs to increase their mobility so that they could be captured by a series of vapor and multiphase extraction wells.

The COPC concentrations in groundwater would be reduced through dynamically enhancing advective flushing through the impacted portions of the aquifer focusing that flushing through both preferential and less preferential flow paths. This method would be designed to consider the complexity of flow in natural aquifer systems and would be better tailored to those complexities than more conventional purely groundwater extraction methods only. Similar to the other potential remedial alternatives, natural attenuation from natural subsurface processes would reduce remaining COPC concentrations in groundwater after eventual shutdown of the dynamic groundwater recirculation system. Monitoring would also be performed to evaluate/document the performance of the systems. Also, similar to the other potential remedial alternatives, potential receptor exposure would be further limited through deed notifications/restrictions.

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Table 6-6 presents the evaluation of the effectiveness, implementability, and cost associated with in-situ thermal treatment of the vadose and saturated zone sources and dynamic groundwater recirculation of the downgradient dissolved-phase area. This evaluation concludes that this alternative would be protective of receptors by limiting exposure and is, therefore, retained for detailed analysis.

7 DETAILED EVALUATION OF ASSEMBLED REMEDIAL ACTION ALTERNATIVES

This section and **Table 7-1** present a detailed analysis of each remedial action alternative developed in Section 6 based on the standard criteria specified in the NCP (USEPA 1990). These analyses are intended to aid in selection of an alternative that satisfies the RAOs; complies with the ARARs; provides a permanent solution; and reduces toxicity, mobility, and/or volume of area-specific COPCs for groundwater and surface water.

In accordance with CERCLA Section 121, the NCP (USEPA 1990), and USEPA Remedial Investigation/FS guidance (USEPA 1988, 2000), each alternative will undergo a detailed analysis based on nine criteria that are commonly viewed as three groups of criteria: threshold, balancing, and modifying criteria. Criteria 1 and 2 are considered to be threshold criteria, Criteria 3 through 7 are considered primary balancing criteria, and Criteria 8 and 9 are considered modifying criteria. A description of the criteria groups is presented below, with further definition of each individual criteria presented thereafter:

- *Threshold Criteria* – The selected remedial action alternative must be protective of human health and the environment and comply with ARARs. Therefore, the USEPA has designated overall protection of human health and the environment and compliance with ARARs as the two threshold criteria. Absent an appropriate case for a waiver of some ARARs, an alternative must meet both criteria to be eligible for selection as the remedial action alternative.
- *Balancing Criteria* – The five primary balancing criteria are long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and cost. This balancing provides a preliminary assessment of the maximum extent to which permanent solutions and treatment can be used practicably in a cost-effective manner. The alternative that is protective of human health and the environment, complies with ARARs, and affords the most favorable balancing criteria is identified as the preferred remedial action alternative.
- *Modifying Criteria* – State and community acceptance are factored into a final evaluation that determines which remedial action alternatives are acceptable. State and community acceptance will be addressed after comments on the FS have been received.

Further detail regarding all the nine criteria, that are within the above three referenced groups of criteria, is presented below:

1. *Overall Protection of Human Health and the Environment* – Addresses how the alternative protects human health and the environment. This assessment focuses on how an alternative achieves protection over time and indicates how each source of COPCs would be minimized; reduced; or controlled through treatment, engineering, or institutional controls. The evaluation of the degree of overall protection associated with each alternative is based largely on the exposure pathways and scenarios set forth in the risk assessment.
2. *Compliance with ARARs* – Addresses whether the alternative complies with ARARs developed in Section 3.
3. *Long-Term Effectiveness and Permanence* – Addresses the results of an alternative in terms of the residual risk remaining after the RAOs have been met. The primary focus of this evaluation is the

extent and effectiveness of the controls that will be applied to manage the risk posed by the residual COPCs of the treatment process and/or untreated COPCs.

4. *Reduction of Mobility, Toxicity, or Volume* – Addresses the statutory preference for selecting remedial actions that include treatment technologies that permanently and significantly reduce the mobility, toxicity, or volume of the COPCs. Factors of this criterion to be evaluated include the treatment process employed; the amount of COPCs destroyed or treated; the degree of reduction in toxicity, mobility, or volume expected; the degree to which the treatment will be irreversible; and the type and quantity of residual COPCs.
5. *Short-Term Effectiveness* – Addresses potential human health and environmental risks of the alternative during the construction and implementation phase until remedial response objectives are met.
6. *Implementability* – Addresses the technical and administrative feasibility of implementing an alternative and the availability of services and materials required during implementation. Implementability is further categorized into technical feasibility, administrative feasibility, and availability criteria.
7. *Cost* – Addresses the capital and O&M costs and includes a present worth analysis of all costs. The capital costs consist of direct costs (construction) and indirect costs (non-construction and overhead). Direct capital costs include construction costs, equipment costs, land and development costs, relocation expenses, and disposal costs. Indirect capital costs include engineering expenses, legal fees and license or permit costs, startup costs, and contingency allowances.

O&M costs are post-construction costs necessary to confirm the continued effectiveness of a remedial action. These costs include operating labor costs, maintenance materials and labor costs, auxiliary materials and energy, treatment residue disposal costs, purchased services, administrative cost, insurance, taxes, licensing costs, maintenance reserve and contingency funds, rehabilitation costs, and costs of periodic site reviews, if required.

The cost estimates presented in this FS-OU1 were developed utilizing USEPA guidance, professional engineering judgment, and quotations from appropriate vendors. In accordance with USEPA guidance, the cost estimates in this FS-OU1 have been prepared to provide accuracy in the range of -30 to +50% (USEPA 2000). All capital and O&M cost estimates are expressed in 2019 dollars.

After development of the capital and O&M costs, a present-worth analysis of the overall remedial action costs associated with each alternative was completed. A present-worth analysis relates costs that occur over different time periods to present costs by discounting all future costs to the present value. This allows the cost of alternatives to be compared based on a single figure that represents the capital required in 2019 dollars to construct, operate, and maintain the alternative throughout its planned life. The present-worth calculations are based on a discount rate of 7%. Life-cycle costs are calculated for each alternative

8. *State Acceptance* – Addresses the technical and administrative issues and concerns of the state (or support agency) regarding the alternative. This input is limited to formal comments made by the state following the FS submittal.

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9. *Community Acceptance* – Addresses public issues and concerns regarding the alternative. This input is limited to comments made during the public comment period following the FS submittal.

The selected remediation alternatives developed in Section 6 are summarized in **Table 7-1**. Detailed backup to the cost shown in **Table 7-1** are provided in **Appendix C**.

8 COMPARATIVE ANALYSIS OF OPERABLE UNIT 1- ASSEMBLED REMEDIAL ACTION ALTERNATIVES

The development of remedial action alternatives has followed the process below:

- Identification of RAOs and requirements for remediation (Section 3)
- Identification and screening of applicable technologies and formulation of remedial action alternatives for groundwater and surface water (Sections 4 through 6)
- Individual analysis of soil and groundwater remedial action alternatives (Section 7)

The formulation of the operable unit alternatives for this FS-OU1 is developed using a comparative analysis of the alternatives relative to one another. The identification of and selection of the preferred remedial action alternative are based on consideration of the major trade-offs among the alternatives in terms of the nine evaluation criteria within the three groups of criteria, including threshold, balancing, and modifying criteria.

A comparative analysis of the assembled remedial action alternatives based on the threshold and balancing evaluation criteria is presented herein. This comparative analysis includes an evaluation of the expected performance of each alternative relative to the other alternatives to identify their respective advantages and disadvantages.

The assembled remedial action alternatives are summarized again as follows:

- **Alternative 1** – No Further Action
- **Alternative 2** – Excavation, ERD, MNA, Institutional Controls, and Long-Term Monitoring
- **Alternative 3** – Excavation, Pumping and Treatment, Institutional Controls, and Long-Term Monitoring
- **Alternative 4** – Excavation, Dynamic Groundwater Recirculation, MNA, Institutional Controls, and Long-Term Monitoring
- **Alternative 5** – In-Situ Thermal Treatment, ERD, MNA, Institutional Controls, and Long-Term Monitoring
- **Alternative 6** – In-Situ Thermal Treatment, Dynamic Groundwater Recirculation, MNA, Institutional Controls, and Long-Term Monitoring

The summary of remedial component options, targets of remediation, and remedial alternative combinations is provided on **Figure 6-1** and presented again in the following table.

Summary of Remedial Component Options, Targets of Remediation, and Remedial Alternative Combinations

| Vadose Source Zone Component Options | Targets of Remediation | Remedial Alternative Combinations | | | | | |
|--|------------------------------------|-----------------------------------|-----|-----|-----|-------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| Excavation (EXC) | Source Vadose Zone | No Action | EXC | EXC | EXC | ISTVZ | ISTVZ |
| Insitu Thermal Vadose Zone (ISTVZ) | Source Saturated Zone | No Action | ERD | P&T | DGR | ISTSZ | ISTSZ |
| | Down Gradient Dissolved Phase Area | No Action | ERD | P&T | DGR | ERD | DGR |
| Saturated Source Zone Component Options | | | | | | | |
| Insitu Thermal Saturated Zone (ISTSZ) | | | | | | | |
| Enhanced Reductive Dechlorination (ERD) | | | | | | | |
| Pumping and Treatment (P&T) | | | | | | | |
| Dynamic Groundwater Recirculation (DGR) | | | | | | | |
| Downgradient Dissolved Phase Area Component Options | | | | | | | |
| Enhanced Reductive Dechlorination (ERD) | | | | | | | |
| Pumping and Treatment (P&T) | | | | | | | |
| Dynamic Groundwater Recirculation (DGR) | | | | | | | |

8.1 Overall Protection of Human Health and the Environment

The No Further Action Alternative (Alternative 1) is not protective of human health and the environment. Alternatives 2 through 6 are protective of human health and the environment through a combination mass removal or destruction of COPCs by both active remediation and natural attenuation, by further limiting potential exposure through administrative institutional controls (land/groundwater use restrictions) and by implementing a long-term monitoring program to measure the performance of the remedy components and the overall remedy.

8.2 Compliance with Applicable or Relevant and Appropriate Requirements

Alternative 1 does not comply with chemical-specific ARARs. Each of the alternatives would attain remediation goals in the long-term, although some (Alternatives 3 and 4) will take much longer (possibly 30 or more years for Alternative 3 and possibly up to 30 years for Alternative 4). Monitoring would be used to verify that natural attenuation continues to make progress toward reduction of COPCs remaining in groundwater, eventually toward achievement of RAOs.

8.3 Long-Term Effectiveness and Permanence

Although groundwater monitoring indicates that some destruction of COPCs has been occurring through natural processes under Alternative 1, No Further Action is deemed as not effective or permanent. Furthermore, potential exposure risks associated with COPCs in soil and groundwater would remain given that there would be no controls or long-term management plan. Alternatives 2 and 5 would be considered highly effective, with remedial components like excavation (vadose zone source), in-situ thermal (vadose and saturated zone sources), and ERD (saturated zone source and downgradient dissolved-phase area) being particularly effective and permanent. Alternatives 3, 4, and 6 are considered

moderately to moderately/highly effective given that they include dynamic groundwater recirculation or pumping and treatment as remedial components in the saturated zone source and downgradient dissolved-phase area, although the length of time to achieve this state with these components of the remedy is much longer and has some higher degree of uncertainty compared with ERD or in-situ thermal.

8.4 Reduction of Mobility, Toxicity, or Volume

Alternative 1 (No Further Action) would have a relatively small effect on limiting the mobility, toxicity, or volume of COPCs through natural attenuation processes that we know are ongoing currently. Alternatives 2 through 6 would all be moderately to highly effective in reducing mobility, toxicity, or volume of COPCs in soil and groundwater. The most highly effective of the alternatives in this regard are Alternatives 2, 5, and 6 through aggressive methods for the vadose zone source area (excavation or in-situ thermal), the saturated zone source area (in-situ thermal and ERD), and the downgradient dissolved-phase area (ERD and dynamic groundwater recirculation). Alternative 4 would be somewhat less effective given it counts on dynamic groundwater recirculation to address the saturated zone source area, and Alternative 3 would be even less effective because it counts on pumping and treatment throughout the saturated zone source and dissolved-phase areas.

8.5 Short-Term Effectiveness

All alternatives would have at least moderate short-term effectiveness in that excavation or installation of remedial component infrastructure could potentially increase the short-term risks due to potentially higher exposure to COPCs during the construction. The No Further Action Alternative (Alternative 1) would have the smallest potential for potential short-term exposure risks to human health or the environment because it includes no construction or operation activities that could potentially increase exposure to COPCs.

8.6 Implementability

Alternative 1 (No Further Action) has low to moderate implementability; however, this alternative is not expected to be administratively viable as there would be no controls on the migration of COPCs. The most highly effective alternatives are Alternatives 2, 3, and 4, which include components that have precedent of success of implementation at either OU-1 or OU-2, including excavation, ERD, and pumping and treatment. Dynamic groundwater recirculation is viewed as having moderately high implementability, similar to that for pumping and treatment given that dynamic groundwater recirculation is essentially a modified pumping and treatment remedial technique that adds an injection component. Because Alternatives 5 and 6 include in-situ thermal, these two alternatives would be considered slightly less implementable relative to the other alternatives that have precedent of implementation at OU-1 and OU-2. Furthermore, in-situ thermal requires the installation of a high complex and dense network of heating elements (steam and electrically conductive probes), extraction wells, and treatment that makes this alternative more difficult to successfully implement.

8.7 Cost

Based on net present value costs, Alternative 1 (No Further Action) has the lowest cost of implementation given that no construction, operation, or monitoring is required. Alternative 3 has the lowest cost given

that the pumping and treatment component of the alternative is already in place and operating (therefore, little or no capital costs for that part of the remedy), and the annual costs to operate that system are relatively low and spread out over time. Alternatives 2 and 4 have moderate costs, with Alternative 2 costs being incurred over a shorter period of time and Alternative 4 costs being spread out over a longer period of time, with the 20 years of active dynamic groundwater recirculation and 10 additional years of MNA. Alternatives 5 and 6 are by far the highest cost alternatives to implement being nearly triple the next most expensive alternative.

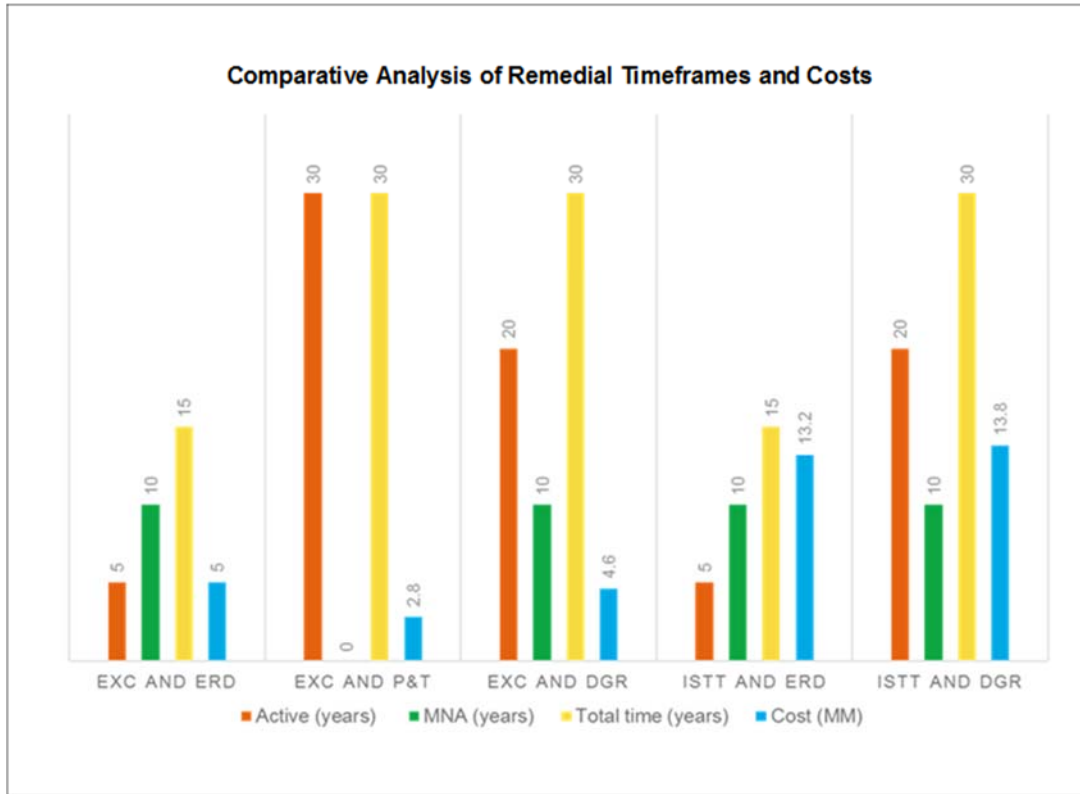
8.8 Comparative Analysis Summary

The comparative analysis scoring is presented in **Table 7-1**, with a summary of the scoring, costs, and durations presented below. A bar chart is also provided that shows a graphic of the remedial timeframes and costs for each of the six remedial alternatives.

| Alternative 1 | Alternative 2 | Alternative 3 |
|--------------------------------|--|---|
| No Action | Excavation, ERD, MNA, Institutional Controls, Long-Term Monitoring | Excavation, Pumping and Treatment, Institutional Controls, Long-Term Monitoring |
| Total Present Value Costs: \$0 | Total Net Present Value Costs: \$5,009,611 | Total Net Present Value Costs: \$2,777,047 |
| Rating = 13 | Rating = 30 | Rating = 28 |
| Duration – Not Applicable | Duration – 5 Years, Active Remediation and 10 Years, MNA | Duration – 30 Years, Active Remediation and Performance Monitoring |

| Alternative 4 | Alternative 5 | Alternative 6 |
|--|---|---|
| Excavation, Dynamic Groundwater Recirculation, MNA, Institutional Controls, Long-Term Monitoring | In-Situ Thermal Treatment, ERD, MNA, Institutional Controls, Long-Term Monitoring | In-Situ Thermal Treatment, Dynamic Groundwater Recirculation, MNA, Institutional Controls, Long-Term Monitoring |
| Total Net Present Value Costs: \$4,640,170 | Total Net Present Value Costs: \$13,197,583 | Total Net Present Value Costs: \$13,841,112 |
| Rating = 28 | Rating = 26 | Rating = 25 |
| Duration – 20 Years, Active Remediation and 10 Years, MNA | Duration – 5 Years, Active Remediation and 10 Years, MNA | Duration – 20 Years, Active Remediation and 10 Years, MNA |

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TABLES



**Table 3-1
Chemical-Specific ARARs, Criteria, Advisories, and Guidance
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina**

| Media/Authority | Requirements | Status | Requirement Synopsis | Anticipated Actions to Attain ARARs |
|---------------------------------|--|--------------------------|---|--|
| Groundwater | | | | |
| State Regulatory Requirements | South Carolina (SC) Water Quality Standards (SC Code Ann. Regs. 61-68), pursuant to the SC Pollution Control Act (SC Code of Laws Title 48, Chapter 1 et seq.) | Applicable | Establishes the state's official classified water uses for all waters of the state, establishes general rules and specific numeric and narrative criteria for protecting classified and existing water uses, and establishes procedures for classifying waters of the state. The water quality standards include uses of the waters, numeric and narrative criteria, and antidegradation rules. | Groundwater beneath the site (which is currently not used as drinking water source) is currently classified as GB (potential underground source of drinking water). |
| | South Carolina Safe Drinking Water Regulations (SC Code Ann. Regs. 61-58), pursuant to the SC Safe Drinking Water Act (SC Code of Laws Title 44, Chapter 58) | Relevant and Appropriate | State water quality standards with respect to drinking water. Provides maximum contaminant levels for constituents in public drinking water supplies. The SC Safe Drinking Water Act applies to all public water systems in the state. | Groundwater beneath the site (which is currently not used as drinking water) is currently classified as a potential underground source of drinking water even though public water is available and used as the local potable water source. |
| Federal Regulatory Requirements | Title XIV of Public Health Service Act - Safety of Public Water System (Safe Drinking Water Act) | Relevant and Appropriate | The Safe Drinking Water Act authorizes the USEPA to set MCLs and MCLGs and a process for developing them. The Safe Drinking Water Act applies to all public water systems in the US. | These requirements are relevant and appropriate if exposure studies performed for the site indicate a risk level higher than acceptable levels using MCLs or MCLGs. Groundwater is not currently used as a drinking water source because a public water supply is available. |

**Table 3-1
Chemical-Specific ARARs, Criteria, Advisories, and Guidance
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina**

| Media/Authority | Requirements | Status | Requirement Synopsis | Anticipated Actions to Attain ARARs |
|--|---|------------------|---|---|
| Federal Criteria, Advisories, and Guidance | USEPA Groundwater Protection Strategy | To be considered | The Groundwater Protection Strategy provides a common reference for preserving clean groundwater and protecting the public health against the effects of past contamination. Guidelines for consistency in groundwater protection programs focus on the highest beneficial use of a groundwater aquifer and defines three classes of groundwater. | Groundwater beneath the site (which is currently not used as drinking water) is classified as Class II (potential source of drinking water), which is protected at levels consistent with that for current sources of drinking water. |
| | USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites | To be Considered | Provide non-enforceable, generic, risk-based contaminant concentrations to be used for site "screening." | Provides screening levels for constituents in tap water. Even though groundwater is not used as a drinking water source in the area, groundwater is nonetheless considered as a potential source of drinking water; therefore, these screening levels will be considered. |
| | Use of Monitored Natural Attenuation at Superfund RCRA Corrective Action and UST Sites (OSWER Directive 9200.4-17P) (1999). | To be Considered | Provides guidance for proposing, evaluating, and approving MNA remedies | Decisions on use and efficacy of MNA will be consistent with guidance. |
| | USEPA Carcinogen Assessment Group Potency Factors | To be Considered | Carcinogenic effects present the most up-to-date information on cancer risk potency derived from the USEPA's cancer assessment group. | Carcinogen potency factors are used to compute the individual incremental cancer risk resulting from exposure to certain compounds. |
| | USEPA Human Health Assessment Cancer Slope Factors (CSFs) | To be Considered | CSFs are developed by USEPA for health effects assessments or evaluation by the Human Health Assessment Group. | The values present the most up-to-date cancer risk potency information. CSFs will be used to compute the individual cancer risk resulting from exposure to constituents of potential concern. |
| | USEPA Risk Reference Dose (RfDs) | To be Considered | RfDs are considered to be levels unlikely to cause significant adverse health effects associated with a threshold mechanism of action in human exposure for a lifetime. | USEPA RfDs are used to characterize risks due to noncarcinogens in various media. They are considered when developing target cleanup levels. |

Table 3-1
Chemical-Specific ARARs, Criteria, Advisories, and Guidance
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

| Media/Authority | Requirements | Status | Requirement Synopsis | Anticipated Actions to Attain ARARs |
|--|---|------------------|--|---|
| Soil | | | | |
| Federal Criteria, Advisories, and Guidance | USEPA RSLs for Chemical Contaminants at Superfund Sites | To be considered | Provide non-enforceable, generic, risk-based contaminant concentrations to be used for site "screening." | Provide screening levels for constituents in soil based on potential exposure to the site worker. |

Notes:

ARAR = applicable or relevant and appropriate requirement
 MCL = Maximum Contaminant Level
 MNA = monitored natural attenuation
 OSWER = Office of Solid Waste and Emergency Response
 RCRA = Resource Conservation and Recovery Act
 USEPA = United States Environmental Protection Agency
 UST = underground storage tank

Table 3-2
Location-Specific ARARs, Criteria, Advisories, and Guidance
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

| Site Feature/ Authority | Requirements | Status/System | Requirement Synopsis | Consideration in the RI/FS |
|----------------------------------|---|---------------|---|---|
| Coastal Zones | | | | |
| State Regulatory Requirements | South Carolina Coastal Zone Management Act (SC Code of Laws Title 48, Chapter 39). | Applicable | Provides for the protection and enhancement of the state's coastal resources. | All land and waters in Horry County are part of the "coastal zone" as defined in the law, and as such, are subject to its provision. Remedial measures will be designed to mitigate adverse impacts on the protected areas. |
| | SC Water Quality Standards (SC Code Ann. Regs. 61-68), pursuant to the SC Pollution Control Act (SC Code of Laws Title 48, Chapter 1 et seq.) | Applicable | Establishes the state's official classified water uses for all waters of the state, establishes general rules and specific numeric and narrative criteria for protecting classified and existing water uses, and establishes procedures for classifying waters of the state. The water quality standards include uses of the waters, numeric and narrative criteria, and antidegradation rules. | Withers Swash is classified as SFH - tidal saltwaters protected for shellfish harvesting. Suitable for primary and secondary contact recreation, crabbing, and fishing. Also suitable for the survival and propagation of a balanced indigenous aquatic community of marine fauna and flora. Surface water cannot be impacted to concentrations above levels that would be harmful to humans, fish, or wildlife of the most sensitive populations. Contaminant source areas are not likely to cause these exceedances in surface water quality. |
| Wetlands and Floodplains | | | | |
| Local Regulatory Requirements | Horry County Code of Ordinances Chapter 9 Flood Damage Prevention and Control | Applicable | Regulations related to actions conducted at sites with the 100-year floodplain. | The site is located within a 100-year floodplain. Remedial measures will be designed to comply with local regulations. |
| State Regulatory Requirements | SC Department of Health and Environmental Control Coastal Division Regulations (SC Code Ann. Reg 30-1 et seq.) | Applicable | Regulations to ensure the preservation and wise utilization of coastal resources. Regulates activities that may adversely affect wetlands. | Remedial measures will be designed to mitigate adverse impacts on protected functions and achieve no net loss. |

Table 3-2
Location-Specific ARARs, Criteria, Advisories, and Guidance
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

| Site Feature/ Authority | Requirements | Status/System | Requirement Synopsis | Consideration in the RI/FS |
|---------------------------------------|--|---------------|--|---|
| Federal Regulatory Requirements | Clean Water Act, Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR Part 230.231) | Applicable | Under this requirement, no activity that adversely affects a wetland shall be permitted if a practicable alternative with lesser effects is available. Controls discharges of dredged or fill material to protect aquatic ecosystems. | Remedial measures will be designed to mitigate adverse impacts on protected functions and achieve no net loss. |
| | Executive Order 11990; Statement of Procedures on Wetlands Protection (40 CFR Part 6, Appendix A) | Applicable | Action to avoid, whenever possible, the long- and short-term impacts on wetlands and to preserve and enhance wetlands. Plans for action in wetlands must be submitted for public review. | All practicable means will be used to minimize harm to the wetlands. Wetlands disturbed by remedial activities will be mitigated in accordance with requirements. |
| | Coastal Zone Management Act (CZMA) 16 U.S.C. 1451 et seq. | Applicable | To protect the Nations' coastal zone and is implemented through state-federal partnerships. Section 307(c) of CZMA prohibits the issuance of NPDES permits for activities affecting land or water use in coastal zones unless the permit applicant certifies that the proposed activity complies with the state coastal zone management program. | Remedial measures will be designed to mitigate adverse impacts on protected functions and achieve no net loss. |
| | Executive Order 11988, Statement of Procedures on Floodplain Management (40 CFR Part 6, Appendix A) | Applicable | Action to avoid, whenever possible, the long- and short-term impacts associated with the occupancy and modifications of floodplains development wherever there is a practical alternative. Promotes the preservation and restoration of floodplains so that their natural and beneficial value can be realized. | Floodplains disturbed during remediation activities will be restored to their original or an improved condition and function. |

Table 3-2
Location-Specific ARARs, Criteria, Advisories, and Guidance
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

| Site Feature/ Authority | Requirements | Status/System | Requirement Synopsis | Consideration in the RI/FS |
|---------------------------------|--|---------------|---|--|
| Endangered Species | | | | |
| State Regulatory Requirements | Nongame and Endangered Species Conservation Act (SC Code of Laws Title 50, Chapter 15) | Applicable | Requires actions to ensure the continued existence of endangered or threatened species. | No endangered species have been identified at the site, though several are listed for Horry County. Consultation with South Carolina Department of Natural Resources is recommended to ensure that remedial actions do not jeopardize the continued existence of endangered or threatened species. |
| Federal Regulatory Requirements | Endangered Species Act (50 CFR 402, 16 USC 1531 et seq., 50 CFR 200) | Applicable | Requires actions to ensure the continued existence of any endangered or threatened species. Also requires that their habitats will not be jeopardized by a site action. | No endangered species have been identified at the site, though several are listed for Horry County. Consultation with federal agencies is recommended to ensure that remedial actions do not jeopardize the continued existence of endangered or threatened species or adversely modify or destroy critical habitat. |

Notes:

ARAR = applicable or relevant and appropriate requirement
 CFR = Code of Federal Regulations
 NPDES = National Pollutant Discharge Elimination System
 RI/FS = remedial investigation/feasibility study
 SC = South Carolina
 USC = United States Code

Table 3-3
Action-Specific ARARs, Criteria, Advisories, and Guidance
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

| Media/Authority | Regulation | Status | Requirement | Action to be Taken to Attain ARARs |
|--|---|------------------|---|--|
| Air | | | | |
| State Regulatory Requirements | South Carolina Air Pollution Control Regulations and Standards (SC Code Ann Reg 61-62) | To be Considered | Prohibits emissions of any contaminant that may become injurious to human, plant, or animal life. | Air emissions from remedial actions will meet the regulatory limits. |
| Federal Regulatory Requirements | National Emissions Standards for Hazardous Air Pollutants (40 CFR Part 61) | To be Considered | Establishes air emissions limits for hazardous air pollutants. | Air emissions will meet all applicable standards. |
| Federal Criteria, Advisories, and Guidance | USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites | To be Considered | Provide non-enforceable, generic, risk-based contaminant concentrations to be used for site "screening." | Provides screening levels for constituents in industrial and residential air. Screening levels will be considered for remedial actions involving treatment with air stripping. |
| Groundwater | | | | |
| State Regulatory Requirements | SC Water Quality Standards (SC Code Ann Reg 61-68), pursuant to the SC Pollution Control Act (SC Code of Laws Title 48, Chapter 1 et seq.) | Applicable | Establishes the state's official classified water uses for surface waters of the state, establishes general rules and specific numeric and narrative criteria for protecting classified and existing water uses, and establishes procedures for classifying waters of the state. The water quality standards include uses of the waters, numeric and narrative criteria, and antidegradation rules. | All alternatives will comply with regulations that apply to groundwater. |
| | Groundwater Use and Reporting Regulation (SC Code Ann Reg 61-113, et seq.), promulgated pursuant to the Groundwater Use and Reporting Act (SC Code Ann. Sections 49-5-10 et seq.) | To be Considered | Regulations to maintain, conserve, and protect the groundwater resources of the state. | Applicable if combined pumping volume of groundwater extraction wells is greater than 3 million gallons per month. |
| Federal Regulatory Requirements | RCRA Groundwater Protection (40 CFR 264) | Applicable | Regulations include groundwater protection standard requirements for groundwater monitoring, detection monitoring, and compliance monitoring and the corrective action program. | All alternatives will comply with the portions of the regulations that apply to installing groundwater monitoring wells and compliance monitoring. |

Table 3-3
Action-Specific ARARs, Criteria, Advisories, and Guidance
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

| Media/Authority | Regulation | Status | Requirement | Action to be Taken to Attain ARARs |
|---------------------------------|---|------------------|---|---|
| Waste | | | | |
| Federal Regulatory Requirements | RCRA-Hazardous Waste Identification (40 CFR, Part 261) | Applicable | Defines wastes that are subject to regulation as hazardous waste under 40 CFR Parts 262-264. | If remedial alternatives require excavation of waste, management approaches for listed and characteristic waste, if encountered, will be met. |
| Surface Water | | | | |
| State Regulatory Requirements | South Carolina NPDES Permit Regulations (SC Code Ann Reg 61-9), pursuant to SC Pollution Control Act (SC Code of Law, Title 48, Chapter 1) R.61-119 Surface Water Withdrawal, Permitting, and Reporting Sec.49-4-10 et seq. | Applicable | State-mandated water quality standards with respect to state-wide surface waters and pollutant effluent discharge standards. | Water discharged to surface water during remedial activities will meet the substantive requirements of these rules. |
| | | Applicable | Establishes a system and rules for permitting and registering the withdrawal and use of surface water. | Applies to any person withdrawing surface waters at volumes in excess of 3 million gallons during any one month. |
| State Regulatory Requirements | SC Water Quality Standards (SC Code Ann Reg 61-68), pursuant to the SC Pollution Control Act (SC Code of Laws Title 48, Chapter 1 et seq.) | To be Considered | Establishes the state's official classified water uses for groundwaters of the state, establishes general rules and specific numeric and narrative criteria for protecting classified and existing water uses, and establishes procedures for classifying waters of the state. The water quality standards include uses of the waters, numeric and narrative criteria, and antidegradation rules. | Treated water discharged to surface water during remedial activities will meet the substantive requirements of these regulations. |

Table 3-3
Action-Specific ARARs, Criteria, Advisories, and Guidance
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

| Media/Authority | Regulation | Status | Requirement | Action to be Taken to Attain ARARs |
|---------------------------------|---|------------------|--|---|
| Federal Regulatory Requirements | Federal NPDES Regulations (40 CFR Part 122) | To be Considered | Federal water quality standards/pollutant effluent discharge standards. | Treated water discharged to surface water during remedial activities will meet the substantive requirements of these regulations. |
| | CWA Ambient Water Quality Criteria (AWQC), 40 CFR Part 122, 125, 129, 133 and 136 | To be Considered | Non-enforceable guidance used by states in conjunction with a designated use for a stream effluent to establish water quality standards. AWQC levels for protection of human health from consuming fish and aquatic organisms have been developed for several contaminants. The standards are relevant and appropriate if state standards are no more stringent. | Applicable to any point-source discharges of wastewaters to waters of the United States. At this site, it is applicable to discharge of treated waters from the groundwater treatment system to any surface water body. Treated water will be the requirements of the regulation. |
| General | | | | |
| State Regulatory Requirements | SC Underground Injection Control Regulations (SC Code Ann Reg 61-87) | To be Considered | These regulations set forth the specific requirements for controlling underground injection in the state and include provisions for: the classification and regulation of injection wells; prohibiting unauthorized injection; protecting underground sources of drinking water from injection; classifying underground sources of drinking water; and requirements for abandonment, monitoring, and reporting for existing injection wells used to inject wastes or contaminants. | All underground injection actions will comply with the regulations. |
| State Regulatory Requirements | SC Well Standards (SC Code Ann Reg 61-71) | To be Considered | These regulations establish minimum standards for the construction, maintenance, and operation of the following wells: individual residential, irrigation, monitoring, and boreholes to ensure that underground sources of drinking water are not contaminated and public health is protected. | All wells will be constructed adhering to the standards listed in this regulation. |
| Federal Regulatory Requirements | Federal UIC Regulations (40 CFR Parts 144 -148) | To be Considered | These regulations set forth the federal requirements for controlling underground injections. | All underground injection actions will comply with the regulations. |

Notes:

- ARAR = applicable and relevant or appropriate requirement
- CFR = Code of Federal Regulations
- CWA = Clean Water Act
- NPDES = National Pollutant Discharge Elimination System
- RCRA = Resource Conservation and Recovery Act
- SC = South Carolina
- USEPA = United States Environmental Protection Agency
- WQC = Water Quality Criteria

Table 3-4
Remediation Goals Summary
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

Groundwater - USEPA MCLs or SCDHEC Drinking Water Standards, unless otherwise noted

| Groundwater COPC | Risk-Based Remedial Goal ^a (µg/L) | MCL (µg/L) | Detected Above MCL in HHRA Groundwater Dataset? (Yes/No) |
|---------------------------------------|--|------------|--|
| Benzene ^a | NA | 5.0 | No |
| 1,1-Dichloroethane ^a | NA | 5.0 | Yes |
| 1,1-Dichloroethene ^a | NA | 7.0 | Yes |
| cis-1,2-Dichloroethene ^a | NA | 70 | Yes |
| trans-1,2-Dichloroethene ^a | NA | 100 | Yes |
| Ethylbenzene ^a | NA | 700 | No |
| Trichloroethene ^b | NA | 5.0 | Yes |
| Vinyl chloride ^c | NA | 2.0 | Yes |

Soil and Groundwater - Health-Based Goals for Non-Residential Use

| Constituent | Soil HBG (mg/kg) | | | | Minimum Groundwater HBG (mg/L) | | Vapor Intrusion from Groundwater HBG (mg/L) | | |
|-----------------------------------|------------------|-------------|---------------------|---------|--------------------------------|---------|---|-------------|---------|
| | Resident | Site Worker | Construction Worker | FINAL* | Construction Worker | FINAL | Resident | Site Worker | FINAL* |
| Volatile Organic Compounds | | | | | | | | | |
| Trichloroethene | 1.1E+00 | 6.9E+00 | 1.3E+01 | 1.3E+01 | 1.9E+01 | 1.9E+01 | 2.9E-01 | 2.0E+00 | 2.0E+00 |
| Vinyl Chloride | - | - | - | -- | - | -- | 2.6E-02 | - | - |

Notes:

- ^a For these COPCs, the constituent has an MCL but the calculated site-specific risk was less than or equal to 1×10^{-6} ELCR and less than or equal to an HI of 1.
- ^b For trichloroethene, the most conservative site-related risk-based remedial goal for soil is based on a Site Worker exposure. Trichloroethene is present in groundwater and has a published groundwater MCL.
- ^c There is no calculated soil remediation goal for vinyl chloride because it does not contribute to more than 1% of the total risk to soil exposure and therefore was dropped from further consideration in soil. Vinyl chloride is present in groundwater and has a published groundwater MCL.
- ^d The site-specific risk-based remedial goals were established in the HHRA (Appendix B). Only trichloroethene and vinyl chloride contribute to more than 1% of the total risk. Each has one or more exposure scenarios with calculated ELCR of $> 1 \times 10^{-6}$ or $> HI$ of > 1 .
- * The "FINAL" soil and groundwater risk-risk based concentrations are based on non-residential future use. If residential use is ever considered in the future, the more stringent health based goal for a resident exposure will apply.

COPC = constituent of potential concern

ELCR = Excess Lifetime Cancer Risk

HBG = Health-Based Goal

HHRA = Human Health Risk Assessment

HI = hazard index

MCL = Maximum Contaminant Levels

mg/L = milligram per liter

mg/kg = milligram per kilogram

RSL = Risk Screening Level

SCDHEC = South Carolina Department of Health and Environmental Control

µg/L = microgram per liter

USEPA = United States Environmental Protection Agency

Table 4-1
Initial Screening of Potentially Applicable Technologies and Process Options for the Source Area Vadose Zone
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

| General Response Action | Technology Type | Process Option | Description | Retained? (Yes/No) | Initial Screening |
|-------------------------|---------------------|---------------------------------|---|--------------------|--|
| No Further Action | None | None | Not Applicable | Yes | Used as a baseline for comparison to other process options. |
| Institutional Controls | Access Restrictions | Deed Notification/ Restrictions | Using legal actions to prevent excavation, control land use, and prohibit or restrict trenching in soil that contain constituents of potential concern (COPCs). | Yes | Potentially implementable. Access restrictions are usually used in conjunction with other technology types for remedial actions. |
| | | Fencing | Fencing will minimize access to soils containing COPCs. | Yes | Potentially implementable. Access restrictions are usually used in conjunction with other technology types for remedial actions. |
| Containment | Capping | Impermeable Cap | An impermeable cap will prevent physical contact with the soils and prevent surface water infiltration and leaching. | Yes | Potentially implementable. |
| Removal | Excavation | Excavation | Physical removal of soil containing COPCs with treatment or off-site disposal | Yes | Potentially implementable. |
| In-Situ Treatment | Physical Treatment | Soil Vapor Extraction | Extract COPCs from subsurface in vapor form. | No | Pilot testing conducted in 1997 (Geraghty & Miller, Inc. 1997) indicated that groundwater recovery rate was high and radius of influence was low. |
| | | In-Situ Soil Flushing | Involves injecting a solvent mixture (e.g., water plus a miscible organic solvent, such as alcohol) into either vadose zone, saturated zone, or both to extract organic constituents. Flushing can be applied to soils to dissolve either the source of the organic constituents or the plume emanating from it. The cosolvent mixture is normally injected upgradient of the source area, and the solvent with dissolved COPCs is extracted downgradient and treated above ground. | No | Site conditions (shallow groundwater, stratified lithology) may be difficult to treat. Aboveground separation and treatment costs for recovered fluids can be costly and complicated. |
| | | In-Situ Thermal Treatment | Steam/hot air injection or electrical resistance/electromagnetic/fiber optic/radio frequency heating is used to increase the volatilization rate of semivolatiles and facilitate extraction. | Yes | Potentially implementable; pilot testing conducted in 1997 (Geraghty & Miller, Inc. 1997) indicated shallow groundwater, limited vacuum influence, and that the lithology is stratified. |
| | | In-Situ Stabilization | Soils containing COPCs are mixed with a reactive media (i.e., zero valent iron) and stabilizing agents (i.e., Portland cement) to decrease concentrations of COPCs and reduce the hydraulic conductivity of the treatment zone. | No | Likely not viable based on field conditions and presence of permeable layer. Geotechnical stability following in-situ soil stabilization can be a concern depending on future land use. |
| | Chemical Treatment | Chemical Oxidation | Use of chemical oxidant (ozone, hydrogen peroxide, persulfate, and permanganate) to oxidize organic COPCs in situ. | No | For some oxidants, gas generation is possible, and management of that gas would be difficult due to the shallow depth to water. Oxidant-specific secondary water quality may be a concern. |

Table 4-1
Initial Screening of Potentially Applicable Technologies and Process Options for the Source Area Vadose Zone
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

| General Response Action | Technology Type | Process Option | Description | Retained? (Yes/No) | Initial Screening |
|-------------------------|--------------------------------------|--------------------|--|--------------------|----------------------------|
| Ex-Situ Treatment | Physical Treatment of Excavated Soil | Chemical Oxidation | Use of chemical oxidant (ozone, hydrogen peroxide, persulfate, and permanganate) to oxidize organic COPCs ex-situ. | Yes | Potentially implementable. |
| | | Soil Flushing | Use of a solvent mixture to extract the organic COPCs from excavated soil. | Yes | Potentially implementable. |

Note:

Shading indicates that the process option was eliminated during the initial screening stage.

Reference:

Geraghty & Miller, Inc. 1997. *Remedial Investigation and Pilot Testing Report*. AVX Corporation Facility, Myrtle Beach, South Carolina. September.

Table 4-2
 Initial Screening of Potentially Applicable Technologies and Process Options for the Source Area Saturated Zone
 Feasibility Study
 AVX Corporation
 Myrtle Beach, South Carolina

| General Response Action | Technology Type | Process Option | Description | Retained? (Yes/No) | Initial Screening | |
|-------------------------|--|-----------------------------------|---|---|---|---|
| No Further Action | None | None | Not Applicable | Yes | Used as a baseline for comparison to other process options. | |
| Institutional Controls | Access Restrictions | Deed Notification/ Restrictions | Uses legal actions to prevent excavation, control land use, and prohibit or restrict use of groundwater. | Yes | Potentially implementable. Access restrictions are usually used in conjunction with other technology types for remedial actions. | |
| Containment | Hydraulic Control | Groundwater Extraction | Use extraction wells to pump large volumes of water. Typically requires ex-situ treatment to meet discharge criteria. | Yes | Implementable. Although an effective hydraulic control system could be installed in the source area saturated zone, such a system would not necessarily effectively contain the downgradient dissolved phase area (DPA) on its own. Conversely, a downgradient DPA containment system is currently containing and would, in the future, contain both the downgradient DPA and the source area saturated zone. Therefore, some set of extraction wells, either as currently configured or with a modified configuration, could address the source area saturated zone. | |
| | | Vertical Subsurface Barrier | Slurry Wall | Using a bentonite slurry to form an impermeable wall that prevents the migration of constituents of potential concern (COPCs) in groundwater. | No | Site groundwater contains trichloroethene, making other (removal) technologies feasible. In addition, an impermeable barrier wall may create unpredictable effects on vertical groundwater flow and create undesirable vertical flow paths. |
| | | | Sheet Piling | Using steel sheet piles to form an impermeable wall that prevents the migration of COPCs in groundwater. | | |
| Grout Curtain | Injecting cement grout to create an impermeable wall that prevents the migration COPCs in groundwater. | | | | | |
| In-Situ Treatment | Attenuation | Monitored Natural Attenuation | Natural subsurface processes are allowed to reduce concentrations of COPCs to acceptable levels. | Yes | Potentially implementable. Monitored natural attenuation is usually used in conjunction with other technology types for remedial actions. | |
| | Chemical/ Biological Treatment | Enhanced Anaerobic Bioremediation | The injection of a substrate to stimulate native microorganisms and degrade COPCs. | Yes | Potentially implementable. In-situ bioremediation has been applied successfully at a variety of sites with similar characteristics. In addition, an in-situ bioremediation pilot test was completed with encouraging results. | |

Table 4-2
 Initial Screening of Potentially Applicable Technologies and Process Options for the Source Area Saturated Zone
 Feasibility Study
 AVX Corporation
 Myrtle Beach, South Carolina

| General Response Action | Technology Type | Process Option | Description | Retained? (Yes/No) | Initial Screening |
|-------------------------|-----------------------------|------------------------------------|--|--------------------|---|
| In-Situ Treatment | Chemical Treatment | Chemical Oxidation | Use of chemical oxidant (ozone, hydrogen peroxide, persulfate, and permanganate) to oxidize contaminants in-situ. | No | Most effective in focused high concentration areas due to the short reaction kinetics. The existing reducing conditions will limit the effectiveness of this technology. Oxidant-specific secondary water quality may be a concern. In addition, hydrostratigraphic complexities make it exceedingly difficult to deliver chemical oxidants to all areas that should be targeted. |
| | | Co-solvent Flooding | The addition of a surfactant, a cosolvent, or a surfactant-cosolvent mixture (typically alcohols, often methanol, ethanol, isopropanol, or tert-butanol) to mobilize and solubilize NAPL phases and effectively remove the NAPL via groundwater extraction. | No | Cosolvent flooding is most applicable in highly permeable and relatively homogenous sand or gravel aquifers. |
| In-Situ Treatment | Physical/Chemical Treatment | Permeable Reactive Barrier (PRB) | Consists of a wall built below ground to intercept and treat groundwater containing COPCs. A PRB is built by excavating a narrow trench perpendicular to the path of the COPC plume in groundwater. The PRB is filled with a reactive material, such as zero valent iron, that can destroy or mitigate the transport of COPCs while allowing the passage of water. | No | Likely not implementable. The depth (40 to 45 feet below ground surface) and location where the PRB would need to be installed would be beyond what could be practicably and safely installed. |
| | Physical Treatment | Air Sparging/Soil Vapor Extraction | Injection of air below the groundwater table to physically strip volatile COPCs from groundwater. A low to moderate vacuum is applied to vadose zone extraction wells to capture volatilized COPCs for treatment. Depth of source COPCs and specific site geology must be considered. The resulting increase in oxygen concentration promotes aerobic biodegradation of aromatic hydrocarbons. | No | Pilot testing conducted in 1997 (Geraghty & Miller, Inc. 1997) indicated shallow groundwater, limited vacuum influence, and that the lithology is stratified. The parent VOC COPCs have limited aerobic biodegradation, and naturally occurring reductive dechlorination would be disrupted by the increase in oxygen concentrations. |
| | | Multi-phase Extraction | Uses vacuum pressure to physically remove separate phase COPCs and physically strip the volatile COPCs from the subsurface. | No | Pilot testing conducted in 1997 (Geraghty & Miller, Inc. 1997) indicated that groundwater recovery rate was high and radius of influence was low. |
| | | In-Situ Thermal Treatment | Steam/hot air injection or electrical resistance/electromagnetic/fiber optic/radio frequency heating is used to increase the volatilization rate of semivolatiles and facilitate extraction. | Yes | Potentially implementable; pilot testing conducted in 1997 (Geraghty & Miller, Inc. 1997) indicated shallow groundwater, limited vacuum influence, and that the lithology is stratified. |
| | | In Situ Stabilization | Soils containing COPCs are mixed with a reactive media (i.e., zero valent iron) and stabilizing agents (i.e., Portland cement) to decrease concentrations of COPCs and reduce the hydraulic conductivity of the treatment zone. | No | Likely not viable based on field conditions and presence of permeable layer. Geotechnical stability following in-situ soil stabilization can be a concern depending on future land use. |
| | | Dynamic Groundwater Recirculation | Uses extraction and injection wells including aboveground treatment of extracted groundwater. Reinjection of treated groundwater can enhance the existing natural attenuation processes and significantly reduce the treatment timeframe. | Yes | Potentially implementable. Groundwater extraction wells are in use on site, and testing completed as part of the FSIR indicate that injections are feasible in Upper and Lower Terrace Deposits in Operable Unit 1. |

Table 4-2
 Initial Screening of Potentially Applicable Technologies and Process Options for the Source Area Saturated Zone
 Feasibility Study
 AVX Corporation
 Myrtle Beach, South Carolina

| General Response Action | Technology Type | Process Option | Description | Retained? (Yes/No) | Initial Screening |
|-------------------------|---|--------------------------------------|---|--------------------|--|
| Ex-Situ Treatment | Physical Treatment of extracted groundwater | Air Stripping | COPCs in extracted groundwater are removed with an air stripping treatment unit. | Yes | Implementable. Groundwater extraction wells are currently being used onsite. If Dynamic Groundwater Recirculation (In-Situ Treatment) or Groundwater Extraction (Containment) are part of the final remedy, ex-situ treatment of groundwater will still be necessary, and air stripping is already successfully being used with the existing hydraulic control system. |
| | | Granular-Activated Carbon Adsorption | COPCs in extracted groundwater are treated by pumping through a series of vessels containing activated carbon, to which the dissolved COPCs adsorb. Periodic replacement or regeneration of the carbon is required. | Yes | Implementable. Groundwater extraction wells are currently being used on site. If Dynamic Groundwater Recirculation (In-Situ Treatment) or Groundwater Extraction (Containment) are part of the final remedy, ex-situ treatment of groundwater will still be necessary. Use of granular activated carbon is one proven method for groundwater treatment, although air stripping has been historically deemed as the more applicable technology. |

Notes:

Shading indicates that the process option was eliminated during the initial screening stage.

DPA = dissolved-phase area

FSIR = Feasibility Study Investigation Report

NAPL = non-aqueous phase liquid

VOC = volatile organic compound

Reference:

Geraghty & Miller, Inc. 1997. *Remedial Investigation and Pilot Testing Report*. AVX Corporation Facility, Myrtle Beach, South Carolina. September.

Table 4-3
Initial Screening of Potentially Applicable Technologies and Process Options for Dissolved-Phase Area (Downgradient)
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

| General Response Action | Technology Type | Process Option | Description | Retained? (Yes/No) | Initial Screening | |
|-------------------------|--------------------------------|-----------------------------------|---|---|--|---|
| No Further Action | None | None | Not Applicable | Yes | Used as a baseline for comparison to other process options. | |
| Institutional Controls | Access Restrictions | Deed Notification/ Restrictions | Uses legal actions to prevent groundwater use, control land use, and prohibit potable use of groundwater. | Yes | Implementable. Access restrictions are usually used in conjunction with other technology types for remedial actions. | |
| Containment | Hydraulic Control | Groundwater Extraction | Use extraction wells to pump large volumes of water. Typically requires ex-situ treatment to meet discharge criteria. | Yes | Implementable and currently being used onsite. Due to the extent of constituents of potential concern (COPCs) in groundwater, groundwater extraction will potentially be used in conjunction with other technology types for remedial actions. | |
| | | Vertical Subsurface Barrier | Slurry Wall | Using a bentonite slurry to form an impermeable wall that prevents the migration of COPCs in groundwater. | No | Site groundwater contains trichloroethene, making other (removal) technologies feasible. In addition, an impermeable barrier wall may create unpredictable effects on vertical groundwater flow and create undesirable vertical flow paths. |
| | Sheet Piling | | Using steel sheet piles to form an impermeable wall that prevents the migration of COPCs in groundwater. | | | |
| | Grout Curtain | | Injecting cement grout to create an impermeable wall that prevents the migration COPCs in groundwater. | | | |
| In-Situ Treatment | Attenuation | Monitored Natural Attenuation | Natural subsurface processes are allowed to reduce concentrations of COPCs to acceptable levels. | Yes | Implementable. Monitored natural attenuation is usually used in conjunction with other technology types for remedial actions. | |
| | Chemical/ Biological Treatment | Enhanced Anaerobic Bioremediation | The injection of a substrate to stimulate native microorganisms and degrade COPCs. | Yes | Implementable. In-situ bioremediation has been applied successfully at a variety of sites with similar characteristics including in adjacent Operable Unit 2. In addition, an injection pilot test was completed with encouraging results. | |
| | | Chemical Treatment | Chemical Oxidation | Use of chemical oxidant (ozone, hydrogen peroxide, persulfate, and permanganate) to oxidize contaminants in-situ. | No | Most effective in focused high concentration areas due to the short reaction kinetics. The extent of COPCs and the existing reducing conditions will limit the effectiveness of this technology. For some oxidants, gas generation is possible, and management of that gas could be difficult due to the shallow depth to water. Oxidant-specific secondary water quality may be a concern. |
| | | | Cosolvent Flooding | The addition of a surfactant, a cosolvent, or a surfactant-cosolvent mixture (typically alcohols, often methanol, ethanol, isopropanol, or tert-butanol) to mobilize and solubilize NAPL phases and effectively remove the NAPL via groundwater extraction. | No | Cosolvent flooding is most applicable in highly permeable and relatively homogenous sand or gravel aquifers. |

Table 4-3
Initial Screening of Potentially Applicable Technologies and Process Options for Dissolved-Phase Area (Downgradient)
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

| General Response Action | Technology Type | Process Option | Description | Retained? (Yes/No) | Initial Screening |
|-------------------------|---|--------------------------------------|--|--------------------|---|
| In-Situ Treatment | Physical/Chemical Treatment | Permeable Reactive Barrier (PRB) | Consists of a wall built below ground to intercept and treat groundwater containing COPCs. A PRB is built by excavating a narrow trench perpendicular to the path of the COPC plume in groundwater. The PRB is filled with a reactive material, such as zero valent iron, that can destroy or mitigate the transport of COPCs while allowing the passage of water. | No | Likely not implementable. The depth (40 to 45 feet below ground surface) and location where the PRB would need to be installed would be beyond what could be practicably and safely installed. |
| | Physical Treatment | Air Sparging/Soil Vapor Extraction | Injection of air below the groundwater table to physically strip volatile COPCs from groundwater. A low to moderate vacuum is applied to vadose zone extraction wells to capture volatilized COPCs for treatment. Depth of source COPCs and specific site geology must be considered. The resulting increase in oxygen concentration promotes aerobic biodegradation of aromatic hydrocarbons. | No | Pilot testing conducted in 1997 (Geraghty & Miller, Inc. 1997) indicated shallow groundwater, limited vacuum influence, and that the lithology is stratified. The parent VOC COPCs have limited aerobic biodegradation, and naturally occurring reductive dechlorination would be disrupted by the increase in oxygen concentrations. |
| | | Multi-Phase Extraction | Uses vacuum pressure to physically remove separate phase COPCs and physically strip the volatile COPCs from the subsurface. | No | Pilot testing conducted in 1997 (Geraghty & Miller, Inc. 1997) indicated that groundwater recovery rate was high, and radius of influence was low. |
| | | Dynamic Groundwater Recirculation | Uses extraction and injection wells, including aboveground treatment of extracted groundwater. Reinjection of treated groundwater can enhance the existing natural attenuation processes and significantly reduce the treatment timeframe. | Yes | Potentially implementable. Groundwater extraction wells are in use on site, and testing completed as part of the FSIR indicates that injections are feasible in Upper and Lower Terrace Deposits in Operable Unit 1. |
| Ex-Situ Treatment | Physical Treatment of extracted groundwater | Air Stripping | COPCs in extracted groundwater are removed with an air stripping treatment unit. | Yes | Potentially implementable. |
| | | Granular-Activated Carbon Adsorption | COPCs in extracted groundwater are treated by pumping it through a series of vessels containing activated carbon, to which the dissolved COPCs adsorb. Periodic replacement or regeneration of the carbon is required. | Yes | Potentially implementable. |

Notes:

Shading indicates that the process option was eliminated during the initial screening stage.

NAPL = non-aqueous phase liquid

VOC = volatile organic compound

Reference:

Geraghty & Miller, Inc. 1997. *Remedial Investigation and Pilot Testing Report*. AVX Corporation Facility, Myrtle Beach, South Carolina. September.

Table 5-1
Secondary Screening of Potentially Applicable Technologies and Process Options for the Source Area Vadose Zone
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

| General Response Action | Remedial Technology | Remedial Technology Process Option | Effectiveness | Implementability | Cost | Comments |
|-------------------------|---------------------|--|---|---|---|---|
| No Further Action | None | None | NA | High | NA | Retain. Required by NCP and USEPA guidance as a baseline for comparison to other process options. |
| Institutional Controls | Access Restrictions | Deed Notification/ Restrictions | Low to moderate. Effective for protection of potential onsite receptors by reducing potential for exposure, but does not reduce COPC concentrations or prevent leaching. | High | Low | Retain. Typically useful in combination with other technologies |
| | | Fencing | Low to moderate. Effective for protection of potential onsite receptors by reducing potential for exposure, but does not reduce COPC concentrations or prevent leaching. | High | Low to moderate, will require long-term maintenance if not combined with another remedial technology | Retain. Typically useful in combination with other technologies |
| Containment | Capping | Impermeable Cap | Low to moderate. An impermeable cap will prevent physical contact with the soils and reduce surface-water infiltration and leaching, but does not reduce COPC concentrations. | High | Moderate, will require long-term maintenance | Due to shallow depth to groundwater, capping will provide limited effectiveness in reducing the potential migration of CVOCs in soil or groundwater. |
| Removal | Excavation | Excavation with Offsite Disposal | High. Would provide immediate protection of potential onsite receptors by removing the potential for exposure and would also reduce COPC mass. | Highly implementable, conventional technology | Moderate to high depending on the volume to be excavated. Would have no operations and maintenance costs. | Retain |
| | | Excavation with Ex-Situ Chemical Oxidation | High. Would provide immediate protection of potential onsite receptors by removing the potential for exposure and would also reduce COPC mass. | Implementable, conventional technology. Would require bench testing to confirm correct application rates. | High depending on the volume to be excavated. Would have no operations and maintenance costs. | Not Retained. Does not provide advantages over offsite disposal due to higher costs, bench testing, application, and confirmation that disposal requirements are met. |
| | | Excavation with Ex-Situ Soil Flushing | High. Would provide immediate protection of potential onsite receptors by removing the potential for exposure and would also reduce COPC mass. | Implementable, conventional technology. Would require bench testing to confirm correct application rates. | High depending on the volume to be excavated. Would have no operations and maintenance costs. | Not Retained. Does not provide advantages over offsite disposal due to higher costs, bench testing, application, and confirmation that disposal requirements are met. |

Table 5-1
Secondary Screening of Potentially Applicable Technologies and Process Options for the Source Area Vadose Zone
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

| General Response Action | Remedial Technology | Remedial Technology Process Option | Effectiveness | Implementability | Cost | Comments |
|-------------------------|---------------------|------------------------------------|--|---|--|---|
| In-Situ Treatment | Physical Treatment | In-Situ Thermal Treatment | High. Would provide protection of potential onsite receptors in a short timeframe by reducing COPC mass. | Implementable, conventional technology. | High depending on the area and depths to be remediated. After treatment is complete, would have no further operations and maintenance costs. | Retain. This technology could address both the source area vadose zone and the source area saturated zone simultaneously. |

Notes:

Shading indicates that the process option was eliminated during the screening stage.

COPC = constituent of potential concern

CVOC = chlorinated volatile organic compound

NA = not applicable

NCP = National Contingency Plan

USEPA = United States Environmental Protection Agency

Table 5-2
 Secondary Screening of Potentially Applicable Technologies and Process Options for the Source Area Saturated Zone
 Feasibility Study
 AVX Corporation
 Myrtle Beach, South Carolina

| General Response Action | Technology Type | Process Option | Effectiveness | Implementability | Cost | Comments |
|-------------------------|-------------------------------|-----------------------------------|--|--|---|---|
| No Further Action | None | None | NA | High | NA | Retain. Required by NCP and USEPA guidance as a baseline for comparison to other process options. |
| Institutional Controls | Access Restrictions | Deed Notification/ Restrictions | Moderate to high. Effective for protection of potential onsite receptors by reducing potential for exposure, but does not reduce COPC concentrations or prevent offsite migration of those COPCs. | High | Low | Retain. |
| Containment | Hydraulic Control | Groundwater Extraction | Moderate. Extraction and treatment system currently in place and effectively maintaining capture of dissolved COPCs, although it is far less effective for quick mass removal/destruction in the source area because it counts on rate limiting desorption from finer grained materials and transport to pumping wells for removal and treatment | High. Extraction wells and treatment system currently in place and operating. | Low to Moderate. Costs associated with O&M of 40 to 60 gpm system. Pumping rates may be reduced in conjunction with implementation of other remedial technologies | Retained. The downgradient DPA containment system would also capture/contain COCs from saturated source area although removal will be rate limited by desorption from fine grained materials and transport to pumping wells where COCs would be captured and treated. Additional wells could and possibly would be installed to improve overall performance of the system, although rate limiting desorption will still be the primary control the time necessary to meet corrective action objectives. |
| In-Situ Treatment | Attenuation | Monitored Natural Attenuation | Limited for source areas. Effective in identifying changing conditions. | High | Low. Installation of additional wells for attenuation monitoring may be needed. | Retain. Limited efficacy for source areas, but at a minimum, will serve as a polishing technology in combination with other technologies. |
| | Chemical/Biological Treatment | Enhanced Anaerobic Bioremediation | Moderate to high. | High. Conventional technology and already effective in remediation with Operable Unit 2. | Moderate to High. | Retain. |
| | Chemical | Chemical Oxidation | Moderate. Highly dependent on the ability to deliver chemical oxidants to targeted mass in a complex hydrostratigraphic setting. | High. Conventional technology. | High due to existing reducing conditions. | Not Retained. Likely less effective and higher cost compared to other in-situ technologies due to existing reducing conditions at the site and difficulty with delivering oxidants to targeted mass. |

Table 5-2
Secondary Screening of Potentially Applicable Technologies and Process Options for the Source Area Saturated Zone
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

| General Response Action | Technology Type | Process Option | Effectiveness | Implementability | Cost | Comments |
|-------------------------|---|--------------------------------------|---|---|--|--|
| | Physical | In-Situ Thermal Treatment | High. Would meet remedial goals in a short timeframe by reducing COPC mass. | Implementable. Conventional technology. | High depending on the area and depths to be remediated. After treatment is complete, would have no further operations and maintenance costs. | Retain. This technology could address both the source area vadose zone and the source area saturated zone simultaneously. |
| | | Dynamic Groundwater Recirculation | Moderate to high. | High. Conventional technology | Moderate. Would require installation of extraction and injection wells, potential for re-use of existing treatment system. | Retain |
| Ex-Situ Treatment | Physical Treatment of extracted groundwater | Air Stripping | High. Extraction and treatment system currently in place in conjunction with groundwater extraction system and effectively treating water containing COPCs. | High. Currently operating. | Low to Moderate. Costs associated with O&M of the air stripper and treatment system. | Retain. Current system is operating effectively. |
| | | Granular Activated Carbon Adsorption | Moderate. Treatment efficiency is lower relative to air stripping at current rates. Air stripping treatment alternative currently in place. | Moderate. Additional infrastructure needed. | Moderate to High. Additional infrastructure costs compared to air stripping. O&M costs higher for carbon at current extraction rates and COPC loading. | Not Retained. Currently effective operation of air stripping system. Higher installation and O&M costs associated with implementing carbon treatment at current extraction rates and VOC concentrations. |

Notes:

Shading indicates that the process option was eliminated during the screening stage.

COPC = constituent of potential concern

DPA = dissolved phase area

gpm = gallons per minute

NA = not applicable

NCP = National Contingency Plan

O&M = operation and maintenance

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

Table 5-3
 Secondary Screening of Potentially Applicable Technologies and Process Options for Dissolved-Phase Area (Downgradient)
 Feasibility Study
 AVX Corporation
 Myrtle Beach, South Carolina

| General Response Action | Technology Type | Process Option | Effectiveness | Implementability | Cost | Comments |
|-------------------------|-------------------------------|-----------------------------------|--|---|--|---|
| No Further Action | None | None | Not Effective | High | No costs | Retain. Required by NCP and USEPA guidance as a baseline for comparison to other process options. |
| Institutional Controls | Access Restrictions | Deed Notification/ Restrictions | Moderate to high. Effective for protection of potential onsite receptors by reducing potential for exposure, but does not reduce COPCs or prevent offsite migration of those COPCs. | High | Low | Retain. |
| Containment | Hydraulic Control | Groundwater Extraction | High. Extraction and treatment system currently in place and effectively maintaining capture of dissolved COPCs, although possibly not efficient given our updated understanding of the distribution of COPCs in the source area saturated zone based on the FSIR. | High. Extraction wells and treatment system currently in place and operating, although refinements to that system may be advisable. | Low to Moderate. Costs associated with O&M of 40 to 60 gpm system. Pumping rates may be reduced in conjunction with implementation of other remedial technologies. | Retain. Capture analysis concluded that current extraction system is effective, although not necessarily efficient given FSIR that better delineates the mass of COPCs in the source area saturated zone. |
| In-Situ Treatment | Attenuation | Monitored Natural Attenuation | Moderate. Effective at identifying changing conditions. | High | Low to Moderate. Installation of additional wells may be needed. | Retain. Typically useful in combination with other technologies. |
| | Chemical/Biological Treatment | Enhanced Anaerobic Bioremediation | Moderate to high. | High. Conventional technology | Moderate to High. | Retain |
| | Physical Treatment | Dynamic Groundwater Recirculation | Moderate to high. | High. Conventional technology | Moderate. Would require installation of extraction and injection wells, potential for reuse of existing treatment system. | Retain |

Table 5-3
 Secondary Screening of Potentially Applicable Technologies and Process Options for Dissolved-Phase Area (Downgradient)
 Feasibility Study
 AVX Corporation
 Myrtle Beach, South Carolina

| General Response Action | Technology Type | Process Option | Effectiveness | Implementability | Cost | Comments |
|-------------------------|---|--------------------------------------|---|---|--|--|
| Ex-Situ Treatment | Physical Treatment of extracted groundwater | Air Stripping | High. Extraction and treatment system currently in place in conjunction with groundwater extraction system and effectively treating water containing COPCs. | High. Currently operating. | Low to Moderate. Costs associated with O&M of the air stripper and treatment system. | Retain. Current system is operating effectively. |
| | | Granular-Activated Carbon Adsorption | Moderate. Treatment efficiency is lower relative to air stripping at current rates. Air stripping treatment alternative currently in place. | Moderate. Additional infrastructure needed. | Moderate to High. Additional infrastructure costs compared to air stripping. O&M costs higher for carbon at current extraction rates and COPC loading. | Not Retained. Currently effective operation of air stripping system that has already been deemed more appropriate than using granular activated carbon. Higher installation and O&M costs associated with implementing carbon treatment COPC/VOC concentrations. |

Notes:

Shading indicates that the process option was eliminated during the screening stage.

COPC = constituent of potential concern

FSIR = Feasibility Study Investigation Report

gpm = gallons per minute

NCP = National Contingency Plan

O&M = operation and maintenance

USEPA = United States Environmental Protection Agency

VOC = volatile organic compound

Table 6-1
Screening of Remedial Alternative 1: No Further Action
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

Synopsis: Under this alternative, no further action would be taken to address constituents of potential concern (COPCs) in the vadose or saturated zone source areas or the downgradient groundwater dissolved phase area.

| Effectiveness | Implementability | Cost |
|---|--|--|
| Advantages | | |
| Natural attenuation processes would continue to reduce concentrations of COPCs in soil. | Easily implemented. | No capital or operation and maintenance (O&M) costs would be required. |
| Disadvantages | | |
| Little to no measurable relative reduction in COPC mobility, toxicity, or volume in the short term. COPCs in the vadose zone would continue to leach to the saturated zone and then migrate with groundwater. | Because this alternative does not meet the Remedial Action Objectives (RAOs) for soil or groundwater, future remedial action would likely be required. | May defer and increase eventual future capital and O&M expenditures if future remediation is required. |
| Limits future land use. | | |
| It is not further protective of human receptors. | | |
| No monitoring would be performed to evaluate changes in risks or determine when remedial goals are met. | | |

Conclusion: Alternative 1 - No Further Action Alternative would not achieve the Remedial Action Objectives for soil or groundwater. ***Nonetheless, this alternative is retained as a baseline for comparison to the remaining alternatives as is required by the National Contingency Plan.***

Table 6-2
Screening of Remedial Alternative 2: Excavation + Enhanced Reductive Dechlorination
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

Synopsis: Under this alternative, excavation and off-site disposal of source area vadose zone soils would be performed to reduce constituent of potential concern (COPC) concentrations, minimizing potential for future direct contact exposure to COPCs, minimizing leaching of COPCs to groundwater, and meeting Remedial Action Objectives (RAOs) for soil. In addition, in-situ enhanced reductive dechlorination (ERD) via anaerobic bioremediation would be used to remediate the COPCs in the groundwater source and downgradient dissolved phase areas to reduce the overall time to achieve RAOs for groundwater. For the ERD alternative, injection wells would be installed in transects across the source area saturated zone and the downgradient dissolved phase area into which an electron donor (such as molasses or emulsified vegetable oil) would be injected to create an anaerobic reactive zone. Monitored natural attenuation (MNA) would be implemented following completion of the active phase of the enhanced anaerobic bioremediation to remediate residual low-level concentrations of COPCs. Deed notifications/restrictive covenants would further reduce the potential for receptor exposure to residual COPCs in soil and groundwater.

| Effectiveness | Implementability | Cost |
|---|--|---|
| Advantages | | |
| Excavation and off-site disposal of vadose zone soil containing elevated concentrations of COPCs would aggressively reduce COPC mass and toxicity in soil over a short timeframe and thereby reduce the potential for COPCs in soil to leach to groundwater. It would decrease the overall timeframe to achieve remedial goals. | Excavation and off-site disposal is a conventional easily implementable technology that has been used at many sites. Historically, excavation has been successfully implemented at two other locations within Operable Unit 1. | Predictable and relatively low annual maintenance and monitoring costs for the performance monitoring and MNA component of the remedy. |
| Excavation of soil containing COPCs would represent permanent protection. | ERD is also a commonly and easily implementable technology that has been successfully implemented to remediate groundwater in Operable Unit 2. | Some components of the Operable Unit 2 ERD system could be used on the Operable Unit 1 site. |
| With time, natural attenuation processes would reduce any remaining residual COPC concentrations over time in the vadose zone that lie outside the targeted excavation area. | | Relatively lower costs for excavation and off-site disposal of soil versus in situ thermal treatment (IST). |
| ERD has been highly effective at achieving RAOs in groundwater over much of the Operable Unit 2 area, and similar effectiveness is anticipated in Operable Unit 1 based on similar hydrogeologic and geochemical conditions. | | |
| Would reduce the potential for future receptor access by greatly reducing COPC mass in soil and groundwater and by further restricting potential future exposure to residual COPCs by potentially implementing deed notifications/restrictive covenants. | | |
| This remedy would take substantially less overall time to achieve RAOs versus the No Action Alternative. This method would have the shortest time to achieve RAOs in the vadose zone source area. | | |
| Disadvantages | | |
| Will eliminate most but not all of the COPCs in vadose zone soil; therefore, future minimal leaching of COPCs from the vadose zone to groundwater is possible. | Although this alternative should successfully meet groundwater RAOs in a relatively short remediation timeframe, ERD infrastructure could inhibit near-term redevelopment unless substantially reconfigured. | Moderate to high costs for excavation and off-site disposal depending on the volume of soil to be excavated and concentration of COPCs in the soil. |
| Although very successful in remediating groundwater in Operable Unit 2, as with Operable Unit 2, some areas of fine-grained materials may be slower to achieve the groundwater RAOs. | | Some recalcitrant areas that are slower in responding to the remedy could require some longer periods (and additional costs) for monitoring until meeting groundwater RAOs. |

Conclusion: This alternative would achieve the RAO of minimizing the potential for human exposure to site-related COPCs via contact with soil and would also achieve the RAO of minimizing, containing, or eliminating site-related COPCs from most soils at OU-1 that may be leaching to groundwater. Furthermore, the ERD portion of this remedial alternative has a proven track record in Operable Unit 2 of achieving RAOs for groundwater quickly in most locations. **Therefore, this alternative is retained for detailed analysis.**

Table 6-3
Screening of Remedial Alternative 3: Excavation + Pumping and Treatment
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

Synopsis: Under this alternative, excavation and off-site disposal of source area vadose zone soils would be performed to reduce constituent of potential concern (COPC) concentrations, minimizing potential for future direct contact exposure to COPCs, minimizing leaching of COPCs to groundwater, and meeting Remedial Action Objectives (RAOs) for soil. Furthermore, groundwater pumping and treatment would be used to hydraulically control the dissolved phase COPCs and would remove the mass of COPCs captured by the pumping wells. Extracted groundwater would be treated with an air stripper and discharged pursuant to a National Pollutant Discharge Elimination System permit. Monitored natural attenuation (MNA) would also be implemented in parallel and subsequent to the other active remedial components to remove residual COPC mass. Deed notifications/restrictive covenants would reduce the potential for future receptor exposure to COPCs in soil and groundwater.

| Effectiveness | Implementability | Cost |
|--|--|--|
| Advantages | | |
| Excavation and off-site disposal of vadose zone soil containing elevated concentrations of COPCs would aggressively reduce COPC mass and toxicity in soil over a short timeframe and thereby reduce the potential for COPCs in soil to leach to groundwater. It would decrease the overall timeframe to achieve remedial goals. | Excavation and off-site disposal is a conventional easily implementable technology that has been implemented at many sites and has been successfully implemented historically at two other locations within Operable Unit 1. | Predictable and low annual maintenance and monitoring costs for the pumping and treatment component of the remedy. |
| Excavation of soil containing COPCs would represent permanent protection and would achieve RAOs in the shortest time in the vadose zone. | Pumping and treatment is also highly implementable, as it has been a remedial method used at the site for many years. | The existing pumping and treatment system infrastructure could be used to continue the groundwater portion of this remedy, thereby reducing costs. |
| Over time, natural attenuation processes would reduce any remaining residual COPC concentrations in the vadose zone that lie outside the targeted excavation area. | The pumping and treatment component would be implemented as currently configured. | Relatively lower costs for excavation and off-site disposal of soil versus in situ thermal treatment (IST). |
| Would reduce the potential for future potential receptor exposure by reducing COPC mass in soil and by implementing deed notifications/restrictive covenants. | | |
| Pumping and treatment is extremely effective at control of migration of COPCs in groundwater and has been operating successfully this way at the site for many years. This remedy would take less overall time to achieve RAOs versus the No Action Alternative. | | |
| Disadvantages | | |
| Will eliminate most but not all of the COPCs in vadose zone soil; therefore, future minimal leaching of COPCs from the vadose zone to groundwater is possible. | This alternative would take the longest to achieve RAOs. | Groundwater pumping and treatment timeframes could exceed the estimated 30 years to achieve RAOs, as the rate of cleanup is difficult to estimate. The uncertainty in timeframes to reach RAOs also has an impact on total cost certainty. |
| Although pumping and treatment is extremely effective at controlling migration of COPCs in groundwater, it is slow at achieving RAOs because the rate of cleanup is based on the rate of diffusion of COPCs from fine-grained into solution and is further limited by the rate of solute transport to the point of capture by the pumping wells. It is difficult to predict the time it will take to achieve groundwater RAOs. | The estimate timeframe to reach RAOs is set at 30 years for the purposes of this FS, but it is conceivable that the actual timeframe could be substantially longer. | Longer-term costs to maintain deed notifications/restrictive covenants than for other remedial alternatives. |

Conclusion: This alternative would achieve the soil RAO of minimizing the potential for human exposure to site-related COPCs via contact with soil and would also achieve the soil RAO of minimizing, containing, or eliminating site-related COPCs from most soils at OU-1 that may be leaching to groundwater. This alternative would also be expected to achieve groundwater RAOs after a long period of operation and maintenance of the pumping and treatment system in parallel with and as complimented by MNA. **Therefore, this alternative is retained for detailed analysis.**

Table 6-4
Screening of Remedial Alternative 4: Excavation + Dynamic Groundwater Recirculation
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

Synopsis: Under this alternative, excavation and off-site disposal of source area vadose zone soils would be performed to reduce constituent of potential concern (COPC) concentrations, minimizing potential for future direct contact exposure to COPCs, minimizing leaching of COPCs to groundwater, and meeting Remedial Action Objectives (RAOs) for soil. Furthermore, dynamic groundwater recirculation (DGR), which uses a combination of groundwater pumping and treatment (P&T) and directed groundwater reinjection, would be used to hydraulically control the dissolved phase COPCs and would remove the mass of COPCs captured by the pumping wells. Dynamic reinjection of treated groundwater would also improve flushing of COPCs from aquifer materials. Monitored natural attenuation (MNA) would also be used as a parallel and polishing step of the remedy to remove residual COPC mass. Deed notifications/restrictive covenants would reduce the potential for future receptor exposure to COPCs in soil and groundwater.

| Effectiveness | Implementability | Cost |
|---|---|--|
| Advantages | | |
| Excavation and off-site disposal of vadose zone soil containing elevated concentrations of COPCs would aggressively reduce COPC mass and toxicity in soil over a short timeframe and thereby reduce the potential for COPCs in soil to leach to groundwater. It would decrease the overall timeframe to achieve remedial goals. | Excavation and off-site disposal is a conventional easily implementable technology that has been implemented at many sites and has been successfully implemented historically at two other locations within Operable Unit 1. | Moderate costs for excavation and off-site disposal of soil. |
| Excavation of soil containing COPCs would represent permanent protection. | The pumping and treatment component would be implemented largely as currently configured, although with the addition of another pumping wells as well as injection wells. The existing treatment system would be used to treat groundwater. | Predictable and relatively low annual maintenance and monitoring costs for the DGR component of the remedy. |
| With time, natural attenuation processes would reduce any remaining residual COPC concentrations over time in the vadose zone that lie outside the targeted excavation area. | | The existing pumping and treatment system infrastructure would be used as part of the DGR remedy thereby reducing costs. |
| Would reduce the potential for future receptor access by reducing COPC mass in soil and by implementing deed notifications/restrictive covenants. | | Relatively lower costs for excavation and off-site disposal of soil versus in situ thermal treatment (IST). |
| The pumping portion of the DGR system would employ the existing pumping system, which has been extremely effective at controlling migration of COPCs in groundwater and has been operating successfully this way at the site for many years. | | |
| This remedy would take less overall time to achieve RAOs versus the No Action Alternative and the excavation + P&T alternative. This method would have the shortest time to achieve RAOs in the vadose zone source area. | | |
| Disadvantages | | |
| Will eliminate most but not all of the COPCs in vadose zone soil; therefore, future minimal leaching of COPCs from the vadose zone to groundwater is possible. | This alternative would take longer than any other alternatives to reach RAOs except for excavation + P&T. | DGR timeframes could exceed the estimated 20 years to achieve RAOs, as the rate of cleanup is difficult to estimate. The uncertainty in timeframes to reach RAOs also has an impact on total cost certainty. |
| Although DGR is extremely effective at controlling migration of COPCs in groundwater and is better than P&T for source flushing and removal, the method will still be relatively slow at achieving RAOs because the rate of cleanup is based on the rate of diffusion of COPCs from fine grained into solution and is further limited by the rate of solute transport to the point of capture by the pumping wells. It is difficult to predict the time it will take to achieve groundwater RAOs. | The estimate timeframe to reach RAOs is set at 30 years (20 years of active remediation plus 10 years of MNA) for the purposes of this Feasibility Study, but it is conceivable that the actual timeframe could be longer. | Longer-term costs to maintain deed notifications/restrictive covenants than for other remedial alternatives except for excavation + P&T. |
| | DGR infrastructure in the downgradient dissolved phase area would likely have to be reconfigured substantially to allow for redevelopment in the central area of the site. | |

Conclusion: This alternative would achieve the RAO of minimizing the potential for human exposure to site-related COPCs via contact with soil and would also achieve the RAO of minimizing, containing, or eliminating site-related COPCs from most soils at OU-1 that may be leaching to groundwater. This alternative would also be expected to achieve groundwater RAOs after a long period of operation and maintenance of the DGR system in parallel with and as complimented by MNA with timeframes to meet these RAOs less than that for excavation + P&T. **Therefore, this alternative is retained for detailed analysis.**

Table 6-5
Screening of Remedial Alternative 5: In-Situ Thermal Treatment + Enhanced Reductive Dechlorination
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

Synopsis: Under this alternative, in-situ thermal (IST) remediation would be conducted to remediate the constituents of potential concern (COPCs) in soil and to reduce the overall time needed to achieve Remedial Action Objectives (RAOs). The in-situ thermal approach at this site would employ a combination of electrical resistance heating (ERH) and steam enhanced extraction (SEE). The ERH component of the method would deliver an electrical current between metal rods installed in the ground. The heat generated as movement of the current meets resistance from soil would convert COPCs and water/groundwater into steam, vaporizing COPCs. The SEE component would rely on injecting steam underground by pumping it through wells drilled within the footprint of the vadose and saturated zone source areas. The steam would heat the area, evaporating the COPCs to increase their mobility so that they could be captured by a series of vapor and multiphase extraction wells. In addition, in-situ enhanced reductive dechlorination (ERD) via anaerobic bioremediation would be used to remediate the COPCs in the downgradient dissolved phase areas to reduce the overall time to achieve RAOs. For the ERD alternative, injection wells would be installed in transects across the downgradient dissolved phase area into which an electron donor (such as molasses or emulsified vegetable oil) would be injected to create an anaerobic reactive zone. Monitored natural attenuation (MNA) would be implemented following completion of the active phase of the enhanced anaerobic bioremediation to remediate residual low-level concentrations of COPCs. Deed notifications/restrictive covenants would further reduce the potential for receptor exposure to residual COPCs in soil and groundwater.

| Effectiveness | Implementability | Cost |
|---|---|---|
| Advantages | | |
| IST is expected to be highly effective at removing COPCs in both the vadose and saturated zone source areas including from clay-rich strata. | Access will be restricted in the source area for only a short time, as duration of the thermal method is only approximately 6 months. | Low long-term operation and maintenance (O&M) costs for the source areas. |
| Over time, natural attenuation processes would reduce any remaining residual COPC concentrations in the vadose zone that lie outside the targeted IST area. | | Some components of the Operable Unit 2 ERD system could be used on the Operable Unit 1 site. |
| ERD has been highly effective at achieving RAOs in groundwater over much of the Operable Unit 2 area. | | |
| This remedy would take the least overall time to achieve RAOs compared to all the other retained alternatives. This method would also have the shortest time to achieve RAOs in the saturated zone source area. | | |
| Disadvantages | | |
| Will eliminate most but not all of the COPCs in vadose zone soil; therefore, future minimal leaching of COPCs from the vadose zone to groundwater is possible. | As the in-situ thermal treatment remedy is the most complex of the retained alternatives, it is also the most difficult to implement. | IST + ERD capital and total costs are by far the highest of all three remedial alternatives. |
| Although very successful at remediating groundwater in Operable Unit 2, like in Operable Unit 2, some areas of fine grained materials may be slower to achieve the groundwater RAOs. | Although this alternative should successfully meet groundwater RAOs in a relatively short remediation timeframe, ERD infrastructure in the downgradient dissolved phase area could inhibit near-term redevelopment unless it is substantially reconfigured. | IST capital costs and O&M costs will increase if volatilized vapors cannot be captured effectively. |

Conclusion: This alternative would achieve the RAO of minimizing the potential for human exposure to site-related COPCs via contact with soil and would also achieve the RAO of minimizing, containing, or eliminating site-related COPCs from most soils at Operable Unit 1 that may be leaching to groundwater. This alternative would also be expected to achieve groundwater RAOs in the shortest period of all the remedial alternatives. **Therefore, this alternative is retained for detailed analysis.**

Table 6-6
Screening of Remedial Alternative 6: In-Situ Thermal Treatment + Dynamic Groundwater Recirculation
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

Synopsis: Under this alternative, in-situ thermal remediation would be conducted to remediate the constituents of potential concern (COPCs) in soil and to reduce the overall time needed to achieve Remedial Action Objectives (RAOs). The in-situ thermal approach at this site would employ a combination of electrical resistance heating (ERH) and steam enhanced extraction (SEE). The ERH component of the method would deliver an electrical current between metal rods installed in the ground. The heat generated as movement of the current meets resistance from soil would convert COPCs and water/groundwater into steam, vaporizing contaminants. The SEE component would rely on injecting steam underground by pumping it through wells drilled within the footprint of the vadose and saturated zone source areas. The steam would heat the area, evaporating the COPCs to increase their mobility so that they could be captured by a series of vapor and multiphase extraction wells. Furthermore, dynamic groundwater recirculation (DGR), which uses a combination of groundwater pumping and treatment (P&T) and directed groundwater reinjection, would be used to hydraulically control the dissolved phase COPCs and would remove the mass of COPCs captured by the pumping wells. Dynamic reinjection of treated groundwater would also be employed to improve flushing of COPCs from aquifer materials. Monitored natural attenuation (MNA) would also be used as a parallel and polishing step of the remedy to remove residual COPC mass. Deed notifications/restrictive covenants would reduce the potential for future receptor exposure to COPCs in soil and groundwater.

| Effectiveness | Implementability | Cost |
|---|--|--|
| Advantages | | |
| Natural attenuation processes would reduce COPC concentrations over time to achieve remedial goals. | Access will be restricted in the source area for only a short time, as duration of the thermal method is only approximately 6 months. | Predictable and relatively low annual maintenance and monitoring costs for the DGR component of the remedy. |
| Groundwater monitoring would determine when remedial goals are met. | The P&T component would be implemented largely as currently configured, although with the addition of another pumping well as well as injection wells. The existing treatment system would be used to treat groundwater. | The existing P&T system infrastructure would be used as part of the DGR remedy, thereby reducing costs. |
| Would reduce the potential for receptor exposure to COPCs in groundwater through deed notifications/restrictive covenants. | | |
| This remedy would take less overall time to achieve RAOs than the No Action or the excavation + P&T alternatives. This method would have the shortest time to achieve RAOs in the saturated zone source area. | | |
| Disadvantages | | |
| Will eliminate most but not all of the COPCs in vadose zone soil; therefore, future minimal leaching of COPCs from the vadose zone to groundwater is possible. | The estimate timeframe to reach RAOs in the downgradient dissolved phase area is set at 30 years (20 years of active remediation plus 10 years of MNA) for the purposes of this FS, but it is conceivable that the actual timeframe could be longer. | IST + DGR capital costs and total costs are extremely high. |
| Although DGR is extremely effective at controlling migration of COPCs in groundwater and is better than P&T for source flushing and removal, the method will still be relatively slow at achieving RAOs because the rate of cleanup is based on the rate of diffusion of COPCs from fine grained into solution and is further limited by the rate of solute transport to the point of capture by the pumping wells. It is difficult to predict the time it will take to achieve groundwater RAOs. | DGR infrastructure in the downgradient dissolved phase area would likely have to be reconfigured substantially to allow for redevelopment in the central area of the site. | IST capital costs and O&M costs will increase if volatilized vapors cannot be captured effectively. |
| | | Longer-term costs to maintain deed notifications/restrictive covenants than for other remedial alternatives except for excavation + P&T or excavation + DGR. |

Conclusion: This alternative would achieve the RAO of minimizing the potential for human exposure to site-related COPCs via contact with soil and would also achieve the RAO of minimizing, containing, or eliminating site-related COPCs from most soils at OU-1 that may be leaching to groundwater. This alternative would also be expected to achieve groundwater RAOs after a long period of operation and maintenance of the DGR system, in parallel with and as complemented by MNA, with timeframes to meet these RAO greater than that for IST + ERD. **Therefore, this alternative is retained for detailed analysis.**

Table 7-1
 Summary of Detailed and Comparative Analysis of Remedial Alternatives
 Feasibility Study
 AVX Corporation
 Myrtle Beach, South Carolina

| Evaluation Criteria | Rating | Alternative 1 | | Alternative 2 | | Alternative 3 | |
|---------------------------|--|-------------------|--|--|---|---|---|
| | | No Further Action | Rating | Excavation, Enhanced Reductive Dechlorination, Monitored Natural Attenuation, Institutional Controls, Long-Term Monitoring | Rating | Excavation, Pumping and Treatment, Institutional Controls, Long-Term Monitoring | Rating |
| Threshold Criteria | | | | | | | |
| 1) | Overall protection of human health and the environment | 0 | Does not further minimize, reduce, or control COPCs in source soil areas or groundwater or provide measures to control potential leaching or migration. Soil and groundwater RAOs may be met by natural processes after a very long and indeterminate time, but specific monitoring to document the achievement of RAOs would not be performed. | 5 | Protective of human health and the environment. The remedy is expected to meet RAOs through aggressively addressing both the vadose zone and saturated zone source masses and downgradient dissolved-phase area with remedies (excavation and ERD) that have been successfully applied to other areas of OU-1 and OU-2. Furthermore, removal of vadose zone source mass will be documented, and performance monitoring will be undertaken to document the removal/destruction of the COPCs in the saturated zone and downgradient dissolved-phase area. Natural processes will also be expected to address residual concentrations after the active part of the remedy has run its course. ICs will also restrict exposure to residual COPCs in soil and groundwater. Soil and groundwater RAOs would be met. | 5 | Protective of human health and the environment. The remedy is expected to quickly meet soil RAOs by removing and documenting vadose zone source mass via excavation, which has precedent elsewhere within OU-1. P&T is also effective at controlling migration of COPCs and minimizing risk of exposure to human and ecological receptors, although this groundwater remedy will have to be operated/maintained for an estimated 30 years with significant uncertainty associated with that duration estimate. Compliance/performance monitoring will be performed to document the removal of the COPCs in the saturated zone source and downgradient dissolved-phase area. Natural processes will also be expected to address residual concentrations after the active part of the remedy has run its course. ICs will limit exposure to residual COPCs in soil and groundwater. Soil and groundwater RAOs would be met. |
| 2) | Compliance with ARARs | 0 | Does not comply with ARARs. | 5 | Complies with ARARs. | 5 | Complies with ARARs. |
| Balancing Criteria | | | | | | | |
| 3) | Long-term effectiveness and permanence | 0 | Not effective or permanent. Groundwater monitoring indicates that some destruction of COPCs through natural processes has been occurring. Potential exposure risks associated with COPCs in soil and groundwater would remain with no controls or long-term management plan. | 5 | Highly effective and permanent for removal of COPCs from soil and groundwater and eliminating human health risks. Remediation goals for groundwater expected to be met following active ERD for 5 years and 10 additional years of MNA. ICs may be lifted after drinking water standards are met. | 3 | Moderately effective and permanent for removing COPCs in vadose zone soil. Expected to eventually permanently remove COPCs from groundwater, thereby eliminating any potential for human exposure. Until then, ICs will be in place to minimize potential human exposure. |
| 4) | Reduction of mobility, toxicity, or volume | 1 | Natural attenuation processes would have little effect on limiting the mobility, toxicity, or volume of COPCs in the soil, which in turn, would lead to continued leaching to groundwater. Natural attenuation is known to have had some positive effect on degrading some COPCs in groundwater, but the rate of that attenuation is exceedingly slow. | 5 | Permanently removes COPC mass from soil via excavation. Reduces mobility, toxicity, and volume of COPCs in groundwater where these COPCs will be destroyed in-situ. | 3 | Quickly reduces mass of COPCs in soil via excavation and offsite disposal. P&T system immediately reduces mobility of COPCs, although has little effect on constituent toxicity. The mass of COPCs in groundwater will slowly be reduced with time. |
| 5) | Short-term effectiveness | 5 | No activities would be implemented that would present potential short-term exposure risks to human health or the environment. | 3 | Construction and treatment activities (soil excavation and installation of additional monitoring and injection wells followed by periodic injection activities, vapor monitoring, and mitigation) will create potential short-term exposure risks to workers, adjacent populations, or the environment that would be managed through monitoring and engineering controls if controls are deemed necessary. | 3 | Soil removal during excavation and groundwater treatment activities could create limited potential short-term exposure risks to workers, adjacent populations, or the environment. These risks would be managed through monitoring, engineering controls, and worker training or some combination thereof. |
| 6) | Implementability | 2 | Technically feasible because no technical components are necessary. However, this alternative is not expected to be administratively viable, as there would be no controls on the migration of COPCs. | 4 | Technically and administratively feasible. Remediation activities performed entirely within bounds of owner's property (except for transportation and disposal of excavated soil). A successful precedent for both excavation (within OU-1) and ERD (within OU-2) have been established. | 4 | Technically and administratively feasible. There is precedent for both technologies being implementable with excavation being successfully implemented during past onsite surgical soil removal activities and the P&T system being successfully operated for decades to control dissolved-phase COPCs within the OU-1 site boundaries. |
| 7) | Cost | 5 | Capital Costs: \$0 Total O&M Costs:\$0 Total Present Value Costs: \$0 No Remedy - Not Applicable | 3 | Capital Costs: \$2,618,961 Total Operating Costs (not discounted): \$2,618,560 Total Net Present Value Costs: \$5,009,611 5 Yrs. Active Remediation and 10 Yrs. MNA | 5 | Capital Costs: \$1,483,299 Total Operating Costs (not discounted): \$2,894,400 Total Net Present Value Costs: \$2,777,047 30 Yrs. of Active Remediation and Performance Monitoring |
| Screening Totals | | 13 | | 30 | | 28 | |

Table 7-1
 Summary of Detailed and Comparative Analysis of Remedial Alternatives
 Feasibility Study
 AVX Corporation
 Myrtle Beach, South Carolina

| Evaluation Criteria | Rating | Alternative 4 | Rating | Alternative 5 | Rating | Alternative 6 | |
|---------------------------|--|--|---|---|--|---|--|
| | | Excavation, Dynamic Groundwater Recirculation, Monitored Natural Attenuation, Institutional Controls, Long-Term Monitoring | | In-Situ Thermal Treatment, Enhanced Reductive Dechlorination, Monitored Natural Attenuation, Institutional Controls, Long-Term Monitoring | | In-Situ Thermal Treatment, Dynamic Groundwater Recirculation, Monitored Natural Attenuation, Institutional Controls, Long-Term Monitoring | |
| Threshold Criteria | | | | | | | |
| 1) | Overall protection of human health and the environment | 5 | Protective of human health and the environment. The remedy is expected to quickly meet soil RAOs by removing and documenting vadose zone source mass via excavation, which has precedent elsewhere within OU-1. DGR will also be effective at controlling migration of COPCs and minimizing risk of exposure to human and ecological receptors, and will do so faster than P&T alone. Compliance/performance monitoring will be performed to document the removal of the COPCs in the saturated zone source and downgradient dissolved-phase area. Natural processes will also be expected to address residual concentrations after the active part of the remedy has run its course. ICs will restrict exposure to residual COPCs in soil and groundwater. Soil and groundwater RAOs would be met. | 5 | Protective of human health and the environment. The remedy is expected to quickly meet soil RAOs by heating, mobilizing, and capturing COPCs from the vadose and saturated source zones. The remedy is also expected to meet groundwater RAOs through aggressively addressing the saturated zone source masses and downgradient dissolved-phase area with ERD, which has been successfully applied to groundwater in OU-2. Compliance/performance monitoring will be performed to document the removal of the COPCs in the saturated zone source and downgradient dissolved-phase area. Natural processes will also be expected to address residual concentrations after the active part of the remedy has run its course. ICs will restrict exposure to residual COPCs in soil and groundwater. Soil and groundwater RAOs would be met. | 5 | Protective of human health and the environment. The remedy is expected to quickly meet soil RAOs by heating, mobilizing, and capturing COPCs from the vadose and saturated source zones. DGR will also be effective at controlling migration of COPCs and minimizing risk of exposure to human and ecological receptors, and will do so faster than P&T alone. Compliance/performance monitoring will be performed to document the removal of the COPCs in the saturated zone source and downgradient dissolved-phase area. Natural processes will also be expected to address residual concentrations after the active part of the remedy has run its course. ICs will restrict exposure to residual COPCs in soil and groundwater. Soil and groundwater RAOs would be met. |
| 2) | Compliance with ARARs | 5 | Complies with ARARs. | 5 | Complies with ARARs. | 5 | Complies with ARARs. |
| Balancing Criteria | | | | | | | |
| 3) | Long-term effectiveness and permanence | 4 | Moderately/highly effective and permanent for removing COPCs in vadose zone soil. Anticipated to be somewhat more effective than P&T of groundwater due to improved flushing through saturated areas. Expected to eventually permanently remove COPCs from groundwater, thereby eliminating any potential for human exposure. Until then, ICs will be in place to minimize potential human exposure. | 5 | Highly effective and permanent for removing COPCs in vadose zone soil. Remediation goals for groundwater expected to be met following active ERD for 5 years and 10 additional years of MNA. ICs may be lifted after drinking water standards are met. | 4 | Moderately/highly effective and permanent for removing COPCs in vadose zone soil. Anticipated to be somewhat more effective than P&T of groundwater due to improved flushing through saturated areas. Expected to eventually permanently remove COPCs from groundwater, thereby eliminating any potential for human exposure. Until then, ICs will be in place to minimize potential human exposure. |
| 4) | Reduction of mobility, toxicity, or volume | 4 | Quickly reduces mass of COPCs in soil via excavation and offsite disposal. Pumping portion of DGR system immediately reduces mobility of COPCs, although has little effect on constituent toxicity. The mass of COPCs in groundwater will be reduced with time, with improved mass removal (compared with pumping and treatment) via directed and dynamic flushing with clean/treated water. | 5 | Relatively quickly reduces mass of COPCs in soil via thermal treatment and capture of volatilized COPCs. Reduces mobility, toxicity, and volume of COPCs in groundwater where these COPCs will be destroyed in-situ. | 5 | Relatively quickly reduces mass of COPCs in soil via thermal treatment and capture of volatilized COPCs. Pumping portion of DGR system immediately reduces mobility of COPCs, although has little effect on constituent toxicity. The mass of COPCs in groundwater will be reduced with time, with improved mass removal (compared with pumping and treatment) via directed and dynamic flushing with clean/treated water. |
| 5) | Short-term effectiveness | 3 | Soil removal during excavation, pumping/injection well installation, and groundwater treatment activities could create limited potential short-term exposure risks to workers, adjacent populations, or the environment. These risks would be managed through monitoring, engineering controls, and worker training or some combination thereof. | 3 | Construction and treatment activities (installation of electrodes, steam injection wells, vapor and multiphase extraction wells, ERD injection wells, as well as periodic vapor monitoring, liquid treatment, and discharge monitoring activities) could create limited short-term exposure risks and impacts to workers, adjacent populations, or the environment that would be managed through engineering controls, vapor monitoring, and worker training. Additional electric and thermal working hazards would also be managed through engineering controls and worker training. | 3 | Construction and treatment activities (installation of electrodes, steam injection wells, vapor and multiphase extraction wells, DGR pumping/injection well installation, as well as periodic vapor monitoring, liquid treatment, and discharge monitoring activities) could create limited short-term exposure risks and impacts to workers, adjacent populations, or the environment that would be managed through engineering controls, vapor monitoring, and worker training. Additional electric and thermal working hazards would also be managed through engineering controls and worker training. |
| 6) | Implementability | 4 | Technically and administratively feasible. There is precedent for excavation being successfully implemented during past onsite surgical soil removal activities. Furthermore, the proposed DGR system is in many ways similar to the currently operating and successful P&T system in that it will make use of the existing pumping wells and treatment system, but will add extraction and reinjection wells to improve flushing and reduce remediation time. | 3 | Technically and administratively feasible with proven success of in-situ thermal treatment at other sites and proven success of ERD in OU-2. Requires installation of many electrodes, steam injection wells, and vapor and multiphase extraction wells and TOC injection wells. Capture of volatilized vapors may be challenging given limited thickness of the vadose zone. | 3 | Technically and administratively feasible with proven success of in-situ thermal treatment at other sites. Furthermore, the proposed DGR system is in many ways similar to the currently operating and successful P&T system in that it will make use of the existing pumping wells and treatment system but will add extraction and reinjection wells to improve flushing and reduce remediation time. |
| 7) | Cost | 3 | Capital Costs: \$2,796,065 Total Operating Costs (not discounted): \$3,272,000 Total Net Present Value Costs: \$4,640,170 20 Yrs. Active Remediation and 10 Yrs. MNA | 0 | Capital Costs: \$11,423,491 Total Operating Costs (not discounted): \$1,918,060 Total Net Present Value Costs: \$13,197,583 5 Yrs. Active Remediation and 10 Yrs. MNA | 0 | Capital Costs: \$11,997,007 Total Operating Costs (not discounted): \$3,272,000 Total Net Present Value Costs: \$13,841,112 20 Yrs. Active Remediation and 10 Yrs. MNA |
| Screening Totals | | 28 | | 26 | | 25 | |

Table 7-1
Summary of Detailed and Comparative Analysis of Remedial Alternatives
Feasibility Study
AVX Corporation
Myrtle Beach, South Carolina

Notes:

All costs are estimated to an accuracy of +50% to -30% (USEPA 2000). Cost estimates were prepared in 2019 and are expressed in 2019 dollars.

ARAR = applicable or relevant and appropriate requirement

COPC = constituent of potential concern

DGR = dynamic groundwater recirculation

ERD = enhanced reductive dechlorination

IC = Institutional Control

MNA = monitored natural attenuation

O&M = operation and maintenance

OU-1 = Operable Unit 1

OU-2 = Operable Unit 2

P&T = pumping and treatment

RAO = remedial action objective

TOC = total organic carbon

USEPA = United States Environmental Protection Agency

Yrs. = years

Reference:

USEPA. 2000. *A Guide to Developing and Documenting Cost Estimates During the Feasibility Study*. EPA 540-R-00-002, OSWER 9355.0-75. July 2000.

**Ratings Categories for Threshold and
Balancing Criteria (Excluding Costs):**

- (0) None
- (1) Low
- (2) Low to moderate
- (3) Moderate
- (4) Moderate to high
- (5) High

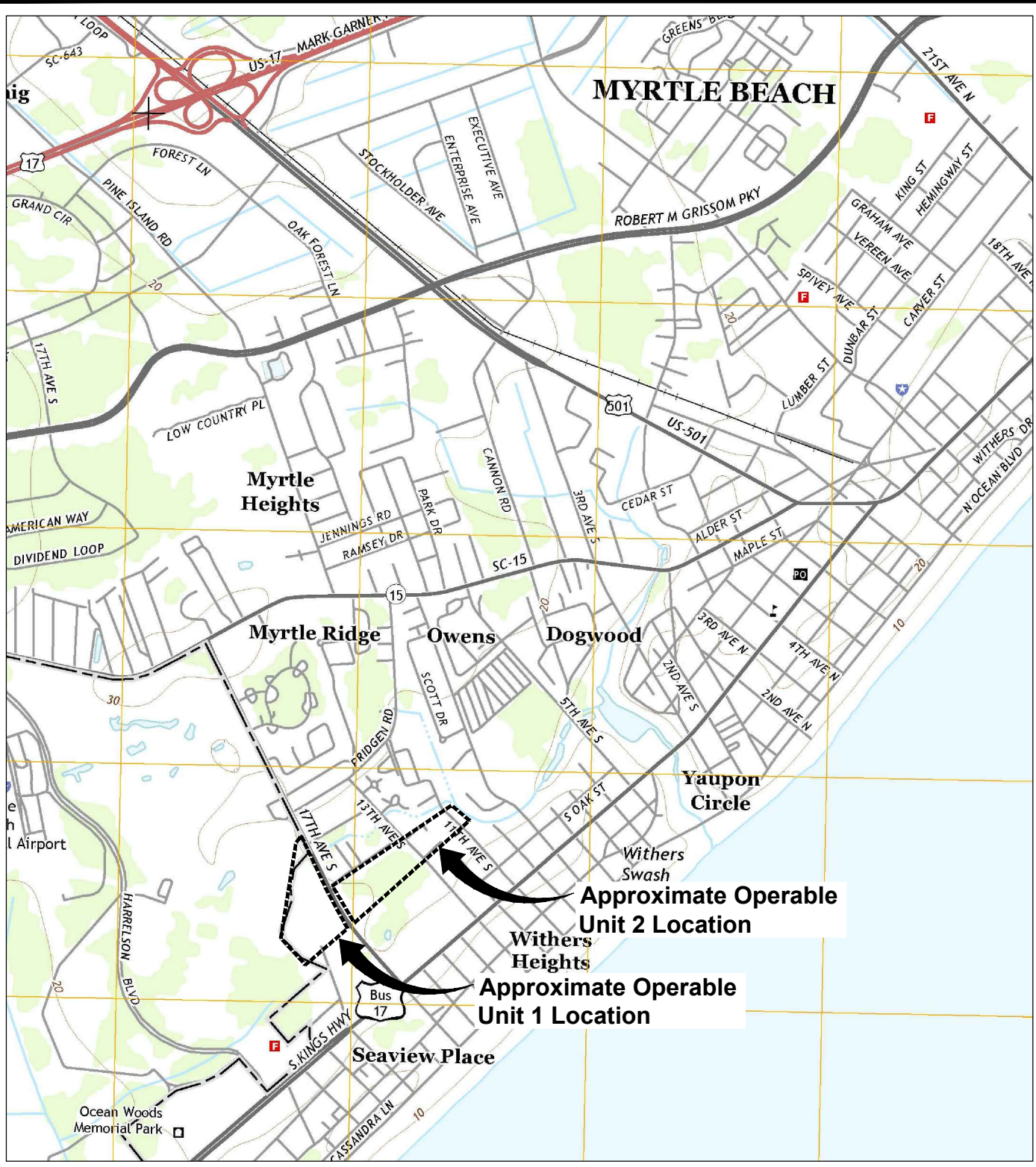
Ratings Categories for Cost

- (5) None
- (4) Low
- (3) Low to moderate
- (2) Moderate
- (1) Moderate to high
- (0) High

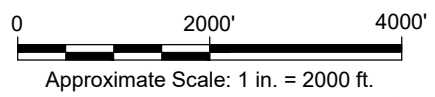
FIGURES



CITY:(Reed) DIV:GROUP:(Reed) DB:(Reed) LD:(Opt) PIC:(Opt) PM:(Reed) TM:(Opt) LYR:(Opt)ON="OFF"=REF+
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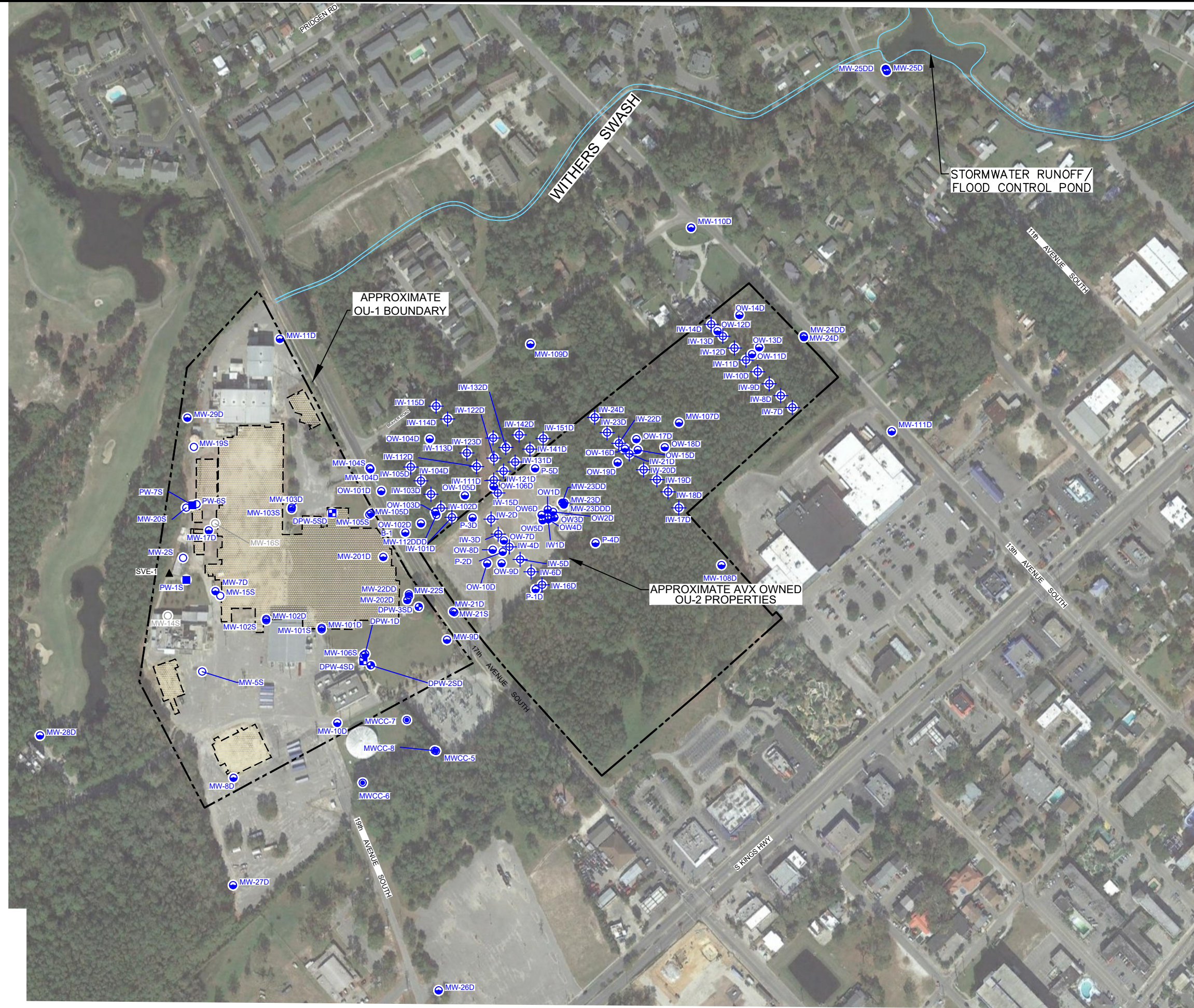


REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., MYRTLE BEACH, SOUTH CAROLINA, 2014.



| | |
|--|--|
| AVX CORPORATION MYRTLE BEACH FACILITY MYRTLE BEACH, SOUTH CAROLINA | |
| <h2 style="margin: 0;">SITE LOCATION</h2> | |
| <b style="font-size: 1.2em; vertical-align: middle;">ARCADIS | <i style="font-size: 0.8em;">Design & Consultancy for natural and built assets</i> |
| FIGURE <h1 style="margin: 0;">1-1</h1> | |

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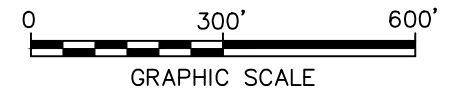


LEGEND:

- MONITORING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- MONITORING WELL SCREENED IN THE LOWER TERRACE DEPOSITS
- ⊕ MONITORING WELL SCREENED IN THE PEEDEE FORMATION
- ⊕ MONITORING WELLS SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- FORMER PUMPING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- PRODUCTION WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- ⊕ INJECTION WELL SCREENED IN THE LOWER TERRACE DEPOSITS
- CARMIKE WELL LOCATION SCREENED IN THE UPPER TERRACE DEPOSITS
- ▲ FORMER SOIL VAPOR EXTRACTION WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- ABANDONED MONITORING WELL
- NANCE PROPERTY PARCELS
- ▨ FORMER BUILDING FOOTPRINT

NOTES:

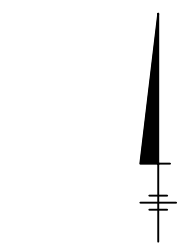
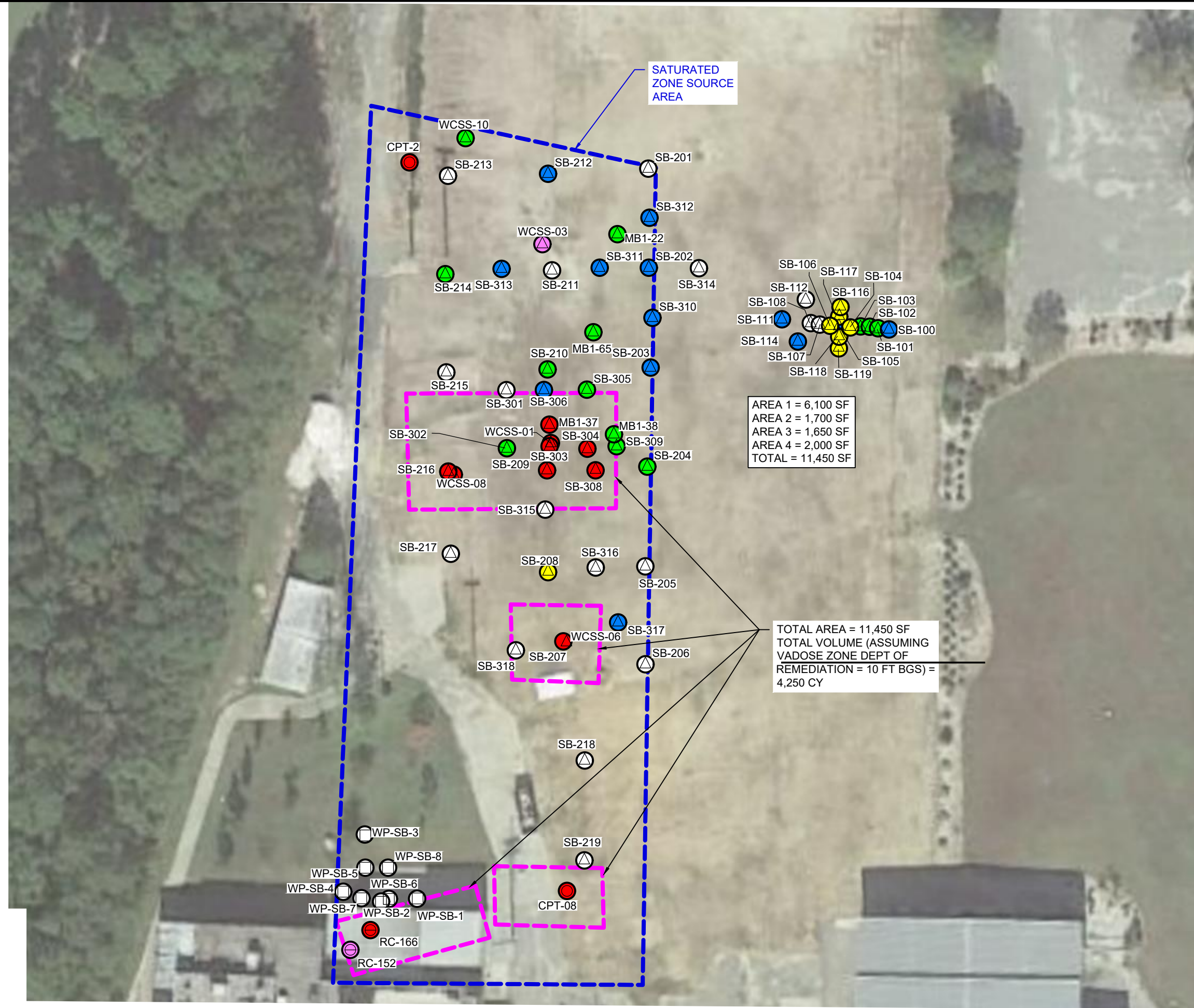
1. AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO, DATED OCTOBER 29, 2016.
2. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.



AVX CORPORATION
 MYRTLE BEACH FACILITY
 MYRTLE BEACH, SOUTH CAROLINA

AVX-OWNED PROPERTIES





- LEGEND:**
- 2008 WASTE PAD POST DEMOLITION SAMPLING LOCATION
 - △ 2015 MB1 PHASE 2 POST DEMOLITION SAMPLING LOCATION
 - ⊖ 2018 RECLAIM AND RMM BLDG POST DEMOLITION SAMPLING LOCATION
 - 2008 DATA GAP INVESTIGATION LOCATION

- TCE CONCENTRATIONS IN SUBSURFACE SOIL (2-10FT BGS)**
- NON-DETECT OR <0.01 mg/kg
 - >/=0.01 mg/Kg AND <0.1 mg/Kg
 - >/=0.1 mg/Kg AND <1.1 mg/Kg
 - >/=1.1 mg/Kg AND <10.0 mg/Kg
 - >/=10.0 mg/Kg AND <100.0 mg/Kg
 - >/=100.0 mg/Kg

- NOTES:**
1. AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO, DATED NOVEMBER 15, 2017.
 1. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.

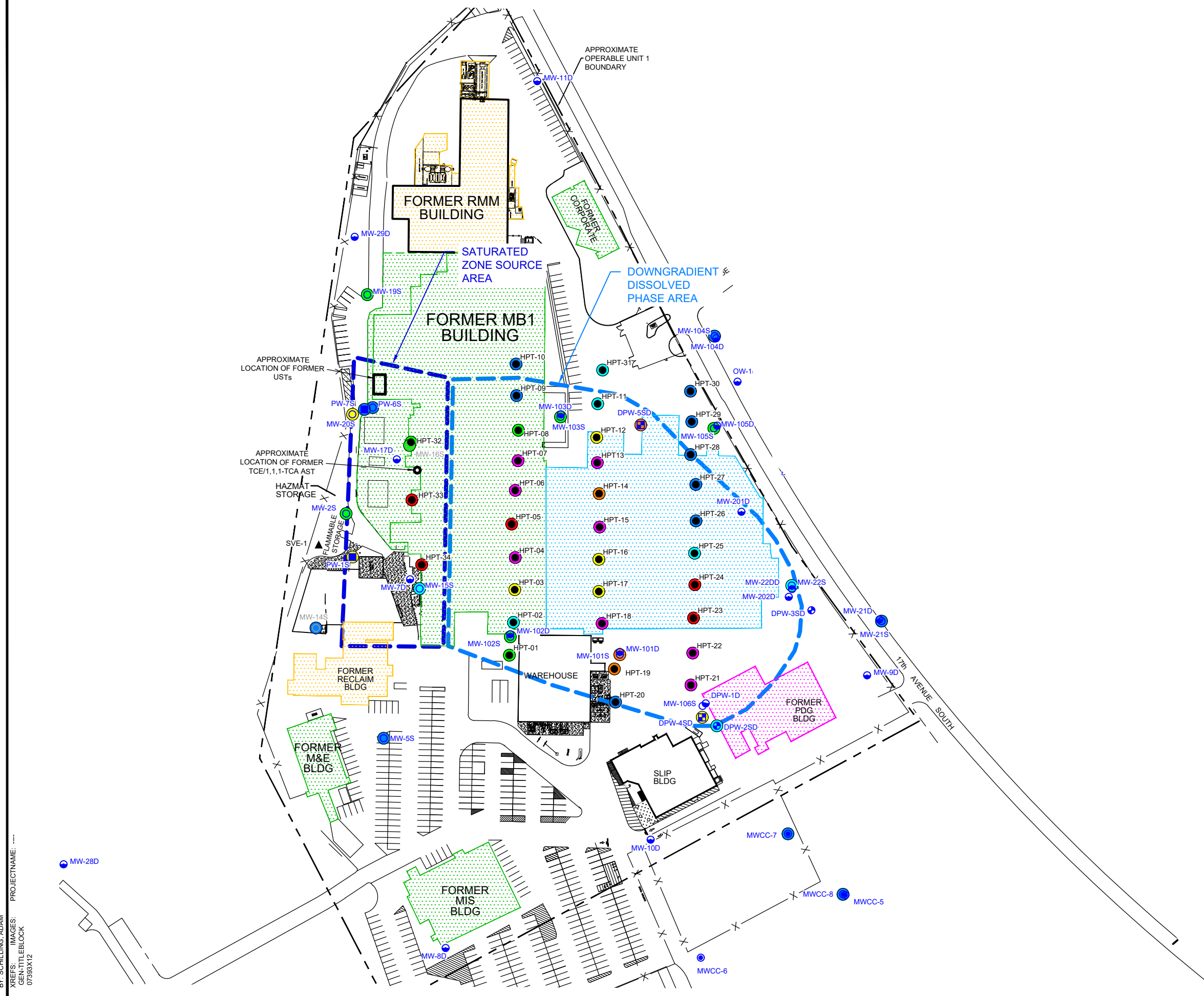


AVX CORPORATION
 MYRTLE BEACH FACILITY
 MYRTLE BEACH, SOUTH CAROLINA

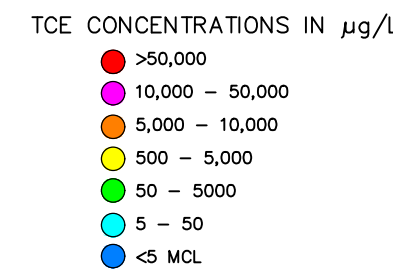
VADOSE ZONE SOURCE AREAS

ARCADIS Design & Consultancy for natural and built assets

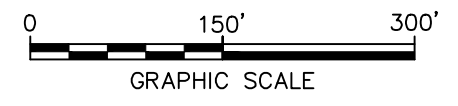
FIGURE
2-1



- LEGEND:**
- MONITORING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
 - MONITORING WELL SCREENED IN THE LOWER TERRACE DEPOSITS
 - MONITORING WELL SCREENED IN THE PEEDEE FORMATION
 - MONITORING WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
 - FORMER PUMPING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
 - PRODUCTION WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
 - CARMIKE WELL LOCATION SCREENED IN THE UPPER TERRACE DEPOSITS
 - ▲ FORMER SOIL VAPOR EXTRACTION WELL SCREENED IN THE UPPER TERRACE DEPOSITS
 - ABANDONED MONITORING WELL
 - DEMOLISHED BUILDING (2018)
 - DEMOLISHED BUILDING (2015)
 - DEMOLISHED BUILDING (2012)
 - DEMOLISHED BUILDING (2009)



- NOTES:**
1. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.
 2. COLORS ASSOCIATED WITH DATA POINTS REPRESENT THE MOST RECENT DATA AVAILABLE FOR THAT LOCATION.

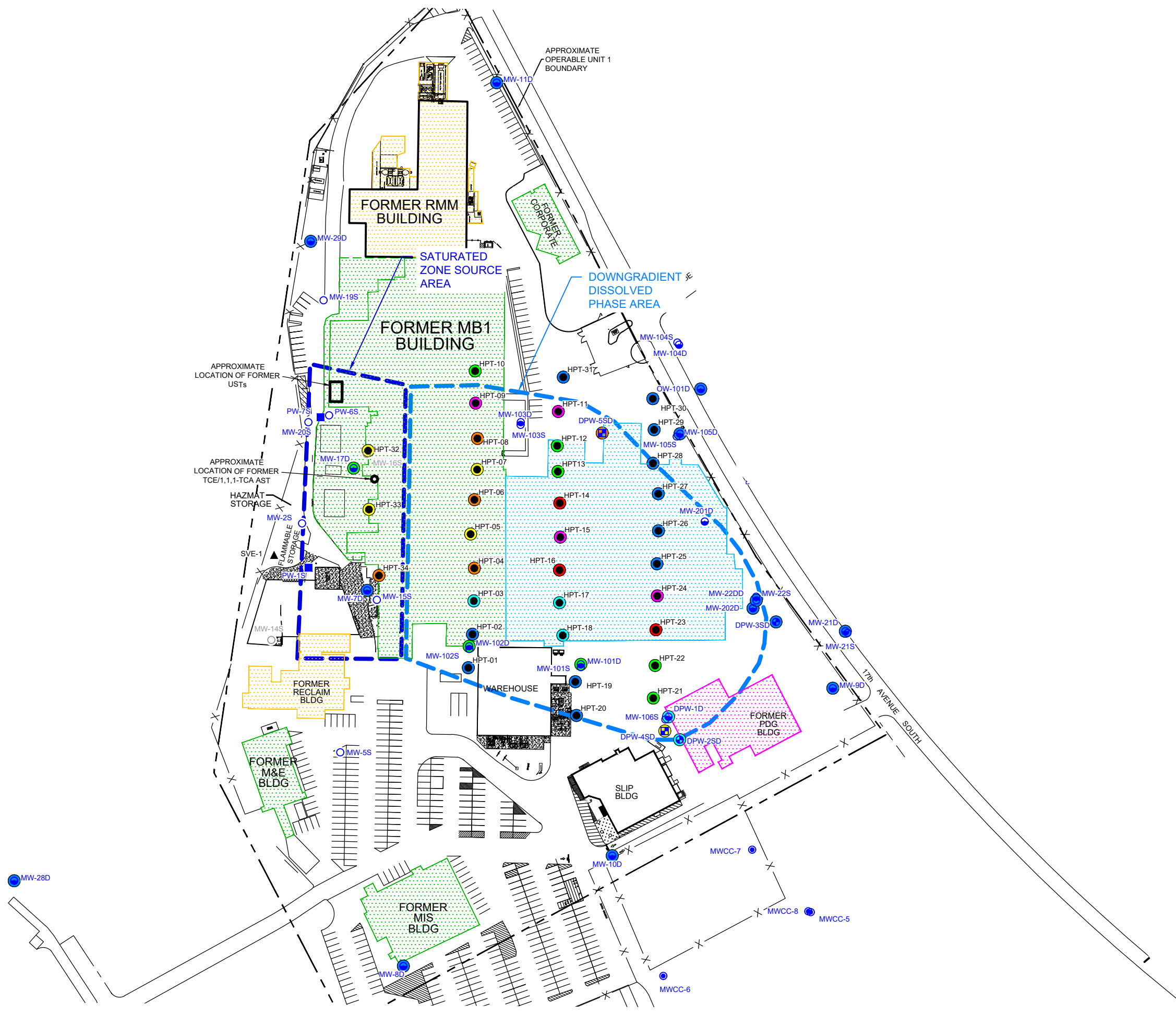


AVX CORPORATION
 MYRTLE BEACH FACILITY
 MYRTLE BEACH, SOUTH CAROLINA

**SATURATED ZONE SOURCE AREA AND
 DOWNGRADIENT DISSOLVED-PHASE
 AREA - UPPER TERRACE DEPOSITS**

ARCADIS Design & Consultancy
 for natural and built assets

FIGURE
2-2



LEGEND:

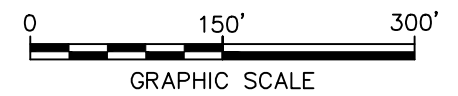
- MONITORING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- MONITORING WELL SCREENED IN THE LOWER TERRACE DEPOSITS
- MONITORING WELL SCREENED IN THE PEEDEE FORMATION
- MONITORING WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- FORMER PUMPING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- PRODUCTION WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- CARMIKE WELL LOCATION SCREENED IN THE UPPER TERRACE DEPOSITS
- ▲ FORMER SOIL VAPOR EXTRACTION WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- ABANDONED MONITORING WELL
- DEMOLISHED BUILDING (2018)
- DEMOLISHED BUILDING (2015)
- DEMOLISHED BUILDING (2012)
- DEMOLISHED BUILDING (2009)

TCE CONCENTRATIONS IN µg/L

- >50,000
- 10,000 – 50,000
- 5,000 – 10,000
- 500 – 5,000
- 50 – 5000
- 5 – 50
- <5 MCL

NOTES:

1. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.
2. COLORS ASSOCIATED WITH DATA POINTS REPRESENT THE MOST RECENT DATA AVAILABLE FOR THAT LOCATION.



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**SATURATED ZONE SOURCE AREA AND
 DOWNGRADIENT DISSOLVED-PHASE
 AREA - LOWER TERRACE DEPOSITS**

ARCADIS Design & Consultancy
 for natural and built assets

FIGURE
2-3


| Vadose Source Zone Component Options | |
|---|--|
| Excavation (EXC) | |
| Insitu Thermal Vadose Zone (ISTVZ) | |
| Saturated Source Zone Component Options | |
| Insitu Thermal Saturated Zone (ISTSZ) | |
| Enhanced Reductive Dechlorination (ERD) | |
| Pumping and Treatment (P&T) | |
| Dynamic Groundwater Recirculation (DGR) | |
| Downgradient GW Component Options | |
| Enhanced Reductive Dechlorination (ERD) | |
| Pumping and Treatment (P&T) | |
| Dynamic Groundwater Recirculation (DGR) | |

| Targets of Remediation | Remedial Alternative Combinations | | | | | | | | | | | | | | | |
|----------------------------------|-----------------------------------|-------|-------|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| Source Vadose Zone (SVZ) | EXC | EXC | EXC | EXC | EXC | EXC | EXC | EXC | ISTVZ | ISTVZ | ISTVZ | ISTVZ | ISTVZ | ISTVZ | ISTVZ | ISTVZ |
| Source Saturated Zone (SSZ) | ISTSZ | ISTSZ | ISTSZ | ERD | ERD | ERD | P&T | DGR | ISTSZ | ISTSZ | ISTSZ | ERD | ERD | ERD | P&T | DGR |
| Down Gradient Groundwater (DGGW) | ERD | P&T | DGR | ERD | P&T | DGR | P&T | DGR | ERD | P&T | DGR | ERD | P&T | DGR | P&T | DGR |
| | X | X | X | OK | X | X | OK | OK | OK | X | OK | X | X | X | X | X |

OK
 X

Combination of components into a comprehensive alternative that is carried through the FS
Combination of components into a comprehensive alternative that is not carried through the FS

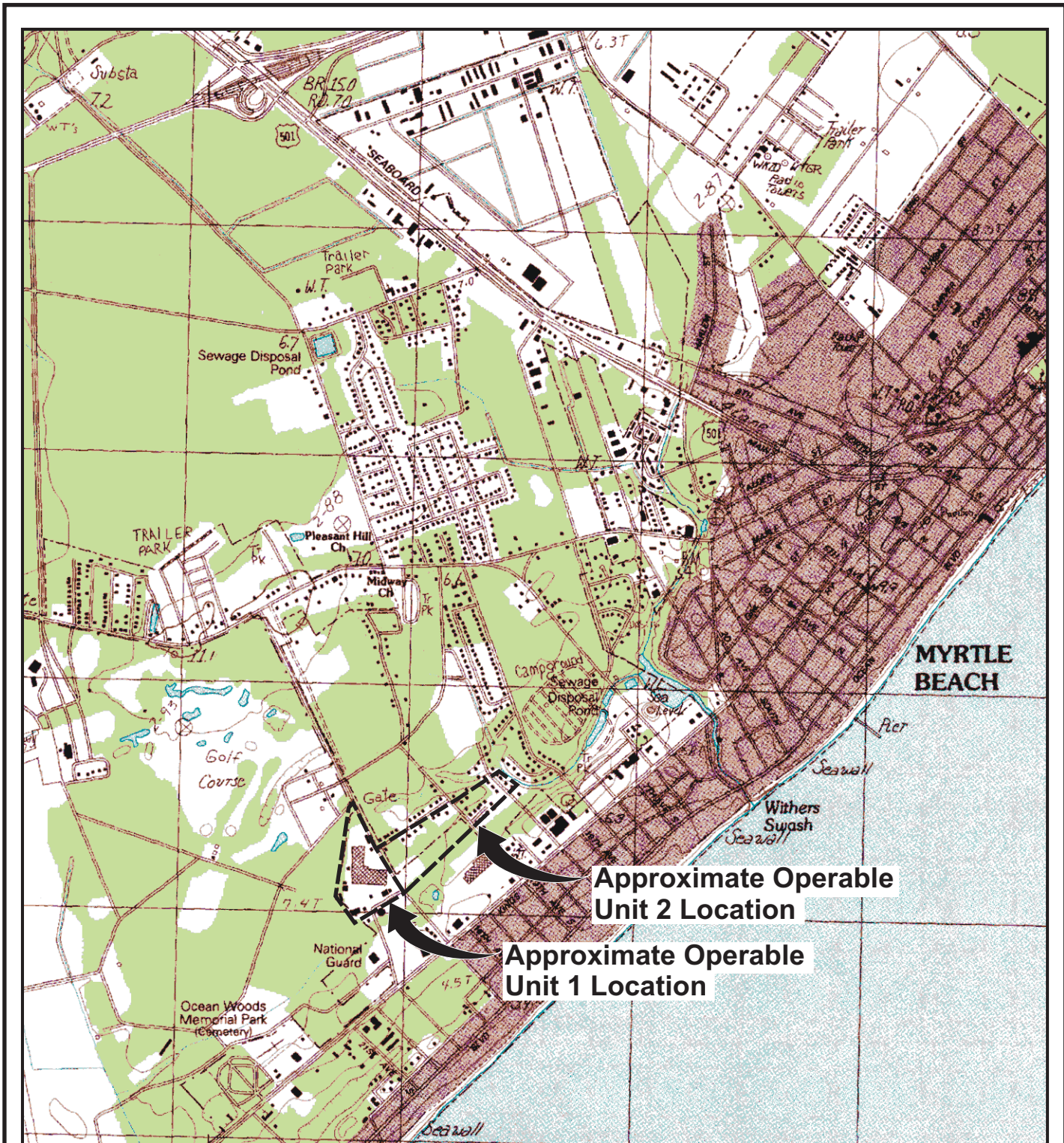
| Rationale for Elimination of Alternative Combinations | |
|---|--|
| 1 | Remedial Alternative Combinations 1 through 3 do not represent a logical combination of component options as IST is best suited only when applied to both the vadose and saturated zone source areas. |
| 2 | Remedial Alternative Combination 5 and 6 do not represent a logical combination of components because ERD is not compatible with closely located P&T or DGR because of the increased potential for water treatment system fouling due to the high organic carbon loading that will eventually enter the groundwater pumping wells and air stripper. Nonetheless, an ERD remedy may count on the current P&T system for a time to increase hydraulic gradients which will help to widen the ERD reactive zone during the early stages of implementation of ERD. The P&T system would eventually be taken offline when ERD wells, more closely located to the pumping wells, are installed and placed on line. |
| 3 | For Remedial Alternative Combination 10, applying the most aggressive option of IST in the source area vadose and saturated zones is considered mismatched if combined with the least aggressive option of P&T for the downgradient dissolved phase area. Would only be logical to apply a more aggressive option in the downgradient dissolved phase area (like ERD or DGR) if committing the very high funding for IST in the source area. |
| 4 | Remedial Alternative Combinations 12 through 16 do not represent a logical assembly of components because IST is best suited for application only when used in both vadose and saturated zones. |

| | |
|--|-----------------------------|
| AVX Corporation Myrtle Beach Facility Myrtle Beach, South Carolina | |
| REMEDIAL COMPONENT OPTIONS AND ASSEMBLY OF OPTIONS INTO REMEDIAL ALTERNATIVES | |
|  <small>Design & Consultancy for natural and built assets</small> | Figure 6-1 |

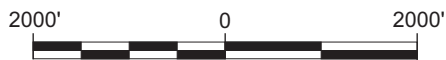
APPENDIX A

Figure Set from 2016 Feasibility Study Investigation Report





REFERENCE: BASE MAP USGS 7.5 MIN. QUAD., MYRTLE BEACH, SOUTH CAROLINA, PHOTOREVISED 1984.



Approximate Scale: 1" = 2000'



Area Location



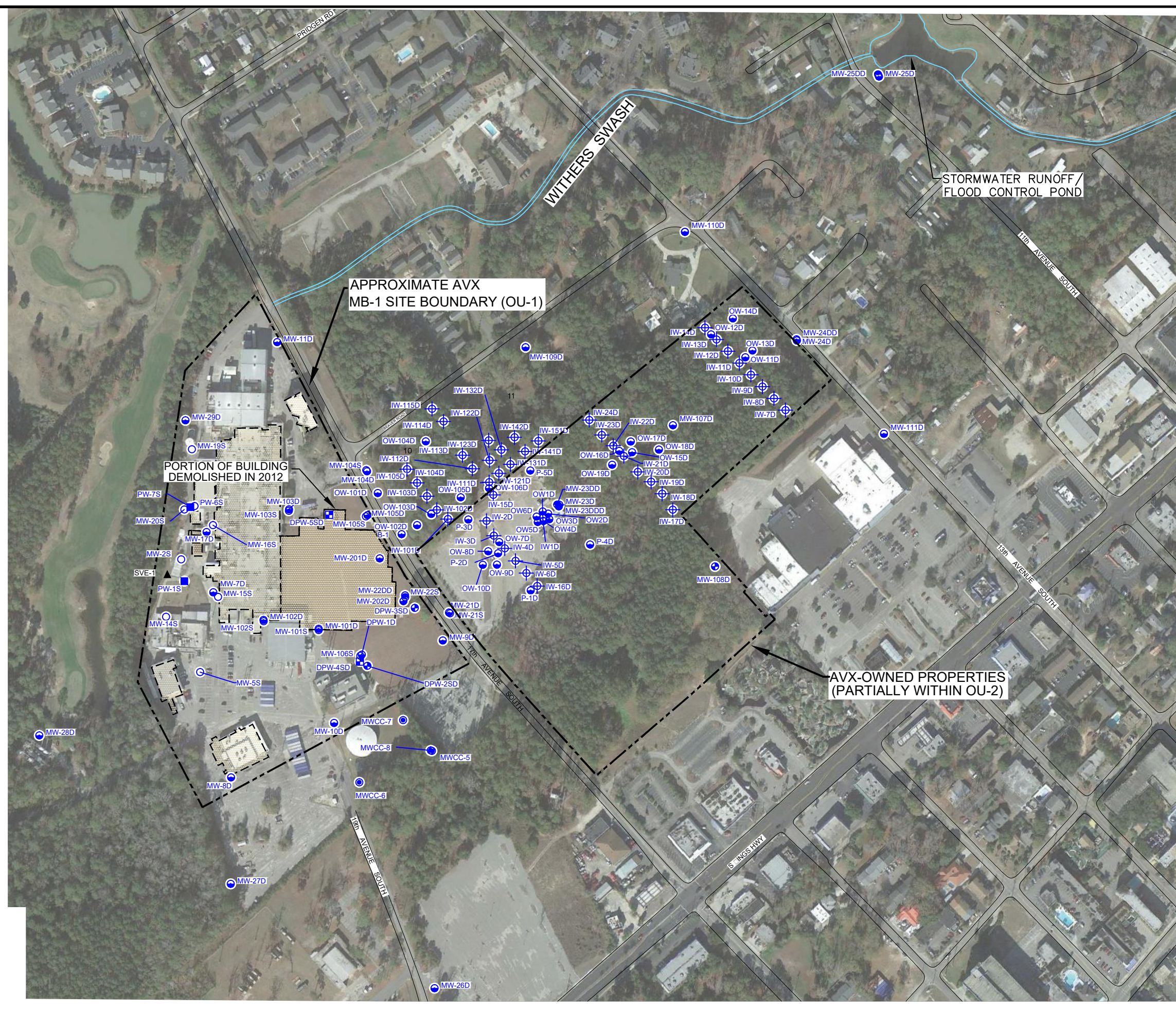
AVX CORPORATION
 MYRTLE BEACH FACILITY
 MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT











SITE LOCATION MAP



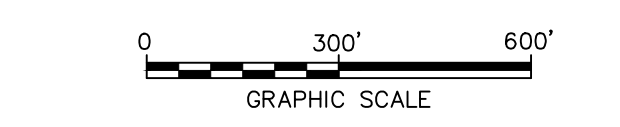
FIGURE
1-1

CITY: Syrac, se DIV/GROUP: EnvCAD DE: A. Schilling, P.LISTER LD: A. Schilling, P.LISTER PW/TM: M. Hanish LYN: ON="OFF=REF. (FR.)
 G:\ENVCAD\SYRACUSE\ACT\180007389\0002\DWG\F07389B01.DWG LAYOUT: 2-1 SAVED: 10/14/2016 12:09 PM ACADVER: 19.1S (LMS TECH) PAGES: 19
 XREFS: 07389B01 07389B02
 IMAGES: PROJECTNAME: --- PLOTSTYLETABLE: PLT\FULL.CTB PAGESETUP: --- PLOTTED: 10/14/2016 12:09 PM BY: SCHILLING, ADAM



- LEGEND:**
-  MONITORING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
 -  MONITORING WELL SCREENED IN THE LOWER TERRACE DEPOSITS
 -  MONITORING WELL SCREENED IN THE PEEDEE FORMATION
 -  MONITORING WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
 -  FORMER PUMPING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
 -  PRODUCTION WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
 -  INJECTION WELL SCREENED IN THE LOWER TERRACE DEPOSITS
 -  CARMIKE WELL LOCATION SCREENED IN THE UPPER TERRACE DEPOSITS
 -  FORMER SOIL VAPOR EXTRACTION WELL SCREENED IN THE UPPER TERRACE DEPOSITS
-  11 NANCE PROPERTY PARCELS 10 & 11

- NOTES:**
1. AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO.
 2. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.



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 MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT

AVX-OWNED PROPERTIES

 **ARCADIS** | Design & Consultancy for natural and built assets

FIGURE
2-1



LEGEND

TCE

- <0.005
- 0.005 - 1.0
- 1.0 - 10
- 10 - 100
- 100 - 1,000
- 1,000 - 5,000
- >5,000

Note: The colors at each location represent the range of the highest detected concentrations. Vertical distribution is not accounted for at these locations.

Figure 3-2
Trichloroethene in Soil

Myrtle Beach Facility
AVX Corporation
Myrtle Beach, South Carolina



Source: USGS 7.5-minute Series Topographic
Quadrangle, NAME (DATE).

SOUTH A NORTH A'

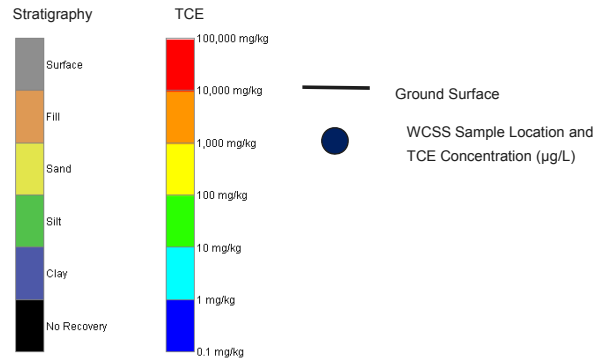
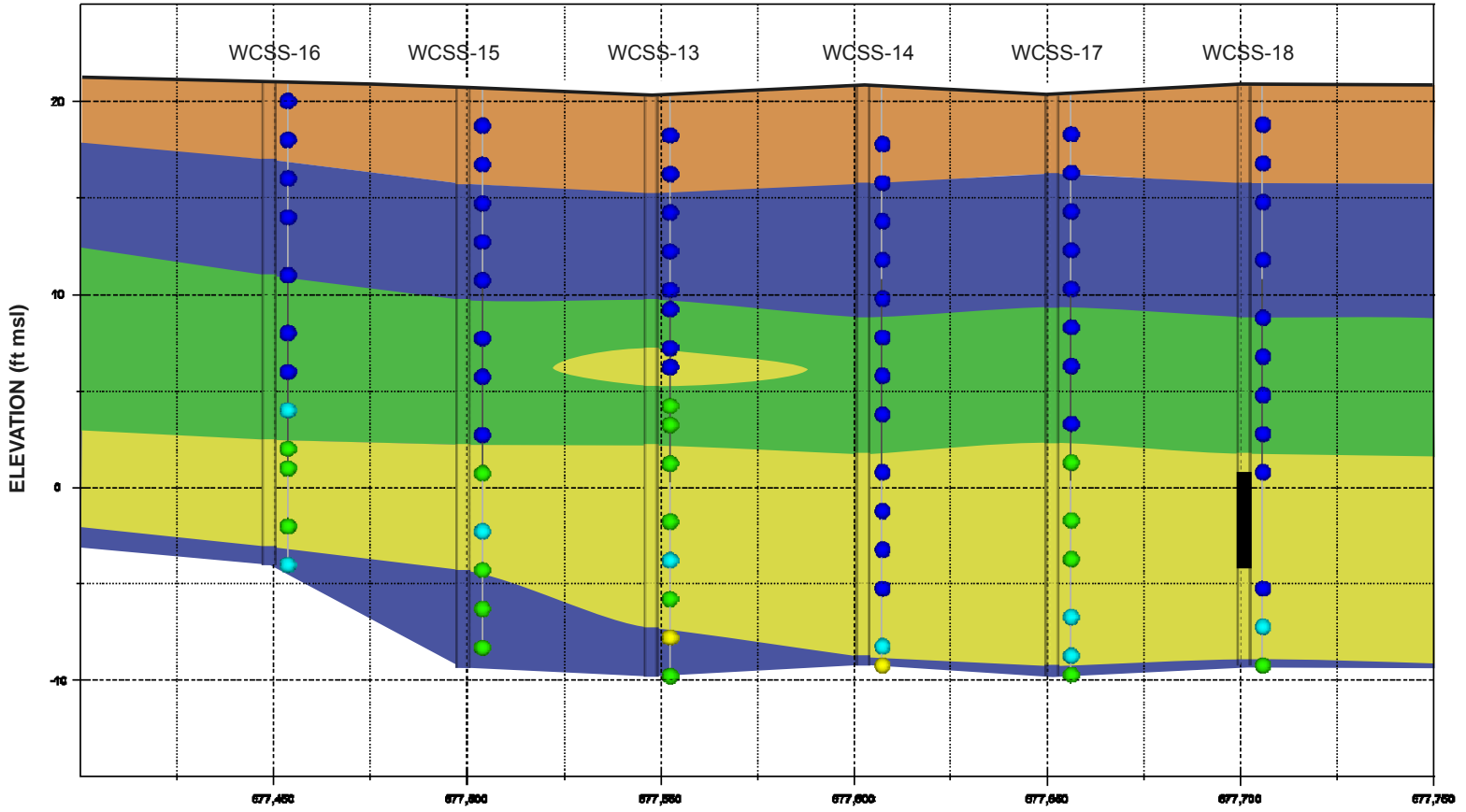


Figure 3-3
Source Area Section A-A'

AVX Myrtle Beach
Myrtle Beach, South Carolina



Source: USGS 7.5-minute Series Topographic
Quadrangle, NAME (DATE).

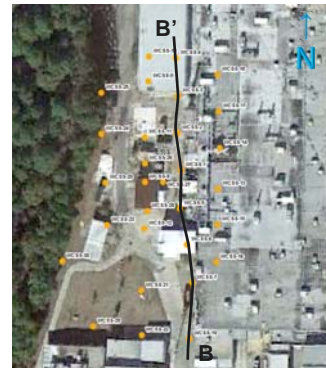
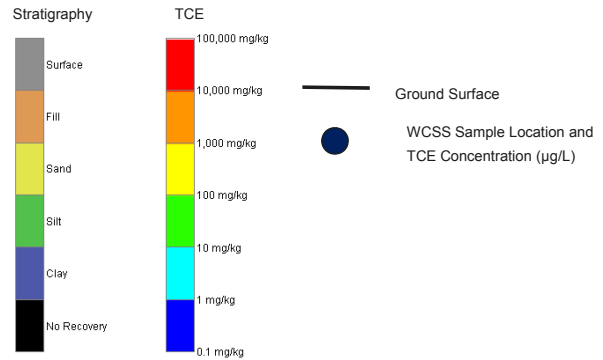
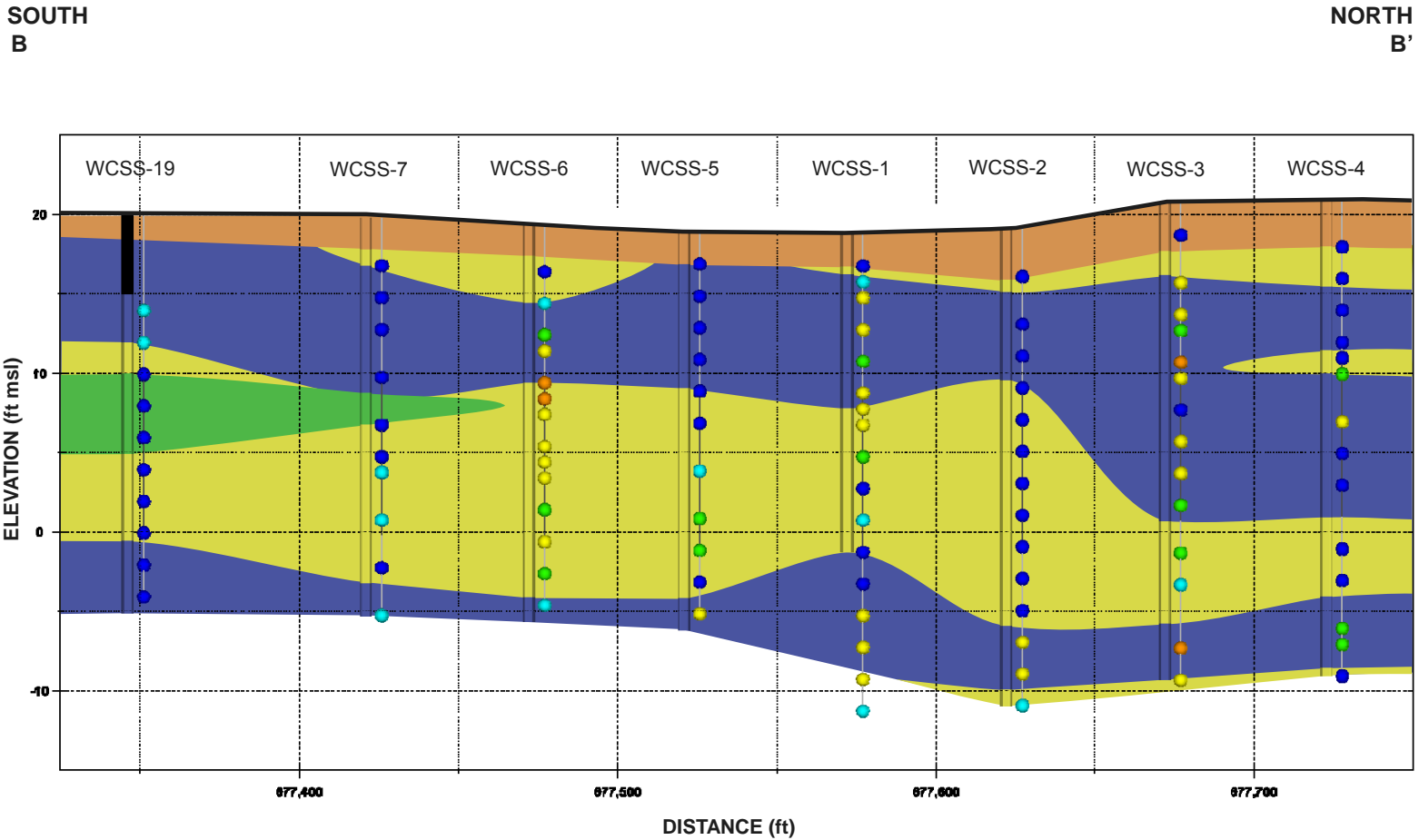


Figure 3-4
Source Area Section B-B'

AVX Myrtle Beach
Myrtle Beach, South Carolina



Source: USGS 7.5-minute Series Topographic
Quadrangle, NAME (DATE).

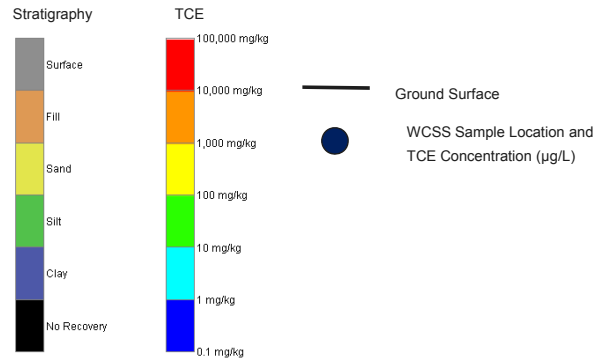
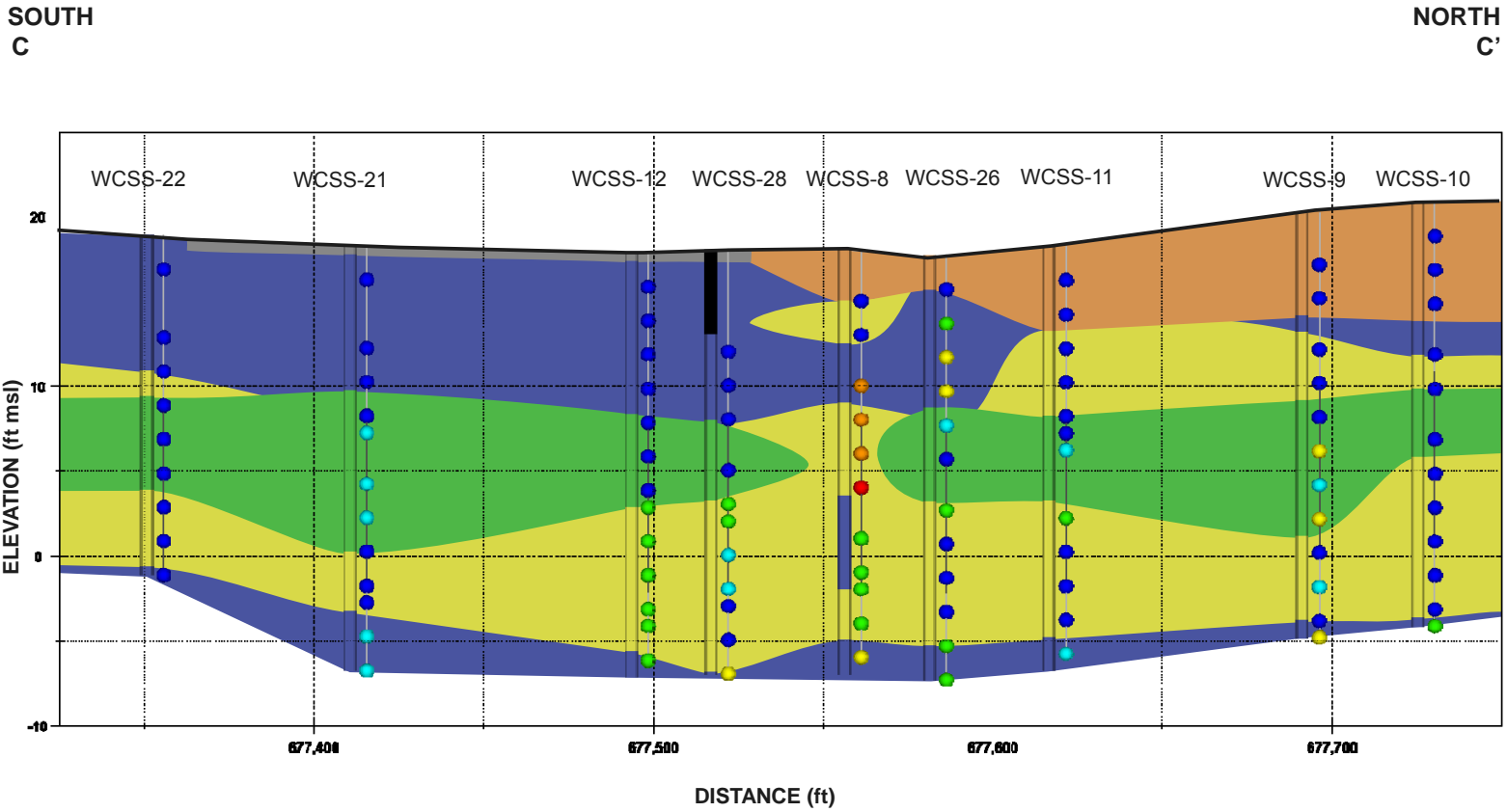


Figure 3-5
Source Area Section C-C'

AVX Myrtle Beach
Myrtle Beach, South Carolina



Source: USGS 7.5-minute Series Topographic
Quadrangle, NAME (DATE).

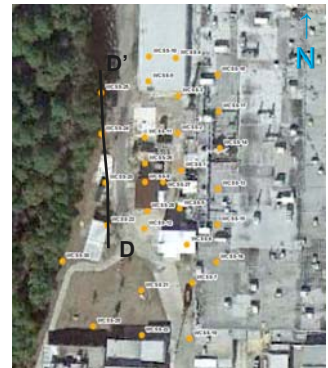
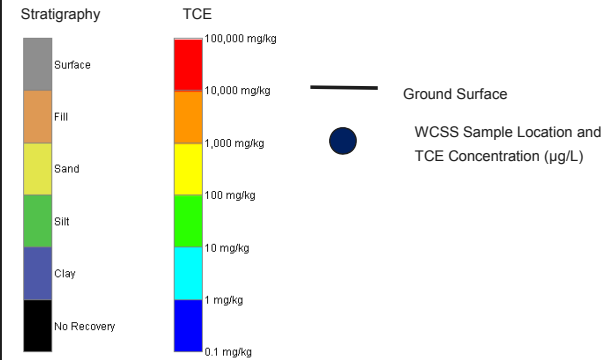
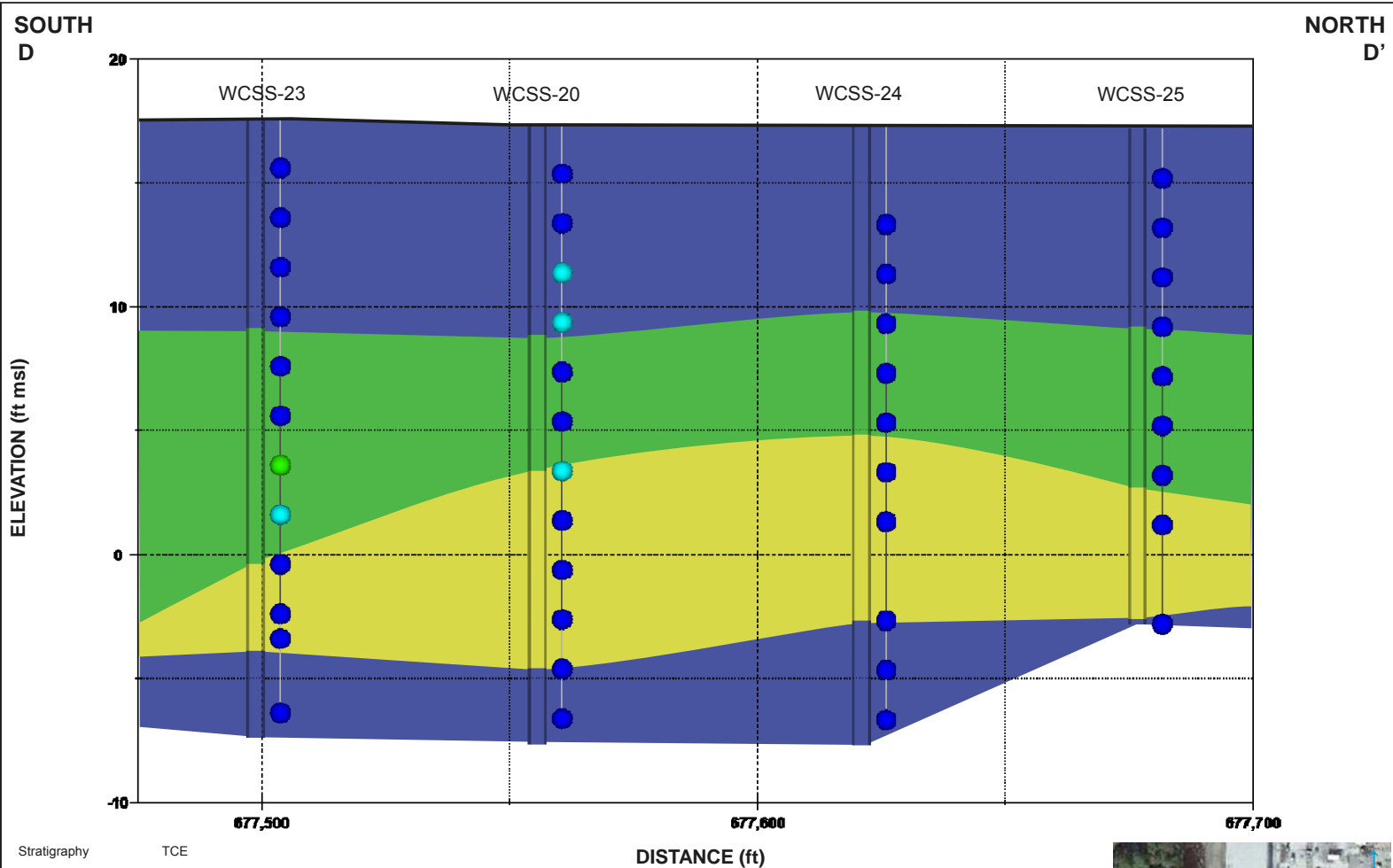


Figure 3-6
Source Area Section D-D'

AVX Myrtle Beach
Myrtle Beach, South Carolina



Source: USGS 7.5-minute Series Topographic
Quadrangle, NAME (DATE).

A SOUTH A' NORTH

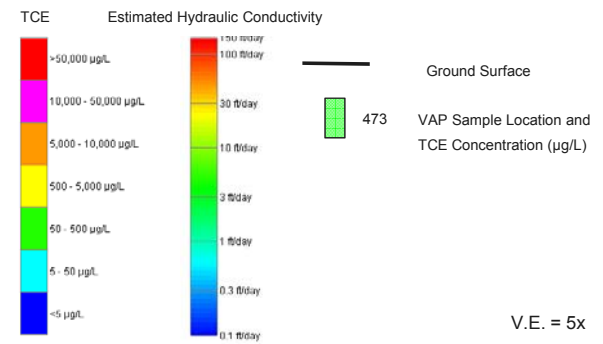
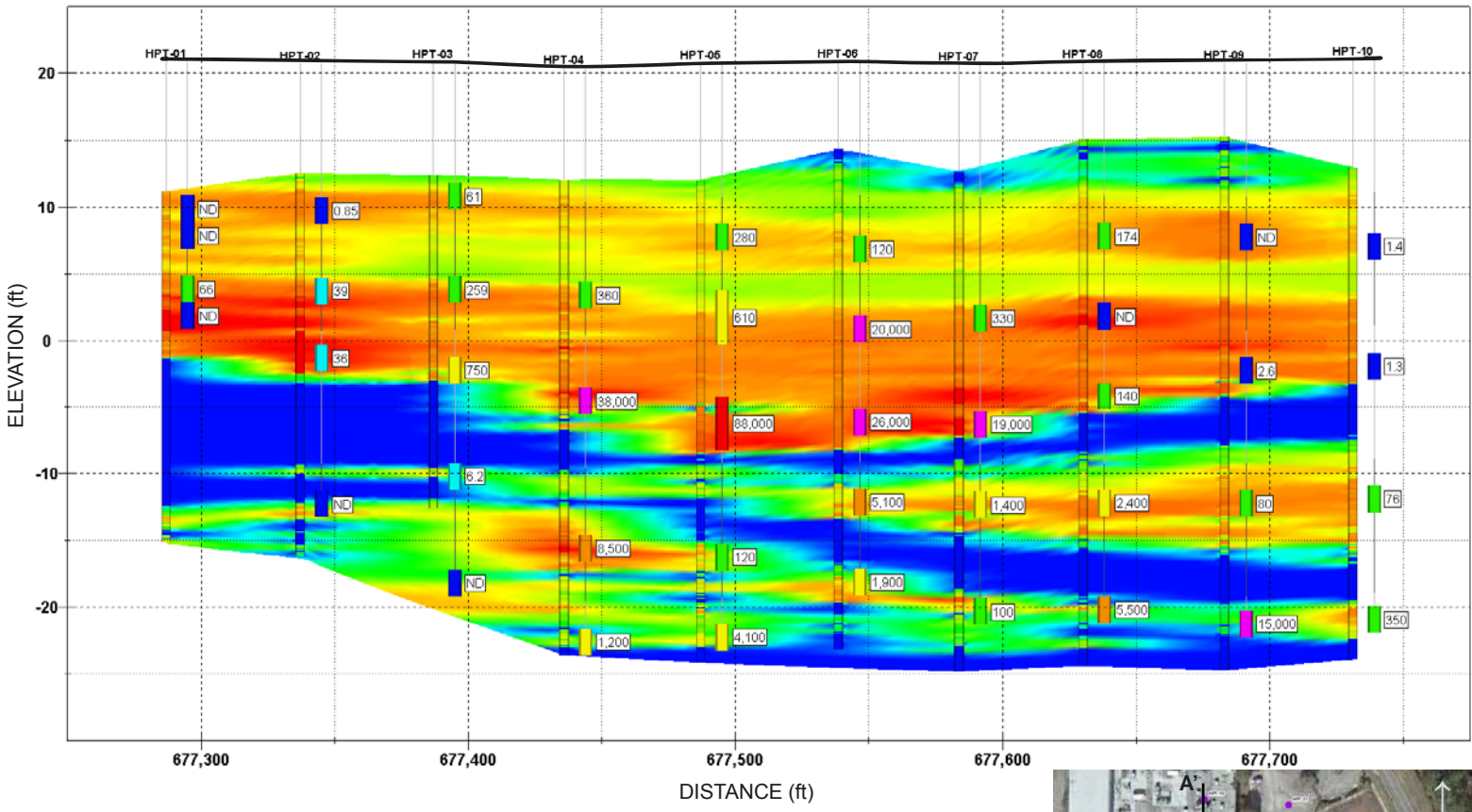


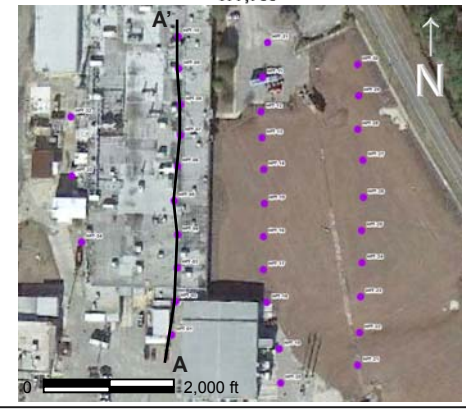
Figure 3-7
Cross-Section A-A'

AVX Myrtle Beach
Myrtle Beach, South Carolina

- Note:
- TCE results represent the VAP sampling intervals. Colors associated with each box are based on the observed concentration.
 - Estimated hydraulic conductivities were generated from HPT results. Colors associated with the estimated hydraulic conductivity are distributed across the entire section and based off the profile generated at each location.



Source: USGS 7.5-minute Series Topographic Quadrangle, NAME (DATE).



B
SOUTH

B'
NORTH

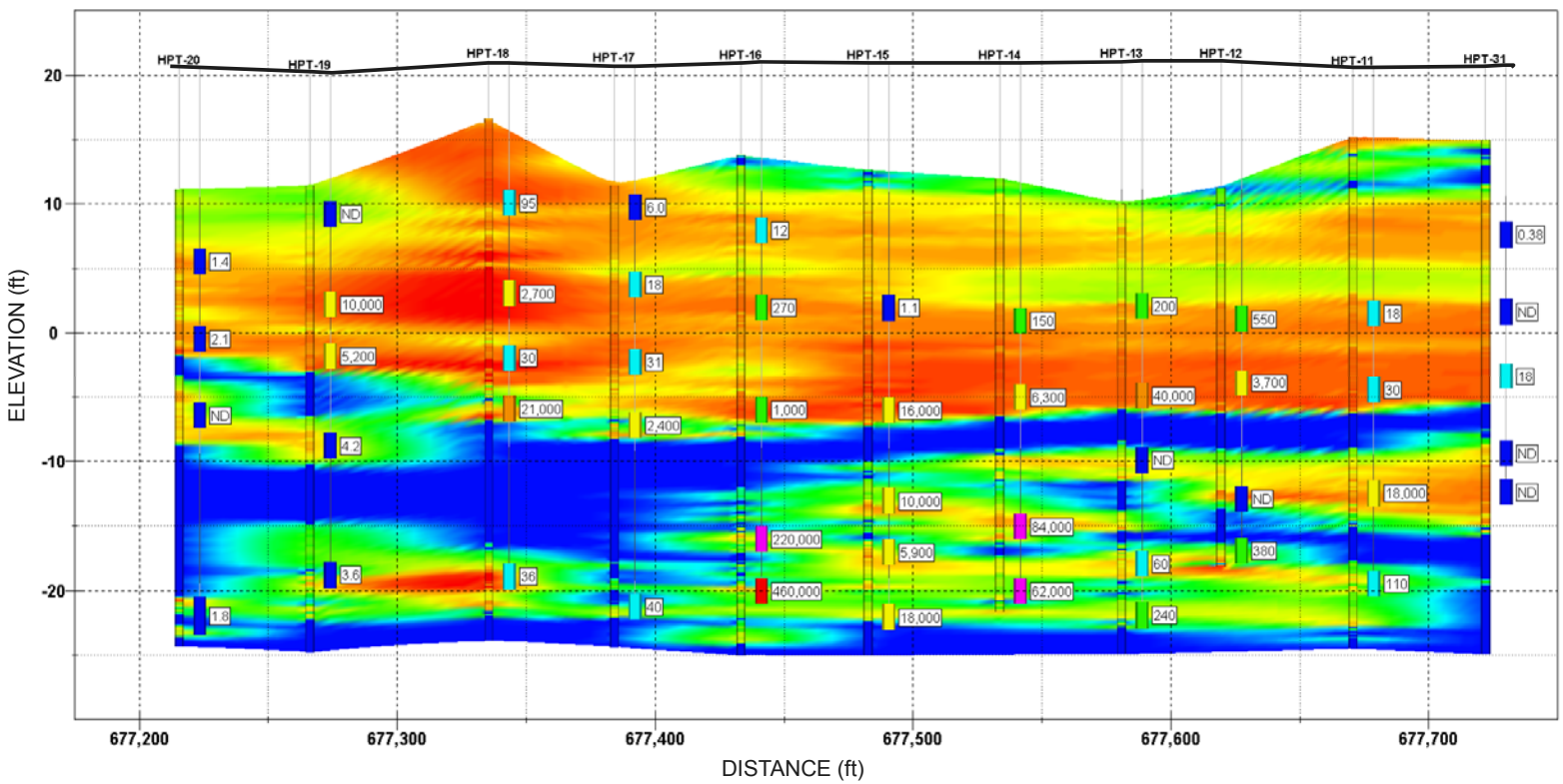
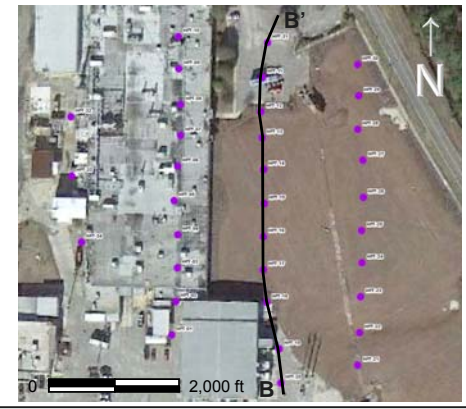


Figure 3-8
Cross-Section B-B'

AVX Myrtle Beach
Myrtle Beach, South Carolina

Note:

- TCE results represent the VAP sampling intervals. Colors associated with each box are based on the observed concentration.
- Estimated hydraulic conductivities were generated from HPT results. Colors associated with the estimated hydraulic conductivity are distributed across the entire section and based off the profile generated at each location.



Source: USGS 7.5-minute Series Topographic Quadrangle, NAME (DATE).

C SOUTH C' NORTH

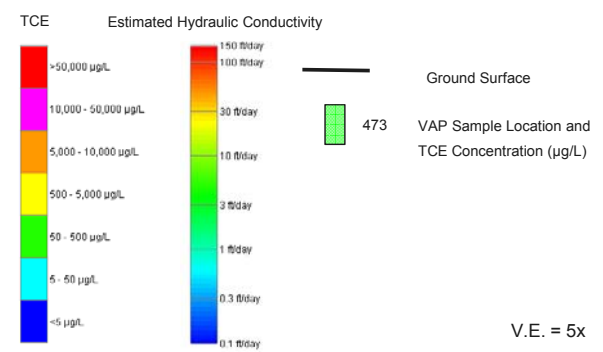
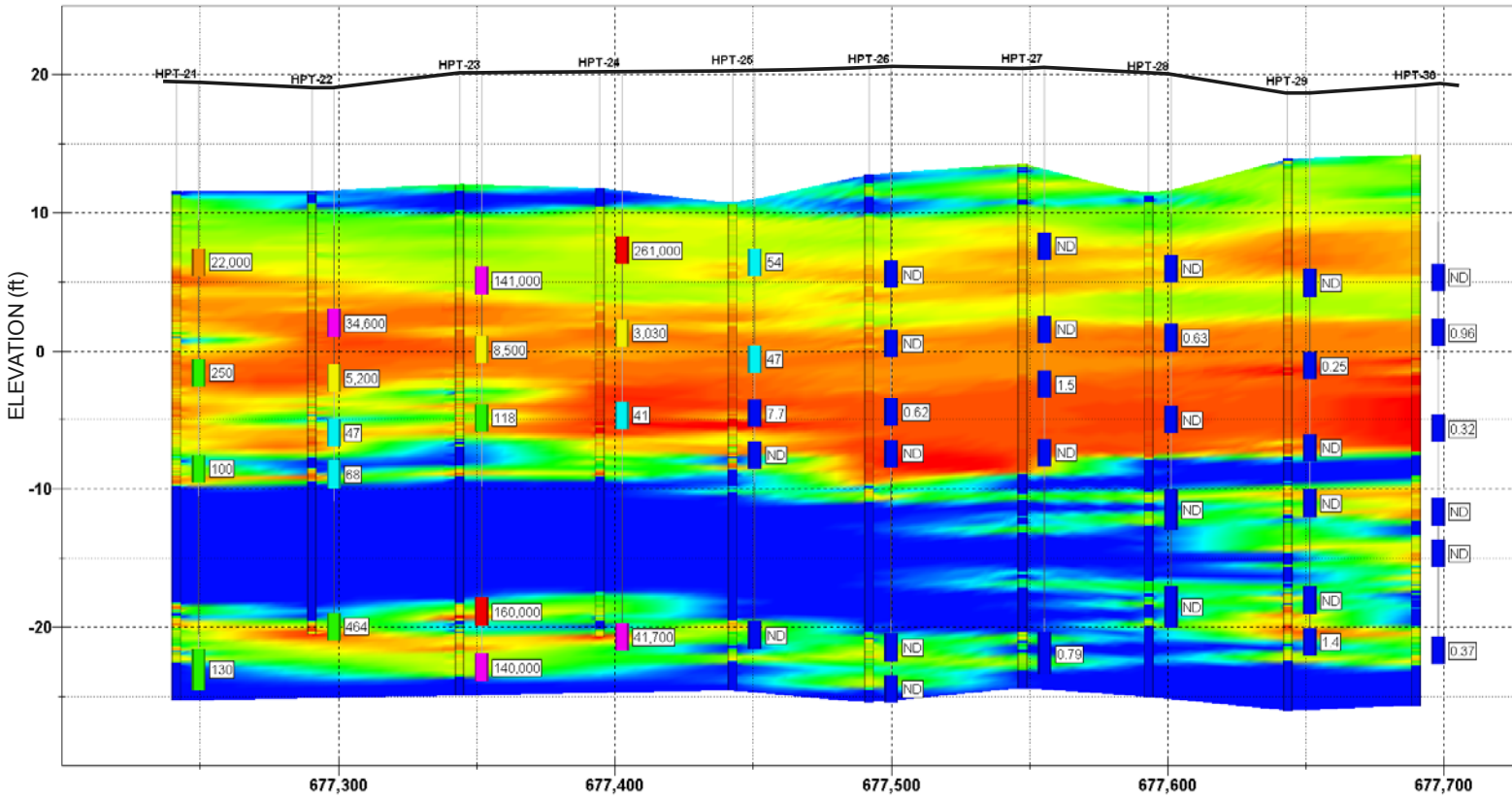


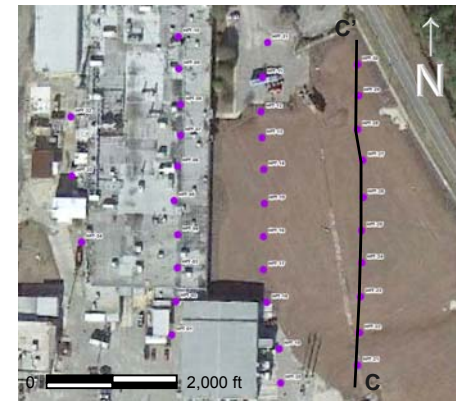
Figure 3-9
Cross-Section C-C'

AVX Myrtle Beach
Myrtle Beach, South Carolina

- Note:
- TCE results represent the VAP sampling intervals. Colors associated with each box are based on the observed concentration.
 - Estimated hydraulic conductivities were generated from HPT results. Colors associated with the estimated hydraulic conductivity are distributed across the entire section and based off the profile generated at each location.

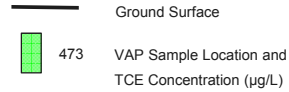
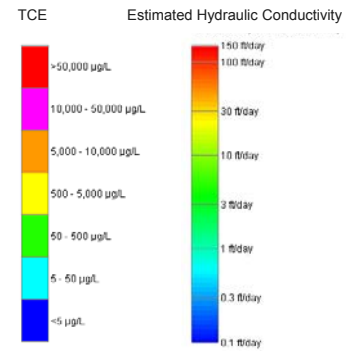
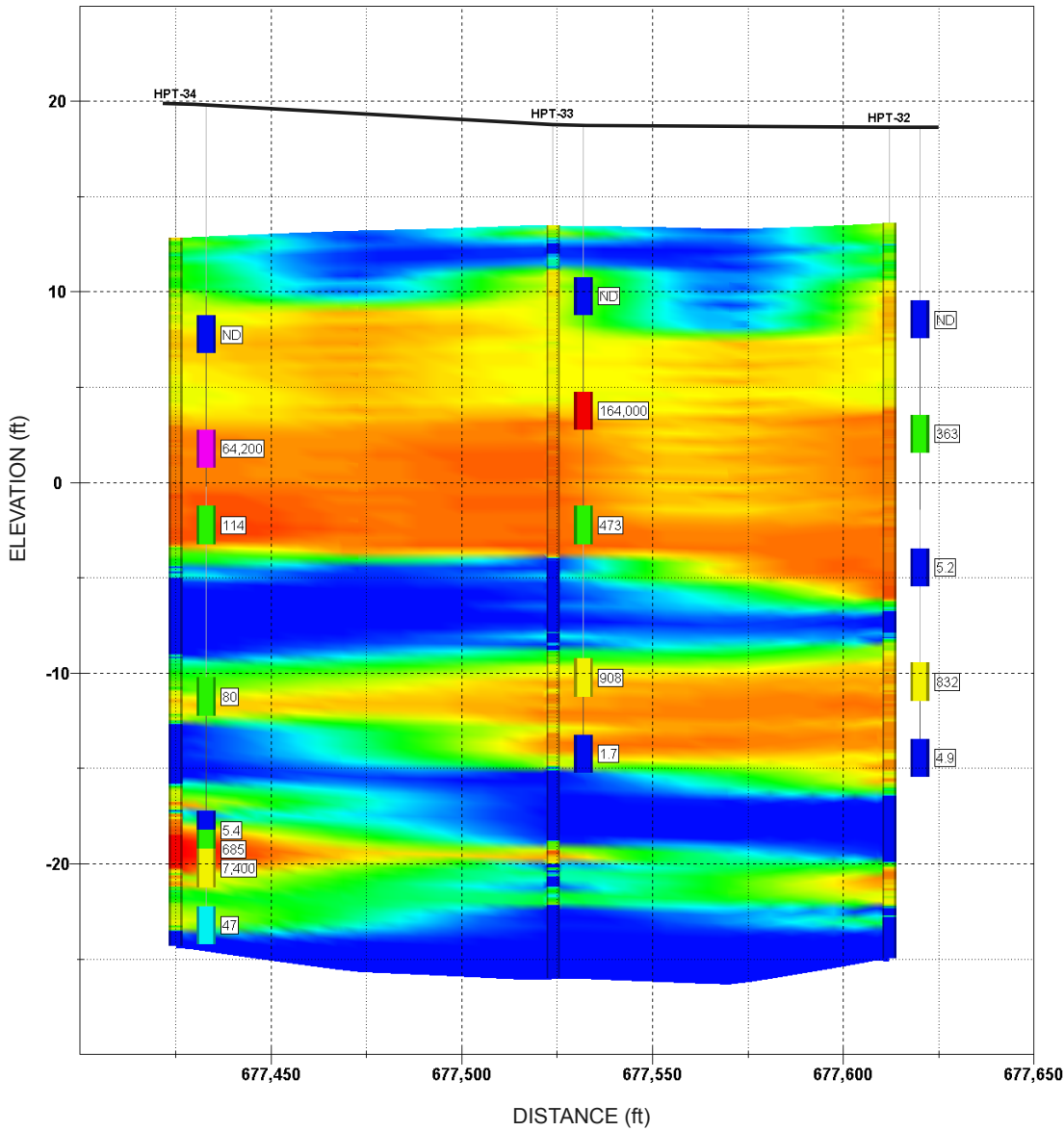


Source: USGS 7.5-minute Series Topographic Quadrangle, NAME (DATE).



D
SOUTH

D'
NORTH



V.E. = 5x



Figure 3-10
Cross-Section D-D'

AVX Myrtle Beach
Myrtle Beach, South Carolina

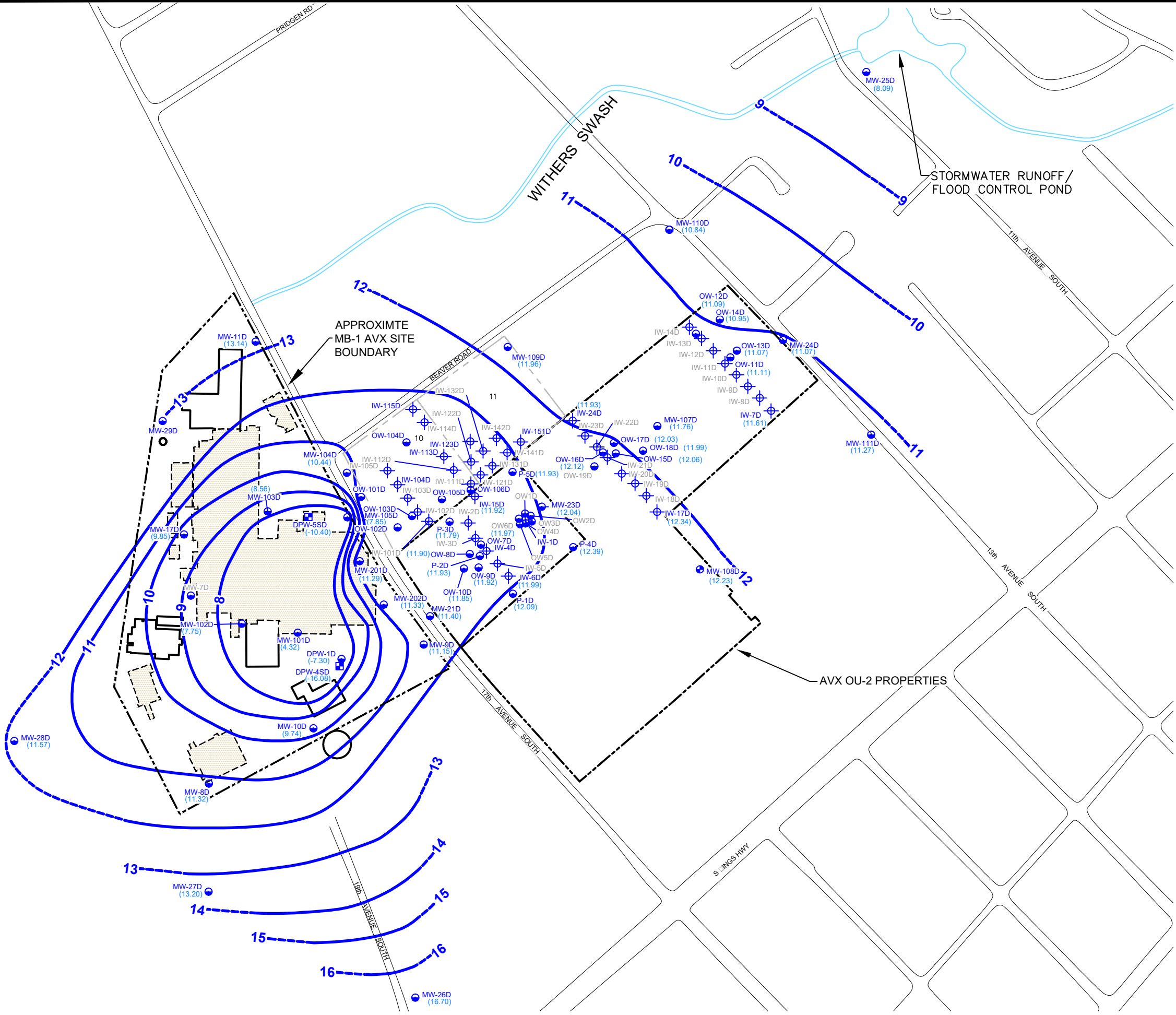
Note:

- TCE results represent the VAP sampling intervals. Colors associated with each box are based on the observed concentration.
- Estimated hydraulic conductivities were generated from HPT results. Colors associated with the estimated hydraulic conductivity are distributed across the entire section and based off the profile generated at each location.
- V.E. = Vertical Exaggeration



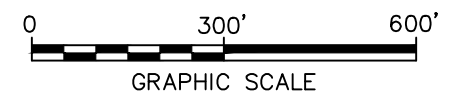
Source: USGS 7.5-minute Series Topographic Quadrangle, NAME (DATE).

CITY: Syracuse DIV/GROUP: EnvCAD DB: A.Schilling, R.BASSETT LD: A.Schilling PM/TM: M.Hanish L/R: ON: OFF-REF. (FR.) PLOTTED: 8/29/2016 2:57 PM BY: SCHILLING, ADAM
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 XREFS: 07393X00 07393X01



- LEGEND:**
- MONITORING WELL SCREENED IN THE LOWER TERRACE DEPOSITS
 - PRODUCTION WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
 - ⊕ INJECTION WELL SCREENED IN THE LOWER TERRACE DEPOSITS
 - (10.83) GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL [AMSL])
 - 12 GROUNDWATER ELEVATION (AMSL) (ONE FOOT CONTOUR INTERVAL (DASHED WHERE INFERRED))
 - PARCELS 10 & 11
 - FORMER BUILDING FOOTPRINT

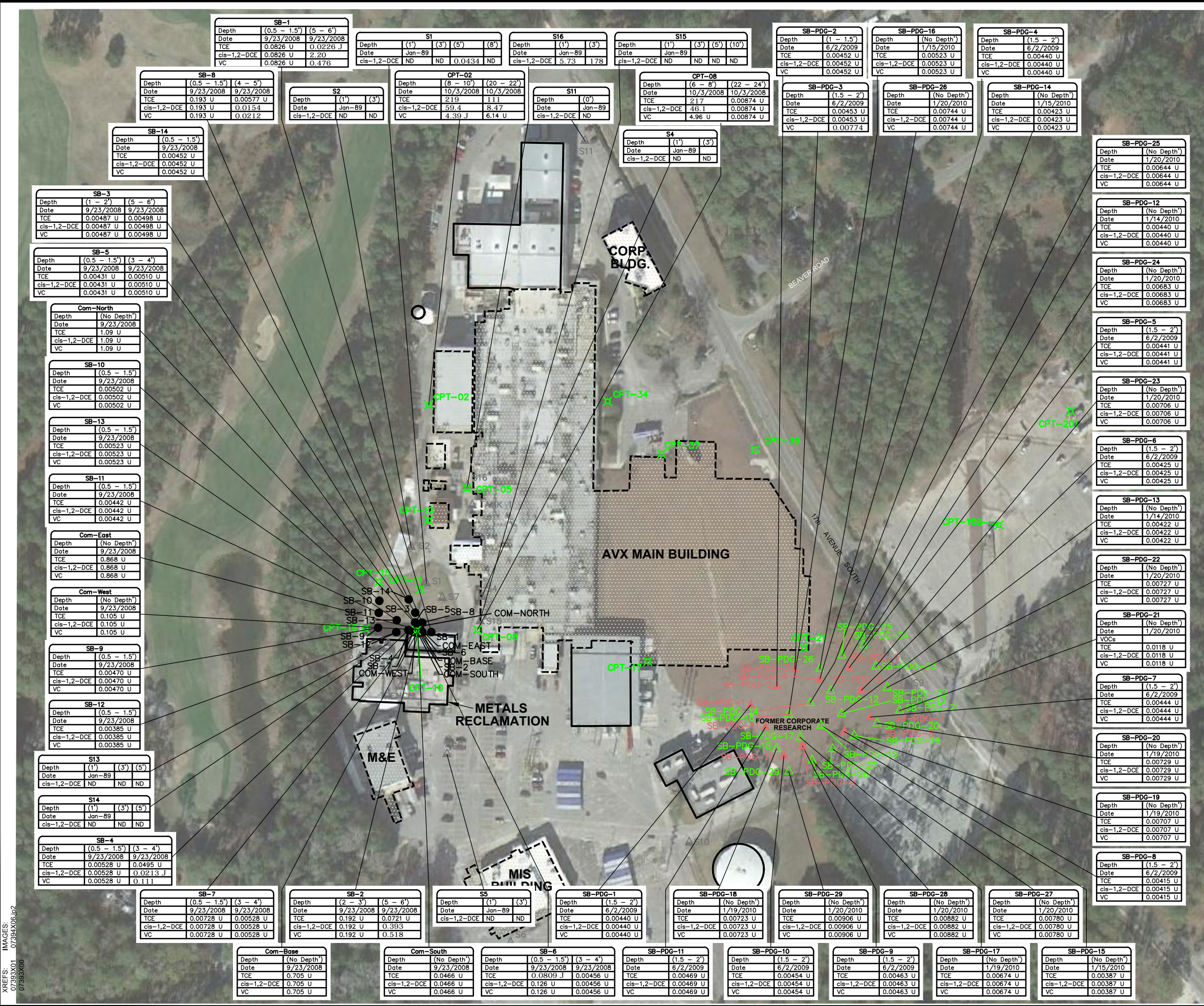
- NOTE:**
1. WELLS LABELED IN GRAY NOT GAUGED.
 2. WATER-LEVELS COLLECTED DURING OPERATION OF DPW-4SD AT 25.8 GPM AND DPW-5SD AT 19.9 GPM.
 3. WATER-LEVELS FROM OPERATING PUMPING WELLS NOT CONTOURED EXPLICITLY.
 4. * VALUES NOT CONTOURED DUE TO UNCERTAINTY IN THE ACCURACY OF THE SURVEY OR MEASUREMENT.
 5. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.



AVX CORPORATION
 MYRTLE BEACH FACILITY
 MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT

**LOWER TERRACE DEPOSITS
 POTENTIOMETRIC SURFACE
 APRIL 11, 2016**

CITY: SYRACUSE, NY GROUP: ENV/CAD: DB: A SCHILLING, R. BASSETT, P. LISTER, R. BASSETT, LD: A SCHILLING, R. BASSETT, TR: R. MATOR, LYN: ONE, OFF-REF: (FR) G:\ENV\CAD\SYRACUSE\ACT\18007393\0002\DWG\VF\S07393C02.DWG LAYOUT: 5-3. SAVED: 6/24/2015 2:41 PM ACADVER: 19.1S (LMS TECH) PAGES: 10. PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/29/2016 3:00 PM BY: SCHILLING, ADAM

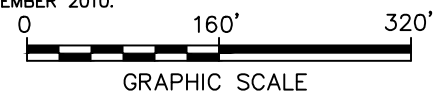


LEGEND:

- ▲ LOCATION OF HISTORICAL SOIL BORING
- LOCATION OF WASTE PAD AREA SOIL BORING
- ▲ LOCATION OF PRE-DEMOLITION SOIL BORING
- ▲ LOCATION OF POST-DEMOLITION SOIL BORING
- ✕ LOCATION OF CPT BORING

NOTES:

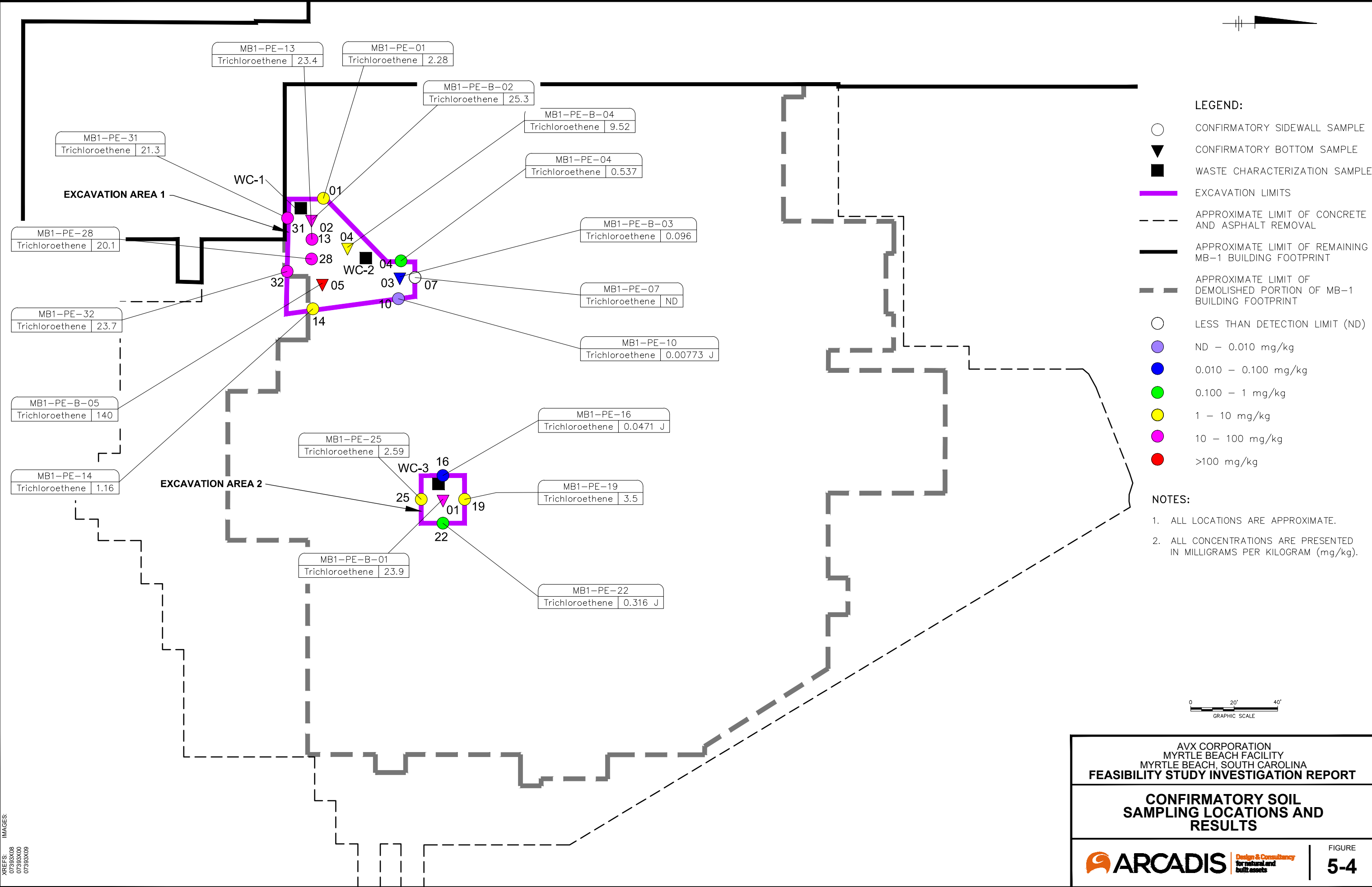
1. AERIAL PHOTOGRAPH OBTAINED FROM THE SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES WEBSITE (2007).
2. LOCATION OF ROADS ARE APPROXIMATE.
3. THE FORMER CORPORATE RESEARCH BUILDING HAS BEEN DEMOLISHED.
4. DATA PRESENTED IN MILLIGRAM PER KILOGRAM (mg/kg).
5. BOLD VALUES INDICATE COMPOUND DETECTED ABOVE ANALYTICAL METHOD DETECTION LIMIT.
6. J - INDICATES AN ESTIMATED VALUE.
7. U - COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. ASSOCIATED VALUE IS THE COMPOUND QUANTITATION LIMIT.
8. cis-1,2-DCE - cis-1,2-DICHLOROETHENE
9. TCE - TRICHLOROETHENE
10. VC - VINYL CHLORIDE
11. ft.- FEET BELOW GROUND SURFACE
12. ND - COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. HISTORICAL QUANTITATION LIMIT IS UNKNOWN.
13. DATA ORIGINALLY PRESENTED AS FIGURE 4-10 IN THE FEASIBILITY STUDY DATA GAP INVESTIGATION REPORT - NOVEMBER 2010.



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MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT**

SOIL ANALYTICAL DATA

CITY: SYRACUSE, NY DIV/GROUP: ENV/MDV DB: A. SCHILLING, R. BASSETT, P. LISTER, LD: A. SCHILLING, R. BASSETT, P. LISTER, TR: A. RICHARDSON, LYN: ONF+OFF=REF, (FR) G:\ENV\CAD\SYRACUSE\ACT\18007389\0002\DWG\F07389B06.DWG LAYOUT: 5-4, SAVED: 6/24/2015 12:20 PM, ACADVER: 19.1.5 (LMS TECH), PAGES: 19, PLOTSTYLETABLE: PLTFULLCTB, PLOTTED: 8/29/2016 3:01 PM, BY: SCHILLING, ADAM



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 MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT

**CONFIRMATORY SOIL
 SAMPLING LOCATIONS AND
 RESULTS**


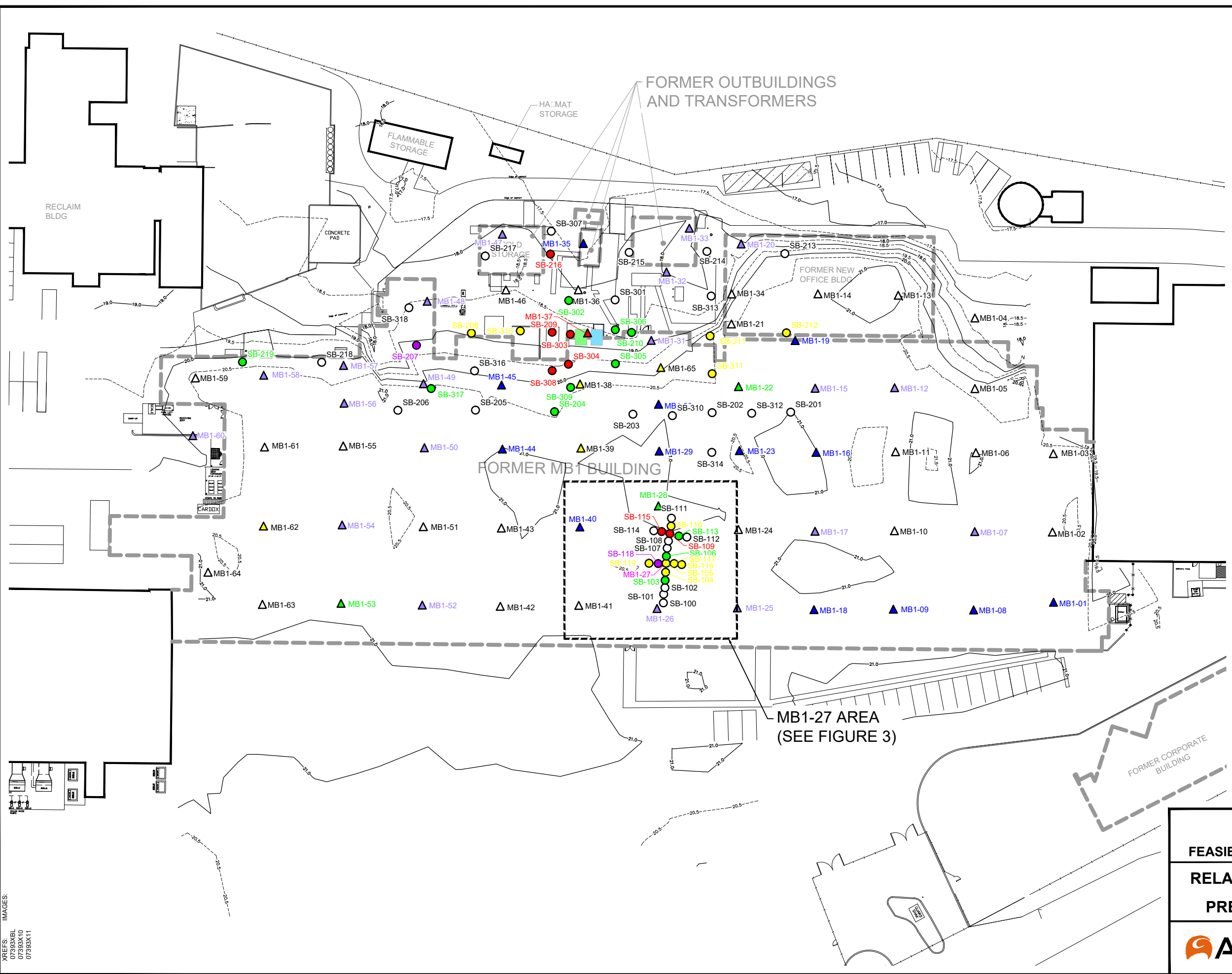

Design & Consultancy
for natural and built assets

FIGURE
5-4

CITY: SYRACUSE, NY DIV/GROUP: ENV/REM-WIM+DV DB: A. SCHILLING, R. BASSETT, LD: A. SCHILLING, PW: D. RUSSELL, TR: D. RUSSELL, LVR: ON=OFF-REF. (FR)
 G:\ENV\CAD\SYRACUSE\ACT\18007393\002\0002\DWG\F07393B03.DWG LAYOUT: 5-5, SAVER: 10/14/2016 12:21 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLT-FULL.CTB PLOTTED: 10/14/2016 12:21 PM BY: SCHILLING, ADAM



LEGEND:

- SUBSURFACE VADOSE ZONE SAMPLING LOCATION
- ▲ SHALLOW SOIL SAMPLE LOCATION
- APPROXIMATE LIMIT OF CONCRETE AND ASPHALT REMOVAL
- - - APPROXIMATE LIMIT OF FORMER BUILDING FOOTPRINT
- 20.0— MAJOR TOPOGRAPHIC SURFACE CONTOUR LINE
- - -20.5— MINOR TOPOGRAPHIC SURFACE CONTOUR LINE

SHALLOW SOIL SAMPLING DATA (TOTAL CHLORINATED VOCs)

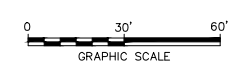
- △ NON-DETECTABLE
- △ ND - 0.010 mg/kg
- ▲ 0.010 - 0.100 mg/kg
- ▲ 0.100 - 1 mg/kg
- ▲ 1 - 10 mg/kg
- ▲ 10 - 100 mg/kg
- ▲ >100 mg/kg

SUBSURFACE VADOSE ZONE SOIL SAMPLING DATA

- CONCENTRATIONS < RESIDENTIAL RSLs
- CONCENTRATIONS > RESIDENTIAL BUS < INDUSTRIAL RSLs
- CONCENTRATIONS > INDUSTRIAL BUT < 10X INDUSTRIAL RSLs
- CONCENTRATIONS > 10X INDUSTRIAL BUT < 100X INDUSTRIAL RSLs
- CONCENTRATIONS > 100X INDUSTRIAL RSLs

NOTE:

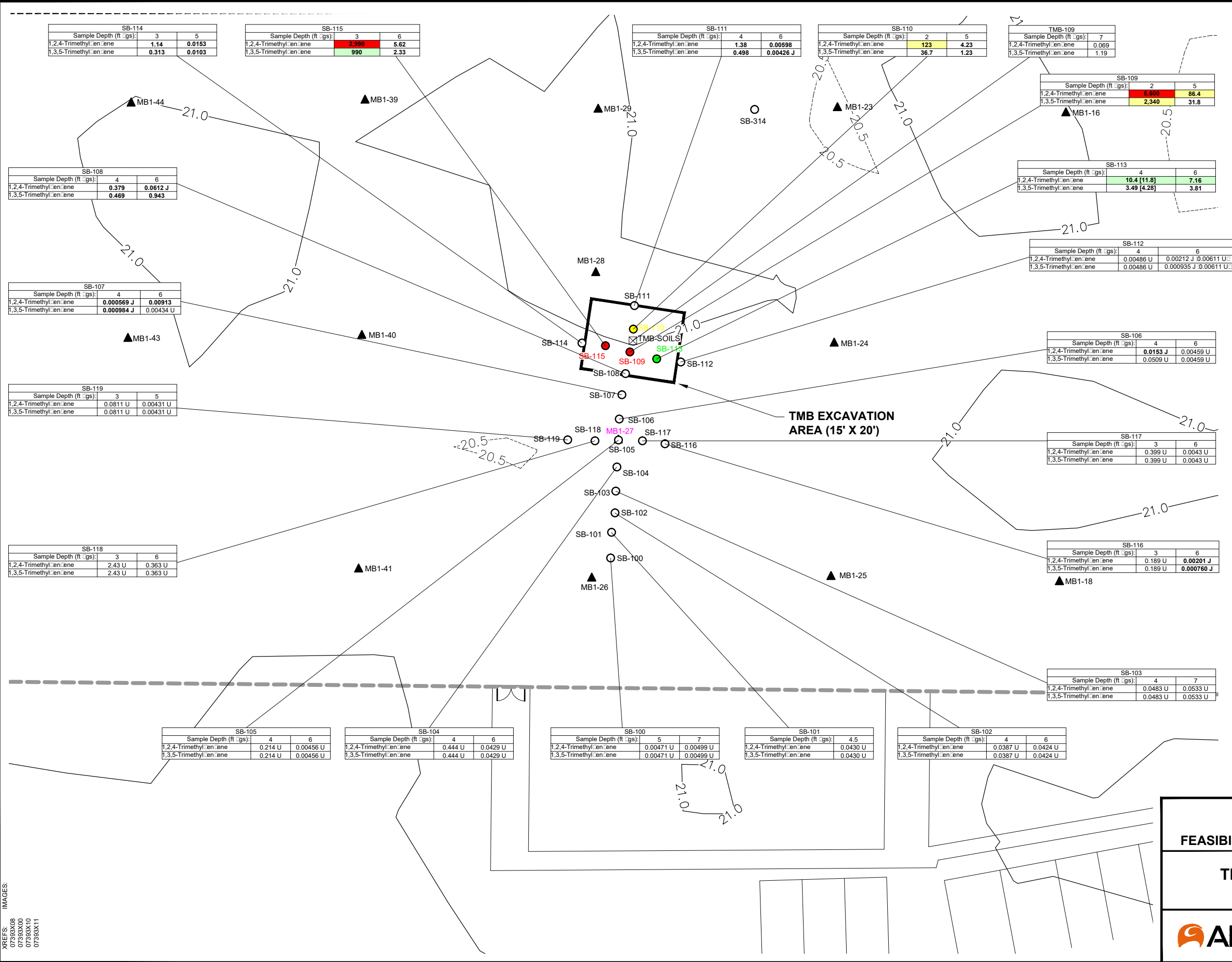
1. ALL SUBSURFACE VADOSE ZONE SAMPLING LOCATIONS WERE SURVEYED BY PEE DEE LAND SURVEYING, LLC. ON OCTOBER 2, 2015. ALL OTHER LOCATIONS ARE APPROXIMATE.
2. PRE-EXCAVATION TOPOGRAPHIC SURVEY CONDUCTED BY PEE DEE LAND SURVEYING, LLC ON DECEMBER 11, 2015.
3. SHALLOW SOIL IS DEFINED AS 0-2 FEET BELOW GROUND SURFACE. SUBSURFACE SOIL IS TO A DEPTH OF 5 FEET BELOW GROUND SURFACE.



MB1-27 AREA
(SEE FIGURE 3)

AVX CORPORATION
 MYRTLE BEACH FACILITY
 MYRTLE BEACH, SOUTH CAROLINA
FEASIBILITY STUDY INVESTIGATION REPORT
RELATIVE VOC CONCENTRATIONS IN VADOSE ZONE SOILS AND PRE-EXCAVATION TOPOGRAPHY

CITY: SYRACUSE, NY DIV/GROUP: ENV/REM-WIM-DV DB: A. SCHILLING, R. BASSETT, LD: A. SCHILLING, PW: D. RUSSELL, TR: D. RUSSELL, LVR: ON=OFF-REF. (FR) G:\ENV\CAD\SYRACUSE\ACT\180007393\002\0002\DWG\F07393C01.DWG LAYOUT: 5-6 SAVED: 3/30/2016 11:31 AM ACADVER: 19.1.5 (LMS TECH) PAGES: 1-6 PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/29/2016 3:11 PM BY: SCHILLING, ADAM



| SB-114 | | |
|------------------------|-------|--------|
| Sample Depth (ft. gs): | 3 | 5 |
| 1,2,4-Trimethyl.en.ene | 1.14 | 0.0153 |
| 1,3,5-Trimethyl.en.ene | 0.313 | 0.0103 |

| SB-115 | | |
|------------------------|-------|------|
| Sample Depth (ft. gs): | 3 | 6 |
| 1,2,4-Trimethyl.en.ene | 2.990 | 5.62 |
| 1,3,5-Trimethyl.en.ene | 990 | 2.33 |

| SB-111 | | |
|------------------------|-------|-----------|
| Sample Depth (ft. gs): | 4 | 6 |
| 1,2,4-Trimethyl.en.ene | 1.38 | 0.00598 |
| 1,3,5-Trimethyl.en.ene | 0.498 | 0.00426 J |

| SB-110 | | |
|------------------------|------|------|
| Sample Depth (ft. gs): | 2 | 5 |
| 1,2,4-Trimethyl.en.ene | 123 | 4.23 |
| 1,3,5-Trimethyl.en.ene | 36.7 | 1.23 |

| TMB-109 | | |
|------------------------|-------|--|
| Sample Depth (ft. gs): | 7 | |
| 1,2,4-Trimethyl.en.ene | 0.069 | |
| 1,3,5-Trimethyl.en.ene | 1.19 | |

| SB-109 | | |
|------------------------|-------|------|
| Sample Depth (ft. gs): | 2 | 5 |
| 1,2,4-Trimethyl.en.ene | 6.600 | 86.4 |
| 1,3,5-Trimethyl.en.ene | 2.340 | 31.8 |

| SB-113 | | |
|------------------------|-------------|------|
| Sample Depth (ft. gs): | 4 | 6 |
| 1,2,4-Trimethyl.en.ene | 10.4 [11.8] | 7.16 |
| 1,3,5-Trimethyl.en.ene | 3.49 [4.28] | 3.81 |

| SB-112 | | |
|------------------------|-----------|----------------------|
| Sample Depth (ft. gs): | 4 | 6 |
| 1,2,4-Trimethyl.en.ene | 0.00486 U | 0.00212 J 0.00611 U |
| 1,3,5-Trimethyl.en.ene | 0.00486 U | 0.000935 J 0.00611 U |

| SB-106 | | |
|------------------------|----------|-----------|
| Sample Depth (ft. gs): | 4 | 6 |
| 1,2,4-Trimethyl.en.ene | 0.0153 J | 0.00459 U |
| 1,3,5-Trimethyl.en.ene | 0.0509 U | 0.00459 U |

| SB-117 | | |
|------------------------|---------|----------|
| Sample Depth (ft. gs): | 3 | 6 |
| 1,2,4-Trimethyl.en.ene | 0.399 U | 0.0043 U |
| 1,3,5-Trimethyl.en.ene | 0.399 U | 0.0043 U |

| SB-116 | | |
|------------------------|---------|------------|
| Sample Depth (ft. gs): | 3 | 6 |
| 1,2,4-Trimethyl.en.ene | 0.189 U | 0.00201 J |
| 1,3,5-Trimethyl.en.ene | 0.189 U | 0.000760 J |

| SB-103 | | |
|------------------------|----------|----------|
| Sample Depth (ft. gs): | 4 | 7 |
| 1,2,4-Trimethyl.en.ene | 0.0483 U | 0.0533 U |
| 1,3,5-Trimethyl.en.ene | 0.0483 U | 0.0533 U |

| SB-105 | | |
|------------------------|---------|-----------|
| Sample Depth (ft. gs): | 4 | 6 |
| 1,2,4-Trimethyl.en.ene | 0.214 U | 0.00456 U |
| 1,3,5-Trimethyl.en.ene | 0.214 U | 0.00456 U |

| SB-104 | | |
|------------------------|---------|----------|
| Sample Depth (ft. gs): | 4 | 6 |
| 1,2,4-Trimethyl.en.ene | 0.444 U | 0.0429 U |
| 1,3,5-Trimethyl.en.ene | 0.444 U | 0.0429 U |

| SB-100 | | |
|------------------------|-----------|-----------|
| Sample Depth (ft. gs): | 5 | 7 |
| 1,2,4-Trimethyl.en.ene | 0.00471 U | 0.00499 U |
| 1,3,5-Trimethyl.en.ene | 0.00471 U | 0.00499 U |

| SB-101 | | |
|------------------------|----------|--|
| Sample Depth (ft. gs): | 4.5 | |
| 1,2,4-Trimethyl.en.ene | 0.0430 U | |
| 1,3,5-Trimethyl.en.ene | 0.0430 U | |

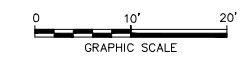
| SB-102 | | |
|------------------------|----------|----------|
| Sample Depth (ft. gs): | 4 | 6 |
| 1,2,4-Trimethyl.en.ene | 0.0387 U | 0.0424 U |
| 1,3,5-Trimethyl.en.ene | 0.0387 U | 0.0424 U |



- LEGEND:**
- SUBSURFACE VADOSE ZONE SAMPLING LOCATION
 - ▲ SHALLOW SOIL SAMPLE LOCATION
 - ⊠ WASTE CHARACTERIZATION SAMPLING LOCATION
 - APPROXIMATE LIMIT OF TMB EXCAVATION
 - - - APPROXIMATE LIMIT OF FORMER MB-1 BUILDING FOOTPRINT

- SUBSURFACE VADOSE ZONE SOIL SAMPLING DATA (TMB ONLY)**
- CONCENTRATIONS < RESIDENTIAL RSLs
 - CONCENTRATIONS > RESIDENTIAL BUT < INDUSTRIAL RSLs
 - CONCENTRATIONS > INDUSTRIAL BUT < 10X INDUSTRIAL RSLs
 - CONCENTRATIONS > 10X INDUSTRIAL BUT < 100X INDUSTRIAL RSLs
 - CONCENTRATIONS > 100X INDUSTRIAL RSLs

- NOTE:**
- ALL SUBSURFACE VADOSE ZONE SAMPLING LOCATIONS WERE SURVEYED BY PEE DEE LAND SURVEYING, LLC. ON OCTOBER 2, 2015. ALL OTHER LOCATIONS ARE APPROXIMATE.
 - ONLY TRIMETHYLBENZENE CONCENTRATIONS ARE PRESENTED ON THIS FIGURE.
 - ALL RESULTS ARE PRESENTING IN mg/kg (MILLIGRAMS PER KILOGRAM).



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FEASIBILITY STUDY INVESTIGATION REPORT

TRIMETHYLBENZENE (TMB)
EXCAVATION AREA

Design & Consultancy
for natural and built assets

FIGURE
5-6

APPENDIX B

Human Health Risk Assessment for Operable Unit 1



AVX Corporation

HUMAN HEALTH RISK ASSESSMENT

Operable Unit 1

Myrtle Beach, South Carolina

April 2019



HUMAN HEALTH RISK ASSESSMENT

Operable Unit 1

Myrtle Beach, South Carolina



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April 2019

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HUMAN HEALTH RISK ASSESSMENT

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HUMAN HEALTH RISK ASSESSMENT

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ACRONYMS AND ABBREVIATIONS

| | |
|-------------|--|
| 1,1,1-TCA | 1,1,1-trichloroethane |
| ADAF | age-dependent adjustment factor |
| Arcadis | Arcadis U.S., Inc. |
| AST | aboveground storage tank |
| ATSDR | Agency for Toxic Substances and Disease Registry |
| AVX | AVX Corporation |
| bgs | below ground surface |
| BMDL | benchmark dose modeling |
| CalEPA | California Department of Environmental Protection Agency |
| cis-1,2-DCE | cis-1,2-dichloroethene |
| COPC | constituent of potential concern |
| CSF | cancer slope factor |
| CVOC | chlorinated volatile organic compound |
| ELCR | excess lifetime cancer risk |
| EPC | exposure point concentration |
| FSIR | <i>Feasibility Study Investigation Report</i> |
| FSWP | <i>Feasibility Study Work Plan</i> |
| HBG | health-based goal |
| HHRA | Human Health Risk Assessment |
| HI | hazard index |
| HPT | hydraulic profiling tool |
| HQ | hazard quotient |
| IRIS | Integrated Risk Information System |
| MCL | maximum contaminant level |
| MOA | mode of action |
| NOAEL | no observed adverse effect level |
| OU-1 | Operable Unit 1 |
| OU2 | Operable Unit 2 |
| PCE | tetrachloroethene |

HUMAN HEALTH RISK ASSESSMENT

| | |
|--------|---|
| QA/QC | quality assurance and quality control |
| RACSM | risk assessment conceptual site model |
| RfC | reference concentration |
| RfD | reference dose |
| RME | reasonable maximum exposure |
| RSL | Regional Screening Level |
| SCDHEC | South Carolina Department of Health and Environmental Control |
| site | former AVX Corporation facility located at 2200 AVX Drive in Myrtle Beach, South Carolina |
| SSL | soil screening level |
| TCE | trichloroethene |
| UCL | upper confidence limit |
| USEPA | United States Environmental Protection Agency |
| UST | underground storage tank |
| VC | vinyl chloride |
| VF | volatilization factor |
| VISL | vapor intrusion screening level |
| VOC | volatile organic compound |

1 INTRODUCTION

Arcadis U.S., Inc. (Arcadis) prepared this Human Health Risk Assessment (HHRA) for Operable Unit 1 (OU-1) for the former AVX Corporation (AVX) facility located at 2200 AVX Drive in Myrtle Beach, South Carolina (site; **Figure 1-1**). This HHRA was prepared following the approach outlined in the *Feasibility Study Work Plan* (FSWP; Arcadis 2015), submitted to the South Carolina Department of Health and Environmental Control (SCDHEC) and approved by the SCDHEC on October 20, 2015.

The FSWP (Arcadis 2015) provided the framework for this HHRA. OU-1 represents the onsite portion of the AVX facility but includes only the older portion of the operations (sometimes referred to as AVX MB1). The HHRA for the offsite operable unit (Operable Unit 2 [OU-2]) was submitted in November 2010, revised in February 2011 based on SCDHEC comments, and approved by the SCDHEC on May 13, 2011. Similar to the OU-2 HHRA, which is a companion document to the OU-2 Feasibility Study, this HHRA for OU-1 is a companion document to the *Feasibility Study for Operable Unit 1*.

The purpose of this HHRA is to evaluate potential risks to human health associated with constituents detected in the sampled media. The risk assessment is performed in a manner like that performed for OU-2 but modified as necessary to match current or anticipated future conditions specific to OU-1. Included in this HHRA is an evaluation of potential risks that can be used to identify and evaluate potential remedial options and risk management strategies for the OU-1 area.

Together with this introductory section, this HHRA provides a brief description of the data used and is organized as follows:

- *Section 2 – Site Characterization:* Provides a description of OU-1 and OU-1 features and provides a brief history for context.
- *Section 3 – Constituent Characterization:* Identifies and summarizes the occurrence of constituents in groundwater, surface water, and soil gas and identifies constituents of potential concern (COPCs) for the HHRA.
- *Section 4 – Exposure Assessment:* Identifies the potential human exposure scenarios relevant to this HHRA.
- *Section 5 – Toxicity Assessment:* Identifies toxicity values used to estimate excess lifetime cancer risk (ELCR) and non-cancer hazard for the COPCs.
- *Section 6 – Risk Characterization:* Presents the estimated human health risks associated with the identified COPCs and the relevant human exposure scenarios.
- *Section 7 – Summary and Conclusions:* Summarizes the results of this HHRA.
- *Section 8 – References:* Lists the sources of information cited in this HHRA.

2 SITE CHARACTERIZATION

This section describes OU-1, outlines the site history, and provides information regarding the environmental setting and previous environmental investigations.

2.1 Site Description

The former manufacturing portion of the site is located within approximately 20 acres within the City of Myrtle Beach, in Horry County, South Carolina (**Figure 1-1**). This portion of the AVX property is also referred to as OU-1, which represents the onsite portion of the site (**Figure 2-1**). The site is located within an area referred to as the Grand Strand, a roughly 60-mile strip of Atlantic Ocean beaches and beachfront communities in North and South Carolina, bounded by the Atlantic Ocean and the Intracoastal Waterway. The center of the site is approximately 3,300 feet northwest of the ocean and 2.3 miles southeast of the Intracoastal Waterway. The surrounding land use is as follows:

- The areas north, south, and east of the site are primarily residential or tourist-related commercial properties with a few undeveloped properties intermixed, primarily to the east. A parcel immediately south of the facility belongs to the City of Myrtle Beach and contains an unused deep water supply well and large water storage tank. A vacant parcel farther south, on South Kings Highway, was formerly the location a movie theater, but is now owned by AVX.
- The site is bordered to the west by a golf course owned by the City of Myrtle Beach, an approximately 69-acre parcel owned by AVX but not included as part of OU-1 (sometimes referred to as MB-2).

The OU-1 area includes what was historically the primary manufacturing area of the site. The area contained several buildings, including the main manufacturing building referred to as MB-1, which was approximately 300,000 square feet (**Figure 2-2**). Several building demolition events have transpired over the last decade, starting with the demolition of the PDG Building in 2009, with the latest demolition including the Metals Reclaim and RMM Buildings completed in 2018. The history of demolition is depicted on **Figure 2-2**.

2.2 Site History

The Aerovox Corporation, predecessor to AVX, began its Myrtle Beach operations in 1953 on land that was formerly part of the Myrtle Beach Air Force Base. AVX used chlorinated volatile organic compounds (CVOCs) at the site until 1993 in the manufacturing of ceramic capacitors. In 1981, AVX discovered that shallow groundwater beneath the OU-1 area contained CVOCs, notably the solvents trichloroethene (TCE) and 1,1,1-trichloroethane (1,1,1-TCA).

Virgin and spent TCE had been stored in underground storage tanks (USTs) on the western side of the OU-1 site until 1983 (**Figure 2-2**), when they were removed in 1983 prior to construction of an addition to the main building that covered that area. After the USTs were removed, TCE was stored in aboveground storage tanks (ASTs) adjacent to the western side of the manufacturing building (**Figure 2-2**). In 1986, AVX transitioned from using TCE to 1,1,1-TCA, continuing to use the former TCE ASTs for storage of 1,1,1-TCA. Use of 1,1,1-TCA was discontinued in 1993. Currently, OU-1 has limited activity as most of the operations have been terminated and buildings demolished.

2.3 Topography and Drainage

The OU-1 area is relatively flat, with a grade elevation of approximately 20 feet above mean sea level (**Figure 1-1**), with a gentle slope to the northeast. A small stream (Withers Swash) is located adjacent to the northern end of OU-1 (**Figure 2-1**). Withers Swash flows northeast approximately parallel to the beach, passing through multiple flood control ponds before ultimately discharging to the Atlantic Ocean. A golf course to the west includes several artificial ponds as water hazards. The nearest pond is immediately west of OU-1 in an upgradient direction. Construction details and surface elevation of this pond are not known.

2.4 Geology

Myrtle Beach is within the Atlantic Coastal Plain physiographic province. Bedrock is approximately 1,400 to 1,500 feet below sea level (Zack 1977). The majority of the overlying thickness of consolidated sediments is Cretaceous age and older marine margin deposits, typically alternating beds of sand and clay. Thin beds of calcite-cemented siltstone or fine-grained sandstone are common throughout the section, interbedded with unconsolidated sediments. The two uppermost relevant units are:

- *Terrace Deposits (0 to 45 feet below ground surface [bgs])* – A Quaternary-aged sequence of marine terraces consisting of stratified sand, silt, and clay beds reflecting a beach and lagoon depositional environment.
- *Peedee Formation (45 to 300 feet bgs)* – A Cretaceous-aged marginal marine unit formed predominantly of stratified sand and clay (similar to the terrace deposits but much older), with thin beds of calcite-cemented siltstone or fine-grained sandstone.

The uppermost portion of the Peedee Formation was encountered in investigation borings within OU-1 and is described as a calcite-cemented siltstone. This lithified zone strongly inhibits vertical flow of groundwater between the Peedee Formation and the overlying Upper and Lower Terrace Deposits. Therefore, the investigations have largely focused on the Upper and Lower Terrace Deposits. Additional detail regarding site geology is presented in the *Feasibility Study Investigation Report* (FSIR; Arcadis 2016).

2.5 Hydrogeology

Shallow groundwater is first encountered at various depths dependent, in part, on the stratigraphy encountered at any specific location, time of year, and precipitation prior to the time of assessment. Natural groundwater gradients are to the northeast within the Upper and Lower Terrace Deposits, although locally influenced by groundwater pumping at the two onsite pumping wells DPW-4SD and DPW-5SD (**Figure 2-1**). Additional detail regarding hydrogeology of the site is presented in the FSIR (Arcadis 2016).

3 CONSTITUENT CHARACTERIZATION

This section discusses the groundwater and soil data collected during the site investigations within OU-1, the methodology used to evaluate the data, and the selection of COPCs. Detailed information describing the distribution of constituents observed in environmental media is also discussed in this section.

3.1 Data Evaluation

Groundwater and soil samples have been collected in OU-1, as discussed in the FSWP (Arcadis 2015) and FSIR (Arcadis 2016).

An onsite mobile laboratory was used to analyze some of the samples by direct sampling ion trap mass spectrometry (United States Environmental Protection Agency [USEPA] Method 8265), while other samples were shipped to and analyzed by a fixed laboratory by USEPA Method 8260. While TCE data were available from the mobile laboratory, because other volatile organic compounds (VOCs) were reported as pairs or groups of compounds using the mobile laboratory USEPA Method 8265, the analytical results from the mobile laboratory analysis were not included in the dataset for this HHRA. Constituent-specific data are required for the risk assessment because one cannot evaluate potential exposure to groups of constituents.

The fixed laboratory data available for each medium were evaluated in accordance with USEPA guidance for risk assessments (USEPA 1989, 1992, 2002a). The data evaluation guidelines are summarized as follows:

- Constituents that were not detected in a medium were not included in the data evaluation for that medium.
- Analytical results reported as detected or estimated values were considered to be present at the reported values. Analytical results that are “U” qualified were non-detects.

3.1.1 Sample Age

Soil samples were collected between September 2008 and October 2018. The soil data collected at the site are presented in **Table 1**. These data were separated by depth as described below before use in the risk assessment.

Groundwater samples were collected between December 1990 and April 2018, as presented in **Table 2**. The groundwater data collected between 2013 and 2018 were selected for use in this HHRA because they represent current site conditions from the four relatively recent sampling events for most wells across the site. Spatially, most of the groundwater monitoring wells are in the central area of the site in the area of former manufacturing activities. The highest concentrations of VOCs were observed in samples from the central portion of the site. Therefore, data from 2013 through 2018 for the central area wells were included in the risk assessment dataset. All groundwater data collected from 2013 through 2018 were used to generate data subsets by depth, as described below, and are included in **Table 3**.

3.1.2 Sample Depth

Soil datasets were developed based on different potential exposures. Surface soil samples were identified as those samples collected from 0 to 2 feet bgs, as presented in **Table 4**. These samples represent site conditions assuming that the ground surface remains undisturbed. The surface soil data were also combined with subsurface soil data to a depth of 10 feet bgs. These soil samples represent conditions where construction or some sort of excavation activities may occur. The combined surface and subsurface soil data collected from 0 to 10 feet bgs are presented in **Table 5**.

Site groundwater data are available from sampling several groundwater monitoring wells with differing screened intervals. In addition, groundwater data from laboratory-analyzed groundwater samples collected from hydraulic profiling tool (HPT) locations, during the FSIR, were also included in the dataset. Groundwater data from 2013 through 2018 are summarized in **Table 3**. These data were also divided into samples collected to a maximum depth of 15 feet bgs to correspond with potential exposures to groundwater in an excavation trench, as presented in **Table 6**, and samples collected to a maximum depth of 25 feet bgs to correspond with potential exposures to vapor migration from groundwater into potential future buildings (see **Table 7**).

3.2 Identification of Screening Levels

For direct contact with soil and groundwater exposure pathways, health-based screening levels were identified from the USEPA Regional Screening Level (RSL) tables. RSLs based on a target cancer risk of 1×10^{-6} and a target hazard quotient (HQ) of 0.1 were used to account for potentially additive effects. RSLs were obtained from the USEPA RSL tables dated November 2018.

Exposure to vapors could occur in outdoor air, as well as indoor air, due to vapor migration from the subsurface. However, exposure to vapors in indoor air is typically higher than exposure to vapors in outdoor air because vapors tend to concentrate indoors. It is likely that vapors migrating from the subsurface into outdoor air would result in lower concentrations due to mixing with the ambient air. Therefore, groundwater data were compared with the USEPA Vapor Intrusion Screening Levels (VISLs) based on a target cancer risk of 1×10^{-6} and a target HQ of 0.1 to account for potentially additive effects. The output from the VISL Calculator (USEPA 2018b) is presented in **Appendix A**.

3.3 Selection of Constituents of Potential Concern

The maximum detected constituent concentration in each medium was compared with the appropriate screening level. Constituents detected at concentrations below the screening levels were not identified as COPCs, and therefore, were not evaluated further in this HHRA. Those constituents present at concentrations greater than their risk-based screening levels were retained for further analysis. The following sections present the COPC selection results for each medium and each dataset. The data used in the risk assessment are presented in **Tables 1 through 7**.

3.3.1 Surface Soil

Soil samples collected from 0 to 2 feet bgs during sampling events in 2008 through 2018 were included in the risk assessment dataset. As shown in **Table 8**, 256 samples were collected in this depth range.

Acetone was the most frequently detected constituent followed by methylene chloride and TCE. Most of the detected constituents were found in 10% or fewer samples.

The maximum detected concentration of each constituent was compared to the residential soil RSL (USEPA 2018a). As shown in **Table 8**, cis-1,2-dichloroethene (cis-1,2-DCE), tetrachloroethene (PCE), TCE, and vinyl chloride (VC) were detected in surface soil above their residential soil RSLs. As a point of comparison, industrial soil RSLs were also presented in **Table 8**, and cis-1,2-DCE and TCE were present at concentrations above their industrial soil RSLs. Therefore, cis-1,2-DCE, PCE, TCE, and VC were selected as COPCs for surface soil.

3.3.2 Combined Surface and Subsurface Soil

Surface and subsurface soil data to a depth of 10 feet bgs were combined to allow evaluation of potential future exposures to soil should the site be redeveloped. Soil removal activities have occurred at the site, and those samples collected from areas where soil has since been removed were not included in the dataset. Soil samples collected below 10 feet bgs (the approximate depth where water is commonly encountered) were also not included in the dataset because constituent concentrations in saturated soil may be more representative of groundwater conditions. **Table 9** summarizes the combined surface and subsurface soil data. Soil samples from 2008 through 2018 were collected at 383 sampling locations as seen on **Figures 3-1 and 3-2**. Acetone, TCE, and cis-1,2-DCE were detected most frequently. COPCs for combined surface and subsurface soil were identified by comparing the maximum constituent concentrations to the USEPA residential soil RSLs based on a target risk of 1×10^{-6} and an HQ of 0.1 (USEPA 2018a). COPCs for direct contact with soil are 1,1-dichloroethane; 1,1-dichloroethene; cis-1,2-DCE; ethylbenzene; PCE; 1,1,1-TCA; TCE; and VC. As a point of comparison, the maximum soil concentrations were also compared to the USEPA industrial soil RSLs. 1,1-Dichloroethene; cis-1,2-DCE; TCE; and VC were the only constituents with maximum detected concentrations above the USEPA industrial soil RSLs.

Constituents in soil may migrate to groundwater. Therefore, soil leaching to groundwater COPCs were identified by comparing the maximum detected soil concentrations to groundwater protection of soil screening levels (SSLs), assuming a dilution attenuation factor of 1 due to the shallow depth to groundwater in many locations. As shown in **Table 9**, 29 constituents exceeded their leaching to groundwater SSLs.

3.3.3 Groundwater Constituents of Potential Concern

The available groundwater data were reviewed to evaluate sampling dates and constituent concentrations. Typically, more recent groundwater data provide a more accurate picture of current conditions than older data. Groundwater from monitoring wells in the central area of the site have been routinely sampled, while groundwater from several wells on the perimeter of the site were not routinely sampled because of historically high frequencies of non-detected results. Use of the central area groundwater data provides a conservative evaluation of potential exposures because the concentrations tend to be greater in these areas. **Figure 2-1** shows the location of the site monitoring wells, although **Figure 3-3** shows the location where groundwater samples were collected (HHRA dataset inclusive of samples collected from 0 to 25 feet bgs between the years 2013 and 2018).

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Constituent concentrations observed in groundwater were compared to tap water RSLs, assuming potable use of groundwater under a conservative future residential exposure scenario. Currently, groundwater is not used nor is it expected to be used as a potable water supply near the site because drinking water is supplied throughout the area by the municipal water district. The comparison of groundwater data to tap water RSLs (USEPA 2018a) can be used to determine if there is a need to potentially restrict the use of groundwater as a potable water supply in the future. Constituent concentrations in groundwater were also compared to the residential and industrial VISLs (USEPA 2018b). In each case, the tap water RSLs or the VISLs were based on a target risk of 1×10^{-6} and an HQ of 0.1.

3.3.3.1 All Groundwater Data

Table 10 presents a summary of the site groundwater data. Monitoring wells are screened at various depths, although there is only a semi-confining layer between these screened intervals of certain wells. Therefore, **Table 10** presents a summary of the groundwater data from all the depth intervals collected from 2013 to 2018, representing 142 samples. cis-1,2-DCE was the most frequently detected constituent, followed by VC and TCE. These data indicate that natural degradation of TCE to its daughter breakdown products is occurring.

The groundwater COPCs, based on the potential conservative potable use of the groundwater are benzene; 1,1-dichloroethane; 1,1-dichloroethene; cis-1,2-DCE; trans-1,2-dichloroethene; ethylbenzene; hexachlorobutadiene; naphthalene; TCE; 1,2,4-trimethylbenzene; VC; iron; and manganese.

The vapor intrusion COPCs are:

- *Residential*: Benzene; 1,1-dichloroethane; 1,1-dichloroethene; hexachlorobutadiene; naphthalene; TCE; 1,2,4-trimethylbenzene; and VC
- *Industrial*: 1,1-Dichloroethane; 1,1-dichloroethene; naphthalene; TCE; and VC

3.3.3.2 Shallow Groundwater Data

Shallow groundwater could be contacted by workers excavating soils during construction activities. As discussed above, the uppermost groundwater is commonly first encountered at a depth of 10 feet bgs. However, the groundwater data collected from 2013 to 2018 were segregated to reflect potential exposure of construction workers excavating to a depth of 15 feet bgs. Although it is unlikely that most construction activities (like installation of underground utilities) would be deeper than 10 feet bgs, and therefore, would not encounter groundwater, data for groundwater samples collected from depths of up to 15 feet bgs were selected for use in this HHRA because there were limited samples collected between the 0 to 10-foot bgs range (three samples total). The selection of groundwater data from between 0 and 15 feet bgs expanded the depth of potential exposure and increased the dataset size (33 samples total) as a conservative evaluation of vapor inhalation risks from groundwater immediately below a utility trench. **Table 11** summarizes these data. A total of 33 samples were collected from monitoring wells or temporary vertical aquifer profiling sampling points (i.e., HPTs). The COPCs for shallow groundwater were identified by comparing the maximum constituent concentrations to the USEPA tap water RSLs (USEPA 2018a), residential VISLs, and industrial VISLs (USEPA 2018b). The COPCs for the shallow groundwater are listed below:

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- *Potable Use of Groundwater:* Benzene; 1,1-dichloroethane; 1,1-dichloroethene; cis-1,2-DCE; ethylbenzene; naphthalene; TCE; 1,2,4-trimethylbenzene; VC; and total iron
- *Residential Vapor Intrusion:* Benzene; 1,1-dichloroethane; 1,1-dichloroethene; naphthalene; TCE; 1,2,4-trimethylbenzene; and VC
- *Industrial Vapor Intrusion:* 1,1-Dichloroethane; 1,1-dichloroethene; naphthalene; TCE; and VC

3.3.3.3 Groundwater Data for Vapor Intrusion

It is unlikely that groundwater present at depths greater than 15 feet bgs could be contacted by any receptors. However, it is possible that the VOCs could migrate from the deeper groundwater into a building and site workers and residents could be exposed to these constituents. Based on the site stratigraphy observed in the central portion of OU-1, volatile constituents found in groundwater at a depth of less than 25 feet are the most likely to potentially migrate into buildings that could be built onsite. Furthermore, samples collected from this depth represent groundwater concentrations that are closest to the foundation of any potential future onsite buildings. Therefore, groundwater data collected from a depth of less than or equal to 25 feet were compared to tap water RSLs (USEPA 2018a) and the residential and industrial VISLs (USEPA 2018b) to identify COPCs, as detailed in **Table 12**. This dataset was used to evaluate vapor intrusion into buildings.

The COPCs for groundwater less than 25 feet bgs are listed below:

- *Potable Use of Groundwater:* Benzene, 1,1-dichloroethane; 1,1-dichloroethene; cis-1,2-DCE; trans-1,2-dichloroethene; ethylbenzene; naphthalene; TCE; 1,2,4-trimethylbenzene; VC; and total iron
- *Residential Vapor Intrusion:* Benzene, 1,1-dichloroethane; 1,1-dichloroethene; naphthalene; TCE; 1,2,4-trimethylbenzene and VC
- *Industrial Vapor Intrusion:* 1,1-Dichloroethane; 1,1-dichloroethene; naphthalene; TCE; and VC

4 EXPOSURE ASSESSMENT

The purpose of the exposure assessment is to evaluate the ways receptors might be exposed to COPCs at locations within OU-1. Exposure can occur only when the potential exists for a receptor to contact COPCs, or when there is a mechanism for COPCs to be transported to a receptor. Without exposure there is no risk; therefore, the exposure assessment is a critical component of this HHRA. The exposure assessment includes characterization of the physical environment, identification of exposure pathways (including migration pathways, exposure points, and exposure routes), and identification of potentially exposed individuals and populations.

An exposure pathway is defined by the following four elements:

1. A source and mechanism of constituent release to the environment.
2. An environmental transport medium for the released constituent.
3. A point of potential contact by the receptor with the medium containing the constituent (the exposure point).
4. A route of exposure to the receptor at the exposure point (i.e., ingestion, inhalation, or dermal contact).

The purpose of the exposure assessment is to identify and evaluate the ways a population may be exposed to COPCs. This involves estimating concentrations along potential pathways between sources and receptors. This is accomplished using site-specific data and, when necessary, mathematical modeling. The following sections present the risk assessment conceptual site model (RACSM) detailing the potential receptors and exposure pathways, methods used to calculate exposure point concentrations (EPCs), and methods used to estimate intake.

4.1 Risk Assessment Conceptual Site Model

The RACSM provides the framework of the HHRA. It characterizes the primary and secondary potential sources and release mechanisms and identifies the media of interest (exposure points), potential receptors, and their potential exposure routes. Exposure points are places or “points” where exposure could potentially occur, and exposure routes are the means by which constituents of interest may be taken up by the receptor (ingestion, inhalation, and dermal contact). The RACSM for the site is provided on **Figure 4-1** and discussed below.

Human exposure within OU-1 is expected to be minimal under current conditions because most of the operations have been terminated and nearly all of the buildings in which those operations were performed have been demolished. However, OU-1 could be used for either residential or commercial uses in the future. Therefore, there is the potential for future exposure of commercial site workers and construction workers, as well as hypothetical future residents of the site.

There are no current exposures to groundwater at the site because groundwater is not currently used as a potable water source within the site boundaries or nearby; however, exposure to groundwater could occur during excavation activities. Exposure to soil and groundwater through direct contact (incidental ingestion and dermal contact), as well as inhalation of vapors in air and constituents adhered to dust, were considered. Finally, because volatile constituents were detected at the site and vapors can migrate

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from the subsurface into indoor air, exposure through the vapor intrusion pathway was also evaluated. The vapor intrusion pathway was assessed using groundwater data in a weight of evidence approach consistent with USEPA guidance (USEPA 2015). Groundwater data collected from a depth of less than or equal to 25 feet were used to evaluate the vapor intrusion pathway. Samples collected from this depth interval represent groundwater concentrations that are closest to the foundations of onsite buildings.

4.2 Potential Receptors

This section identifies the potential receptors that are currently present or could be present at OU-1 in the future and could be exposed to COPCs in groundwater and soil. Groundwater is not used as a potable water supply as there is a well-established public water supply system that uses surface water from the Great Pee Dee Watershed and intakes at Bull Creek and the Intracoastal Waterway. Therefore, exposure to groundwater in OU-1 was evaluated assuming that a drinking water exposure pathway will not occur. Exposure to surface soil could occur under current conditions, although it is unlikely because most of the site is vacant, particularly in the former source areas.

If the site were redeveloped, it is possible that a construction worker could contact soil, groundwater, or vapors emanating from the groundwater, depending on the specific project. Construction of a building would involve a large excavation with a high air exchange rate that would dissipate any vapors that might be present from volatilized groundwater. On the other hand, a smaller excavation, like a utility trench, would cause less dissipation of vapors and would present higher estimated risks. To be health protective, the risk assessment evaluated a utility trench. The utility trench was assumed to involve the excavation of soil to a depth of 5 feet bgs, because utilities need not be buried at a greater depth in South Carolina. The approximate average depth to the first encountered groundwater within OU-1 is 10 feet bgs. Therefore, it was assumed that a construction worker in a utility trench could contact soil and inhale vapors from the groundwater beneath the utility trench. In addition, during construction activities, the soil could be redistributed, and future site workers or residents could contact soil currently present at the ground surface or at depth. These individuals are assumed to contact soil through incidental ingestion, dermal contact, and inhalation of volatiles or soil-derived dust.

VOCs were found in groundwater. It is possible that vapors could migrate from the subsurface into a future building on the property. Therefore, the vapor intrusion exposure pathway was evaluated in the risk assessment.

To summarize, three potential current or future receptors have been identified, and the potential exposure pathways are summarized below by receptor:

- *Current and Hypothetical Future Site Workers* – This receptor is assumed to work indoors and outdoors:
 - Exposure to surface soil (0 to 2 feet bgs) via incidental ingestion, dermal contact, and inhalation of vapors or dust
 - Exposure to combined surface and subsurface soil (0 to 10 feet bgs) for the hypothetical future site worker via incidental ingestion, dermal contact, and inhalation of vapors or particulates (dust)

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- No likely exposure to groundwater via ingestion, dermal contact, or inhalation of volatiles (assumes deed restrictions in addition to the knowledge that shallow groundwater is not used locally as a potable water supply)
- Exposure to volatile constituents in groundwater (0 to 25 feet bgs) migrating into an existing or hypothetical future building through the migration of vapors into a building (i.e., vapor intrusion exposure pathway)
- *Hypothetical Future Construction Workers* – This receptor is assumed to work at the site in the future, should construction activities occur:
 - Exposure to surface soil (0 to 2 feet bgs) via incidental ingestion, dermal contact, and inhalation of vapors and/or particulates (dust)
 - Exposure to combined surface and subsurface soil (0 to 10 feet bgs) via incidental ingestion, dermal contact, and inhalation of vapors and/or particulates (dust)
 - Exposure to groundwater (0 to 15 feet bgs) via inhalation of volatiles during excavation activities
- *Hypothetical Future Adult and Child Residents*
 - Exposure to surface soil (0 to 2 feet bgs) via incidental ingestion, dermal contact, and inhalation of vapors and/or particulates (dust)
 - Exposure to combined surface and subsurface soil (0 to 10 feet bgs) via incidental ingestion, dermal contact, and inhalation of vapors and/or particulates (dust) assuming the soil is redistributed, and subsurface soil is brought to the ground surface during construction activities
 - No likely exposure to groundwater via ingestion, dermal contact, or inhalation of volatiles (assumes deed restrictions will be in place that prohibit using groundwater as a potable water source)
 - Exposure to volatile constituents in groundwater (0 to 25 feet bgs) migrating into a hypothetical future building through the migration of vapors into a building (i.e., vapor intrusion exposure pathway); it is expected, however, that deed restrictions will also be placed on the property that require vapor barriers for any new construction

4.3 Exposure Point Concentrations

The EPC is the representative concentration of a constituent in an environmental medium that is potentially contacted by the receptor (USEPA 1989). The EPC is defined as “the arithmetic average of the concentration that is contacted over the exposure period” (USEPA 1989).

A statistical approach was used to identify the most appropriate representative concentrations for the COPCs. Consistent with USEPA methodology, both the mean and 95% upper confidence limit (UCL) concentrations were calculated using ProUCL, the statistical software available from the USEPA (version 5.1.002; USEPA 2016a). Non-detected values were treated following the ProUCL software technical guide (USEPA 2016b). When duplicate samples were collected, the maximum concentration detected in the parent sample or duplicate sample was used. If both samples were non-detected values, the lowest reporting limit was used in the derivation of the UCL. The UCL concentrations were selected using the

output from the ProUCL software, unless a greater than 95% UCL was recommended, in which case, the 95% UCL was selected. The ProUCL outputs are included in **Appendix B**.

The 95% UCL is a statistical value calculated to estimate the mean concentration with 95% confidence that the true arithmetic mean concentration for the set of environmental data assessed will be less than the UCL. The high level of confidence (e.g., 95%) is used to compensate for the uncertainty involved in representing the conditions within OU-1 with a finite number of samples. In accordance with USEPA guidance (USEPA 2016b), if the 95% UCL is greater than the maximum detected concentration, the maximum detected concentration was identified as the EPC. **Table 13** presents the EPCs used in this HHRA. Due to the limited number of detections for some constituents in some of the media (less than four) or too few samples (e.g., one to four), the maximum concentration was used to evaluate risk for several of the exposure pathways.

4.3.1 Current and Hypothetical Future Site Worker

If the property were developed for commercial or industrial purposes, a hypothetical industrial or commercial worker within OU-1 could be exposed to COPCs in soil or migrating into a building. The exposure assumptions for this potential receptor are included in **Table 14**. The equations used to evaluate potential site worker exposure to soil are presented in **Table 15**. These exposure assumptions are standard USEPA default assumptions that are intended to represent a reasonable maximum exposure (RME) designed to overestimate potential future risk.

4.3.2 Hypothetical Future Construction Worker

Construction workers may hypothetically be present at locations within OU-1 in the future to work on new construction or excavation projects; therefore, this exposure scenario was evaluated based on a hypothetical construction project. The invasive excavation work of the construction project was assumed to take 100 days over a period of 1 year to complete. Due to the shallow nature of the groundwater, the construction worker was assumed to contact soil and inhale vapors migrating from groundwater during a construction project, although exposure to COPCs is unlikely because of the greater depths to COPCs in groundwater. The OU-1 shallow groundwater EPCs were used to evaluate these exposure scenarios. The exposure assumptions for this potential receptor are included in **Table 14**. The equations used to evaluate potential construction worker exposure to soil are presented in **Table 16**, and the equations to evaluate potential construction worker exposure to groundwater are presented in **Table 17**.

4.3.3 Hypothetical Future Resident

The area surrounding the AVX property contains both residential and non-residential properties. There are no current plans to redevelop the site, but it could be redeveloped for residential purposes. Residential exposure in OU-1 can occur through contact with soil and through the inhalation of vapors potentially containing COPCs migrating from the subsurface into a home.

Groundwater in the Myrtle Beach area is not used as a potable water supply, as potable water is supplied from surface-water sources (the Great Pee Dee Watershed with surface-water intakes in Bull Creek and the Intracoastal Waterway) Therefore, drinking water exposures were not evaluated in this HHRA. However, VOCs present in groundwater could volatilize and migrate into homes. The exposure

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assumptions for these potential receptors are included in **Table 14**, and the equations to evaluate potential residential exposures to soil are presented in **Table 18**.

4.4 Exposure Assumptions

The potential human receptors include potential future commercial/industrial workers, construction workers, and adult and child residents. Under current conditions, the potential for exposure to COPCs in environmental media within the OU-1 is limited because manufacturing activities at the site have been reduced over time. Groundwater is not used as a potable water supply, and therefore, contact with groundwater is expected to be limited now and in the future because:

- Leaching of residual concentrations of COPCs in soil is expected to be inconsequential especially in light of the other aggressive historical and current remedial actions that have been implemented both on OU-1 and OU-2.
- Long-term flushing and natural attenuation of the relatively low residual concentration of VOCs are expected within the soil column in and adjacent to the vadose zone source area.
- Long-term natural attenuation is currently observed and is expected to continue within a large area beneath and downgradient of the vadose zone source area. This natural attenuation is already being enhanced by relatively high carbon influx through the soil column and into groundwater due to all the seeding, sodding, mulching, and fertilizing of acres of land that was once covered by buildings. This has led to elevated organic carbon concentrations in the groundwater shortly after demolition, and land restoration activities began, starting with the demolition of the PDG Building in 2009.

Arcadis recognizes that because the site may be redeveloped, greater potential future exposures may occur. Such increased potential future exposures will be addressed only if and when they happen.

A current worker onsite could contact surface soils, and a future worker could contact soil that has been redistributed from the subsurface and/or inhale vapors migrating from the subsurface into a building. A construction worker may contact soil and/or inhale vapors migrating from groundwater during excavation projects. Should the site be redeveloped for residential purposes, adult and child residents could contact soil or inhale volatile COPCs migrating from the subsurface and into a building. Details regarding each potential exposure scenario are provided in the following sections.

This HHRA is based on evaluation of RME scenarios and assumptions. The USEPA (1992, 1989) defines the concept of RME (using the term High End Exposure scenario) as a potential estimate of the individual exposure for those persons at the upper end of an exposure distribution. In this HHRA, the RME evaluation has been constructed with reasonable maximum input values that are consistent with the risk evaluation envisioned by the USEPA. RME assumptions were estimated for each potential exposure pathway using standard default assumptions (USEPA 2004, 2011a, 2014, 2018c) and site-specific information. Values for the receptor-specific exposure parameters are summarized in **Table 14** and are discussed in the following subsections. The EPCs that are discussed above are presented in **Table 13**.

A conservative assumption underlying all the risk calculations is that the constituent concentrations remain constant over the entire period of exposure. The effects of attenuation processes that reduce the concentrations over time are not considered. This assumption leads to an overestimation of risk.

4.5 Fate and Transport

The environmental fate and transport of the COPCs are dependent on their physical and chemical properties, the environmental transformation processes affecting them, and the media through which they are migrating. Physical and chemical parameters for COPCs were consistent with recommended values by the USEPA (2018a, 2018b). Those parameters that were used in the calculations are presented in the corresponding tables as discussed below.

4.5.1 Vapor Migration into Ambient Air

Constituents present in soil and groundwater could migrate into ambient air. Volatilization factors for groundwater were derived assuming volatilization could occur from groundwater beneath a utility trench. The equations used for groundwater are included in **Table 17**. Migration from soil into ambient air was estimated assuming non-invasive activities using the equations in **Table 15** for a site worker and **Table 18** for a resident and invasive activities using the equations in **Table 16** for a construction worker.

4.5.1.1 Volatilization Factor for Groundwater

Emissions via volatilization from water (i.e., groundwater beneath a utility trench) were estimated following Virginia Department of Environmental Quality (2018) guidance, given that there is not comparable guidance available from the SCDHEC or USEPA. The volatilization factor (VF) equation can be found in **Table 17**. The VF was calculated assuming that there was a mass transfer from the groundwater to the air in the trench. The mass transfer of the constituent is assumed to be driven by molecular diffusion. The results of the calculations are presented in **Table 19**.

4.5.1.2 Volatilization Factor for Soil

To evaluate emission of volatiles from soil, constituent-specific VFs were calculated using the USEPA (2002b) guidance. The VF equation can be broken into two separate models, including a model to estimate the emissions, and a model to estimate the dispersion (reduced to the term Q/C) that simulates the dispersion of volatile constituents in ambient air. USEPA default parameters were used to estimate the VF, using the equations in **Table 15** for hypothetical future residents and current and future site workers and **Table 16** for construction workers. Input parameters and the resulting VFs are presented in **Table 20**.

4.5.2 Vapor Intrusion into Buildings

The evaluation of the vapor intrusion exposure pathway was accomplished using the USEPA vapor intrusion model, which was developed based on the equations derived by Johnson and Ettinger (USEPA 2017). The USEPA model was used to evaluate potential migration of COPCs in groundwater. The specific assumptions used for the OU-1 area are:

- Depth below first encountered groundwater was assumed to be 10 feet, or 304.8 centimeters. The shallowest groundwater samples are found at approximately 10 feet bgs.
- An average subsurface soil temperature of 19.4 degrees Celsius was determined using the USEPA User's Guide for Evaluating Subsurface Vapor Intrusion into Buildings (USEPA 2017).

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- A soil type of silty clay was selected based on the most common unsaturated zone soil type identified during site investigations.

5 TOXICITY ASSESSMENT

The toxicity assessment describes the relationship between the administered and/or the absorbed dose of a constituent and the magnitude or likelihood of adverse health effects (USEPA 1989). For constituents that are known or suspected to cause cancer, the toxicity assessment defines the relationship between the dose of the constituent or agent and the probability of induction of carcinogenic effects in humans or animal species of interest. For systemic toxicants, or constituents that give rise to toxic endpoints other than cancer and gene mutations (called non-carcinogenic effects), the toxicity assessment process determines a threshold value below which adverse non-carcinogenic effects are not expected in the general population, including sensitive subgroups.

This section discusses the two general categories of toxic effects (non-carcinogenic and carcinogenic) and constituent-specific toxicity values used to calculate potential risks for these two types of toxic effects. Toxicity values for potential non-carcinogenic and carcinogenic effects are identified from available databases. For this HHRA, toxicity values were obtained from the RSL website (USEPA 2018a), which used the following sources, in the priority in which they were consulted below, consistent with the USEPA (2003) guidance:

1. USEPA's Integrated Risk Information System (IRIS) (USEPA 2019a)
2. USEPA's Provisional Peer Reviewed Toxicity Values (USEPA 2019b)
3. Agency for Toxic Substances and Disease Registry (ATSDR) minimal risk levels (ATSDR 2018)
4. California Environmental Protection Agency (CalEPA)/Office of Environmental Health Hazard Assessment's toxicity values (CalEPA 2018)
5. USEPA's Health Effects Assessment Summary Tables (USEPA 2011b)

5.1 Non-Carcinogenic Effects

For non-carcinogenic effects, protective mechanisms must be overcome before an effect is manifested. Therefore, a finite dose (threshold), below which adverse effects will not occur, exists for non-carcinogens. Depending on the dose, a single compound might elicit several adverse effects in the exposure route, the duration of exposure, and the susceptibility of the individual. Constituents may exhibit their toxic effects at the point of application or contact (local effect) or at other sites (systemic effects) after they have been absorbed into and distributed throughout the body. Most constituents can produce more than one type of toxic effect, depending on the dose and the susceptibility of the exposed individual or receptor. The potential for non-carcinogenic effects is estimated by comparing a calculated exposure dose with a reference dose (RfD) for each individual constituent. The RfD represents a lifetime, daily exposure level that is designed to be protective of human health, even for sensitive individuals and subpopulations. The reference concentration (RfC) is a comparable level that represents an air concentration designed to be protective of human health for daily lifetime exposures, including sensitive individuals and subpopulations.

For a given constituent, the dose or concentration that elicits no adverse effects when evaluating the most sensitive response in the most sensitive species studied is referred to as the no observed adverse effect level (NOAEL). In some cases, benchmark dose modeling (BMDL) is performed and the lower confidence limit on the benchmark dose is defined instead of the NOAEL. The NOAEL or the BMDL is used to

establish non-cancer toxicity values (called RfDs or RfCs). The RfD represents a daily exposure level that is not expected to cause adverse non-carcinogenic health effects. Chronic RfDs are used to assess long-term exposures ranging from 7 years to a lifetime. Subchronic RfDs are typically used to evaluate the potential for adverse health effects associated with exposure to constituents over a shorter time period up to 7 years and were used in the construction worker exposure scenarios. However, in accordance with the USEPA Region 4 guidance (USEPA 2018c), chronic toxicity values were used to evaluate the potential for adverse health effects for children despite the fact the childhood exposures are subchronic in nature, adding an additional margin of safety to the risk assessment.

For the OU-1 COPCs, **Table 21** presents the RfDs used to assess oral and dermal exposures, and **Table 22** presents the RfCs used to evaluate inhalation exposures. These tables also present the target sites associated with the non-carcinogenic toxicity values for each constituent varying with the exposure route. USEPA confidence values and uncertainty factors associated with the RfDs also are listed (USEPA 2018a). The uncertainty factor represents areas of uncertainty inherent in the extrapolation from the available data. The confidence levels (low, medium, high) assess the degree of confidence in the extrapolation of available data. These levels account for data deficiencies or uncertainties, such as individual sensitivity and variability, interspecies variability (if animal data are used), database deficiency, and the extrapolation between exposure doses/durations.

5.2 Carcinogenic Effects

Cancer induction in humans and animals by chemicals proceeds through a complex series of reactions and processes. Carcinogenic constituents may produce tumors at the point of application or contact, or they may produce tumors in other tissues after they have been distributed throughout the body. Some constituents are associated only with one or two tumor types, while others may cause tumors at many different sites.

Constituents are classified as known, probable, or possible human carcinogens based on a USEPA weight-of-evidence scheme in which they are systematically evaluated for their ability to cause cancer in humans or laboratory animals. The USEPA classification scheme (USEPA 1989) contains five classes based on the weight of available evidence. These classifications were updated in the USEPA's (2005a) cancer guidelines, and the classification is now presented as a narrative. Classifications are updated in the USEPA IRIS files as constituents are reviewed. However, the older classifications are often retained for reference. These are presented in **Tables 23** and **24**, as detailed below.

For the OU-1 COPCs, **Table 23** presents the carcinogenic toxicity values for oral and dermal exposures, and **Table 24** presents the carcinogenic toxicity values for inhalation exposures to the COPCs in the OU-1 area. The carcinogenic toxicity value used in the calculation of potential cancer risks is the cancer slope factor (CSF), which is derived from the conservative assumption that any dose level has a possibility of causing cancer. The inhalation unit risk factor for inhalation exposure is used in the indoor air models as the toxicity value. The cumulative dose, regardless of the particular exposure period, determines the risk; therefore, separate CSFs are not derived separately for subchronic and chronic exposure periods.

For constituents that cause cancer by a mutagenic mode of action (MOA), the USEPA requires that one considers lifestage differences in both exposure and dose response when assessing potential ELCR resulting from early-life exposures (USEPA 2005b). It is postulated that exposure to constituents with a

mutagenic MOA early in life may cause irreversible changes in deoxyribonucleic acid that would have a greater effect than exposure to the same constituent later in life. The USEPA supplemental guidance (USEPA 2005b) recommends that, when carcinogens have a mutagenic MOA and appropriate constituent-specific data are not available regarding susceptibility from early-life exposures, it is appropriate to apply a default safety factor called an age-dependent adjustment factor (ADAF) to risk calculations when evaluating potential ELCR associated with exposure of children 0 to 16 years old. In this HHRA, COPCs classified by the USEPA as potentially mutagenic were assessed using ADAFs to account for carcinogenic potency during dose estimation as presented above and recommended by the USEPA (2005b).

For this HHRA, TCE and VC are the two COPCs that are classified by the USEPA as mutagenic. Potential risks for these two constituents are evaluated differently for children. Therefore, the equations used in the evaluation are included in **Table 18**.

5.3 Dermal Toxicity Values and Dermal Absorption

Whenever possible, route-specific toxicity values have been used; however, the USEPA has not yet developed toxicity values for dermal exposures. For this reason, the oral toxicity values (RfD_o and CSF_o) and the oral absorption efficiency were used to derive adjusted toxicity values (RfD_a and CSF_a) (adjusted to the absorbed dose) for use in assessing dermal exposure (USEPA 1989):

$$\text{RfD}_a = \text{RfD}_o \times \text{Oral Absorption Efficiency}$$

$$\text{CSF}_a = \text{CSF}_o / \text{Oral Absorption Efficiency}$$

The adjusted toxicity values presented in **Table 21** (RfD_{a,s}) and **Table 23** (CSF_{a,s}) represent the theoretical toxicity of the orally absorbed dose of the constituent. An oral absorption efficiency factor (or relative absorption factor) describes the ratio of the absorbed fraction of a constituent from a particular exposure medium to the fraction absorbed from the dosing vehicle used in the toxicity study for that constituent. Oral absorption efficiency values are used in the derivations of the risk-based groundwater constituent concentrations to account for differences in the proportion of absorbed constituent in the groundwater compared to the proportion absorbed in the toxicity studies forming the bases of the toxicity reference values. Oral absorption efficiencies are constituent-specific because they depend on unique physical-chemical properties of each constituent. As a conservative measure, the oral absorption efficiencies were assumed to be equal to 1 (i.e., 100% absorption) for all COPCs via the inhalation pathways. Uncertainty is associated with the adjusted toxicity values and with the dermal risks derived using these values, due to the uncertainty in the oral toxicity values combined with the uncertainty in the oral absorption efficiency default and constituent-specific values. However, the calculated dermal risks are expected to be very conservative and, therefore, will overestimate human health risks.

The USEPA (2004) recommends a non-steady-state approach to estimate the dermally absorbed dose from water (groundwater, irrigation water, or surface water) for organic COPCs. The non-steady-state approach evaluates the absorption of COPCs from water through the skin as a function of the constituent-specific permeability coefficient (K_p), and the duration of exposure. Permeability parameters for COPCs are provided in **Table 25**.

Table 25 also presents the dermal absorption parameters for the COPCs to evaluate soil exposures.

6 RISK CHARACTERIZATION

Potential risks to human health are evaluated quantitatively by combining calculated exposure levels and toxicity data. A distinction is made between non-carcinogenic and carcinogenic endpoints, and two general criteria are used to describe the HQ for non-carcinogenic effects and ELCR for COPCs evaluated as human carcinogens.

6.1 Hazard Quotient for Non-Cancer Hazard

Exposure doses are averaged over the expected exposure period to evaluate non-carcinogenic effects. The HQ is the ratio of the estimated exposure dose and the RfD. Therefore, an HQ greater than 1 indicates that the estimated exposure level for that constituent exceeds the RfD or RfC. This ratio does not provide the probability of an adverse effect. Although an HQ less than 1 indicates that health effects should not occur, an HQ that exceeds 1 does not imply that health effects will occur, but that health effects are possible.

The sum of the HQs is the hazard index (HI). A limitation with the HI approach is that the assumption of dose additivity is applied to compounds that may induce different effects by different mechanisms of action. Consequently, the summing of HIs for a number of compounds that do not induce the same type of effects or that do not act by the same mechanism, will likely overestimate the potential for toxic effects. Consistent with USEPA risk assessment guidelines for chemical mixtures, in the event that the total HI for an exposure scenario exceeds 1, then the HQs may be segregated by target organ/critical effect (USEPA 1989). Therefore, if the calculated HI exceeds 1 as a consequence of summing several HQs for constituents not expected to induce the same type of effects or that do not act by the same mechanism, the HI may be recalculated by effect and mechanism of action to derive separate HIs for each target-organ/critical-effect group (USEPA 1989). However, if an elevated HI is driven by only one constituent, then target organ/critical effect HIs will not be calculated.

6.2 Excess Lifetime Cancer Risk

The ELCR is an estimate of the potential increased risk of cancer that results from lifetime exposure, at specified average daily dosages, to COPCs detected in environmental media at the site. Estimated doses or intakes for each constituent are averaged over the hypothesized lifetime of 70 years. It is assumed that a large dose received over a short period is equivalent to a smaller dose received over a longer period, as long as the total lifetime doses are equal. The ELCR is calculated as the product of the exposure dose and the CSF or unit risk factor. The results of the risk characterization indicate the potential increased risk, above that applying to the general population, which may result from the exposure scenarios described in Section 4. The risk estimate is an upper-bound estimate; therefore, the true risk is far less than that predicted by the model. The USEPA considers ELCRs within and below the range of 10^{-6} to 10^{-4} as cancer risks that require no remedial action.

6.3 Current and Future Site Worker Exposure Scenario Risks and Hazards

The potential for a current site worker to contact surface soil was evaluated using the equations in **Table 15** combined with the toxicity values identified in Section 5. The ELCR for potential exposure to surface soil was calculated to be 2×10^{-5} and the HI was calculated to be 6, as shown in **Table 26**. Inhalation of TCE migrating from the surface soil into ambient air is the main contributor to the risk and hazard results. None of the other COPCs contribute more than 1% to the total calculated risk or hazard. The ELCR is within the USEPA target risk range, but the HI exceeds the benchmark of 1.

If the site were redeveloped, the surface and subsurface soil could become redistributed and a future worker could contact surface and subsurface soil. As shown in **Table 27**, the ELCR and HI were calculated to be 3×10^{-5} and 9, respectively. Inhalation of TCE migrating from the subsurface soil is driving the risks and hazards. TCE is the primary contributor to both the calculated ELCR and HI, while none of the other COPCs contribute more than 1% to the total calculated risk or hazard. The ELCR is within the USEPA target risk range, but the HI exceeds the benchmark of 1.

Finally, a site worker could be exposed to vapors from indoor air resulting from vapor intrusion from groundwater. The vapor intrusion exposure scenario was evaluated using the groundwater data collected from a depth of less than 25 feet bgs. **Table 28** presents the input parameters, constituent-specific information, and the results of the risk calculations for the vapor intrusion model. The ELCR is 1×10^{-5} , which is within the USEPA target risk range. The calculated HI is 1, which is equal to the HI benchmark of 1. Again, TCE is the risk driver.

6.4 Hypothetical Future Construction Worker Exposure Scenario Risks and Hazards

Construction workers at the site could potentially contact surface soil, combined surface and subsurface soil, and/or groundwater and inhale vapors migrating from groundwater. The depth to first encountered groundwater within OU-1 varies seasonally, but on average it is assumed to be approximately 10 feet bgs. It was assumed that a construction worker could contact soil through incidental ingestion, dermal contact, and inhalation exposures, and it was assumed that a construction worker could inhale vapors from groundwater beneath a utility trench. The exposure assumptions used to evaluate hypothetical future construction worker exposure to soil and groundwater are presented in **Table 14**. The equations used in the risk characterization calculations are presented in **Table 16** for soil and **Table 17** for groundwater. The ELCR and non-cancer HI for construction workers exposed to surface soil are presented in **Table 29**. The ELCR was calculated to be 1×10^{-6} , which is slightly above the lower end of the USEPA target risk range of 10^{-6} to 10^{-4} . The calculated HI of 10 is above the HI target of 1. Inhalation of TCE migrating from the surface soil is driving the risks and hazards.

Construction workers could excavate to depths of 10 feet bgs and through the vadose zone, and into shallow groundwater. Although it is unlikely that construction activities would occur below the depth of first encountered groundwater (10 feet bgs), exposure to combined surface and subsurface soil (0 to 10 feet bgs) was evaluated, while exposure to shallow groundwater was evaluated using shallow groundwater data from 0 to 15 feet bgs, because there were limited groundwater samples collected between the 0 to

10-foot bgs range. Assuming redistribution of the soil during construction, the risk calculations for combined surface and subsurface soil resulted in an ELCR of 2×10^{-6} and an HI of 16, as shown in **Table 30**. TCE is the risk driver. The equations in **Table 17** were used to evaluate potential construction worker exposure to groundwater. It was assumed that an individual could be exposed through incidental inhalation of vapors from shallow groundwater. The results, as shown in **Table 31**, were below the USEPA target risk range of 10^{-6} to 10^{-4} with a calculated ELCR of 2×10^{-7} , while the results were at the regulatory benchmark with an HI of 1. The HI is driven by TCE.

6.5 Hypothetical Resident Exposure Scenario Risks and Hazards

If the site were redeveloped for residential purposes, hypothetical future residents of the site could contact COPCs in soil or groundwater (via vapor intrusion). The exposure assumptions used to evaluate residential exposure are presented in **Table 14**. The equations used to evaluate residential exposure to soil are presented in **Table 18**. The potential for vapors to migrate from the subsurface into a building were evaluated as well. Exposure of an adult and child resident was evaluated looking at age-averaged exposures. As shown in **Table 18**, exposure to TCE and VC, both classified by USEPA as mutagenic compounds, are evaluated differently than the other COPCs.

The ELCR for residential exposure to surface soil was calculated to be 1×10^{-4} , and the HI was calculated to be 27, as shown in **Table 32**. The ELCR is at the high end of the USEPA target risk range, and the HI is above the benchmark of 1. TCE is the primary contributor to both the calculated ELCR and HI, while none of the other COPCs contribute more than 1% to the total calculated risk or hazard. Following redevelopment of the site, the soil could be re-distributed and hypothetical future residents could contact soil from 0 to 10 feet bgs. The results of the risk and hazard calculations, assuming redistribution of the soil during construction, are presented in **Table 33**. The calculated ELCR is 2×10^{-4} , which is above the USEPA target risk range. The calculated HI is 43, which is above the benchmark of 1. TCE is the risk driver for these calculations. The other COPCs each contribute less than 1% of the total risks and hazards.

The vapor intrusion exposure scenario was evaluated using the groundwater data collected from a depth of less than 25 feet bgs. The data entry, chemical properties, and the results of the risk calculations for the vapor intrusion model are presented in **Table 34**. The calculated ELCR is 1×10^{-4} , which is at the high end of the USEPA target risk range. The calculated HI is 17, which is greater than the HI benchmark of 1. TCE is the primary risk driver, followed by VC.

6.6 Summary of Risks and Hazards

The calculated ELCRs and HIs for each receptor are summarized in **Table 35**. In addition, the ELCRs and HIs were summed for an overall receptor ELCR and HI for exposure to either surface soil and groundwater or combined surface and subsurface soil and groundwater.

Under the current exposure scenario, the overall ELCR is within the USEPA risk range of 1×10^{-6} to 1×10^{-4} for current site workers exposed to COPCs in surface soil and vapor migration from groundwater (3×10^{-5}), while the overall HI was above the benchmark of 1 (7). If the site were redeveloped, and the surface and subsurface soil become redistributed, the overall ELCR is within the USEPA risk range of 1×10^{-6} to 1×10^{-4}

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for hypothetical future site workers exposed to COPCs in combined surface and subsurface soil and vapor migration from groundwater (4×10^{-5}), while the overall HI was above the benchmark of 1 (10).

Should construction activities occur at the site, the overall ELCR is within the USEPA risk range of 1×10^{-6} to 1×10^{-4} for hypothetical future construction workers exposed to COPCs in surface soil and vapor migration from shallow groundwater (1×10^{-6}), while the overall HI for exposure to combined surface and subsurface soil and vapor migration from shallow groundwater was above the benchmark of 1 (11). If the site were redeveloped, and the surface and subsurface soil become redistributed, the overall ELCR is within the USEPA risk range of 1×10^{-6} to 1×10^{-4} for hypothetical future construction workers exposed to COPCs in combined surface and subsurface soil and vapor migration from shallow groundwater (2×10^{-6}), while the overall HI was above the benchmark of 1 (17).

If the site were redeveloped for residential purposes, the overall ELCR is above the USEPA risk range of 1×10^{-6} to 1×10^{-4} for hypothetical future residents exposed to COPCs in surface soil and vapor migration from groundwater (2×10^{-4}), while the overall HI is above the benchmark of 1 (44). If surface and subsurface soils were to become redistributed, the overall ELCR is above the USEPA risk range of 1×10^{-6} to 1×10^{-4} for hypothetical future residents exposed to COPCs in combined surface and subsurface soil and vapor migration from groundwater (3×10^{-4}), while the overall HI is above the benchmark of 1 (60).

For both surface soil and combined surface and subsurface soil for all three receptors, TCE was the only COPC with an ELCR above 1×10^{-6} and/or an HQ above 1, while the total risks and hazards for all other constituents was below the USEPA risk range and hazard benchmark. For construction workers exposed to vapors migrating from shallow groundwater, TCE was the main risk and hazard driver. For vapor intrusion from groundwater, TCE and VC had ELCRs above 1×10^{-6} and/or HQs above 1 for residents, while only TCE had an ELCR above 1×10^{-6} for site workers.

6.7 Health-Based Goal Development

The presence of TCE in soil and groundwater resulted in calculated risks and hazards greater than the USEPA target risk range of 1×10^{-6} to 1×10^{-4} and the non-cancer HI of 1. Health-based goals (HBGs) are concentrations that are protective of human health and correspond to acceptable risk levels. HBGs were calculated following USEPA Region 4 guidance (USEPA 2018c). Two sets of HBGs were calculated for soil and groundwater COPCs whose ELCRs were above 1×10^{-6} or whose HQs were above 1, as indicated in Section 6.6. HBGs for soil were calculated following a ratio approach using the equations presented in **Tables 36** through **38**. The final HBGs for each COPC and receptor were identified as the minimum of the HBGs based on either cancer or non-cancer effects. HBGs for soil based on exposure of residents, site workers, and construction workers are presented in **Tables 36** through **38**, respectively. HBGs for groundwater based on exposure of construction workers are presented in **Table 39**. HBGs for groundwater vapor intrusion based on exposure for residents and site workers are presented in **Tables 40** and **41**, respectively.

A summary of the minimum calculated HBGs for each medium and receptor is provided in **Table 42**. For construction workers exposed to groundwater, the calculated HBG, which is based on inhalation exposures, was also compared to the maximum contaminant level (MCL), if available, assuming that the MCL would be the benchmark to which the calculated HBGs would be compared. If the MCL was higher than the calculated HBG, the final HBG was identified as the MCL, as was the case for TCE.

6.8 Uncertainty Analysis

The risk estimates presented here are conservative estimates of potential risks associated with exposures to constituents detected in the site subsurface. Uncertainty is inherent in the risk assessment process, and a discussion of these uncertainties is presented in this section. Each of the three basic building blocks for risk assessment (data evaluation, exposure assessment, and toxicity assessment) contributes uncertainties. Each of the uncertainties is accounted for by using conservative assumptions wherever specific data are unavailable.

6.8.1 Data Evaluation

The data evaluation step can lead to uncertainty in the risk estimates as discussed below. This risk assessment assumes that the available monitoring data adequately describe the occurrence of constituents in media at the site. Environmental sampling itself introduces uncertainty. This source of uncertainty can be reduced through a well-designed sampling plan, use of appropriate sampling techniques, and implementation of laboratory data validation and quality assurance and quality control (QA/QC). The risk assessment assumes the site is appropriately characterized by the sampling plans used. Further, the data used in this HHRA meet QA/QC requirements and are appropriate for use in a risk assessment.

Uncertainty is inherent in the selection of COPCs for the risk assessment. Eliminating constituents in the COPC screening process can lead to lower estimates of potential health effects than inclusion of all analytes. However, the screening concentrations used for the human health screening were USEPA recommended screening levels. Because of the conservative way in which screening was performed, the possibility of overlooking a significant constituent is minimal.

6.8.2 Toxicity Assessment

The toxicity values and other toxicological information used in this HHRA are associated with significant uncertainty. Many toxicity values are developed using results of studies in which laboratory animals are exposed to massively high doses of particular constituents over an entire lifetime. As such, these studies do not represent realistic examples of environmental exposures. In addition, humans are different than laboratory animals. Many, if not most, animals used for laboratory studies are genetically designed to be more sensitive than humans to specific compounds. In addition, the effects shown by the animals in the high-dose studies are often very different than effects reported by humans in parallel epidemiological studies. This is because a particular compound may have a different mechanism of action in laboratory animals than it does in humans. Even epidemiological studies, which are generally preferable to animal toxicity studies, are characterized by several uncertainties, such as co-exposures to other chemicals and unknown (and uncontrolled) doses.

Toxicity values are not available for dermal exposure. The USEPA-recommended approach to derivation of dermal toxicity values based on available oral toxicity values and oral absorption efficiencies contributes considerable uncertainty to the risk assessment

6.8.3 Exposure Assessment

The exposure assessment contributes uncertainty to the risk assessment as well. The exposure scenarios with the greatest estimated risks were hypothetical future scenarios with lower likelihood of occurring. Although uncertainty is inherent in the exposure assessment, the exposure scenarios, the EPCs, and the receptor exposure assumptions were chosen to err on the side of conservatism leading to an overestimation of potential risk.

7 SUMMARY AND CONCLUSIONS

An HHRA was performed to evaluate whether constituent concentrations in soil and groundwater and predicted concentrations in vapors pose a risk and/or hazard to human health that exceeds regulatory thresholds based on existing conditions and hypothetical future redevelopment. The data were compared to USEPA RSLs and USEPA VISLs to identify COPCs. The potential exposure scenarios quantitatively evaluated included the following (by medium):

- *Surface and Combined Surface and Subsurface Soil:* Exposure of current and hypothetical future site workers, hypothetical future construction workers, and hypothetical future residents.
- *Groundwater:* Exposure of hypothetical future construction workers.
- *Vapors:* Hypothetical exposure, within buildings, of current and hypothetical future site workers, and hypothetical future residents.

Site-specific exposure assumptions were used in conjunction with Agency-derived toxicity values to characterize ELCRs and non-cancer hazards. For cancer endpoints, the USEPA target risk range, which is protective of health, is 1×10^{-6} to 1×10^{-4} . For non-cancer endpoints, the USEPA uses a benchmark of 1.

Table 35 summarizes the results of the risk and hazard calculations. For each receptor, the risks and hazards from each of the exposure scenarios were calculated. The exposure scenarios and results are summarized below by potential receptor:

- *Current and Hypothetical Future Site Worker:* Site workers were assumed to contact surface and combined surface and subsurface soil and inhale COPCs migrating from the subsurface into buildings. Direct contact with either surface or combined surface and subsurface soil resulted in an ELCR calculated to be within the USEPA target risk range. The non-cancer hazard was above the USEPA benchmark of 1. The presence of TCE in soil was the main risk and hazard driver.
- *Hypothetical Future Construction Worker:* Hypothetical future construction workers were assumed to contact surface and combined surface and subsurface soil and/or inhale vapors migrating from groundwater during excavation activities. Groundwater at the site is first encountered at approximately 10 feet bgs. Direct contact with either surface or combined surface and subsurface soil resulted in an ELCR calculated to be within the USEPA target risk range, while the non-cancer hazard was above the USEPA benchmark of 1. Incidental inhalation of vapors from groundwater beneath a utility trench resulted in an ELCR below the USEPA target risk range, while the non-cancer hazard was above the regulatory benchmark. The presence of TCE in soil and groundwater was the main risk and hazard driver.
- *Hypothetical Future Resident:* A future resident could contact surface soil if the redevelopment project did not redistribute the soil. In this case, the risks and hazards were at the high end of the target risk range or above the non-cancer benchmark. If the soil is redistributed or a building is constructed and vapors migrate from the subsurface into a building, the risks and hazards were above the regulatory benchmarks. This was due to the presence of TCE in soil and TCE and VC in groundwater.

The assumption in preparing this HHRA, is that the groundwater will not be used as a potable water supply. In addition, if redevelopment were to occur, protective measures could be undertaken to reduce the potential for exposure during construction activities or following redevelopment. To assist in the

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remedial activities at the site, HBGs were calculated for each potential receptor for COPCs with an ELCR above 1×10^{-6} or an HQ above 1 in combined surface and subsurface soil and groundwater. These goals can be used to support remedial decision making for the site.

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TABLES



Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | Corp-01 | Corp-02 | Corp-03 | Corp-04 | Corp-05 | Corp-06 | CPT-02 8 - 10 | CPT-02 20 - 22 | CPT-08 6 - 8 | CPT-08 22 - 24 | MB1-01 | MB1-02 | MB1-03 | MB1-04 | MB1-05 | MB1-06 | MB1-07 | MB1-08 | MB1-09 | |
|---|----------|----------|----------|----------|----------|----------|------------------|-------------------|-----------------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--|
| | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 10/03/08 | 10/03/08 | 10/03/08 | 10/03/08 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| 1,1-Dichloropropene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| 1,2,3-Trichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| 1,2,3-Trichloropropane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| 1,2,4-Trimethylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| 1,2-Dibromoethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| 1,3,5-Trimethylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| 1,3-Dichloropropane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| 2,2-Dichloropropane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| 2-Butanone | 1.88 J | 14.2 J | 21.0 U | 23.3 U | 4.54 J | 23.8 U | 207,000 U | 153,000 U | 124,000 U | 43.7 U | 2.55 J | 1.82 J | 2.64 J | 3.14 J | 24.1 U | 24.3 U | 23.7 U | 23.3 U | 22.6 U | |
| 2-Chlorotoluene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| 2-Hexanone | 11.0 U | 10.8 U | 10.5 U | 11.7 U | 10.3 U | 11.9 U | 41,400 U | 30,700 U | 24,800 U | 21.8 U | 12.0 U | 11.6 U | 11.2 U | 12.6 U | 12.1 U | 12.2 U | 11.9 U | 11.6 U | 11.3 U | |
| 4-Chlorotoluene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| 4-Methyl-2-pentanone | 11.0 U | 10.8 U | 10.5 U | 11.7 U | 10.3 U | 11.9 U | 41,400 U | 30,700 U | 24,800 U | 21.8 U | 12.0 U | 11.6 U | 11.2 U | 12.6 U | 12.1 U | 12.2 U | 11.9 U | 11.6 U | 11.3 U | |
| Acetone | 15.0 J | 60.0 | 7.30 J | 5.67 J | 44.7 | 6.90 J | 207,000 U | 153,000 U | 124,000 U | 52.4 J | 18.9 J | 14.4 J | 17.9 J | 17.9 J | 8.97 J | 6.66 J | 6.45 J | 10.8 J | 9.43 J | |
| Benzene | 4.41 U | 4.34 U | 4.21 U | 2.35 J | 4.12 U | 2.31 J | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| Bromobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| Bromochloromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| Bromoform | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| Bromomethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| Carbon Disulfide | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 11.2 | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Dibromomethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| Diisopropyl ether (DIPE) | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Ethylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| Hexachlorobutadiene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| Iodomethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| Isopropylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| m-,p-Xylene | 8.83 U | 8.67 U | 8.41 U | 9.34 U | 8.24 U | 9.51 U | 16,600 U | 12,300 U | 9,920 U | 17.5 U | 9.58 U | 9.28 U | 8.98 U | 10.0 U | 9.65 U | 9.73 U | 9.49 U | 9.30 U | 9.03 U | |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Methyl tert-butyl ether | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Naphthalene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| n-Butylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| n-Propylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| o-Xylene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| p-Isopropyltoluene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |
| sec-Butylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | Corp-01 05/06/15 | Corp-02 05/06/15 | Corp-03 05/06/15 | Corp-04 05/06/15 | Corp-05 05/06/15 | Corp-06 05/06/15 | CPT-02 8 - 10 10/03/08 | CPT-02 20 - 22 10/03/08 | CPT-08 6 - 8 10/03/08 | CPT-08 22 - 24 10/03/08 | MB1-01 07/14/15 | MB1-02 07/14/15 | MB1-03 07/14/15 | MB1-04 07/14/15 | MB1-05 07/14/15 | MB1-06 07/14/15 | MB1-07 07/14/15 | MB1-08 07/14/15 | MB1-09 07/14/15 |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------------------|-------------------------------|-----------------------------|-------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Styrene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 1.42 J | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| tert-Butylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| Toluene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 0.925 J | 5.02 U | 0.974 J | 1.27 J | 4.75 U | 4.65 U | 0.966 J |
| trans-1,4-Dichloro-2-butene | 22.1 U | 21.7 U | 21.0 U | 23.3 U | 20.6 U | 23.8 U | 41,400 U | 30,700 U | 24,800 U | 43.7 U | 23.9 U | 23.2 U | 22.4 U | 25.1 U | 24.1 U | 24.3 U | 23.7 U | 23.3 U | 22.6 U |
| Xylenes (total) | 8.83 U | 8.67 U | 8.41 U | 9.34 U | 8.24 U | 9.51 U | NA | NA | NA | NA | 9.58 U | 9.28 U | 8.98 U | 10.0 U | 9.65 U | 9.73 U | 9.49 U | 9.30 U | 9.03 U |
| 1,1,1-Trichloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 15.0 | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 1.67 J | 32.2 | 12.9 |
| 1,1,2,2-Tetrachloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| 1,1-Dichloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.72 | 4.51 U |
| 1,1-Dichloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| 1,2,4-Trichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| 1,2-Dibromo-3-chloropropane | 26.5 U | 26.0 U | 25.2 U | 28.0 U | 24.7 U | 28.5 U | 41,400 U | 30,700 U | 24,800 U | 43.7 U | 28.7 U | 27.8 U | 26.9 U | 30.1 U | 28.9 U | 29.2 U | 28.5 U | 27.9 U | 27.1 U |
| 1,2-Dichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| 1,2-Dichloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| 1,2-Dichloropropane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| 1,3-Dichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| 1,4-Dichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| Bromodichloromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| Carbon Tetrachloride | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| Chlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | |
| Chloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| Chloroform | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| Chloromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| cis-1,3-Dichloropropene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| Dibromochloromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| Dichlorodifluoromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 41,400 U | 30,700 U | 24,800 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| Methylene Chloride | 17.7 U | 17.3 U | 16.8 U | 18.7 U | 16.5 U | 19.0 U | 41,400 U | 30,700 U | 24,800 U | 34.9 U | 19.2 U | 18.6 U | 18.0 U | 20.1 U | 19.3 U | 19.5 U | 19.0 U | 18.6 U | 18.1 U |
| trans-1,3-Dichloropropene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| Trichlorofluoromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| cis-1,2-Dichloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 59,400 | 8,470 | 46,100 | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 1.99 J | 4.51 U |
| Tetrachloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 1.52 J | 1.18 J |
| trans-1,2-Dichloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| Trichloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 219,000 | 111,000 | 217,000 | 8.74 U | 4.17 J | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 8.11 | 1.26 J |
| Vinyl Chloride | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4,390 J | 6,140 U | 4,960 U | 8.74 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U |
| Total Chlorinated VOCs | ND | ND | ND | ND | ND | ND | 283,000 J | 119,000 | 263,000 | ND | 19.2 J | ND | ND | ND | ND | ND | 1.67 J | 48.5 J | 15.3 J |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | MB1-10 | MB1-11 | MB1-12 | MB1-13 | MB1-14 | MB1-15 | MB1-16 | MB1-17 | MB1-18 | MB1-19 | MB1-20 | MB1-21 | MB1-22 | MB1-22A | MB1-23 | MB1-24 | MB1-25 | MB1-26 | MB1-27 | MB1-28 | MB1-29 | MB1-30 | MB1-31 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/16/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 1,1-Dichloropropene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 1,2,3-Trichlorobenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 1,2,3-Trichloropropane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 1,2,4-Trimethylbenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 170 | 4.92 U | 4.94 U | 5.68 U |
| 1,2-Dibromoethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 1,3,5-Trimethylbenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 41.2 J | 0.974 J | 4.94 U | 5.68 U |
| 1,3-Dichloropropane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 2,2-Dichloropropane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 2-Butanone | 26.0 U | 24.3 U | 24.7 U | 23.4 U | 23.7 U | 26.5 U | 25.3 U | 21.8 U | 3.71 J | 21.8 U | 22.6 U | 27.0 U | 28.7 U | 1,250 U | 22.9 U | 4.52 J | 26.9 U | 26.3 U | 26,900 U | 73.0 J | 24.6 U | 24.7 U | 22.9 J |
| 2-Chlorotoluene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 2-Hexanone | 13.0 U | 12.1 U | 12.4 U | 11.7 U | 11.9 U | 13.3 U | 12.6 U | 10.9 U | 12.6 U | 10.9 U | 11.3 U | 13.5 U | 14.3 U | 250 U | 11.5 U | 13.0 U | 13.4 U | 13.1 U | 5,380 U | 312 U | 12.3 U | 12.3 U | 14.2 U |
| 4-Chlorotoluene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 4-Methyl-2-pentanone | 13.0 U | 12.1 U | 12.4 U | 11.7 U | 11.9 U | 13.3 U | 12.6 U | 10.9 U | 12.6 U | 10.9 U | 11.3 U | 13.5 U | 14.3 U | 250 U | 11.5 U | 13.0 U | 13.4 U | 13.1 U | 5,380 U | 312 U | 12.3 U | 12.3 U | 5.13 J |
| Acetone | 51.9 U | 11.2 J | 10.6 J | 15.7 J | 18.1 J | 17.8 J | 15.0 J | 13.7 J | 35.2 J | 14.4 J | 20.2 J | 17.2 J | 15.7 J | 1,250 U | 9.01 J | 40.7 J | 30.9 J | 14.0 J | 26,900 U | 1,560 U | 11.1 J | 23.2 J | 119 |
| Benzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 1.26 J | 1.34 J | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Bromobenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Bromochloromethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Bromoform | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Bromomethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Carbon Disulfide | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Diisopropyl ether (DIPE) | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 48.7 J | 4.92 U | 4.94 U | 5.68 U |
| Hexachlorobutadiene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Iodomethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Isopropylbenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 23.7 J | 4.92 U | 4.94 U | 5.68 U |
| m-,p-Xylene | 10.4 U | 9.71 U | 9.90 U | 9.38 U | 9.48 U | 10.6 U | 10.1 U | 8.71 U | 10.1 U | 8.74 U | 9.06 U | 10.8 U | 11.5 U | 100 U | 9.18 U | 10.4 U | 10.7 U | 10.5 U | 2,150 U | 287 | 9.84 U | 9.87 U | 1.75 J |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 187 | 4.92 U | 4.94 U | 5.68 U |
| n-Butylbenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| n-Propylbenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 31.2 J | 4.92 U | 4.94 U | 5.68 U |
| o-Xylene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 137 | 4.92 U | 4.94 U | 0.978 J |
| p-Isopropyltoluene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 1.35 J | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 118 | 4.92 U | 4.94 U | 5.68 U |
| sec-Butylbenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 33.7 J | 4.92 U | 4.94 U | 5.68 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | MB1-10 | MB1-11 | MB1-12 | MB1-13 | MB1-14 | MB1-15 | MB1-16 | MB1-17 | MB1-18 | MB1-19 | MB1-20 | MB1-21 | MB1-22 | MB1-22A | MB1-23 | MB1-24 | MB1-25 | MB1-26 | MB1-27 | MB1-28 | MB1-29 | MB1-30 | MB1-31 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/16/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| Styrene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| tert-Butylbenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Toluene | 1.17 J | 1.20 J | 1.19 J | 1.15 J | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 1.23 J | 1.18 J | 1.23 J | 1.40 J | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 497 | 4.92 U | 1.05 J | 3.19 J |
| trans-1,4-Dichloro-2-butene | 26.0 U | 24.3 U | 24.7 U | 23.4 U | 23.7 U | 26.5 U | 25.3 U | 21.8 U | 25.2 U | 21.8 U | 22.6 U | 27.0 U | 28.7 U | 250 U | 22.9 U | 26.1 U | 26.9 U | 26.3 U | 5,380 U | 312 U | 24.6 U | 24.7 U | 28.4 U |
| Xylenes (total) | 10.4 U | 9.71 U | 9.90 U | 9.38 U | 9.48 U | 10.6 U | 10.1 U | 8.71 U | 10.1 U | 8.74 U | 9.06 U | 10.8 U | 11.5 U | 100 U | 9.18 U | 10.4 U | 10.7 U | 10.5 U | 2,150 U | 424 | 9.84 U | 9.87 U | 2.73 J |
| 1,1,1-Trichloroethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 1.36 J | 4.36 U | 1.08 J | 4.37 U | 4.53 U | 5.39 U | 11.6 | 31.5 J | 2.32 J | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 691 | 16.6 | 28.0 | 5.68 U |
| 1,1,2,2-Tetrachloroethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 1,1-Dichloroethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 7.61 | 18.0 J | 1.94 J | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 12.5 J | 7.78 | 18.5 | 5.68 U |
| 1,1-Dichloroethene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 1,2,4-Trichlorobenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 1,2-Dibromo-3-chloropropane | 31.1 U | 29.1 U | 29.7 U | 28.1 U | 28.4 U | 31.8 U | 30.3 U | 26.1 U | 30.2 U | 26.2 U | 27.2 U | 32.3 U | 34.4 U | 250 U | 27.5 U | 31.3 U | 32.2 U | 31.5 U | 5,380 U | 312 U | 29.5 U | 29.6 U | 34.1 U |
| 1,2-Dichlorobenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 1,2-Dichloroethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 1,2-Dichloropropane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 1,3-Dichlorobenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| 1,4-Dichlorobenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 1.02 J |
| Bromodichloromethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Carbon Tetrachloride | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 2.33 J | 4.94 U | 5.68 U |
| Chlorobenzene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | | | |
| Chloroethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Chloroform | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Chloromethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| cis-1,3-Dichloropropene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Dibromochloromethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Dichlorodifluoromethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 250 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 5,380 U | 312 U | 4.92 U | 4.94 U | 5.68 U |
| Methylene Chloride | 20.8 U | 19.4 U | 19.8 U | 18.8 U | 19.0 U | 21.2 U | 20.2 U | 17.4 U | 20.1 U | 17.5 U | 18.1 U | 21.6 U | 23.0 U | 250 U | 18.4 U | 20.9 U | 21.5 U | 21.0 U | 5,380 U | 312 U | 19.7 U | 19.7 U | 22.7 U |
| trans-1,3-Dichloropropene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Trichlorofluoromethane | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| cis-1,2-Dichloroethene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 27.1 | 4.53 U | 5.39 U | 5.74 U | 18.0 J | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 7,210 | 9.98 J | 3.75 J | 7.23 | 1.84 J |
| Tetrachloroethene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| trans-1,2-Dichloroethene | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,230 | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Trichloroethene | 5.19 U | 4.86 U | 1.04 J | 4.69 U | 4.74 U | 3.43 J | 14.9 | 1.14 J | 4.97 J | 43.9 | 1.38 J | 5.39 U | 21.8 | 235 | 13.7 | 5.22 U | 1.21 J | 2.51 J | 30,100 | 150 | 41.4 | 34.5 | 6.33 |
| Vinyl Chloride | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U |
| Total Chlorinated VOCs | ND | ND | 1.04 J | ND | ND | 3.43 J | 16.3 J | 1.14 J | 6.05 J | 71.0 | 1.38 J | ND | 41.0 | 303 J | 18.0 J | ND | 1.21 J | 2.51 J | 38,500 | 863 J | 71.9 J | 88.2 | 9.19 J |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | MB1-32 | MB1-33 | MB1-34 | MB1-35 | MB1-36 | MB1-37A | MB1-37B | MB1-37C | MB1-37D | MB1-37E | MB1-38 | MB1-38A | MB1-39 | MB1-40 | MB1-41 | MB1-42 | MB1-43 | MB1-44 | MB1-45 | MB1-46 | MB1-47 | MB1-48 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/16/15 | 07/15/15 | 07/16/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| 1,1-Dichloropropene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| 1,2,3-Trichlorobenzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| 1,2,3-Trichloropropane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| 1,2,4-Trimethylbenzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 210 | 57.2 U | 989 U | 329 | 318 | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| 1,2-Dibromoethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| 1,3,5-Trimethylbenzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 1,100 | 57.2 U | 989 U | 170 | 145 | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| 1,3-Dichloropropane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| 2,2-Dichloropropane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| 2-Butanone | 22.7 U | 24.2 U | 28,900 U | 21.7 J | 38.0 J | 1,430 U | 24,700 U | 1,190 U | 37.1 J | 1,940,000 U | 1,160 U | 4,730 U | 2,850 U | 22.5 U | 23.0 U | 22.5 U | 21.8 U | 23.4 U | 25.0 U | 7.74 J | 23.5 U | 6.23 J |
| 2-Chlorotoluene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| 2-Hexanone | 11.3 U | 12.1 U | 5,790 U | 11.0 U | 247 U | 286 U | 4,940 U | 238 U | 251 U | 389,000 U | 231 U | 946 U | 570 U | 11.2 U | 11.5 U | 11.2 U | 10.9 U | 11.7 U | 12.5 U | 11.2 U | 11.8 U | 10.6 U |
| 4-Chlorotoluene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| 4-Methyl-2-pentanone | 2.25 J | 12.1 U | 5,790 U | 11.0 U | 247 U | 286 U | 4,940 U | 238 U | 251 U | 389,000 U | 231 U | 946 U | 570 U | 11.2 U | 11.5 U | 11.2 U | 10.9 U | 11.7 U | 12.5 U | 11.2 U | 11.8 U | 10.6 U |
| Acetone | 7.76 J | 6.33 J | 28,900 U | 87.3 | 1,230 U | 1,430 U | 24,700 U | 1,190 U | 54.7 J | 1,940,000 U | 1,160 U | 4,730 U | 2,850 U | 10.8 J | 14.6 J | 8.05 J | 15.7 J | 9.76 J | 12.1 J | 49.2 | 23.6 J | 32.0 J |
| Benzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| Bromobenzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| Bromochloromethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| Bromoform | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| Bromomethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| Carbon Disulfide | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 2.27 J |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| Diisopropyl ether (DIPE) | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.53 U | 4.84 U | 1,160 U | 1.56 J | 6.90 J | 57.2 U | 989 U | 10.9 J | 33.1 J | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 0.767 J |
| Hexachlorobutadiene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| Iodomethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| Isopropylbenzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 401 | 57.2 U | 989 U | 9.51 J | 12.0 J | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| m-,p-Xylene | 9.07 U | 9.69 U | 2,320 U | 3.64 J | 11.8 J | 114 U | 1,980 U | 23.8 J | 37.6 J | 155,000 U | 92.5 U | 378 U | 228 U | 9.00 U | 9.21 U | 8.99 U | 8.71 U | 9.35 U | 10.0 U | 8.93 U | 9.41 U | 8.52 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 68.0 | 57.2 U | 989 U | 17.1 J | 80.8 | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| n-Butylbenzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| n-Propylbenzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 165 | 57.2 U | 989 U | 47.1 J | 64.2 | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| o-Xylene | 4.53 U | 4.84 U | 1,160 U | 1.66 J | 15.3 J | 57.2 U | 989 U | 18.1 J | 25.1 J | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| p-Isopropyltoluene | 4.53 U | 4.84 U | 1,370 | 2.28 J | 106 | 57.2 U | 989 U | 43.3 J | 161 | 71,500 J | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |
| sec-Butylbenzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 105 | 57.2 U | 989 U | 47.5 U | 29.1 J | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | MB1-32 | MB1-33 | MB1-34 | MB1-35 | MB1-36 | MB1-37A | MB1-37B | MB1-37C | MB1-37D | MB1-37E | MB1-38 | MB1-38A | MB1-39 | MB1-40 | MB1-41 | MB1-42 | MB1-43 | MB1-44 | MB1-45 | MB1-46 | MB1-47 | MB1-48 | |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----|
| | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/16/15 | 07/15/15 | 07/16/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | |
| Styrene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| tert-Butylbenzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| Toluene | 5.66 | 11.4 | 8,280 | 36.1 | 49.3 U | 57.2 U | 989 U | 16.6 J | 132 | 77,700 U | 46.3 U | 189 U | 114 U | 0.828 J | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 1.01 J | |
| trans-1,4-Dichloro-2-butene | 22.7 U | 24.2 U | 5,790 U | 21.9 U | 247 U | 286 U | 4,940 U | 238 U | 251 U | 389,000 U | 231 U | 946 U | 570 U | 22.5 U | 23.0 U | 22.5 U | 21.8 U | 23.4 U | 25.0 U | 22.3 U | 23.5 U | 21.3 U | |
| Xylenes (total) | 9.07 U | 9.69 U | 2,320 U | 5.30 J | 27.1 J | 114 U | 1,980 U | 41.8 J | 62.7 J | 155,000 U | 92.5 U | 378 U | 228 U | 9.00 U | 9.21 U | 8.99 U | 8.71 U | 9.35 U | 10.0 U | 8.93 U | 9.41 U | 8.52 U | |
| 1,1,1-Trichloroethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 191 | 41,600 | 526 | 152 | 159,000 | 219 | 1,710 | 156 | 3.39 J | 4.61 U | 4.49 U | 4.36 U | 59.7 | 21.8 | 4.47 U | 4.70 U | 4.26 U | |
| 1,1,2,2-Tetrachloroethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,1,2-Trichloroethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| 1,1-Dichloroethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 130 | 77,700 U | 35.2 J | 410 | 22.8 J | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.81 | 4.47 U | 4.70 U | 4.26 U | |
| 1,1-Dichloroethene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 134 J | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 1.15 J | 4.47 U | 4.70 U | 4.26 U | |
| 1,2,4-Trichlorobenzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| 1,2-Dibromo-3-chloropropane | 27.2 U | 29.1 U | 5,790 U | 26.3 U | 247 U | 286 U | 4,940 U | 238 U | 251 U | 389,000 U | 231 U | 946 U | 570 U | 27.0 U | 27.6 U | 27.0 U | 26.1 U | 28.1 U | 30.0 U | 26.8 U | 28.2 U | 25.6 U | |
| 1,2-Dichlorobenzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| 1,2-Dichloroethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| 1,2-Dichloropropane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| 1,3-Dichlorobenzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| 1,4-Dichlorobenzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| Bromodichloromethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| Carbon Tetrachloride | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 8.41 | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| Chlorobenzene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | | | |
| Chloroethane | 4.53 U | 4.84 U | 1,160 U | 13.4 | 49.3 U | 57.2 U | 989 U | 47.5 U | 52.2 | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| Chloroform | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| Chloromethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| cis-1,3-Dichloropropene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| Dibromochloromethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| Dichlorodifluoromethane | 4.53 U | 4.84 U | 5,790 U | 4.38 U | 247 U | 286 U | 4,940 U | 238 U | 251 U | 389,000 U | 231 U | 946 U | 570 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| Methylene Chloride | 18.1 U | 19.4 U | 5,790 U | 17.5 U | 247 U | 286 U | 4,940 U | 238 U | 251 U | 389,000 U | 231 U | 946 U | 570 U | 18.0 U | 18.4 U | 18.0 U | 17.4 U | 18.7 U | 20.0 U | 17.9 U | 18.8 U | 0.869 J | |
| trans-1,3-Dichloropropene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| Trichlorofluoromethane | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| cis-1,2-Dichloroethene | 4.53 U | 4.84 U | 1,160 U | 2.66 J | 178 | 57.2 U | 326 J | 16.6 J | 58.7 | 252,000 | 124 | 594 | 216 | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 8.02 | 4.47 U | 1.03 J | 4.26 U | |
| Tetrachloroethene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| trans-1,2-Dichloroethene | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| Trichloroethene | 3.84 J | 3.30 J | 1,160 U | 1.70 J | 35.5 J | 449 | 16,400 | 418 | 178 | 557,000 | 201 | 518 | 823 | 16.6 | 4.61 U | 4.49 U | 4.36 U | 19.8 | 21.5 | 4.47 U | 7.32 | 1.71 J | |
| Vinyl Chloride | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U | 47.5 U | 12.5 J | 10,100 J | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | |
| Total Chlorinated VOCs | 3.84 J | 3.30 J | ND | 17.8 J | 214 J | 640 | 58,300 J | 961 J | 583 J | 978,000 J | 579 J | 3,370 J | 1,220 J | 20.0 J | ND | ND | ND | 87.9 | 58.3 J | ND | 8.35 J | 2.58 J | |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | MB1-49 | MB1-50 | MB1-51 | MB1-52 | MB1-53 | MB1-54 | MB1-55 | MB1-56 | MB1-57 | MB1-58 | MB1-59 | MB1-60 | MB1-61 | MB1-62 | MB1-63 | MB1-64 | MB1-65A | MB1-65B | MB1-PE-01 | MB1-PE-04 | MB1-PE-07 | MB1-PE-10 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|
| | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/16/15 | 07/16/15 | 04/05/12 | 04/05/12 | 04/05/12 | 04/05/12 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,1-Dichloropropene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,2,3-Trichlorobenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,2,3-Trichloropropane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,2,4-Trimethylbenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 42.3 J | 45.4 U | 4.26 U | 77.1 J | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,2-Dibromoethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,3,5-Trimethylbenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,3-Dichloropropane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 2,2-Dichloropropane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 2-Butanone | 25.1 U | 22.7 U | 26.2 U | 23.5 U | 1,410 U | 23.8 U | 21.5 U | 21.8 U | 2.98 J | 21.4 U | 49.2 J | 1,130 U | 21.3 U | 2,380 U | 22.2 U | 21.9 U | 2,510 U | 2,720 U | 4,850 U | 1,090 U | 1,170 U | 1,070 U |
| 2-Chlorotoluene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 2-Hexanone | 12.6 U | 11.3 U | 13.1 U | 11.7 U | 282 U | 11.9 U | 10.8 U | 10.9 U | 12.2 U | 10.7 U | 265 U | 227 U | 10.6 U | 476 U | 11.1 U | 10.9 U | 503 U | 544 U | 969 U | 217 U | 234 U | 215 U |
| 4-Chlorotoluene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 4-Methyl-2-pentanone | 12.6 U | 11.3 U | 13.1 U | 11.7 U | 282 U | 11.9 U | 10.8 U | 10.9 U | 12.2 U | 10.7 U | 265 U | 227 U | 10.6 U | 476 U | 11.1 U | 10.9 U | 503 U | 544 U | 969 U | 217 U | 234 U | 215 U |
| Acetone | 7.83 J | 9.88 J | 12.8 J | 14.8 J | 1,410 U | 15.6 J | 9.71 J | 14.5 J | 19.6 J | 11.4 J | 1,320 U | 1,130 U | 9.71 J | 148 J | 14.3 J | 8.75 J | 2,510 U | 2,720 U | 4,850 U | 1,090 U | 1,170 U | 1,070 U |
| Benzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 12.2 J | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Bromobenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Bromochloromethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Bromoform | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Bromomethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Carbon Disulfide | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 1.65 J | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Diisopropyl ether (DIPE) | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 95.3 | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Hexachlorobutadiene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Iodomethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Isopropylbenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| m-,p-Xylene | 10.0 U | 9.08 U | 10.5 U | 9.39 U | 113 U | 9.52 U | 8.62 U | 8.70 U | 9.75 U | 8.56 U | 106 U | 90.7 U | 8.52 U | 190 U | 8.89 U | 8.74 U | 201 U | 218 U | 388 U | 86.9 U | 93.6 U | 85.9 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| n-Butylbenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| n-Propylbenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 9.00 J | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| o-Xylene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| p-Isopropyltoluene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 88.9 | 45.4 U | 4.26 U | 89.5 J | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| sec-Butylbenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | MB1-49 | MB1-50 | MB1-51 | MB1-52 | MB1-53 | MB1-54 | MB1-55 | MB1-56 | MB1-57 | MB1-58 | MB1-59 | MB1-60 | MB1-61 | MB1-62 | MB1-63 | MB1-64 | MB1-65A | MB1-65B | MB1-PE-01 | MB1-PE-04 | MB1-PE-07 | MB1-PE-10 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|
| | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/16/15 | 07/16/15 | 04/05/12 | 04/05/12 | 04/05/12 | 04/05/12 |
| Styrene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| tert-Butylbenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Toluene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 175 | 45.4 U | 4.26 U | 13.3 J | 1.08 J | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| trans-1,4-Dichloro-2-butene | 25.1 U | 22.7 U | 26.2 U | 23.5 U | 282 U | 23.8 U | 21.5 U | 21.8 U | 24.4 U | 21.4 U | 265 U | 227 U | 21.3 U | 476 U | 22.2 U | 21.9 U | 503 U | 544 U | 969 U | 217 U | 234 U | 215 U |
| Xylenes (total) | 10.0 U | 9.08 U | 10.5 U | 9.39 U | 113 U | 9.52 U | 8.62 U | 8.70 U | 9.75 U | 8.56 U | 106 U | 90.7 U | 8.52 U | 190 U | 8.89 U | 8.74 U | 201 U | 218 U | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 0.940 J | 4.87 U | 4.28 U | 52.9 U | 9.07 J | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 1,120 | 558 | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,1,2,2-Tetrachloroethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,1-Dichloroethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 875 | 609 | 69.8 J | 12.2 J | 46.8 U | 43.0 U |
| 1,1-Dichloroethene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 99.5 J | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,2,4-Trichlorobenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,2-Dibromo-3-chloropropane | 30.1 U | 27.2 U | 31.4 U | 28.2 U | 282 U | 28.6 U | 25.9 U | 26.1 U | 29.2 U | 25.7 U | 265 U | 227 U | 25.6 U | 476 U | 26.7 U | 26.2 U | 503 U | 544 U | 969 U | 217 U | 234 U | 215 U |
| 1,2-Dichlorobenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,2-Dichloroethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,2-Dichloropropane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,3-Dichlorobenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| 1,4-Dichlorobenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Bromodichloromethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Carbon Tetrachloride | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Chlorobenzene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | | |
| Chloroethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Chloroform | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Chloromethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| cis-1,3-Dichloropropene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Dibromochloromethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Dichlorodifluoromethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 282 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 265 U | 227 U | 4.26 U | 476 U | 4.44 U | 4.37 U | 503 U | 544 U | 969 U | 217 U | 234 U | 215 U |
| Methylene Chloride | 1.11 J | 18.2 U | 1.08 J | 0.929 J | 282 U | 19.0 U | 17.2 U | 17.4 U | 19.5 U | 17.1 U | 265 U | 227 U | 17.0 U | 476 U | 17.8 U | 17.5 U | 503 U | 544 U | 969 U | 217 U | 234 U | 215 U |
| trans-1,3-Dichloropropene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| Trichlorofluoromethane | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 1.16 J | 4.87 U | 4.28 U | 52.9 U | 33.6 J | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| cis-1,2-Dichloroethene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 3.02 J | 95.2 U | 4.44 U | 4.37 U | 438 | 278 | 5,160 | 1,050 | 254 | 1,290 |
| Tetrachloroethene | 5.02 U | 4.54 U | 5.23 U | 1.99 J | 56.3 U | 4.76 U | 4.31 U | 1.04 J | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 18.1 J | 4.44 U | 4.37 U | 101 U | 109 U | 194 U | 43.5 U | 46.8 U | 43.0 U |
| trans-1,2-Dichloroethene | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 54.3 J | 43.5 U | 46.8 U | 11.6 J |
| Trichloroethene | 8.79 | 9.85 | 5.23 U | 4.69 U | 157 | 4.16 J | 4.31 U | 6.53 | 4.10 J | 2.82 J | 52.9 U | 45.4 U | 10.9 | 1,010 | 4.44 U | 4.37 U | 385 | 145 | 2,280 | 537 | 46.8 U | 7.73 J |
| Vinyl Chloride | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 65.9 J | 39.5 J | 23.4 J | 21.5 J |
| Total Chlorinated VOCs | 9.90 J | 9.85 | 1.08 J | 2.92 J | 157 | 4.16 J | ND | 9.67 J | 4.10 J | 2.82 J | ND | 42.7 J | 13.9 J | 1,030 J | ND | ND | 2,920 J | 1,590 | NA | NA | NA | NA |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | MB1-PE-13 | MB1-PE-14 | MB1-PE-16 | MB1-PE-19 | MB1-PE-22 | MB1-PE-25 | MB1-PE-28 | MB1-PE-31 | MB1-PE-32 | MB1-PE-B-01 | MB1-PE-B-02 | MB1-PE-B-03 | MB1-PE-B-04 | MB1-PE-B-05 | ME-01 | ME-02 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|-------------|-------------|-------------|-------------|----------|----------|
| | 04/05/12 | 04/05/12 | 04/05/12 | 04/05/12 | 04/05/12 | 04/05/12 | 04/05/12 | 04/19/12 | 04/19/12 | 04/18/12 | 04/18/12 | 04/18/12 | 04/19/12 | 04/19/12 | 05/06/15 | 05/06/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,1-Dichloropropene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,2,3-Trichlorobenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,2,3-Trichloropropane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,2,4-Trimethylbenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,2-Dibromoethane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,3,5-Trimethylbenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,3-Dichloropropane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 2,2-Dichloropropane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 2-Butanone | 21,100 U | 2,380 U | 5,350 U | 9,020 U | 9,300 U | 2,290 U | 10,900 U | 35,400 U | 42,500 U | 24,700 U | 44,000 U | 1,150 U | 10,800 U | 227,000 U | 5.46 J | 22.9 U |
| 2-Chlorotoluene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 2-Hexanone | 4,220 U | 475 U | 1,070 U | 1,800 U | 1,860 U | 458 U | 2,180 U | 7,070 U | 8,490 U | 4,940 U | 8,790 U | 231 U | 2,160 U | 45,500 U | 10.7 U | 11.4 U |
| 4-Chlorotoluene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 4-Methyl-2-pentanone | 4,220 U | 475 U | 1,070 U | 1,800 U | 1,860 U | 458 U | 2,180 U | 7,070 U | 8,490 U | 4,940 U | 8,790 U | 231 U | 2,160 U | 45,500 U | 10.7 U | 11.4 U |
| Acetone | 21,100 U | 2,380 U | 5,350 U | 9,020 U | 9,300 U | 2,290 U | 10,900 U | 35,400 U | 42,500 U | 24,700 U | 44,000 U | 1,150 U | 10,800 U | 227,000 U | 48.3 | 7.03 J |
| Benzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Bromobenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Bromochloromethane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Bromoform | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Bromomethane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Carbon Disulfide | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Diisopropyl ether (DIPE) | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Hexachlorobutadiene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Iodomethane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Isopropylbenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| m-,p-Xylene | 1,690 U | 190 U | 428 U | 721 U | 744 U | 183 U | 874 U | 2,830 U | 3,400 U | 1,980 U | 3,520 U | 92.3 U | 866 U | 18,200 U | 8.52 U | 9.15 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| n-Butylbenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| n-Propylbenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| o-Xylene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| p-Isopropyltoluene | 843 U | 95.0 U | 45.0 J | 361 U | 33.5 J | 11.0 J | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| sec-Butylbenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | MB1-PE-13 | MB1-PE-14 | MB1-PE-16 | MB1-PE-19 | MB1-PE-22 | MB1-PE-25 | MB1-PE-28 | MB1-PE-31 | MB1-PE-32 | MB1-PE-B-01 | MB1-PE-B-02 | MB1-PE-B-03 | MB1-PE-B-04 | MB1-PE-B-05 | ME-01 | ME-02 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|-------------|-------------|-------------|-------------|----------|----------|
| | 04/05/12 | 04/05/12 | 04/05/12 | 04/05/12 | 04/05/12 | 04/05/12 | 04/05/12 | 04/19/12 | 04/19/12 | 04/18/12 | 04/18/12 | 04/18/12 | 04/19/12 | 04/19/12 | 05/06/15 | 05/06/15 |
| Styrene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| tert-Butylbenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Toluene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| trans-1,4-Dichloro-2-butene | 4,220 U | 475 U | 1,070 U | 1,800 U | 1,860 U | 458 U | 2,180 U | 7,070 U | 8,490 U | 4,940 U | 8,790 U | 231 U | 2,160 U | 45,500 U | 21.3 U | 22.9 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 8.52 U | 9.15 U |
| 1,1,1-Trichloroethane | 843 U | 95.0 U | 32.1 J | 79.4 J | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 890 J | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,1,2,2-Tetrachloroethane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,1-Dichloroethane | 843 U | 95.0 U | 550 | 570 | 372 | 398 | 437 U | 1,410 U | 1,700 U | 1,140 | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,1-Dichloroethene | 843 U | 95.0 U | 143 J | 902 | 335 J | 140 | 437 U | 1,410 U | 1,700 U | 3,450 | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,2,4-Trichlorobenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,2-Dibromo-3-chloropropane | 4,220 U | 475 U | 1,070 U | 1,800 U | 1,860 U | 458 U | 2,180 U | 7,070 U | 8,490 U | 4,940 U | 8,790 U | 231 U | 2,160 U | 45,500 U | 25.6 U | 27.4 U |
| 1,2-Dichlorobenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,2-Dichloroethane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,2-Dichloropropane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,3-Dichlorobenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| 1,4-Dichlorobenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Bromodichloromethane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Carbon Tetrachloride | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Chlorobenzene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| Chloroethane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Chloroform | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Chloromethane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| cis-1,3-Dichloropropene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Dibromochloromethane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Dichlorodifluoromethane | 4,220 U | 475 U | 1,070 U | 1,800 U | 1,860 U | 458 U | 2,180 U | 7,070 U | 8,490 U | 4,940 U | 8,790 U | 231 U | 2,160 U | 45,500 U | 4.26 U | 4.57 U |
| Methylene Chloride | 4,220 U | 475 U | 1,070 U | 1,800 U | 1,860 U | 458 U | 2,180 U | 7,070 U | 8,490 U | 4,940 U | 8,790 U | 231 U | 2,160 U | 45,500 U | 17.0 U | 18.3 U |
| trans-1,3-Dichloropropene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Trichlorofluoromethane | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| cis-1,2-Dichloroethene | 5,850 | 2,450 | 7,840 | 13,100 | 14,200 | 5,150 | 6,330 | 30,400 | 18,800 | 26,500 | 7,300 | 663 | 3,360 | 4,910 J | 4.26 U | 4.57 U |
| Tetrachloroethene | 843 U | 95.0 U | 214 U | 361 U | 372 U | 91.6 U | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| trans-1,2-Dichloroethene | 843 U | 95.0 U | 103 J | 361 U | 372 U | 37.6 J | 437 U | 1,410 U | 1,700 U | 989 U | 1,760 U | 46.2 U | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Trichloroethene | 23,400 | 1,160 | 47.1 J | 3,500 | 316 J | 2,590 | 20,100 | 21,300 | 23,700 | 23,900 | 25,300 | 96.0 | 9,520 | 140,000 | 4.26 U | 4.57 U |
| Vinyl Chloride | 843 U | 92.2 J | 146 J | 361 U | 372 U | 122 | 74.3 J | 1,410 U | 662 J | 989 U | 1,760 U | 24.9 J | 433 U | 9,100 U | 4.26 U | 4.57 U |
| Total Chlorinated VOCs | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | ND | ND |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | ME-03 | ME-04 | ME-05 | ME-06 | ME-07 | ME-08 | ME-09 | ME-10 | MIS-01 | MIS-02 | MIS-03 | MIS-04 | MIS-05 | MIS-06 | MIS-07 | MIS-08 | MIS-09 | MIS-10 | MIS-11 | MIS-12 | MIS-13 | MIS-14 | MIS-15 | MIS-16 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,1-Dichloropropene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2,3-Trichlorobenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2,3-Trichloropropane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2,4-Trimethylbenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2-Dibromoethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,3,5-Trimethylbenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,3-Dichloropropane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 2,2-Dichloropropane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 2-Butanone | 21.7 U | 21.7 U | 22.2 U | 22.2 U | 21.9 U | 22.5 U | 21.7 U | 1.37 J | 20.9 U | 21.7 U | 22.1 U | 21.3 U | 21.5 U | 21.2 U | 2.44 J | 3.99 J | 20.7 U | 22.4 U | 21.1 U | 2.09 J | 2.24 J | 21.3 U | 22.1 U | 22.1 U |
| 2-Chlorotoluene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 2-Hexanone | 10.9 U | 10.8 U | 11.1 U | 11.1 U | 10.9 U | 11.2 U | 10.9 U | 10.8 U | 10.5 U | 10.8 U | 11.1 U | 10.6 U | 10.8 U | 10.6 U | 11.2 U | 11.4 U | 10.3 U | 11.2 U | 10.6 U | 10.8 U | 10.3 U | 10.7 U | 11.1 U | 11.0 U |
| 4-Chlorotoluene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 4-Methyl-2-pentanone | 10.9 U | 10.8 U | 11.1 U | 11.1 U | 10.9 U | 11.2 U | 10.9 U | 10.8 U | 10.5 U | 10.8 U | 11.1 U | 10.6 U | 10.8 U | 10.6 U | 11.2 U | 11.4 U | 10.3 U | 11.2 U | 10.6 U | 10.8 U | 10.3 U | 10.7 U | 11.1 U | 11.0 U |
| Acetone | 5.52 J | 4.15 J | 7.83 J | 4.96 J | 3.93 J | 4.80 J | 8.77 J | 12.4 J | 3.17 J | 4.18 J | 5.87 J | 3.88 J | 4.05 J | 6.45 J | 11.2 J | 29.5 J | 5.34 J | 4.22 J | 4.92 J | 19.2 J | 19.3 J | 4.78 J | 7.04 J | 4.56 J |
| Benzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Bromobenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Bromochloromethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Bromoform | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Bromomethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Carbon Disulfide | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Diisopropyl ether (DIPE) | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 1.02 J | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Hexachlorobutadiene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Iodomethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Isopropylbenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| m-,p-Xylene | 8.69 U | 8.67 U | 8.87 U | 8.90 U | 8.74 U | 8.98 U | 8.69 U | 8.67 U | 8.37 U | 8.66 U | 8.85 U | 8.52 U | 8.61 U | 8.48 U | 8.93 U | 9.15 U | 8.26 U | 8.96 U | 8.44 U | 8.66 U | 8.26 U | 8.54 U | 8.85 U | 8.82 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| n-Butylbenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| n-Propylbenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| o-Xylene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| p-Isopropyltoluene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| sec-Butylbenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | ME-03 | ME-04 | ME-05 | ME-06 | ME-07 | ME-08 | ME-09 | ME-10 | MIS-01 | MIS-02 | MIS-03 | MIS-04 | MIS-05 | MIS-06 | MIS-07 | MIS-08 | MIS-09 | MIS-10 | MIS-11 | MIS-12 | MIS-13 | MIS-14 | MIS-15 | MIS-16 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 |
| Styrene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| tert-Butylbenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Toluene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 1.09 J | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| trans-1,4-Dichloro-2-butene | 21.7 U | 21.7 U | 22.2 U | 22.2 U | 21.9 U | 22.5 U | 21.7 U | 21.7 U | 20.9 U | 21.7 U | 22.1 U | 21.3 U | 21.5 U | 21.2 U | 22.3 U | 22.9 U | 20.7 U | 22.4 U | 21.1 U | 21.7 U | 20.6 U | 21.3 U | 22.1 U | 22.1 U |
| Xylenes (total) | 8.69 U | 8.67 U | 8.87 U | 8.90 U | 8.74 U | 8.98 U | 8.69 U | 8.67 U | 8.37 U | 8.66 U | 8.85 U | 8.52 U | 8.61 U | 8.48 U | 8.93 U | 9.15 U | 8.26 U | 8.96 U | 8.44 U | 8.66 U | 8.26 U | 8.54 U | 8.85 U | 8.82 U |
| 1,1,1-Trichloroethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,1,2,2-Tetrachloroethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,1-Dichloroethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,1-Dichloroethene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2,4-Trichlorobenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2-Dibromo-3-chloropropane | 26.1 U | 26.0 U | 26.6 U | 26.7 U | 26.2 U | 26.9 U | 26.1 U | 26.0 U | 25.1 U | 26.0 U | 26.5 U | 25.6 U | 25.8 U | 25.4 U | 26.8 U | 27.5 U | 24.8 U | 26.9 U | 25.3 U | 26.0 U | 24.8 U | 25.6 U | 26.5 U | 26.5 U |
| 1,2-Dichlorobenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2-Dichloroethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2-Dichloropropane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,3-Dichlorobenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,4-Dichlorobenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Bromodichloromethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Carbon Tetrachloride | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Chlorobenzene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | | | | |
| Chloroethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Chloroform | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Chloromethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| cis-1,3-Dichloropropene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Dibromochloromethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Dichlorodifluoromethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 9.52 | 4.58 U | 1.00 J | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 1.88 J |
| Methylene Chloride | 17.4 U | 17.3 U | 17.7 U | 17.8 U | 17.5 U | 18.0 U | 17.4 U | 17.3 U | 16.7 U | 17.3 U | 17.7 U | 17.0 U | 17.2 U | 17.0 U | 17.9 U | 18.3 U | 16.5 U | 17.9 U | 16.9 U | 17.3 U | 16.5 U | 17.1 U | 17.7 U | 17.6 U |
| trans-1,3-Dichloropropene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Trichlorofluoromethane | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 1.45 J | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| cis-1,2-Dichloroethene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Tetrachloroethene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| trans-1,2-Dichloroethene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Trichloroethene | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Vinyl Chloride | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Total Chlorinated VOCs | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 11.0 J | ND | 1.00 J | ND | ND | ND | ND | ND | ND | 1.88 J |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | MIS-17 | MIS-18 | RC-3 | RC-5 | RC-14 | RC-19 | RC-73 | RC-78 | RC-84 | RC-98 | RC-109 | RC-112 | RC-112 | RC-144 | RC-149 | RC-152 | RC-152 | RC-152 | RC-152 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 05/05/15 | 05/05/15 | 08/20/18 | 08/20/18 | 08/20/18 | 08/20/18 | 08/20/18 | 08/20/18 | 08/21/18 | 08/20/18 | 08/21/18 | 08/16/18 | 10/26/18 | 08/21/18 | 08/20/18 | 08/16/18 | 10/25/18 | 10/25/18 | 10/25/18 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloropropene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| 1,2,3-Trichloropropane | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trimethylbenzene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromoethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| 1,3,5-Trimethylbenzene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichloropropane | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropane | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Butanone | 22.4 U | 20.9 U | 22.0 U | 22.0 U | 22.0 U | 23.0 U | 22.0 U | 22.0 U | 1,300 U | 24.0 U | 22.0 U | 21.0 U | NA | 21.0 U | 25.0 U | 5,100 U | 2,000 U | 21,000 U | 4,600 U |
| 2-Chlorotoluene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 11.2 U | 10.4 U | 22.0 U | 22.0 U | 22.0 U | 23.0 U | 22.0 U | 22.0 U | 1,300 U | 24.0 U | 22.0 U | 21.0 U | NA | 21.0 U | 25.0 U | 5,100 U | 2,000 U | 21,000 U | 4,600 U |
| 4-Chlorotoluene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 11.2 U | 10.4 U | 22.0 U | 22.0 U | 22.0 U | 23.0 U | 22.0 U | 22.0 U | 1,300 U | 24.0 U | 22.0 U | 21.0 U | NA | 21.0 U | 25.0 U | 5,100 U | 2,000 U | 21,000 U | 4,600 U |
| Acetone | 12.3 J | 6.53 J | 22.0 U | 25.0 | 22.0 U | 23.0 U | 26.0 | 22.0 U | 1,300 U | 28.0 | 22.0 U | 110 | NA | 21.0 U | 25.0 U | 5,100 U | 2,000 U | 21,000 U | 4,600 U |
| Benzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Bromobenzene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Bromoform | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Bromomethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Carbon Disulfide | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Cyclohexane | NA | NA | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Dibromomethane | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diisopropyl ether (DIPE) | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 320 | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Hexachlorobutadiene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Iodomethane | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| m-,p-Xylene | 8.95 U | 8.35 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl Acetate | NA | NA | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Methyl tert-butyl ether | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Methylcyclohexane | NA | NA | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Naphthalene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Butylbenzene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Propylbenzene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| p-Isopropyltoluene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | MIS-17 05/05/15 | MIS-18 05/05/15 | RC-3 08/20/18 | RC-5 08/20/18 | RC-14 08/20/18 | RC-19 08/20/18 | RC-73 08/20/18 | RC-78 08/20/18 | RC-84 08/21/18 | RC-98 08/20/18 | RC-109 08/21/18 | RC-112 08/16/18 | RC-112 10/26/18 | RC-144 08/21/18 | RC-149 08/20/18 | RC-152 08/16/18 | RC-152 10/25/18 | RC-152 10/25/18 | RC-152 10/25/18 |
|---|--------------------|--------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Styrene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| tert-Butylbenzene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 9.70 | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| trans-1,4-Dichloro-2-butene | 22.4 U | 20.9 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | 8.95 U | 8.35 U | 8.70 U | 8.90 U | 8.90 U | 9.30 U | 9.00 U | 9.00 U | 3,200 | 9.50 U | 8.70 U | 27.0 | NA | 8.40 U | 10.0 U | 2,000 U | 820 U | 8,400 U | 1,800 U |
| 1,1,1-Trichloroethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 2,000 |
| 1,1,2,2-Tetrachloroethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| 1,1,2-Trichloroethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| 1,1-Dichloroethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| 1,1-Dichloroethene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,200 | 610 | 4,200 | 1,200 |
| 1,2,4-Trichlorobenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| 1,2-Dibromo-3-chloropropane | 26.9 U | 25.1 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| 1,2-Dichlorobenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| 1,2-Dichloroethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| 1,2-Dichloropropane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| 1,3-Dichlorobenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| 1,4-Dichlorobenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Bromodichloromethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Carbon Tetrachloride | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Chlorobenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | |
| Chloroethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Chloroform | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Chloromethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| cis-1,3-Dichloropropene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Dibromochloromethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Dichlorodifluoromethane | 19.0 | 7.64 | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Methylene Chloride | 17.9 U | 16.7 U | 13.0 U | 13.0 U | 13.0 U | 14.0 U | 13.0 U | 13.0 U | 760 U | 14.0 U | 13.0 U | 12.0 U | NA | 13.0 U | 15.0 U | 3,100 U | 1,200 U | 13,000 U | 2,800 U |
| trans-1,3-Dichloropropene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Trichlorofluoromethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 11.0 | 5.80 | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| cis-1,2-Dichloroethene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 20,000 | 15,000 | 96,000 | 19,000 |
| Tetrachloroethene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 22,000 | 2,200 | 16,000 | 920 U |
| trans-1,2-Dichloroethene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Trichloroethene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 51,000 | 4,800 | 18,000 | 920 U |
| Vinyl Chloride | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U |
| Total Chlorinated VOCs | 19.0 | 7.64 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 5,600 U | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RC-154 | RC-161 | RC-166 | RC-166 | RC-166 | RC-166 | RC-166 | RC-168 | RC-174 | RC-186 | RC-191 | RC-213 | RC-215 | RC-220 | RC-222 | RC-223 |
|---|----------|----------|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 08/20/18 | 08/16/18 | 08/16/18 | 10/26/18 | 10/26/18 | 10/26/18 | 10/26/18 | 10/25/18 | 08/16/18 | 08/16/18 | 08/16/18 | 08/21/18 | 08/21/18 | 08/21/18 | 10/25/18 | 10/25/18 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloropropene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| 1,2,3-Trichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromoethane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| 1,3,5-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Butanone | 21.0 U | 22.0 U | 610,000 U | 660,000 U | 440,000 U | 25,000 U | 15,000 U | 1,000 U | 1,100 U | 20.0 U | 21.0 U | 24.0 U | 24.0 U | 33.0 U | 23.0 U | 21.0 U |
| 2-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 21.0 U | 22.0 U | 610,000 U | 660,000 U | 440,000 U | 25,000 U | 15,000 U | 1,000 U | 1,100 U | 20.0 U | 21.0 U | 24.0 U | 24.0 U | 33.0 U | 23.0 U | 21.0 U |
| 4-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 21.0 U | 22.0 U | 610,000 U | 660,000 U | 440,000 U | 25,000 U | 15,000 U | 1,000 U | 1,100 U | 20.0 U | 21.0 U | 24.0 U | 24.0 U | 33.0 U | 23.0 U | 21.0 U |
| Acetone | 21.0 U | 38.0 | 610,000 U | 660,000 U | 440,000 U | 25,000 U | 15,000 U | 1,000 U | 1,100 U | 52.0 | 29.0 | 28.0 | 27.0 | 33.0 U | 32.0 | 40.0 |
| Benzene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Bromobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Bromoform | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Bromomethane | 4.20 U* | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U* | 4.20 U |
| Carbon Disulfide | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Cyclohexane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Dibromomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diisopropyl ether (DIPE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Hexachlorobutadiene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Iodomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| m-,p-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl Acetate | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 520 | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Methyl tert-butyl ether | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Methylcyclohexane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Naphthalene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Propylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| p-Isopropyltoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RC-154 | RC-161 | RC-166 | RC-166 | RC-166 | RC-166 | RC-166 | RC-168 | RC-174 | RC-186 | RC-191 | RC-213 | RC-215 | RC-220 | RC-222 | RC-223 |
|---|----------|----------|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 08/20/18 | 08/16/18 | 08/16/18 | 10/26/18 | 10/26/18 | 10/26/18 | 10/26/18 | 10/25/18 | 08/16/18 | 08/16/18 | 08/16/18 | 08/21/18 | 08/21/18 | 08/21/18 | 10/25/18 | 10/25/18 |
| Styrene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| tert-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| trans-1,4-Dichloro-2-butene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | 8.30 U | 8.90 U | 250,000 U | 270,000 U | 180,000 U | 9,800 U | 6,000 U | 420 U | 430 U | 8.10 U | 8.20 U | 9.70 U | 9.50 U | 13.0 U | 9.20 U | 8.40 U |
| 1,1,1-Trichloroethane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 6,100 | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| 1,1,2,2-Tetrachloroethane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| 1,1,2-Trichloroethane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| 1,1-Dichloroethane | 12.0 | 5.10 | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 | 210 U | 4.00 U | 19.0 | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| 1,1-Dichloroethene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 1,600 | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| 1,2,4-Trichlorobenzene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| 1,2-Dibromo-3-chloropropane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| 1,2-Dichlorobenzene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| 1,2-Dichloroethane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| 1,2-Dichloropropane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| 1,3-Dichlorobenzene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| 1,4-Dichlorobenzene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Bromodichloromethane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Carbon Tetrachloride | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Chlorobenzene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| Chloroethane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Chloroform | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Chloromethane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| cis-1,3-Dichloropropene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Dibromochloromethane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Dichlorodifluoromethane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Methylene Chloride | 12.0 U | 13.0 U | 370,000 U | 400,000 U | 260,000 U | 15,000 U | 9,000 U | 630 U | 640 U | 12.0 U | 12.0 U | 15.0 U | 14.0 U | 20.0 U | 14.0 U | 13.0 U |
| trans-1,3-Dichloropropene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Trichlorofluoromethane | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| cis-1,2-Dichloroethene | 10.0 | 4.40 U | 250,000 | 130,000 U | 220,000 | 85,000 | 160,000 | 1,700 | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Tetrachloroethene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| trans-1,2-Dichloroethene | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Trichloroethene | 4.20 U | 4.40 U | 6,000,000 | 2,900,000 | 3,200,000 | 180,000 | 3,000 U | 1,200 | 440 | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Vinyl Chloride | 6.30 | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U |
| Total Chlorinated VOCs | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RC-225 | RC-227 | RC-229 | RC-231 | RC-232 | RC-233 | RC-234 | RMM-35 | RMM-40 | RMM-44 | RMM-48 | RMM-106 | RMM-134 | RMM-138 | RMM-143 | RMM-147 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 10/25/18 | 10/25/18 | 10/25/18 | 10/26/18 | 10/26/18 | 10/26/18 | 10/26/18 | 08/21/18 | 08/21/18 | 08/21/18 | 08/21/18 | 08/21/18 | 08/22/18 | 08/22/18 | 08/22/18 | 08/22/18 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloropropene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| 1,2,3-Trichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromoethane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,3,5-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Butanone | 38.0 U | 21.0 U | 19.0 U | NA | NA | NA | NA | 2,300 U | 22.0 U | 21.0 U | 24.0 U | 22.0 U | 21.0 U | 24.0 U | 24.0 U | 24.0 U |
| 2-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 38.0 U | 21.0 U | 19.0 U | NA | NA | NA | NA | 2,300 U | 22.0 U | 21.0 U | 24.0 U | 22.0 U | 21.0 U | 24.0 U | 24.0 U | 24.0 U* |
| 4-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 38.0 U | 21.0 U | 19.0 U | NA | NA | NA | NA | 2,300 U | 22.0 U | 21.0 U | 24.0 U | 22.0 U | 21.0 U | 24.0 U | 24.0 U | 24.0 U |
| Acetone | 38.0 U | 29.0 | 19.0 U | NA | NA | NA | NA | 2,300 U | 28.0 | 24.0 | 66.0 | 27.0 | 57.0 | 50.0 | 69.0 | 160 |
| Benzene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 8.60 | 46.0 |
| Bromobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Bromoform | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| Bromomethane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Carbon Disulfide | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Cyclohexane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Dibromomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diisopropyl ether (DIPE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Hexachlorobutadiene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Iodomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| m-,p-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl Acetate | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 610 | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Methyl tert-butyl ether | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Methylcyclohexane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 6.00 |
| Naphthalene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Propylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| p-Isopropyltoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RC-225 10/25/18 | RC-227 10/25/18 | RC-229 10/25/18 | RC-231 10/26/18 | RC-232 10/26/18 | RC-233 10/26/18 | RC-234 10/26/18 | RMM-35 08/21/18 | RMM-40 08/21/18 | RMM-44 08/21/18 | RMM-48 08/21/18 | RMM-106 08/21/18 | RMM-134 08/22/18 | RMM-138 08/22/18 | RMM-143 08/22/18 | RMM-147 08/22/18 |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Styrene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| tert-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| trans-1,4-Dichloro-2-butene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | 15.0 U | 8.40 U | 7.50 U | NA | NA | NA | NA | 910 U | 9.00 U | 8.50 U | 9.80 U | 8.90 U | 8.20 U | 9.70 U | 9.80 U | 12.0 |
| 1,1,1-Trichloroethane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,1,2,2-Tetrachloroethane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| 1,1,2-trichloro-1,2,2-trifluoroethane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,1,2-Trichloroethane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,1-Dichloroethane | 7.50 U | 13.0 | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,1-Dichloroethene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,2,4-Trichlorobenzene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| 1,2-Dibromo-3-chloropropane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| 1,2-Dichlorobenzene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| 1,2-Dichloroethane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,2-Dichloropropane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,3-Dichlorobenzene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| 1,4-Dichlorobenzene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| Bromodichloromethane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Carbon Tetrachloride | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Chlorobenzene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| Chloroethane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Chloroform | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Chloromethane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| cis-1,3-Dichloropropene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Dibromochloromethane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Dichlorodifluoromethane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Methylene Chloride | 23.0 U | 13.0 U | 11.0 U | NA | NA | NA | NA | 1,400 U | 13.0 U | 13.0 U | 15.0 U | 13.0 U | 12.0 U | 15.0 U | 15.0 U | 14.0 U |
| trans-1,3-Dichloropropene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Trichlorofluoromethane | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 7.70 | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| cis-1,2-Dichloroethene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Tetrachloroethene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| trans-1,2-Dichloroethene | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Trichloroethene | 19.0 | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Vinyl Chloride | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Total Chlorinated VOCs | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | 5,900 U | 5,400 U | 5,600 U | 5,600 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RMM-152 | RMM-204 | RMM-230 | RMM-240 | RMM-243 | RMM-248 | RMM-263 | RMM-279 | RMM-298 | RMM-310 | RMM-314 | RMM-318 | RMM-333 | RMM-355 | RMM-359 | |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--|
| | 08/22/18 | 08/23/18 | 08/22/18 | 08/23/18 | 08/23/18 | 08/23/18 | 08/23/18 | 08/23/18 | 08/22/18 | 08/23/18 | 08/23/18 | 08/23/18 | 08/23/18 | 08/23/18 | 08/23/18 | |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,1-Dichloropropene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,3-Trichlorobenzene | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U | |
| 1,2,3-Trichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2-Dibromoethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U | |
| 1,3,5-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,3-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,2-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Butanone | 27.0 U | 22.0 U | 23.0 U | 21.0 U | 23.0 U | 23.0 U | 25.0 U | 1,200 U | 30.0 U | 23.0 U | 19.0 U | 21.0 U | 23.0 U | 23.0 U | 22.0 U | |
| 2-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Hexanone | 27.0 U | 22.0 U | 23.0 U* | 21.0 U | 23.0 U | 23.0 U | 25.0 U | 1,200 U | 30.0 U | 23.0 U | 19.0 U | 21.0 U | 23.0 U | 23.0 U | 22.0 U | |
| 4-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4-Methyl-2-pentanone | 27.0 U | 22.0 U | 23.0 U | 21.0 U | 23.0 U | 23.0 U | 25.0 U | 2,900 | 30.0 U | 23.0 U | 19.0 U | 21.0 U | 23.0 U | 23.0 U | 22.0 U | |
| Acetone | 69.0 | 22.0 U | 51.0 | 30.0 | 23.0 U | 23.0 U | 25.0 U | 1,200 U | 30.0 U | 23.0 U | 19.0 U | 93.0 | 23.0 U | 23.0 U | 45.0 | |
| Benzene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U | |
| Bromobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Bromochloromethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U | |
| Bromoform | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U | |
| Bromomethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U | |
| Carbon Disulfide | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U | |
| Cyclohexane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U | |
| Dibromomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Diisopropyl ether (DIPE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Ethylbenzene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U | |
| Hexachlorobutadiene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Iodomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Isopropylbenzene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U | |
| m-,p-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Methyl Acetate | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U | |
| Methyl tert-butyl ether | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U | |
| Methylcyclohexane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U | |
| Naphthalene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| n-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| n-Propylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| o-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| p-Isopropyltoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| sec-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RMM-152 08/22/18 | RMM-204 08/23/18 | RMM-230 08/22/18 | RMM-240 08/23/18 | RMM-243 08/23/18 | RMM-248 08/23/18 | RMM-263 08/23/18 | RMM-279 08/23/18 | RMM-298 08/22/18 | RMM-310 08/23/18 | RMM-314 08/23/18 | RMM-318 08/23/18 | RMM-333 08/23/18 | RMM-355 08/23/18 | RMM-359 08/23/18 |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Styrene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| tert-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| trans-1,4-Dichloro-2-butene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | 11.0 U | 9.00 U | 9.20 U | 8.30 U | 9.00 U | 9.20 U | 9.80 U | 970 | 12.0 U | 9.00 U | 7.80 U | 8.40 U | 9.20 U | 9.10 U | 8.80 U |
| 1,1,1-Trichloroethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| 1,1,2,2-Tetrachloroethane | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| 1,1,2-Trichloroethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| 1,1-Dichloroethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| 1,1-Dichloroethene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| 1,2,4-Trichlorobenzene | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| 1,2-Dibromo-3-chloropropane | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| 1,2-Dichlorobenzene | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| 1,2-Dichloroethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| 1,2-Dichloropropane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| 1,3-Dichlorobenzene | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| 1,4-Dichlorobenzene | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| Bromodichloromethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| Carbon Tetrachloride | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| Chlorobenzene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | |
| Chloroethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| Chloroform | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| Chloromethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| cis-1,3-Dichloropropene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| Dibromochloromethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| Dichlorodifluoromethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| Methylene Chloride | 16.0 U | 13.0 U | 14.0 U | 12.0 U | 14.0 U | 14.0 U | 15.0 U | 740 U | 18.0 U | 14.0 U | 12.0 U | 13.0 U | 14.0 U | 14.0 U | 13.0 U |
| trans-1,3-Dichloropropene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| Trichlorofluoromethane | 5.50 U | 4.50 U | 4.60 U | 4.30 | 4.50 U | 4.60 U | 4.90 U | 2,400 | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| cis-1,2-Dichloroethene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| Tetrachloroethene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| trans-1,2-Dichloroethene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| Trichloroethene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| Vinyl Chloride | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U | 4.40 U |
| Total Chlorinated VOCs | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RMM-363 | RMM-374 | RMM-379 | RMM-396 | SB-100 5 | SB-100 7 | SB-101 4.5 | SB-102 4 | SB-102 6 | SB-103 4 | SB-103 7 | SB-104 4 | SB-104 6 | SB-105 4 | SB-105 6 | SB-106 4 |
|---|---------|---------|---------|---------|-------------|-------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,1-Dichloropropene | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,2,3-Trichlorobenzene | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,2,3-Trichloropropane | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,2,4-Trimethylbenzene | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 15.3 J |
| 1,2-Dibromoethane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,3,5-Trimethylbenzene | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,3-Dichloropropane | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 2,2-Dichloropropane | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 2-Butanone | 22.0 U | 22.0 U | 24.0 U | 21.0 U | 23.6 U | 24.9 U | 1,070 U | 968 U | 1,060 U | 1,210 U | 1,330 U | 11,100 U | 1,070 U | 5,360 U | 22.8 U | 1,270 U |
| 2-Chlorotoluene | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 2-Hexanone | 22.0 U | 22.0 U* | 24.0 U | 21.0 U | 11.8 U | 12.5 U | 215 U | 194 U | 212 U | 241 U | 266 U | 2,220 U | 215 U | 1,070 U | 11.4 U | 255 U |
| 4-Chlorotoluene | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 4-Methyl-2-pentanone | 22.0 U | 22.0 U | 24.0 U | 21.0 U | 11.8 U | 12.5 U | 215 U | 194 U | 212 U | 241 U | 266 U | 2,220 U | 215 U | 1,070 U | 11.4 U | 255 U |
| Acetone | 49.0 | 42.0 | 130 | 21.0 U | 47.1 U | 49.9 U | 1,070 U | 968 U | 1,060 U | 1,210 U | 1,330 U | 11,100 U | 1,070 U | 5,360 U | 45.6 U | 1,270 U |
| Benzene | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 38.2 J |
| Bromobenzene | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Bromochloromethane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Bromoform | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Bromomethane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Carbon Disulfide | 4.40 U | 4.50 U | 5.50 | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Cyclohexane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Diisopropyl ether (DIPE) | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.40 U | 4.50 U | 23.0 | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Hexachlorobutadiene | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Iodomethane | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Isopropylbenzene | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 11.2 J |
| m-,p-Xylene | NA | NA | NA | NA | 9.42 U | 9.98 U | 85.9 U | 77.5 U | 84.9 U | 96.5 U | 107 U | 889 U | 85.8 U | 429 U | 9.13 U | 102 U |
| Methyl Acetate | 4.40 U | 4.50 U | 4.70 U | 4.10 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Methylcyclohexane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| n-Butylbenzene | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| n-Propylbenzene | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| o-Xylene | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| p-Isopropyltoluene | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| sec-Butylbenzene | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RMM-363 08/23/18 | RMM-374 08/22/18 | RMM-379 08/22/18 | RMM-396 08/22/18 | SB-100 5 08/31/15 | SB-100 7 08/31/15 | SB-101 4.5 09/01/15 | SB-102 4 09/01/15 | SB-102 6 09/01/15 | SB-103 4 09/01/15 | SB-103 7 09/01/15 | SB-104 4 09/01/15 | SB-104 6 09/01/15 | SB-105 4 09/01/15 | SB-105 6 09/01/15 | SB-106 4 09/01/15 |
|---|---------------------|---------------------|---------------------|---------------------|-------------------------|-------------------------|---------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Styrene | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| tert-Butylbenzene | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Toluene | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 21.4 J |
| trans-1,4-Dichloro-2-butene | NA | NA | NA | NA | 23.6 U | 24.9 U | 215 U | 194 U | 212 U | 241 U | 266 U | 2,220 U | 215 U | 1,070 U | 22.8 U | 255 U |
| Xylenes (total) | 8.80 U | 9.00 U | 9.40 U | 8.20 U | 9.42 U | 9.98 U | 85.9 U | 77.5 U | 84.9 U | 96.5 U | 107 U | 889 U | 85.8 U | 429 U | 9.13 U | 102 U |
| 1,1,1-Trichloroethane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,1,2,2-Tetrachloroethane | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,1-Dichloroethane | 4.40 U | 4.50 U | 13.0 | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,1-Dichloroethene | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,2,4-Trichlorobenzene | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,2-Dibromo-3-chloropropane | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 28.3 U | 29.9 U | 215 U | 194 U | 212 U | 241 U | 266 U | 2,220 U | 215 U | 1,070 U | 27.4 U | 255 U |
| 1,2-Dichlorobenzene | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,2-Dichloroethane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,2-Dichloropropane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,3-Dichlorobenzene | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,4-Dichlorobenzene | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Bromodichloromethane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Carbon Tetrachloride | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Chlorobenzene | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| Chloroethane | 4.40 U | 6.50 | 35.0 | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Chloroform | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Chloromethane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| cis-1,3-Dichloropropene | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Dibromochloromethane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Dichlorodifluoromethane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 215 U | 194 U | 212 U | 241 U | 266 U | 2,220 U | 215 U | 1,070 U | 4.56 U | 255 U |
| Methylene Chloride | 13.0 U | 13.0 U | 14.0 U | 12.0 U | 18.8 U | 20.0 U | 215 U | 194 U | 212 U | 241 U | 266 U | 2,220 U | 215 U | 1,070 U | 18.3 U | 14.3 J |
| trans-1,3-Dichloropropene | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Trichlorofluoromethane | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| cis-1,2-Dichloroethene | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 1.23 J | 9.11 | 44.7 | 29.0 J | 56.9 | 112 | 73.5 | 1,180 | 42.5 J | 603 | 32.5 | 967 |
| Tetrachloroethene | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 9.65 J | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| trans-1,2-Dichloroethene | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 83.6 J | 4.56 U | 73.3 |
| Trichloroethene | 4.40 U | 4.50 U | 4.70 U | 12.0 | 27.1 | 57.8 | 266 | 238 | 394 | 844 | 428 | 8,050 | 278 | 3,920 | 24.8 | 1,230 |
| Vinyl Chloride | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 9.08 | 108 |
| Total Chlorinated VOCs | NA | NA | NA | NA | 28.3 J | 66.9 | 311 | 267 J | 451 | 966 J | 502 | 9,230 | 321 J | 4,610 J | 66.4 | 2,390 J |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-106 6 09/01/15 | SB-107 4 09/01/15 | SB-107 6 09/01/15 | SB-108 4 09/01/15 | SB-108 6 09/01/15 | SB-109 2 09/01/15 | SB-109 5 09/01/15 | SB-110 2 09/01/15 | SB-110 5 09/01/15 | SB-111 4 09/01/15 | SB-111 6 09/01/15 | SB-112 4 09/01/15 | SB-112 6 09/01/15 | SB-113 4 09/01/15 | SB-113 6 09/01/15 | SB-114 3 09/01/15 | SB-114 5 09/01/15 |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,1-Dichloropropene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,2,3-Trichlorobenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,2,3-Trichloropropane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,2,4-Trimethylbenzene | 4.59 U | 0.569 J | 9.13 | 379 | 61.2 J | 6,600,000 | 86,400 | 123,000 | 4,230 | 1,380 | 5.98 | 4.86 U | 2.12 J [6.11 U] | 10,400 [11,800] | 7,160 | 1,140 | 15.3 |
| 1,2-Dibromoethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,3,5-Trimethylbenzene | 4.59 U | 0.984 J | 4.34 U | 469 | 943 | 2,340,000 | 31,800 | 36,700 | 1,230 | 498 | 4.26 J | 4.86 U | 0.935 J [6.11 U] | 3,490 [4,280] | 3,810 | 313 | 10.3 |
| 1,3-Dichloropropane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 2,2-Dichloropropane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 2-Butanone | 23.0 U | 19.2 U | 21.7 U | 2,310 U | 1,560 U | 5,490,000 U | 612,000 U | 122,000 U | 4,740 U | 3,190 U | 24.1 U | 24.3 U | 29.6 U [30.5 U] | 13,700 U [11,600 U] | 5,550 U | 1,280 U | 22.7 U |
| 2-Chlorotoluene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 2-Hexanone | 11.5 U | 9.61 U | 10.9 U | 463 U | 312 U | 1,100,000 U | 122,000 U | 24,400 U | 948 U | 638 U | 12.0 U | 12.2 U | 14.8 U [15.3 U] | 2,740 U [2,320 U] | 1,110 U | 255 U | 11.3 U |
| 4-Chlorotoluene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 4-Methyl-2-pentanone | 11.5 U | 9.61 U | 10.9 U | 463 U | 312 U | 1,100,000 U | 122,000 U | 24,400 U | 948 U | 638 U | 12.0 U | 12.2 U | 14.8 U [15.3 U] | 2,740 U [2,320 U] | 1,110 U | 255 U | 11.3 U |
| Acetone | 45.9 U | 10.2 J | 10.1 J | 2,310 U | 1,560 U | 5,490,000 U | 612,000 U | 122,000 U | 4,740 U | 3,190 U | 13.7 J | 17.6 J | 13.4 J [13.1 J] | 13,700 U [11,600 U] | 5,550 U | 1,280 U | 16.8 J |
| Benzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Bromobenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Bromochloromethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Bromoform | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Bromomethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Carbon Disulfide | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Diisopropyl ether (DIPE) | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 13.1 J | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Hexachlorobutadiene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Iodomethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Isopropylbenzene | 4.59 U | 3.84 U | 4.34 U | 119 | 259 | 374,000 | 6,360 J | 6,440 | 300 | 347 | 2.69 J | 4.86 U | 5.92 U [6.11 U] | 691 [798] | 530 | 67.9 | 4.52 J |
| m-,p-Xylene | 9.18 U | 7.69 U | 8.69 U | 185 U | 125 U | 439,000 U | 49,000 U | 9,760 U | 47.4 J | 255 U | 9.63 U | 9.72 U | 11.8 U [12.2 U] | 1,100 U [107 J] | 444 U | 102 U | 9.07 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 77.6 J | 17.4 J | 0.780 J |
| n-Butylbenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 113 J | 51.1 U | 4.53 U |
| n-Propylbenzene | 4.59 U | 3.84 U | 4.34 U | 408 | 639 | 1,470,000 | 22,800 J | 35,600 | 1,420 | 795 | 1.51 J | 4.86 U | 5.92 U [6.11 U] | 3,170 [2,300] | 1,950 | 152 | 7.48 |
| o-Xylene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 20.0 J | 154,000 J | 24,500 U | 2,590 J | 148 J | 154 | 1.59 J | 4.86 U | 5.92 U [6.11 U] | 313 J [752] | 222 U | 17.4 J | 4.53 U |
| p-Isopropyltoluene | 4.59 U | 3.84 U | 4.34 U | 19.4 J | 62.5 U | 125,000 J | 24,500 U | 1,610 J | 167 J | 44.7 J | 0.732 J | 4.86 U | 5.92 U [6.11 U] | 559 [464] | 202 J | 32.2 J | 0.707 J |
| sec-Butylbenzene | 4.59 U | 1.65 J | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 61.3 | 0.916 J |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-106 6 09/01/15 | SB-107 4 09/01/15 | SB-107 6 09/01/15 | SB-108 4 09/01/15 | SB-108 6 09/01/15 | SB-109 2 09/01/15 | SB-109 5 09/01/15 | SB-110 2 09/01/15 | SB-110 5 09/01/15 | SB-111 4 09/01/15 | SB-111 6 09/01/15 | SB-112 4 09/01/15 | SB-112 6 09/01/15 | SB-113 4 09/01/15 | SB-113 6 09/01/15 | SB-114 3 09/01/15 | SB-114 5 09/01/15 |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Styrene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| tert-Butylbenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Toluene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 1.11 J |
| trans-1,4-Dichloro-2-butene | 23.0 U | 19.2 U | 21.7 U | 463 U | 312 U | 1,100,000 U | 122,000 U | 24,400 U | 948 U | 638 U | 24.1 U | 24.3 U | 29.6 U [30.5 U] | 2,740 U [2,320 U] | 1,110 U | 255 U | 22.7 U |
| Xylenes (total) | 9.18 U | 7.69 U | 8.69 U | 185 U | 20.0 J | 154,000 J | 49,000 U | 2,590 J | 195 J | 154 J | 9.63 U | 9.72 U | 11.8 U [12.2 U] | 313 J [858 J] | 444 U | 17.4 J | 9.07 U |
| 1,1,1-Trichloroethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,1,2,2-Tetrachloroethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,1-Dichloroethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,1-Dichloroethene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,2,4-Trichlorobenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,2-Dibromo-3-chloropropane | 27.5 U | 23.1 U | 26.1 U | 463 U | 312 U | 1,100,000 U | 122,000 U | 24,400 U | 948 U | 638 U | 28.9 U | 29.2 U | 35.5 U [36.7 U] | 2,740 U [2,320 U] | 1,110 U | 255 U | 27.2 U |
| 1,2-Dichlorobenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,2-Dichloroethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,2-Dichloropropane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,3-Dichlorobenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| 1,4-Dichlorobenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Bromodichloromethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Carbon Tetrachloride | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Chlorobenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| Chloroethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Chloroform | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Chloromethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| cis-1,3-Dichloropropene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Dibromochloromethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Dichlorodifluoromethane | 4.59 U | 3.84 U | 4.34 U | 463 U | 312 U | 1,100,000 U | 122,000 U | 24,400 U | 948 U | 638 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 2,740 U [2,320 U] | 1,110 U | 255 U | 4.53 U |
| Methylene Chloride | 18.4 U | 15.4 U | 17.4 U | 463 U | 312 U | 1,100,000 U | 122,000 U | 24,400 U | 948 U | 638 U | 19.3 U | 2.28 J | 23.7 U [24.4 U] | 2,740 U [2,320 U] | 1,110 U | 255 U | 3.80 J |
| trans-1,3-Dichloropropene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| Trichlorofluoromethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| cis-1,2-Dichloroethene | 11.8 | 3.84 U | 4.28 J | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 1,220 J | 58.8 J | 568 | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 307 J [464 U] | 222 U | 501 | 4.53 U |
| Tetrachloroethene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 51.1 U | 4.53 U |
| trans-1,2-Dichloroethene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 26.6 J | 4.53 U |
| Trichloroethene | 7.38 | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 33.2 J | 4.82 U | 2.22 J | 5.92 U [6.11 U] | 548 U [464 U] | 222 U | 15.8 J | 4.53 U |
| Vinyl Chloride | 5.14 | 3.84 U | 10.9 | 92.6 U | 62.5 U | 220,000 U | 24,500 U | 4,880 U | 190 U | 38.3 J | 3.84 J | 0.992 J | 2.82 J [3.31 J] | 115 J [464 U] | 222 U | 10.7 J | 1.23 J |
| Total Chlorinated VOCs | 24.3 | ND | 15.2 J | ND | ND | ND | ND | 1,220 J | 58.8 J | 640 J | 3.84 J | 5.49 J | 2.82 J [3.31 J] | 422 J [ND] | ND | 554 J | 5.03 J |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-115 | SB-115 | SB-116 | SB-116 | SB-117 | SB-117 | SB-118 | SB-118 | SB-119 | SB-119 | SB-201 | SB-201 | SB-202 | SB-202 | SB-203 | SB-203 | SB-204 |
|---|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 3 | 6 | 3 | 6 | 3 | 6 | 3 | 6 | 3 | 5 | 4 | 6 | 3 | 4.5 | 3 | 6 | 4 |
| Date Collected: | 09/01/15 | 09/01/15 | 09/01/15 | 09/01/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 1,1-Dichloropropene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 1,2,3-Trichlorobenzene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 1,2,3-Trichloropropane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 1,2,4-Trimethylbenzene | 2,990,000 | 5,620 | 189 U | 2.01 J | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 1,2-Dibromoethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 1,3,5-Trimethylbenzene | 990,000 | 2,330 | 189 U | 0.760 J | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 1,3-Dichloropropane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 2,2-Dichloropropane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 2-Butanone | 5,740,000 U | 4,780 U | 4,720 U | 23.8 U | 9,980 U | 21.5 U | 60,700 U | 9,080 U | 2,030 U | 21.6 U | 21.4 U | 24.5 U | 20.0 U | 3,640 U | 21.3 U | 21.6 U | 1,120 U |
| 2-Chlorotoluene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 2-Hexanone | 1,150,000 U | 956 U | 944 U | 11.9 U | 2,000 U | 10.8 U | 12,100 U | 1,820 U | 406 U | 10.8 U | 10.7 U | 12.3 U | 9.99 U | 728 U | 10.6 U | 10.8 U | 224 U |
| 4-Chlorotoluene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 4-Methyl-2-pentanone | 1,150,000 U | 956 U | 944 U | 11.9 U | 2,000 U | 10.8 U | 12,100 U | 1,820 U | 406 U | 10.8 U | 10.7 U | 12.3 U | 9.99 U | 728 U | 10.6 U | 10.8 U | 224 U |
| Acetone | 5,740,000 U | 4,780 U | 4,720 U | 8.08 J | 9,980 U | 14.5 J | 60,700 U | 9,080 U | 2,030 U | 18.1 J | 22.9 J | 26.7 J | 11.4 J | 3,640 U | 9.89 J | 16.6 J | 1,120 U |
| Benzene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Bromobenzene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Bromochloromethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Bromoform | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Bromomethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Carbon Disulfide | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Diisopropyl ether (DIPE) | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 470 | 4.25 U | 4.31 U | 44.9 U |
| Hexachlorobutadiene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Iodomethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Isopropylbenzene | 126,000 J | 333 | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 189 | 4.25 U | 4.31 U | 44.9 U |
| m-,p-Xylene | 459,000 U | 382 U | 378 U | 9.50 U | 798 U | 8.61 U | 4,860 U | 727 U | 162 U | 8.63 U | 8.55 U | 9.81 U | 7.99 U | 291 U | 8.50 U | 8.63 U | 89.8 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| n-Butylbenzene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| n-Propylbenzene | 542,000 | 1,200 | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| o-Xylene | 230,000 U | 143 J | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| p-Isopropyltoluene | 71,200 J | 88.0 J | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 6,210 | 81.1 U | 1.58 J | 4.27 U | 4.91 U | 4.00 U | 686 | 4.25 U | 4.31 U | 44.9 U |
| sec-Butylbenzene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-115 3 09/01/15 | SB-115 6 09/01/15 | SB-116 3 09/01/15 | SB-116 6 09/01/15 | SB-117 3 09/02/15 | SB-117 6 09/02/15 | SB-118 3 09/02/15 | SB-118 6 09/02/15 | SB-119 3 09/02/15 | SB-119 5 09/02/15 | SB-201 4 09/02/15 | SB-201 6 09/02/15 | SB-202 3 09/02/15 | SB-202 4.5 09/02/15 | SB-203 3 09/02/15 | SB-203 6 09/02/15 | SB-204 4 09/02/15 |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|---------------------------|-------------------------|-------------------------|-------------------------|
| Styrene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| tert-Butylbenzene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Toluene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 121 J | 4.25 U | 4.31 U | 44.9 U |
| trans-1,4-Dichloro-2-butene | 1,150,000 U | 956 U | 944 U | 23.8 U | 2,000 U | 21.5 U | 12,100 U | 1,820 U | 406 U | 21.6 U | 21.4 U | 24.5 U | 20.0 U | 728 U | 21.3 U | 21.6 U | 224 U |
| Xylenes (total) | 459,000 U | 143 J | 378 U | 9.50 U | 798 U | 8.61 U | 4,860 U | 727 U | 162 U | 8.63 U | 8.55 U | 9.81 U | 7.99 U | 291 U | 8.50 U | 8.63 U | 89.8 U |
| 1,1,1-Trichloroethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 29.1 | 146 U | 27.5 | 4.31 U | 556 |
| 1,1,2,2-Tetrachloroethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 1,1-Dichloroethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 27.7 | 146 U | 21.3 | 58.0 | 74.5 |
| 1,1-Dichloroethene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 1.19 J | 146 U | 4.25 U | 4.31 U | 23.8 J |
| 1,2,4-Trichlorobenzene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 1,2-Dibromo-3-chloropropane | 1,150,000 U | 956 U | 944 U | 28.5 U | 2,000 U | 25.8 U | 12,100 U | 1,820 U | 406 U | 25.9 U | 25.6 U | 29.4 U | 24.0 U | 728 U | 25.5 U | 25.9 U | 224 U |
| 1,2-Dichlorobenzene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 1,2-Dichloroethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 1,2-Dichloropropane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 1,3-Dichlorobenzene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| 1,4-Dichlorobenzene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Bromodichloromethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Carbon Tetrachloride | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.30 | 146 U | 3.94 J | 4.31 U | 44.9 U |
| Chlorobenzene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| Chloroethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 45.0 | 44.9 U |
| Chloroform | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Chloromethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| cis-1,3-Dichloropropene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Dibromochloromethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Dichlorodifluoromethane | 1,150,000 U | 956 U | 944 U | 4.75 U | 2,000 U | 4.30 U | 12,100 U | 1,820 U | 406 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 728 U | 4.25 U | 4.31 U | 224 U |
| Methylene Chloride | 1,150,000 U | 956 U | 944 U | 19.0 U | 2,000 U | 17.2 U | 12,100 U | 1,820 U | 406 U | 17.3 U | 17.1 U | 19.6 U | 16.0 U | 728 U | 17.0 U | 17.3 U | 224 U |
| trans-1,3-Dichloropropene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Trichlorofluoromethane | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| cis-1,2-Dichloroethene | 230,000 U | 191 U | 871 | 22.8 | 1,960 | 32.6 | 7,140 | 182 J | 200 | 38.3 | 1.39 J | 4.91 U | 32.6 | 146 U | 19.3 | 1.15 J | 110 |
| Tetrachloroethene | 230,000 U | 191 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| trans-1,2-Dichloroethene | 230,000 U | 191 U | 104 J | 4.75 U | 295 J | 1.87 J | 2,430 U | 363 U | 20.3 J | 1.52 J | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U |
| Trichloroethene | 230,000 U | 191 U | 6,610 | 73.6 | 7,770 | 95.3 | 43,100 | 363 U | 2,010 | 47.5 | 4.27 U | 4.91 U | 84.8 | 146 U | 55.0 | 4.31 U | 469 |
| Vinyl Chloride | 230,000 U | 191 U | 189 U | 1.47 J | 399 U | 2.75 J | 2,430 U | 363 U | 81.1 U | 18.7 | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 3.67 J | 44.9 U |
| Total Chlorinated VOCs | ND | ND | 7,590 J | 97.9 J | 10,000 J | 133 J | 50,200 | 182 J | 2,230 J | 106 J | 1.39 J | ND | 180 J | ND | 127 J | 108 J | 1,230 J |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-204 6 09/02/15 | SB-205 4 09/02/15 | SB-205 6 09/02/15 | SB-206 3 09/02/15 | SB-206 7 09/02/15 | SB-207 3 09/02/15 | SB-207 6 09/02/15 | SB-208 3 09/02/15 | SB-208 5 09/02/15 | SB-209 4 09/02/15 | SB-209 6 09/02/15 | SB-210 1.5 09/02/15 | SB-210 4 09/02/15 | SB-211 3 09/02/15 | SB-211 5 09/02/15 | SB-212 3 09/02/15 | SB-212 5 09/02/15 |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|---------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,1-Dichloropropene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,2,3-Trichlorobenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,2,3-Trichloropropane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,2,4-Trimethylbenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 140 J | 96.5 U | 1,810 U | 9,870 | 4.88 U | 178 U |
| 1,2-Dibromoethane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,3,5-Trimethylbenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 3,540 J | 4.88 U | 178 U |
| 1,3-Dichloropropane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 2,2-Dichloropropane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 2-Butanone | 24.8 U [22.9 U] | 22.4 U [22.5 U] | 25.2 U | 21.3 U | 20.7 U | 5,420 U | 140,000 U | 29.1 U | 4,320 U | 236,000 U | 639,000 U | 4,930 U | 2,410 U | 45,300 U | 233,000 U | 24.4 U | 4,460 U |
| 2-Chlorotoluene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 2-Hexanone | 12.4 U [11.4 U] | 11.2 U [11.3 U] | 12.6 U | 10.7 U | 10.3 U | 1,080 U | 28,000 U | 14.5 U | 865 U | 47,200 U | 128,000 U | 987 U | 483 U | 9,060 U | 46,600 U | 12.2 U | 892 U |
| 4-Chlorotoluene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 4-Methyl-2-pentanone | 12.4 U [11.4 U] | 11.2 U [11.3 U] | 12.6 U | 10.7 U | 10.3 U | 1,080 U | 28,000 U | 14.5 U | 865 U | 47,200 U | 128,000 U | 987 U | 483 U | 9,060 U | 46,600 U | 12.2 U | 892 U |
| Acetone | 25.9 J [15.8 J] | 9.47 J [11.0 J] | 24.6 J | 20.1 J | 41.4 U | 5,420 U | 140,000 U | 77.8 | 4,320 U | 236,000 U | 639,000 U | 4,930 U | 2,410 U | 45,300 U | 233,000 U | 9.26 J | 4,460 U |
| Benzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 1.13 J | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Bromobenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Bromochloromethane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Bromoform | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Bromomethane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Carbon Disulfide | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Diisopropyl ether (DIPE) | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 1.19 J | 1.01 J | 217 U | 5,600 U | 1.44 J | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,180 J | 10,100 | 4.88 U | 178 U |
| Hexachlorobutadiene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Iodomethane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Isopropylbenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 45.4 J | 96.5 U | 8,970 | 9,320 U | 4.88 U | 178 U |
| m-,p-Xylene | 9.92 U [9.15 U] | 8.96 U [9.02 U] | 10.1 U | 2.64 J | 5.36 J | 434 U | 11,200 U | 11.6 U | 346 U | 18,900 U | 51,100 U | 355 J | 193 U | 3,620 U | 35,700 | 9.76 U | 357 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 136 J | 74.3 J | 1,810 U | 9,320 U | 4.88 U | 178 U |
| n-Butylbenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 94.8 J | 96.5 U | 1,230 J | 9,320 U | 4.88 U | 178 U |
| n-Propylbenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 43.4 J | 96.5 U | 36,400 | 3,630 J | 4.88 U | 178 U |
| o-Xylene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 1.12 J | 3.29 J | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 11,700 | 4.88 U | 178 U |
| p-Isopropyltoluene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 1.57 J | 173 U | 9,440 U | 25,600 U | 146 J | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| sec-Butylbenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,540 J | 9,320 U | 4.88 U | 178 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-204 6 09/02/15 | SB-205 4 09/02/15 | SB-205 6 09/02/15 | SB-206 3 09/02/15 | SB-206 7 09/02/15 | SB-207 3 09/02/15 | SB-207 6 09/02/15 | SB-208 3 09/02/15 | SB-208 5 09/02/15 | SB-209 4 09/02/15 | SB-209 6 09/02/15 | SB-210 1.5 09/02/15 | SB-210 4 09/02/15 | SB-211 3 09/02/15 | SB-211 5 09/02/15 | SB-212 3 09/02/15 | SB-212 5 09/02/15 |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|---------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Styrene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| tert-Butylbenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Toluene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 2.82 J | 4.14 U | 217 U | 5,600 U | 4.56 J | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 305,000 | 4.88 U | 87.4 J |
| trans-1,4-Dichloro-2-butene | 24.8 U [22.9 U] | 22.4 U [22.5 U] | 25.2 U | 21.3 U | 20.7 U | 1,080 U | 28,000 U | 29.1 U | 865 U | 47,200 U | 128,000 U | 987 U | 483 U | 9,060 U | 46,600 U | 24.4 U | 892 U |
| Xylenes (total) | 9.92 U [9.15 U] | 8.96 U [9.02 U] | 10.1 U | 3.76 J | 8.66 | 434 U | 11,200 U | 11.6 U | 346 U | 18,900 U | 51,100 U | 355 J | 193 U | 3,620 U | 47,400 | 9.76 U | 357 U |
| 1,1,1-Trichloroethane | 4.96 U [4.58 U] | 8.76 [7.65] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 35,300 | 15,100 J | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,1,2,2-Tetrachloroethane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,1-Dichloroethane | 38.5 [32.5] | 2.05 J [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 2.70 J | 173 U | 4,820 J | 9,710 J | 989 | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,1-Dichloroethene | 1.13 J [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 16,900 | 40,400 | 88.8 J | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,2,4-Trichlorobenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,2-Dibromo-3-chloropropane | 29.8 U [27.5 U] | 26.9 U [27.0 U] | 30.2 U | 25.6 U | 24.8 U | 1,080 U | 28,000 U | 34.9 U | 865 U | 47,200 U | 128,000 U | 987 U | 483 U | 9,060 U | 46,600 U | 29.3 U | 892 U |
| 1,2-Dichlorobenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,2-Dichloroethane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,2-Dichloropropane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,3-Dichlorobenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| 1,4-Dichlorobenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Bromodichloromethane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Carbon Tetrachloride | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Chlorobenzene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| Chloroethane | 29.1 [19.7] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Chloroform | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Chloromethane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| cis-1,3-Dichloropropene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Dibromochloromethane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Dichlorodifluoromethane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 1,080 U | 28,000 U | 5.82 U | 865 U | 47,200 U | 128,000 U | 987 U | 483 U | 9,060 U | 46,600 U | 4.88 U | 892 U |
| Methylene Chloride | 19.8 U [18.3 U] | 17.9 U [18.0 U] | 20.1 U | 17.1 U | 16.6 U | 1,080 U | 28,000 U | 23.3 U | 865 U | 47,200 U | 128,000 U | 987 U | 483 U | 9,060 U | 46,600 U | 19.5 U | 892 U |
| trans-1,3-Dichloropropene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Trichlorofluoromethane | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| cis-1,2-Dichloroethene | 15.7 [15.6] | 4.48 U [4.51 U] | 5.04 U | 1.95 J | 4.14 U | 3,540 | 40,300 | 1.50 J | 34.6 J | 54,400 | 124,000 | 4,410 | 96.5 U | 1,810 U | 85,000 | 111 | 5,220 |
| Tetrachloroethene | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| trans-1,2-Dichloroethene | 3.03 J [2.17 J] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U |
| Trichloroethene | 4.96 U [4.58 U] | 6.54 [4.56] | 5.04 U | 7.71 | 1.28 J | 547 | 166,000 | 2.96 J | 3,110 | 213,000 | 407,000 | 197 U | 147 | 1,810 U | 9,320 U | 81.2 | 178 U |
| Vinyl Chloride | 10.4 [8.00] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 0.836 J | 84.6 J | 2,800 J | 1.45 J | 173 U | 2,360 J | 5,110 J | 288 | 96.5 U | 1,810 U | 10,200 | 4.88 U | 6,200 |
| Total Chlorinated VOCs | 97.9 J [78.0 J] | 17.4 J [12.2] | ND | 9.66 J | 2.12 J | 4,170 J | 209,000 J | 8.61 J | 3,140 J | 327,000 J | 601,000 J | 5,780 J | 147 | ND | 95,200 | 192 | 11,400 |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-213 | SB-214 | SB-215 | SB-215 | SB-216 | SB-216 | SB-217 | SB-217 | SB-218 | SB-218 | SB-219 | SB-219 | SB-301 | SB-301 | SB-302 | SB-302 | SB-303 |
|---|----------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| Sample Depth (Feet): | 3 | 2.5 | 3 | 5 | 3 | 7 | 3 | 5 | 3 | 5 | 4 | 6 | 3 | 4 | 3 | 5 | 4 |
| Date Collected: | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 1,1-Dichloropropene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 1,2,3-Trichlorobenzene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 1,2,3-Trichloropropane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 1,2,4-Trimethylbenzene | 4.62 U | 45.0 U | 11.1 J | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 206 | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 105 | 5.17 | 8,930 U |
| 1,2-Dibromoethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 1,3,5-Trimethylbenzene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 49.1 J | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 107 | 2.52 J | 8,930 U |
| 1,3-Dichloropropane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 2,2-Dichloropropane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 2-Butanone | 23.1 U | 1,130 U | 1,070 U | 30.3 U | 22.3 U | 314,000 U | 23.1 U | 27.7 U | 3,840 U | 4,230 U | 20.6 U | 26.4 U | 23.8 U | 28.0 U | 2,280 U | 22.4 U | 223,000 U |
| 2-Chlorotoluene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 2-Hexanone | 11.5 U | 225 U | 214 U | 15.1 U | 11.2 U | 62,700 U | 11.6 U | 13.9 U | 768 U | 846 U | 10.3 U | 13.2 U | 11.9 U | 14.0 U | 455 U | 11.2 U | 44,600 U |
| 4-Chlorotoluene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 4-Methyl-2-pentanone | 11.5 U | 225 U | 214 U | 15.1 U | 11.2 U | 62,700 U | 11.6 U | 13.9 U | 768 U | 846 U | 10.3 U | 13.2 U | 11.9 U | 14.0 U | 455 U | 11.2 U | 44,600 U |
| Acetone | 17.3 J | 1,130 U | 1,070 U | 28.0 J | 18.6 J | 314,000 U | 23.0 J | 18.0 J | 3,840 U | 4,230 U | 22.9 J | 8.74 J | 32.6 J | 37.1 J | 2,280 U | 18.5 J | 223,000 U |
| Benzene | 4.62 U | 45.0 U | 42.8 U | 1.28 J | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 0.850 J | 8,930 U |
| Bromobenzene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Bromochloromethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Bromoform | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Bromomethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Carbon Disulfide | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Diisopropyl ether (DIPE) | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.62 U | 45.0 U | 121 | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 32.2 J | 129 J | 5.21 | 3.36 J | 4.76 U | 5.61 U | 132 | 12.7 | 8,930 U |
| Hexachlorobutadiene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Iodomethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Isopropylbenzene | 4.62 U | 45.0 U | 11.1 J | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 369 | 37.2 J | 2.44 J | 1.74 J | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| m-,p-Xylene | 9.23 U | 90.1 U | 195 | 12.1 U | 8.93 U | 25,100 U | 9.25 U | 11.1 U | 3,390 | 4,210 | 151 | 10.5 U | 9.51 U | 11.2 U | 1,270 | 20.7 | 17,900 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.62 U | 45.0 U | 9.84 J | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 2.21 J | 8,930 U |
| n-Butylbenzene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| n-Propylbenzene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 249 | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 0.859 J | 8,930 U |
| o-Xylene | 4.62 U | 45.0 U | 206 | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 345 | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 477 | 1.61 J | 8,930 U |
| p-Isopropyltoluene | 4.62 U | 45.0 U | 10.3 J | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 44.5 J | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 394 | 1.67 J | 8,930 U |
| sec-Butylbenzene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-213 3 09/02/15 | SB-214 2.5 09/02/15 | SB-215 3 09/02/15 | SB-215 5 09/02/15 | SB-216 3 09/02/15 | SB-216 7 09/02/15 | SB-217 3 09/03/15 | SB-217 5 09/03/15 | SB-218 3 09/03/15 | SB-218 5 09/03/15 | SB-219 4 09/03/15 | SB-219 6 09/03/15 | SB-301 3 09/03/15 | SB-301 4 09/03/15 | SB-302 3 09/03/15 | SB-302 5 09/03/15 | SB-303 4 09/03/15 |
|---|-------------------------|---------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Styrene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| tert-Butylbenzene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Toluene | 4.62 U | 45.0 U | 180 | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 1.04 J | 5.61 U | 334 | 2.09 J | 8,930 U |
| trans-1,4-Dichloro-2-butene | 23.1 U | 225 U | 214 U | 30.3 U | 22.3 U | 62,700 U | 23.1 U | 27.7 U | 768 U | 846 U | 20.6 U | 26.4 U | 23.8 U | 28.0 U | 455 U | 22.4 U | 44,600 U |
| Xylenes (total) | 9.23 U | 90.1 U | 400 | 12.1 U | 8.93 U | 25,100 U | 9.25 U | 11.1 U | 3,390 | 4,550 | 151 | 10.5 U | 9.51 U | 11.2 U | 1,740 | 22.3 | 17,900 U |
| 1,1,1-Trichloroethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 29.1 J | 4.48 U | 222,000 |
| 1,1,2,2-Tetrachloroethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 1,1-Dichloroethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 7.82 | 4.76 U | 5.61 U | 61.9 J | 2.43 J | 4,020 J |
| 1,1-Dichloroethene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 0.928 J | 4.76 U | 5.61 U | 107 | 4.48 U | 21,200 |
| 1,2,4-Trichlorobenzene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 1,2-Dibromo-3-chloropropane | 27.7 U | 225 U | 214 U | 36.3 U | 26.8 U | 62,700 U | 27.7 U | 33.3 U | 768 U | 846 U | 24.7 U | 31.6 U | 28.5 U | 33.7 U | 455 U | 26.9 U | 44,600 U |
| 1,2-Dichlorobenzene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 1,2-Dichloroethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 1,2-Dichloropropane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 1,3-Dichlorobenzene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| 1,4-Dichlorobenzene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Bromodichloromethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Carbon Tetrachloride | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Chlorobenzene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| Chloroethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 3.32 J | 91.0 U | 6.53 | 8,930 U |
| Chloroform | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Chloromethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| cis-1,3-Dichloropropene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Dibromochloromethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Dichlorodifluoromethane | 4.62 U | 225 U | 214 U | 6.05 U | 4.46 U | 62,700 U | 4.62 U | 5.55 U | 768 U | 846 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 455 U | 4.48 U | 44,600 U |
| Methylene Chloride | 18.5 U | 225 U | 214 U | 24.2 U | 17.9 U | 62,700 U | 3.80 J | 4.97 J | 768 U | 846 U | 16.5 U | 21.1 U | 3.46 J | 4.15 J | 455 U | 17.9 U | 44,600 U |
| trans-1,3-Dichloropropene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Trichlorofluoromethane | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| cis-1,2-Dichloroethene | 11.8 | 172 | 42.8 U | 6.05 U | 2.15 J | 77,100 | 3.66 J | 5.55 U | 154 U | 169 U | 4.12 U | 11.6 | 4.76 U | 5.61 U | 826 | 3.83 J | 27,900 |
| Tetrachloroethene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| trans-1,2-Dichloroethene | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U |
| Trichloroethene | 59.4 | 334 | 42.8 U | 6.05 U | 3.84 J | 234,000 | 8.22 | 4.37 J | 154 U | 169 U | 0.906 J | 5.27 U | 4.76 U | 5.61 U | 435 | 1.79 J | 288,000 |
| Vinyl Chloride | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 0.661 J | 4,520 J | 4.62 U | 5.55 U | 154 U | 169 U | 1.08 J | 72.8 | 4.76 U | 5.61 U | 454 | 1.31 J | 1,880 J |
| Total Chlorinated VOCs | 71.2 | 506 | ND | ND | 6.65 J | 316,000 J | 15.7 J | 9.34 J | ND | ND | 1.99 J | 93.1 J | 3.46 J | 7.47 J | 1,910 J | 15.9 J | 565,000 J |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-303 6 09/03/15 | SB-304 3 09/03/15 | SB-304 5 09/03/15 | SB-305 3 09/03/15 | SB-306 6 09/03/15 | SB-307 2 09/03/15 | SB-308 3 09/03/15 | SB-308 5 09/03/15 | SB-309 3 09/03/15 | SB-309 5 09/03/15 | SB-310 3 09/03/15 | SB-310 5 09/03/15 | SB-311 3 09/03/15 | SB-311 5 09/03/15 | SB-312 3 09/03/15 | SB-312 5 09/03/15 |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|---------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 1,1-Dichloropropene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 1,2,3-Trichlorobenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 1,2,3-Trichloropropane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 1,2,4-Trimethylbenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 1,2-Dibromoethane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 1,3,5-Trimethylbenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 1,3-Dichloropropane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 2,2-Dichloropropane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 2-Butanone | 5,490,000 U | 1,180,000 U | 1,420,000 U | 1,250 U | 1,600 U | 21.9 U | 23.1 U | 6,420,000 U [1,010,000 U] | 1,100 U [1,110 U] | 4,630 U | 22.6 U | 24.3 U | 21.6 U | 204,000 U | 23.0 U | 5.67 J |
| 2-Chlorotoluene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 2-Hexanone | 1,100,000 U | 235,000 U | 284,000 U | 250 U | 320 U | 10.9 U | 11.5 U | 1,280,000 U [202,000 U] | 219 U [222 U] | 925 U | 11.3 U | 12.1 U | 10.8 U | 40,900 U | 11.5 U | 10.6 U |
| 4-Chlorotoluene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 4-Methyl-2-pentanone | 1,100,000 U | 235,000 U | 284,000 U | 250 U | 320 U | 10.9 U | 11.5 U | 1,280,000 U [202,000 U] | 219 U [222 U] | 925 U | 11.3 U | 12.1 U | 10.8 U | 40,900 U | 11.5 U | 10.6 U |
| Acetone | 5,490,000 U | 1,180,000 U | 1,420,000 U | 1,250 U | 1,600 U | 20.9 J | 9.94 J | 6,420,000 U [1,010,000 U] | 1,100 U [1,110 U] | 4,630 U | 45.2 U | 48.0 J | 43.3 U | 204,000 U | 46.0 U | 34.7 J |
| Benzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 1.06 J |
| Bromobenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Bromochloromethane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Bromoform | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Bromomethane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Carbon Disulfide | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Diisopropyl ether (DIPE) | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Hexachlorobutadiene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Iodomethane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Isopropylbenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| m-,p-Xylene | 440,000 U | 94,100 U | 114,000 U | 99.9 U | 128 U | 8.75 U | 9.22 U | 513,000 U [80,700 U] | 87.6 U [89.0 U] | 370 U | 9.03 U | 9.71 U | 8.66 U | 16,400 U | 9.21 U | 8.47 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| n-Butylbenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| n-Propylbenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| o-Xylene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| p-Isopropyltoluene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 157 J | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 0.728 J |
| sec-Butylbenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |

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Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-303 6 09/03/15 | SB-304 3 09/03/15 | SB-304 5 09/03/15 | SB-305 3 09/03/15 | SB-306 6 09/03/15 | SB-307 2 09/03/15 | SB-308 3 09/03/15 | SB-308 5 09/03/15 | SB-309 3 09/03/15 | SB-309 5 09/03/15 | SB-310 3 09/03/15 | SB-310 5 09/03/15 | SB-311 3 09/03/15 | SB-311 5 09/03/15 | SB-312 3 09/03/15 | SB-312 5 09/03/15 |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|---------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Styrene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| tert-Butylbenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Toluene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 1.23 J | 8,180 U | 4.60 U | 1.30 J |
| trans-1,4-Dichloro-2-butene | 1,100,000 U | 235,000 U | 284,000 U | 250 U | 320 U | 21.9 U | 23.1 U | 1,280,000 U [202,000 U] | 219 U [222 U] | 925 U | 22.6 U | 24.3 U | 21.6 U | 40,900 U | 23.0 U | 21.2 U |
| Xylenes (total) | 440,000 U | 94,100 U | 114,000 U | 99.9 U | 128 U | 8.75 U | 9.22 U | 513,000 U [80,700 U] | 87.6 U [89.0 U] | 370 U | 9.03 U | 9.71 U | 8.66 U | 16,400 U | 9.21 U | 8.47 U |
| 1,1,1-Trichloroethane | 796,000 | 488,000 | 674,000 | 1,100 | 63.9 U | 4.38 U | 145 | 1,840,000 [475,000] | 458 [402] | 185 U | 88.6 | 4.86 U | 37.9 | 8,180 U | 8.88 | 18.1 |
| 1,1,2,2-Tetrachloroethane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 1,1-Dichloroethane | 220,000 U | 12,200 J | 11,900 J | 212 | 27.5 J | 4.38 U | 124 | 257,000 U [10,900 J] | 66.6 [57.8] | 2,510 | 82.9 | 4.86 U | 16.6 | 8,180 U | 5.01 | 4.24 U |
| 1,1-Dichloroethene | 125,000 J | 12,700 J | 34,600 J | 81.4 | 14.1 J | 4.38 U | 20.4 | 136,000 J [44,800] | 28.9 J [23.6 J] | 1,100 | 7.38 | 4.86 U | 3.20 J | 8,180 U | 4.60 U | 4.24 U |
| 1,2,4-Trichlorobenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 1,2-Dibromo-3-chloropropane | 1,100,000 U | 235,000 U | 284,000 U | 250 U | 320 U | 26.3 U | 27.7 U | 1,280,000 U [202,000 U] | 219 U [222 U] | 925 U | 27.1 U | 29.1 U | 26.0 U | 40,900 U | 27.6 U | 25.4 U |
| 1,2-Dichlorobenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 1,2-Dichloroethane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 1,2-Dichloropropane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 1,3-Dichlorobenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| 1,4-Dichlorobenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Bromodichloromethane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Carbon Tetrachloride | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 21.2 | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Chlorobenzene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| Chloroethane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 17.3 | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 459 | 1.39 J | 1.81 J | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Chloroform | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Chloromethane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| cis-1,3-Dichloropropene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Dibromochloromethane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Dichlorodifluoromethane | 1,100,000 U | 235,000 U | 284,000 U | 250 U | 320 U | 4.38 U | 4.61 U | 1,280,000 U [202,000 U] | 219 U [222 U] | 925 U | 4.52 U | 4.86 U | 4.33 U | 40,900 U | 4.60 U | 4.24 U |
| Methylene Chloride | 1,100,000 U | 235,000 U | 284,000 U | 250 U | 320 U | 17.5 U | 4.26 J | 1,280,000 U [202,000 U] | 219 U [222 U] | 925 U | 18.1 U | 19.4 U | 17.3 U | 40,900 U | 18.4 U | 16.9 U |
| trans-1,3-Dichloropropene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Trichlorofluoromethane | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| cis-1,2-Dichloroethene | 143,000 J | 32,900 J | 16,500 J | 675 | 606 | 1.47 J | 176 | 257,000 U [18,200 J] | 131 [122] | 2,870 | 32.4 | 4.86 U | 7.22 | 99,000 | 0.893 J | 2.41 J |
| Tetrachloroethene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| trans-1,2-Dichloroethene | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 2.86 J | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 94.4 J | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U |
| Trichloroethene | 4,020,000 | 47,500 | 357,000 | 726 | 67.1 | 5.91 | 58.0 | 2,730,000 [735,000] | 267 [250] | 83.3 J | 58.3 | 4.86 U | 49.5 | 8,180 U | 27.7 | 5.57 |
| Vinyl Chloride | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 158 | 4.38 U | 12.8 | 257,000 U [40,400 U] | 43.8 U [44.5 U] | 801 | 4.52 U | 4.86 U | 4.33 U | 5,560 J | 4.60 U | 4.24 U |
| Total Chlorinated VOCs | 5,080,000 J | 593,000 J | 1,090,000 J | 2,790 | 873 J | 7.38 J | 582 J | 4,710,000 J [1,280,000 J] | 952 J [855 J] | 7,920 J | 271 J | 1.81 J | 114 J | 105,000 J | 42.5 J | 26.1 J |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-313 | SB-313 | SB-314 | SB-314 | SB-315 | SB-315 | SB-316 | SB-316 | SB-317 | SB-317 | SB-318 | SB-318 | SB-MB1-01 | SB-MB1-02 | SB-MB1-03 | SB-MB1-04 | SB-MB1-05 | |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|--|
| Sample Depth (Feet): | 3 | 6 | 3 | 6 | 3 | 5 | 3 | 6 | 3 | 6 | 4 | 6 | | | | | | |
| Date Collected: | 09/03/15 | 09/03/15 | 09/04/15 | 09/04/15 | 09/04/15 | 09/04/15 | 09/04/15 | 09/04/15 | 09/04/15 | 09/04/15 | 09/04/15 | 09/04/15 | 03/12/12 | 03/12/12 | 03/12/12 | 03/13/12 | 03/13/12 | |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| 1,1-Dichloropropene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| 1,2,3-Trichlorobenzene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| 1,2,3-Trichloropropane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| 1,2,4-Trimethylbenzene | 20,900 | 43.5 J | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| 1,2-Dibromoethane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| 1,3,5-Trimethylbenzene | 5,770 | 35.7 J | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| 1,3-Dichloropropane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| 2,2-Dichloropropane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| 2-Butanone | 28,700 U | 1,620 U | 21.2 U | 21.9 U | 1,170 U | 26,200 U | 22.4 U | 22.5 U | 22.8 U | 1,140 U | 24.2 U | 32.1 U | 26.7 U | 27.7 U | 33.0 U | 20.1 U | 19.3 U | |
| 2-Chlorotoluene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| 2-Hexanone | 5,740 U | 325 U | 10.6 U | 11.0 U | 233 U | 5,240 U | 11.2 U | 11.2 U | 11.4 U | 227 U | 12.1 U | 16.0 U | 13.3 U | 13.9 U | 16.5 U | 10.1 U | 9.66 U | |
| 4-Chlorotoluene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| 4-Methyl-2-pentanone | 5,740 U | 325 U | 10.6 U | 11.0 U | 233 U | 5,240 U | 11.2 U | 11.2 U | 11.4 U | 227 U | 12.1 U | 16.0 U | 13.3 U | 13.9 U | 16.5 U | 10.1 U | 9.66 U | |
| Acetone | 28,700 U | 1,620 U | 42.5 U | 19.0 J | 1,170 U | 26,200 U | 16.6 J | 30.6 J | 45.7 U | 1,140 U | 15.3 J | 13.7 J | 4.51 J | 55.4 U | 8.82 J | 40.3 U | 3.02 J | |
| Benzene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 0.683 J | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| Bromobenzene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| Bromochloromethane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| Bromoform | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| Bromomethane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| Carbon Disulfide | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Dibromomethane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| Diisopropyl ether (DIPE) | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Ethylbenzene | 276 J | 61.7 J | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| Hexachlorobutadiene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| Iodomethane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| Isopropylbenzene | 1,680 | 425 | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 2.97 J | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| m-,p-Xylene | 540 J | 130 U | 8.50 U | 8.77 U | 93.3 U | 2,100 U | 8.95 U | 8.98 U | 9.14 U | 90.8 U | 9.69 U | 12.8 U | 10.7 U | 11.1 U | 13.2 U | 8.05 U | 7.73 U | |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Methyl tert-butyl ether | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Naphthalene | 1,150 U | 102 | 4.25 U | 4.39 U | 14.5 J | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| n-Butylbenzene | 425 J | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| n-Propylbenzene | 5,890 | 1,450 | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| o-Xylene | 942 J | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| p-Isopropyltoluene | 529 J | 59.8 J | 4.25 U | 4.39 U | 41.0 J | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |
| sec-Butylbenzene | 1,150 U | 24.7 J | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-313 3 09/03/15 | SB-313 6 09/03/15 | SB-314 3 09/04/15 | SB-314 6 09/04/15 | SB-315 3 09/04/15 | SB-315 5 09/04/15 | SB-316 3 09/04/15 | SB-316 6 09/04/15 | SB-317 3 09/04/15 | SB-317 6 09/04/15 | SB-318 4 09/04/15 | SB-318 6 09/04/15 | SB-MB1-01 03/12/12 | SB-MB1-02 03/12/12 | SB-MB1-03 03/12/12 | SB-MB1-04 03/13/12 | SB-MB1-05 03/13/12 |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Styrene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| tert-Butylbenzene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Toluene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 28.9 J | 1,050 U | 4.48 U | 0.943 J | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| trans-1,4-Dichloro-2-butene | 5,740 U | 325 U | 21.2 U | 21.9 U | 233 U | 5,240 U | 22.4 U | 22.5 U | 22.8 U | 227 U | 24.2 U | 32.1 U | 26.7 U | 27.7 U | 33.0 U | 20.1 U | 19.3 U |
| Xylenes (total) | 1,480 J | 130 U | 8.50 U | 8.77 U | 93.3 U | 2,100 U | 8.95 U | 8.98 U | 9.14 U | 90.8 U | 9.69 U | 12.8 U | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 1,150 U | 65.0 U | 4.09 J | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 1.11 J | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| 1,1,2,2-Tetrachloroethane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| 1,1-Dichloroethane | 1,150 U | 65.0 U | 8.13 | 4.39 U | 327 | 2,380 | 7.91 | 87.9 | 4.57 U | 12.7 J | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| 1,1-Dichloroethene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 2,620 | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| 1,2,4-Trichlorobenzene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| 1,2-Dibromo-3-chloropropane | 5,740 U | 325 U | 25.5 U | 26.3 U | 233 U | 5,240 U | 26.9 U | 27.0 U | 27.4 U | 227 U | 29.1 U | 38.5 U | 32.0 U | 33.3 U | 39.6 U | 24.2 U | 23.2 U |
| 1,2-Dichlorobenzene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| 1,2-Dichloroethane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| 1,2-Dichloropropane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| 1,3-Dichlorobenzene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| 1,4-Dichlorobenzene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Bromodichloromethane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Carbon Tetrachloride | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Chlorobenzene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| Chloroethane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 26.2 | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Chloroform | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Chloromethane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| cis-1,3-Dichloropropene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Dibromochloromethane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Dichlorodifluoromethane | 5,740 U | 325 U | 4.25 U | 4.39 U | 233 U | 5,240 U | 4.48 U | 4.49 U | 4.57 U | 227 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Methylene Chloride | 5,740 U | 325 U | 17.0 U | 17.5 U | 233 U | 5,240 U | 17.9 U | 18.0 U | 18.3 U | 227 U | 19.4 U | 25.7 U | 4.03 J | 1.18 J | 2.44 J | 1.82 J | 1.04 J |
| trans-1,3-Dichloropropene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Trichlorofluoromethane | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| cis-1,2-Dichloroethene | 1,150 U | 65.0 U | 1.36 J | 4.39 U | 46.6 U | 19,300 | 2.46 J | 4.49 U | 1.89 J | 600 | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Tetrachloroethene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| trans-1,2-Dichloroethene | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 36.8 J | 241 J | 4.48 U | 1.22 J | 4.57 U | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Trichloroethene | 1,150 U | 65.0 U | 8.07 | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 18.2 | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Vinyl Chloride | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 513 | 7,240 | 1.07 J | 16.3 | 4.57 U | 62.7 | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U |
| Total Chlorinated VOCs | ND | ND | 21.7 J | ND | 877 J | 31,800 J | 11.4 J | 132 J | 21.2 J | 675 J | ND | ND | NA | NA | NA | NA | NA |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-MB1-06 | SB-MB1-07 | SB-MB1-08 | SB-MB1-09 | SB-MB1-10 | SB-MB1-11 | SB-MB1-12 | SB-MB1-13 | SB-MB1-14 | SB-MB1-15 | SB-MB1-16 | SB-MB1-17 | SB-MB1-18 | SB-MB1-19 | SB-MB1-20 | SB-MB1-21 | SB-MB1-22 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,1-Dichloropropene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,2,3-Trichlorobenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,2,3-Trichloropropane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,2,4-Trimethylbenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,2-Dibromoethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,3,5-Trimethylbenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,3-Dichloropropane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 2,2-Dichloropropane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 2-Butanone | 20.0 U | 20.0 U | 20.9 U | 18.9 U | 20.8 U | 19.7 U | 26.2 U | 27.3 U | 28.6 U | 23.3 U | 27.1 U | 27.8 U | 28.6 U | 27.0 U | 27.7 U | 23.7 U | 26.9 U |
| 2-Chlorotoluene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 2-Hexanone | 9.99 U | 10.0 U | 10.4 U | 9.47 U | 10.4 U | 9.84 U | 13.1 U | 13.7 U | 14.3 U | 11.6 U | 13.5 U | 13.9 U | 14.3 U | 13.5 U | 13.8 U | 11.8 U | 13.4 U |
| 4-Chlorotoluene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 4-Methyl-2-pentanone | 9.99 U | 10.0 U | 10.4 U | 9.47 U | 10.4 U | 9.84 U | 13.1 U | 13.7 U | 14.3 U | 11.6 U | 13.5 U | 13.9 U | 14.3 U | 13.5 U | 13.8 U | 11.8 U | 13.4 U |
| Acetone | 39.9 U | 40.1 U | 41.8 U | 2.77 J | 41.6 U | 39.4 U | 52.4 U | 4.15 J | 57.2 U | 46.5 U | 54.1 U | 4.12 J | 57.1 U | 54.0 U | 55.4 U | 47.3 U | 53.7 U |
| Benzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Bromobenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Bromochloromethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Bromoform | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Bromomethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Carbon Disulfide | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Diisopropyl ether (DIPE) | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Hexachlorobutadiene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Iodomethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Isopropylbenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| m-,p-Xylene | 7.99 U | 8.01 U | 8.36 U | 7.58 U | 8.31 U | 7.87 U | 10.5 U | 10.9 U | 11.4 U | 9.30 U | 10.8 U | 11.1 U | 11.4 U | 10.8 U | 11.1 U | 9.46 U | 10.7 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| n-Butylbenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| n-Propylbenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| o-Xylene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| p-Isopropyltoluene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| sec-Butylbenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-MB1-06 | SB-MB1-07 | SB-MB1-08 | SB-MB1-09 | SB-MB1-10 | SB-MB1-11 | SB-MB1-12 | SB-MB1-13 | SB-MB1-14 | SB-MB1-15 | SB-MB1-16 | SB-MB1-17 | SB-MB1-18 | SB-MB1-19 | SB-MB1-20 | SB-MB1-21 | SB-MB1-22 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 |
| Styrene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| tert-Butylbenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Toluene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 1.92 J | 0.984 J | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| trans-1,4-Dichloro-2-butene | 20.0 U | 20.0 U | 20.9 U | 18.9 U | 20.8 U | 19.7 U | 26.2 U | 27.3 U | 28.6 U | 23.3 U | 27.1 U | 27.8 U | 28.6 U | 27.0 U | 27.7 U | 23.7 U | 26.9 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,1,2,2-Tetrachloroethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,1-Dichloroethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,1-Dichloroethene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,2,4-Trichlorobenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,2-Dibromo-3-chloropropane | 24.0 U | 24.0 U | 25.1 U | 22.7 U | 24.9 U | 23.6 U | 31.4 U | 32.8 U | 34.3 U | 27.9 U | 32.5 U | 33.4 U | 34.3 U | 32.4 U | 33.2 U | 28.4 U | 32.2 U |
| 1,2-Dichlorobenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,2-Dichloroethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,2-Dichloropropane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,3-Dichlorobenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| 1,4-Dichlorobenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Bromodichloromethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Carbon Tetrachloride | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Chlorobenzene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| Chloroethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Chloroform | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Chloromethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| cis-1,3-Dichloropropene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Dibromochloromethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Dichlorodifluoromethane | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Methylene Chloride | 1.76 J | 0.937 J | 1.51 J | 1.04 J | 1.71 J | 1.03 J | 1.40 J | 14.5 J | 6.16 J | 3.34 J | 4.33 J | 2.62 J | 2.46 J | 6.11 J | 4.17 J | 3.67 J | 3.01 J |
| trans-1,3-Dichloropropene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Trichlorofluoromethane | 3.99 U | 4.01 U | 2.63 J | 3.79 U | 4.16 U | 1.05 J | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| cis-1,2-Dichloroethene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Tetrachloroethene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| trans-1,2-Dichloroethene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Trichloroethene | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 0.908 J | 1.05 J |
| Vinyl Chloride | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U |
| Total Chlorinated VOCs | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-MB1-23 | SB-MB1-24 | SB-MB1-25 | SB-MB1-26 | SB-MB1-27 | SB-MB1-28 | SB-MB1-29 | SB-MB1-30 | SB-MB1-31 | SB-MB1-32 | SB-MB1-33 | SB-MB1-34 | SB-MB1-35 | SB-MB1-36 | SB-MB1-37 | SB-MB1-38 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/16/12 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,1-Dichloropropene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,2,3-Trichlorobenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,2,3-Trichloropropane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,2,4-Trimethylbenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,2-Dibromoethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,3,5-Trimethylbenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,3-Dichloropropane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 2,2-Dichloropropane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 2-Butanone | 28.0 U | 33,500 U | 36.5 U | 36.2 U | 18,800 U | 336,000 U | 2,320 U | 1,160 U | 28.4 U | 25.7 U | 1,210 U | 25.2 U | 44,800 U | 27.3 U | 25.3 U | 26.1 U |
| 2-Chlorotoluene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 2-Hexanone | 14.0 U | 6,700 U | 18.3 U | 18.1 U | 3,760 U | 67,200 U | 464 U | 232 U | 14.2 U | 12.9 U | 241 U | 12.6 U | 8,970 U | 13.6 U | 12.7 U | 13.1 U |
| 4-Chlorotoluene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 4-Methyl-2-pentanone | 14.0 U | 6,700 U | 18.3 U | 18.1 U | 3,760 U | 67,200 U | 464 U | 232 U | 14.2 U | 12.9 U | 241 U | 12.6 U | 8,970 U | 13.6 U | 12.7 U | 13.1 U |
| Acetone | 56.0 U | 33,500 U | 73.0 U | 72.3 U | 18,800 U | 336,000 U | 2,320 U | 1,160 U | 3.02 J | 51.4 U | 1,210 U | 50.5 U | 44,800 U | 54.6 U | 50.7 U | 52.3 U |
| Benzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Bromobenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Bromochloromethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Bromoform | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Bromomethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Carbon Disulfide | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Diisopropyl ether (DIPE) | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Hexachlorobutadiene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Iodomethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Isopropylbenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| m-,p-Xylene | 11.2 U | 2,680 U | 14.6 U | 14.5 U | 1,510 U | 26,900 U | 186 U | 92.8 U | 11.4 U | 10.3 U | 96.6 U | 10.1 U | 3,590 U | 10.9 U | 10.1 U | 10.5 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| n-Butylbenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| n-Propylbenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| o-Xylene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| p-Isopropyltoluene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| sec-Butylbenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-MB1-23 | SB-MB1-24 | SB-MB1-25 | SB-MB1-26 | SB-MB1-27 | SB-MB1-28 | SB-MB1-29 | SB-MB1-30 | SB-MB1-31 | SB-MB1-32 | SB-MB1-33 | SB-MB1-34 | SB-MB1-35 | SB-MB1-36 | SB-MB1-37 | SB-MB1-38 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/16/12 |
| Styrene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| tert-Butylbenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Toluene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 1.37 J | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 1.03 J | 5.07 U | 5.23 U |
| trans-1,4-Dichloro-2-butene | 28.0 U | 6,700 U | 36.5 U | 36.2 U | 3,760 U | 67,200 U | 464 U | 232 U | 28.4 U | 25.7 U | 241 U | 25.2 U | 8,970 U | 27.3 U | 25.3 U | 26.1 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 7.84 | 1,650 | 7.30 U | 7.23 U | 791 | 13,400 U | 136 | 146 | 5.69 U | 5.14 U | 142 | 5.05 U | 30,600 | 5.46 U | 5.07 U | 5.23 U |
| 1,1,2,2-Tetrachloroethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,1-Dichloroethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 53.4 | 5.69 U | 5.14 U | 86.4 | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,1-Dichloroethene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,2,4-Trichlorobenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,2-Dibromo-3-chloropropane | 33.6 U | 6,700 U | 43.8 U | 43.4 U | 3,760 U | 67,200 U | 464 U | 232 U | 34.1 U | 30.9 U | 241 U | 30.3 U | 8,970 U | 32.7 U | 30.4 U | 31.4 U |
| 1,2-Dichlorobenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,2-Dichloroethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,2-Dichloropropane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,3-Dichlorobenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| 1,4-Dichlorobenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Bromodichloromethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Carbon Tetrachloride | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Chlorobenzene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| Chloroethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Chloroform | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Chloromethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| cis-1,3-Dichloropropene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Dibromochloromethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Dichlorodifluoromethane | 5.60 U | 6,700 U | 7.30 U | 7.23 U | 3,760 U | 67,200 U | 464 U | 232 U | 5.69 U | 5.14 U | 241 U | 5.05 U | 8,970 U | 5.46 U | 5.07 U | 5.23 U |
| Methylene Chloride | 4.45 J | 6,700 U | 4.75 J | 5.95 J | 361 J | 8,200 J | 75.2 J | 19.0 J | 2.83 J | 2.54 J | 16.4 J | 2.49 J | 8,970 U | 2.01 J | 1.88 J | 2.53 J |
| trans-1,3-Dichloropropene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Trichlorofluoromethane | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| cis-1,2-Dichloroethene | 5.60 U | 1,980 | 1.55 J | 7.23 U | 753 U | 17,900 | 92.8 U | 160 | 5.69 U | 5.14 U | 954 | 5.05 U | 538 J | 5.46 U | 5.07 U | 5.23 U |
| Tetrachloroethene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 36.2 J | 5.69 U | 5.14 U | 24.1 J | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| trans-1,2-Dichloroethene | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 47.8 J | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Trichloroethene | 10.4 | 27,500 | 12.7 | 25.9 | 15,300 | 261,000 | 1,650 | 723 | 5.69 U | 5.14 U | 614 | 5.05 U | 10,100 | 5.06 J | 5.07 U | 5.23 U |
| Vinyl Chloride | 5.60 U | 1,340 U | 7.30 U | 7.23 U | 753 U | 13,400 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 1,790 U | 5.46 U | 5.07 U | 5.23 U |
| Total Chlorinated VOCs | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-MB1-39 | SB-MB1-40 | SB-MB1-41 | SB-MB1-42 | SB-MB1-43 | SB-MB1-44 | SB-MB1-45 | SB-MB1-46 | SB-MB1-47 | SB-MB1-48 | SB-MB1-49 | SB-MB1-50 | SB-MB1-51 | SB-MB1-52 | SB-MB1-53 | SB-MB1-54 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 03/16/12 | 03/16/12 | 03/16/12 | 03/16/12 | 03/16/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/27/12 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,1-Dichloropropene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,2,3-Trichlorobenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,2,3-Trichloropropane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,2,4-Trimethylbenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,2-Dibromoethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,3,5-Trimethylbenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,3-Dichloropropane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 2,2-Dichloropropane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 2-Butanone | 1,080 U | 26.1 U | 1,120 U | 1,120 U | 28.1 U | 25.7 U | 26.4 U | 1,360 U | 28.1 U | 25.8 U | 28.9 U | 26.8 U | 26.9 U | 25.0 U | 27.0 U | 29.3 U |
| 2-Chlorotoluene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 2-Hexanone | 217 U | 13.0 U | 223 U | 224 U | 14.1 U | 12.8 U | 13.2 U | 273 U | 14.1 U | 12.9 U | 14.4 U | 13.4 U | 13.4 U | 12.5 U | 13.5 U | 14.7 U |
| 4-Chlorotoluene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 4-Methyl-2-pentanone | 217 U | 13.0 U | 223 U | 224 U | 14.1 U | 12.8 U | 13.2 U | 273 U | 14.1 U | 12.9 U | 14.4 U | 13.4 U | 13.4 U | 12.5 U | 13.5 U | 14.7 U |
| Acetone | 1,080 U | 52.1 U | 1,120 U | 1,120 U | 56.2 U | 757 | 3.99 J | 1,360 U | 56.2 U | 22.0 J | 10.9 J | 53.7 U | 53.8 U | 12.9 J | 54.0 U | 58.7 U |
| Benzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Bromobenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Bromochloromethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Bromoform | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Bromomethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Carbon Disulfide | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Diisopropyl ether (DIPE) | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Hexachlorobutadiene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Iodomethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Isopropylbenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| m-,p-Xylene | 86.6 U | 10.4 U | 89.3 U | 89.5 U | 11.2 U | 10.3 U | 10.6 U | 109 U | 11.2 U | 10.3 U | 11.6 U | 10.7 U | 10.8 U | 9.98 U | 10.8 U | 11.7 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| n-Butylbenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| n-Propylbenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| o-Xylene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| p-Isopropyltoluene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| sec-Butylbenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-MB1-39 | SB-MB1-40 | SB-MB1-41 | SB-MB1-42 | SB-MB1-43 | SB-MB1-44 | SB-MB1-45 | SB-MB1-46 | SB-MB1-47 | SB-MB1-48 | SB-MB1-49 | SB-MB1-50 | SB-MB1-51 | SB-MB1-52 | SB-MB1-53 | SB-MB1-54 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 03/16/12 | 03/16/12 | 03/16/12 | 03/16/12 | 03/16/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/27/12 |
| Styrene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| tert-Butylbenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Toluene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 3.69 J | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| trans-1,4-Dichloro-2-butene | 217 U | 26.1 U | 223 U | 224 U | 28.1 U | 25.7 U | 26.4 U | 273 U | 28.1 U | 25.8 U | 28.9 U | 26.8 U | 26.9 U | 25.0 U | 27.0 U | 29.3 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 43.3 U | 5.21 U | 567 | 72.1 | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,1,2,2-Tetrachloroethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,1-Dichloroethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,1-Dichloroethene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 535 | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,2,4-Trichlorobenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,2-Dibromo-3-chloropropane | 217 U | 31.3 U | 223 U | 224 U | 33.7 U | 30.8 U | 31.7 U | 273 U | 33.7 U | 30.9 U | 34.7 U | 32.2 U | 32.3 U | 30.0 U | 32.4 U | 35.2 U |
| 1,2-Dichlorobenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,2-Dichloroethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,2-Dichloropropane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,3-Dichlorobenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| 1,4-Dichlorobenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Bromodichloromethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Carbon Tetrachloride | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Chlorobenzene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| Chloroethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Chloroform | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Chloromethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| cis-1,3-Dichloropropene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Dibromochloromethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Dichlorodifluoromethane | 217 U | 5.21 U | 223 U | 224 U | 5.62 U | 5.13 U | 5.28 U | 273 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Methylene Chloride | 217 U | 2.58 J | 223 U | 224 U | 2.69 J | 4.14 J | 3.65 J | 273 U | 6.01 J | 4.27 J | 2.21 J | 21.5 U | 21.5 U | 1.42 J | 4.02 J | 23.5 U |
| trans-1,3-Dichloropropene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Trichlorofluoromethane | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| cis-1,2-Dichloroethene | 90.1 | 5.21 U | 130 | 49.2 | 5.62 U | 5.13 U | 5.28 U | 16.9 J | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 2.44 J |
| Tetrachloroethene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| trans-1,2-Dichloroethene | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Trichloroethene | 268 | 5.21 U | 1,080 | 408 | 4.09 J | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 2.42 J | 9.75 |
| Vinyl Chloride | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 60.0 | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U | 5.40 U | 5.87 U |
| Total Chlorinated VOCs | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-PDG-1 1.5 - 2 06/02/09 | SB-PDG-2 1 - 1.5 06/02/09 | SB-PDG-3 1.5 - 2 06/02/09 | SB-PDG-4 1.5 - 2 06/02/09 | SB-PDG-5 1.5 - 2 06/02/09 | SB-PDG-6 1.5 - 2 06/02/09 | SB-PDG-7 1.5 - 2 06/02/09 | SB-PDG-8 1.5 - 2 06/02/09 | SB-PDG-9 1.5 - 2 06/02/09 | SB-PDG-10 1.5 - 2 06/02/09 |
|---|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|----------------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,1-Dichloropropene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,2,3-Trichlorobenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,2,3-Trichloropropane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,2,4-Trimethylbenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,2-Dibromoethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,3,5-Trimethylbenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,3-Dichloropropane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 2,2-Dichloropropane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 2-Butanone | 22.0 U | 22.6 U | 22.6 U | 22.0 U | 22.1 U | 21.2 U | 22.2 U | 20.8 U | 23.1 U | 22.7 U |
| 2-Chlorotoluene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 2-Hexanone | 11.0 U | 11.3 U | 11.3 U | 11.0 U | 11.0 U | 10.6 U | 11.1 U | 10.4 U | 11.6 U | 11.3 U |
| 4-Chlorotoluene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 4-Methyl-2-pentanone | 11.0 U | 11.3 U | 11.3 U | 11.0 U | 11.0 U | 10.6 U | 11.1 U | 10.4 U | 11.6 U | 11.3 U |
| Acetone | 12.6 J | 7.14 J | 18.8 J | 24.4 J | 26.0 J | 11.3 J | 24.5 J | 14.7 J | 46.3 U | 45.4 U |
| Benzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Bromobenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Bromochloromethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Bromoform | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Bromomethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Carbon Disulfide | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Diisopropyl ether (DIPE) | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Hexachlorobutadiene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Iodomethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Isopropylbenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| m-,p-Xylene | 8.80 U | 9.03 U | 9.05 U | 8.80 U | 8.83 U | 8.50 U | 8.89 U | 8.31 U | 9.26 U | 9.08 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| n-Butylbenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| n-Propylbenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| o-Xylene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| p-Isopropyltoluene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| sec-Butylbenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-PDG-1 1.5 - 2 06/02/09 | SB-PDG-2 1 - 1.5 06/02/09 | SB-PDG-3 1.5 - 2 06/02/09 | SB-PDG-4 1.5 - 2 06/02/09 | SB-PDG-5 1.5 - 2 06/02/09 | SB-PDG-6 1.5 - 2 06/02/09 | SB-PDG-7 1.5 - 2 06/02/09 | SB-PDG-8 1.5 - 2 06/02/09 | SB-PDG-9 1.5 - 2 06/02/09 | SB-PDG-10 1.5 - 2 06/02/09 |
|---|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|----------------------------------|
| Styrene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| tert-Butylbenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Toluene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| trans-1,4-Dichloro-2-butene | 22.0 U | 22.6 U | 22.6 U | 22.0 U | 22.1 U | 21.2 U | 22.2 U | 20.8 U | 23.1 U | 22.7 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,1,2,2-Tetrachloroethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,1-Dichloroethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,1-Dichloroethene | 4.40 U | 4.52 U | 27.4 | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,2,4-Trichlorobenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,2-Dibromo-3-chloropropane | 22.0 U | 22.6 U | 22.6 U | 22.0 U | 22.1 U | 21.2 U | 22.2 U | 20.8 U | 23.1 U | 22.7 U |
| 1,2-Dichlorobenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,2-Dichloroethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,2-Dichloropropane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,3-Dichlorobenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| 1,4-Dichlorobenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Bromodichloromethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Carbon Tetrachloride | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Chlorobenzene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | |
| Chloroethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Chloroform | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Chloromethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| cis-1,3-Dichloropropene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Dibromochloromethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Dichlorodifluoromethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Methylene Chloride | 17.6 U | 18.1 U | 18.1 U | 17.6 U | 17.7 U | 17.0 U | 17.8 U | 16.6 U | 18.5 U | 18.2 U |
| trans-1,3-Dichloropropene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Trichlorofluoromethane | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| cis-1,2-Dichloroethene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Tetrachloroethene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| trans-1,2-Dichloroethene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Trichloroethene | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Vinyl Chloride | 4.40 U | 4.52 U | 7.74 | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U | 4.54 U |
| Total Chlorinated VOCs | ND | ND | 35.1 | ND | ND | ND | ND | ND | ND | ND |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-PDG-11 | SB-PDG-12 | SB-PDG-13 | SB-PDG-14 | SB-PDG-15 | SB-PDG-16 | SB-PDG-17 | SB-PDG-18 | SB-PDG-19 | SB-PDG-20 | SB-PDG-21 | SB-PDG-22 | SB-PDG-23 | SB-PDG-24 | SB-PDG-25 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1.5 - 2 | | | | | | | | | | | | | | |
| | 06/02/09 | 01/14/10 | 01/14/10 | 01/15/10 | 01/15/10 | 01/15/10 | 01/19/10 | 01/19/10 | 01/19/10 | 01/19/10 | 01/20/10 | 01/20/10 | 01/20/10 | 01/20/10 | 01/20/10 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,1-Dichloropropene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,2,3-Trichlorobenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,2,3-Trichloropropane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,2,4-Trimethylbenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,2-Dibromoethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,3,5-Trimethylbenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,3-Dichloropropane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 2,2-Dichloropropane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 2-Butanone | 23.4 U | 12.8 J | 21.1 U | 21.2 U | 19.4 U | 26.1 U | 33.7 U | 36.2 U | 35.4 U | 36.5 U | 58.8 U | 36.4 U | 35.3 U | 34.1 U | 32.2 U |
| 2-Chlorotoluene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 2-Hexanone | 11.7 U | 11.0 U | 10.6 U | 10.6 U | 9.68 U | 13.1 U | 16.9 U | 18.1 U | 17.7 U | 18.2 U | 29.4 U | 18.2 U | 17.6 U | 17.1 U | 16.1 U |
| 4-Chlorotoluene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 4-Methyl-2-pentanone | 11.7 U | 11.0 U | 10.6 U | 10.6 U | 9.68 U | 13.1 U | 16.9 U | 18.1 U | 17.7 U | 18.2 U | 29.4 U | 18.2 U | 17.6 U | 17.1 U | 16.1 U |
| Acetone | 46.9 U | 73.7 | 14.0 J | 16.2 J | 23.2 J | 10.8 J | 16.5 J | 21.3 J | 70.7 U | 18.4 J | 118 U | 24.6 J | 30.3 J | 27.0 J | 23.5 J |
| Benzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Bromobenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Bromochloromethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Bromoform | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Bromomethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Carbon Disulfide | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Diisopropyl ether (DIPE) | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Hexachlorobutadiene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Iodomethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Isopropylbenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| m-,p-Xylene | 9.37 U | 8.80 U | 8.45 U | 8.46 U | 7.75 U | 10.5 U | 13.5 U | 14.5 U | 14.1 U | 14.6 U | 23.5 U | 14.5 U | 14.1 U | 13.7 U | 12.9 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| n-Butylbenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| n-Propylbenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| o-Xylene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| p-Isopropyltoluene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| sec-Butylbenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-PDG-11 | SB-PDG-12 | SB-PDG-13 | SB-PDG-14 | SB-PDG-15 | SB-PDG-16 | SB-PDG-17 | SB-PDG-18 | SB-PDG-19 | SB-PDG-20 | SB-PDG-21 | SB-PDG-22 | SB-PDG-23 | SB-PDG-24 | SB-PDG-25 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1.5 - 2 | | | | | | | | | | | | | | |
| | 06/02/09 | 01/14/10 | 01/14/10 | 01/15/10 | 01/15/10 | 01/15/10 | 01/19/10 | 01/19/10 | 01/19/10 | 01/19/10 | 01/20/10 | 01/20/10 | 01/20/10 | 01/20/10 | 01/20/10 |
| Styrene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| tert-Butylbenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Toluene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| trans-1,4-Dichloro-2-butene | 23.4 U | 22.0 U | 21.1 U | 21.2 U | 19.4 U | 26.1 U | 33.7 U | 36.2 U | 35.4 U | 36.5 U | 58.8 U | 36.4 U | 35.3 U | 34.1 U | 32.2 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,1,2,2-Tetrachloroethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,1-Dichloroethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,1-Dichloroethene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,2,4-Trichlorobenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,2-Dibromo-3-chloropropane | 23.4 U | 22.0 U | 21.1 U | 21.2 U | 19.4 U | 26.1 U | 33.7 U | 36.2 U | 35.4 U | 36.5 U | 58.8 U | 36.4 U | 35.3 U | 34.1 U | 32.2 U |
| 1,2-Dichlorobenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,2-Dichloroethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,2-Dichloropropane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,3-Dichlorobenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| 1,4-Dichlorobenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Bromodichloromethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Carbon Tetrachloride | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Chlorobenzene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | |
| Chloroethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Chloroform | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Chloromethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| cis-1,3-Dichloropropene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Dibromochloromethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Dichlorodifluoromethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Methylene Chloride | 18.7 U | 17.6 U | 16.9 U | 1.69 JB | 3.01 J | 2.31 JB | 27.0 U | 28.9 U | 2.23 J | 29.2 U | 47.0 U | 29.1 U | 28.2 U | 27.3 U | 25.8 U |
| trans-1,3-Dichloropropene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Trichlorofluoromethane | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| cis-1,2-Dichloroethene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Tetrachloroethene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| trans-1,2-Dichloroethene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Trichloroethene | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Vinyl Chloride | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U |
| Total Chlorinated VOCs | ND | ND | ND | 1.69 J | 3.01 J | 2.31 J | ND | ND | 2.23 J | ND | ND | ND | ND | ND | ND |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-PDG-26 01/20/10 | SB-PDG-27 01/20/10 | SB-PDG-28 01/20/10 | SB-PDG-29 01/20/10 | SB-PDG-RW 01/20/10 | TMB-109 7 01/12/16 | WCCS-3 8 10/27/15 | WCCS-3 13 10/27/15 | WCCS-4 11 10/27/15 | WCCS-4 22 10/27/15 | WCCS-4 27 10/27/15 | WCCS-5 15 10/27/15 | WCCS-5 24 10/27/15 | WCCS-6 10 10/27/15 | WCCS-8 8 10/28/15 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,1-Dichloropropene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,2,3-Trichlorobenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,2,3-Trichloropropane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,2,4-Trimethylbenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 69.0 | 4,000 U | 492 | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,2-Dibromoethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,3,5-Trimethylbenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 1,190 | 4,000 U | 254 | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,3-Dichloropropane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 2,2-Dichloropropane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 2-Butanone | 37.2 U | 39.0 U | 44.1 U | 45.3 U | 43.2 U | 1,200 U | 100,000 U | 404 J | 90,100 U | 371 J | 14,700 U | 324 J | 526,000 U | 2,230,000 U | 5,880,000 U |
| 2-Chlorotoluene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 2-Hexanone | 18.6 U | 19.5 U | 22.0 U | 22.6 U | 21.6 U | 240 U | 20,000 U | 248 U | 18,000 U | 210 U | 2,940 U | 459 U | 105,000 U | 446,000 U | 1,180,000 U |
| 4-Chlorotoluene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 4-Methyl-2-pentanone | 18.6 U | 19.5 U | 22.0 U | 22.6 U | 21.6 U | 240 U | 20,000 U | 248 U | 18,000 U | 210 U | 2,940 U | 459 U | 105,000 U | 446,000 U | 1,180,000 U |
| Acetone | 14.5 J | 38.6 J | 44.1 J | 21.9 J | 18.0 J | 1,200 U | 100,000 U | 93.6 J | 90,100 U | 1,050 U | 14,700 U | 2,290 U | 526,000 U | 2,230,000 U | 5,880,000 U |
| Benzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Bromobenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Bromochloromethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Bromoform | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Bromomethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Carbon Disulfide | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Diisopropyl ether (DIPE) | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 6.71 J | 4,000 U | 93.1 | 3,600 U | 91.6 | 588 U | 82.6 J | 21,100 U | 89,300 U | 235,000 U |
| Hexachlorobutadiene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Iodomethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Isopropylbenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 192 | 4,000 U | 51.0 | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| m-,p-Xylene | 14.9 U | 15.6 U | 17.6 U | 18.1 U | 17.3 U | 95.8 U | 8,000 U | 78.2 J | 7,210 U | 84.0 U | 1,180 U | 183 U | 42,100 U | 179,000 U | 471,000 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 54.1 | 4,000 U | 30.2 J | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| n-Butylbenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 26.2 J | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| n-Propylbenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 374 | 4,000 U | 256 | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| o-Xylene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 63.7 | 4,000 U | 87.6 | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| p-Isopropyltoluene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 35.9 J | 4,000 U | 1,490 | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| sec-Butylbenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |

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AVX Corporation
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| Location Identification: Sample Depth (Feet): Date Collected: | SB-PDG-26 01/20/10 | SB-PDG-27 01/20/10 | SB-PDG-28 01/20/10 | SB-PDG-29 01/20/10 | SB-PDG-RW 01/20/10 | TMB-109 7 01/12/16 | WCCS-3 8 10/27/15 | WCCS-3 13 10/27/15 | WCCS-4 11 10/27/15 | WCCS-4 22 10/27/15 | WCCS-4 27 10/27/15 | WCCS-5 15 10/27/15 | WCCS-5 24 10/27/15 | WCCS-6 10 10/27/15 | WCCS-8 8 10/28/15 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|
| Styrene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| tert-Butylbenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Toluene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 1,040 J | 205 | 1,080 J | 49.2 | 588 U | 44.0 J | 21,100 U | 89,300 U | 235,000 U |
| trans-1,4-Dichloro-2-butene | 37.2 U | 39.0 U | 44.1 U | 45.3 U | 43.2 U | 240 U | 20,000 U | 248 U | 18,000 U | 210 U | 2,940 U | 459 U | 105,000 U | 446,000 U | 1,180,000 U |
| Xylenes (total) | NA | NA | NA | NA | NA | 63.7 J | 8,000 U | 166 | 7,210 U | 84.0 U | 1,180 U | 183 U | 42,100 U | 179,000 U | 471,000 U |
| 1,1,1-Trichloroethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,1,2,2-Tetrachloroethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,1-Dichloroethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 49.5 J | 21,100 U | 89,300 U | 235,000 U |
| 1,1-Dichloroethene | 4.88 J | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,2,4-Trichlorobenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,2-Dibromo-3-chloropropane | 37.2 U | 39.0 U | 44.1 U | 45.3 U | 43.2 U | 240 U | 20,000 U | 248 U | 18,000 U | 210 U | 2,940 U | 459 U | 105,000 U | 446,000 U | 1,180,000 U |
| 1,2-Dichlorobenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,2-Dichloroethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,2-Dichloropropane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,3-Dichlorobenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| 1,4-Dichlorobenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Bromodichloromethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Carbon Tetrachloride | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Chlorobenzene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | |
| Chloroethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Chloroform | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Chloromethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| cis-1,3-Dichloropropene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Dibromochloromethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Dichlorodifluoromethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 240 U | 20,000 U | 248 U | 18,000 U | 210 U | 2,940 U | 459 U | 105,000 U | 446,000 U | 1,180,000 U |
| Methylene Chloride | 29.7 U | 31.2 U | 35.3 U | 36.2 U | 34.6 U | 240 U | 20,000 U | 248 U | 18,000 U | 210 U | 2,940 U | 459 U | 105,000 U | 446,000 U | 1,180,000 U |
| trans-1,3-Dichloropropene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Trichlorofluoromethane | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| cis-1,2-Dichloroethene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 15.8 J | 69,700 | 373 | 50,500 | 642 | 2,540 | 2,680 | 21,500 | 89,300 U | 148,000 J |
| Tetrachloroethene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| trans-1,2-Dichloroethene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 4,000 U | 49.5 U | 3,600 U | 42.0 U | 588 U | 91.7 U | 21,100 U | 89,300 U | 235,000 U |
| Trichloroethene | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 24,000 | 1,230 | 3,600 U | 271 | 12,700 | 2,270 | 298,000 | 2,790,000 | 4,380,000 |
| Vinyl Chloride | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 47.9 U | 1,320 J | 49.5 U | 7,280 | 34.9 J | 588 U | 139 | 21,100 U | 89,300 U | 235,000 U |
| Total Chlorinated VOCs | 4.88 J | ND | ND | ND | ND | 15.8 J | 95,000 J | 1,600 | 57,800 | 948 J | 15,200 | 5,140 J | 320,000 | 2,790,000 | 4,530,000 J |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | WCCS-8 10 10/28/15 | WCCS-9 24 10/28/15 | WCCS-10 9 10/28/15 | WCCS-12 15 10/28/15 | WCCS-13 28 10/29/15 | WCCS-14 30 10/29/15 | WCCS-16 20 10/29/15 | WCSS-1 12/03/15 | WCSS-1 12/03/15 | WCSS-1 12/03/15 | WCSS-1 12/03/15 | WCSS-1 12/03/15 | WCSS-1 12/03/15 | WCSS-1 2 10/26/15 | WCSS-1 10 10/26/15 |
|---|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------------|--------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 1,1-Dichloropropene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 1,2,3-Trichlorobenzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 1,2,3-Trichloropropane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 1,2,4-Trimethylbenzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 1,2-Dibromoethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 1,3,5-Trimethylbenzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 1,3-Dichloropropane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 2,2-Dichloropropane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 2-Butanone | 2,530,000 U | 590 J | 439 J | 106,000 U | 145,000 U | 610,000 U | 84,700 U | 1,190 U | 1,220 U | 432,000 U | 255,000 U | 175,000 U | 2,230 U | 445 J | 641,000 U |
| 2-Chlorotoluene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 2-Hexanone | 505,000 U | 255 U | 238 U | 21,200 U | 29,100 U | 122,000 U | 16,900 U | 239 U | 243 U | 86,500 U | 50,900 U | 35,000 U | 446 U | 515 U | 128,000 U |
| 4-Chlorotoluene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 4-Methyl-2-pentanone | 505,000 U | 255 U | 238 U | 21,200 U | 29,100 U | 122,000 U | 16,900 U | 239 U | 243 U | 86,500 U | 50,900 U | 35,000 U | 446 U | 515 U | 128,000 U |
| Acetone | 2,530,000 U | 1,280 U | 1,190 U | 106,000 U | 145,000 U | 610,000 U | 84,700 U | 1,190 U | 1,220 U | 432,000 U | 255,000 U | 175,000 U | 2,230 U | 2,580 U | 641,000 U |
| Benzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Bromobenzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Bromochloromethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Bromoform | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Bromomethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Carbon Disulfide | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Diisopropyl ether (DIPE) | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 101,000 U | 106 | 99.5 | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 105 | 25,600 U |
| Hexachlorobutadiene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Iodomethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Isopropylbenzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| m-,p-Xylene | 202,000 U | 102 U | 10.0 J | 8,470 U | 11,600 U | 48,800 U | 6,780 U | 95.4 U | 97.4 U | 34,600 U | 20,400 U | 14,000 U | 178 U | 206 U | 51,300 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| n-Butylbenzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| n-Propylbenzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| o-Xylene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| p-Isopropyltoluene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| sec-Butylbenzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |

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Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | WCCS-8 10 10/28/15 | WCCS-9 24 10/28/15 | WCCS-10 9 10/28/15 | WCCS-12 15 10/28/15 | WCCS-13 28 10/29/15 | WCCS-14 30 10/29/15 | WCCS-16 20 10/29/15 | WCSS-1 12/03/15 | WCSS-1 12/03/15 | WCSS-1 12/03/15 | WCSS-1 12/03/15 | WCSS-1 12/03/15 | WCSS-1 12/03/15 | WCSS-1 2 10/26/15 | WCSS-1 10 10/26/15 |
|---|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------------|--------------------------|
| Styrene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| tert-Butylbenzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Toluene | 101,000 U | 52.6 | 51.9 | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 13.1 J | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 55.7 J | 25,600 U |
| trans-1,4-Dichloro-2-butene | 505,000 U | 255 U | 238 U | 21,200 U | 29,100 U | 122,000 U | 16,900 U | 239 U | 243 U | 86,500 U | 50,900 U | 35,000 U | 446 U | 515 U | 128,000 U |
| Xylenes (total) | 202,000 U | 102 U | 10.0 J | 8,470 U | 11,600 U | 48,800 U | 6,780 U | 95.4 U | 97.4 U | 34,600 U | 20,400 U | 14,000 U | 178 U | 206 U | 51,300 U |
| 1,1,1-Trichloroethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 13,200 J | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 2,730 | 66,900 |
| 1,1,2,2-Tetrachloroethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 1,1-Dichloroethane | 101,000 U | 51.0 U | 10.5 J | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 15.7 J | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 405 | 25,600 U |
| 1,1-Dichloroethene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 165 | 31,300 |
| 1,2,4-Trichlorobenzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 1,2-Dibromo-3-chloropropane | 505,000 U | 255 U | 238 U | 21,200 U | 29,100 U | 122,000 U | 16,900 U | 239 U | 243 U | 86,500 U | 50,900 U | 35,000 U | 446 U | 515 U | 128,000 U |
| 1,2-Dichlorobenzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 1,2-Dichloroethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 1,2-Dichloropropane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 1,3-Dichlorobenzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| 1,4-Dichlorobenzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Bromodichloromethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Carbon Tetrachloride | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Chlorobenzene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | |
| Chloroethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Chloroform | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Chloromethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| cis-1,3-Dichloropropene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Dibromochloromethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Dichlorodifluoromethane | 505,000 U | 255 U | 238 U | 21,200 U | 29,100 U | 122,000 U | 16,900 U | 239 U | 243 U | 86,500 U | 50,900 U | 35,000 U | 446 U | 515 U | 128,000 U |
| Methylene Chloride | 505,000 U | 255 U | 238 U | 21,200 U | 29,100 U | 122,000 U | 16,900 U | 239 U | 243 U | 86,500 U | 50,900 U | 35,000 U | 446 U | 515 U | 128,000 U |
| trans-1,3-Dichloropropene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Trichlorofluoromethane | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| cis-1,2-Dichloroethene | 62,600 J | 301 | 482 | 12,500 | 76,600 | 22,000 J | 8,540 | 562 | 545 | 52,600 | 38,600 | 15,100 | 1,060 | 1,660 | 58,500 |
| Tetrachloroethene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| trans-1,2-Dichloroethene | 101,000 U | 51.0 U | 47.6 U | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 47.7 U | 48.7 U | 17,300 U | 10,200 U | 7,000 U | 89.2 U | 103 U | 25,600 U |
| Trichloroethene | 2,430,000 | 360 | 192 | 87,800 | 115,000 | 400,000 | 53,200 | 53.9 | 15.1 J | 447,000 | 334,000 | 149,000 | 2,220 | 458 | 617,000 |
| Vinyl Chloride | 101,000 U | 26.5 J | 64.3 | 4,240 U | 5,810 U | 24,400 U | 3,390 U | 13.4 J | 268 | 3,110 J | 1,430 J | 7,000 U | 89.2 U | 87.6 J | 25,600 U |
| Total Chlorinated VOCs | 2,490,000 J | 688 J | 749 J | 100,000 | 192,000 | 435,000 J | 61,700 | 645 J | 828 J | 503,000 J | 374,000 J | 164,000 | 3,280 | 5,510 J | 774,000 |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | WCSS-1 20 10/26/15 | WP-Com-Base 09/23/08 | WP-Com-East 09/23/08 | WP-Com-North 09/23/08 | WP-Com-South 09/23/08 | WP-Com-West 09/23/08 | WP-SB-01 0.5 - 1.5 09/23/08 | WP-SB-01 5 - 6 09/23/08 | WP-SB-02 2 - 3 09/23/08 | WP-SB-02 5 - 6 09/23/08 | WP-SB-03 1 - 2 09/23/08 | WP-SB-03 5 - 6 09/23/08 |
|---|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|-----------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,1-Dichloropropene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,2,3-Trichlorobenzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,2,3-Trichloropropane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,2,4-Trimethylbenzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,2-Dibromoethane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,3,5-Trimethylbenzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,3-Dichloropropane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 2,2-Dichloropropane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 2-Butanone | 459 J | 17,600 U | 21,700 U | 27,300 U | 1,170 U | 2,620 U | 2,060 U | 3,140 U | 4,800 U | 1,800 U | 24.4 U | 24.9 U |
| 2-Chlorotoluene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 2-Hexanone | 1,020 U | 3,530 U | 4,340 U | 5,460 U | 233 U | 525 U | 413 U | 628 U | 960 U | 360 U | 12.2 U | 12.4 U |
| 4-Chlorotoluene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 4-Methyl-2-pentanone | 1,020 U | 3,530 U | 4,340 U | 5,460 U | 233 U | 525 U | 413 U | 628 U | 960 U | 360 U | 12.2 U | 12.4 U |
| Acetone | 5,100 U | 17,600 U | 21,700 U | 27,300 U | 1,170 U | 2,620 U | 2,060 U | 3,140 U | 4,800 U | 1,800 U | 54.5 | 49.8 U |
| Benzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Bromobenzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Bromochloromethane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Bromoform | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Bromomethane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Carbon Disulfide | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Diisopropyl ether (DIPE) | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 95.9 J | 2,300 | 3,520 | 3,810 | 301 | 959 | 1,070 | 126 U | 2,880 | 941 | 1.50 J | 4.98 U |
| Hexachlorobutadiene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Iodomethane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Isopropylbenzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 60.3 J | 126 U | 57.6 J | 55.5 J | 4.87 U | 4.98 U |
| m-,p-Xylene | 408 U | 9,020 | 13,700 | 15,400 | 803 | 3,190 | 6,200 | 251 U | 9,820 | 789 | 9.75 U | 4.12 J |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| n-Butylbenzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| n-Propylbenzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 30.4 J | 28.1 J | 126 U | 192 U | 72.1 U | 2.37 J | 4.98 U |
| o-Xylene | 204 U | 818 | 677 J | 1,090 U | 46.6 U | 105 U | 408 | 126 U | 1,090 | 259 | 4.87 U | 1.53 J |
| p-Isopropyltoluene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 33.6 J | 97.4 | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| sec-Butylbenzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | WCSS-1 20 10/26/15 | WP-Com-Base 09/23/08 | WP-Com-East 09/23/08 | WP-Com-North 09/23/08 | WP-Com-South 09/23/08 | WP-Com-West 09/23/08 | WP-SB-01 0.5 - 1.5 09/23/08 | WP-SB-01 5 - 6 09/23/08 | WP-SB-02 2 - 3 09/23/08 | WP-SB-02 5 - 6 09/23/08 | WP-SB-03 1 - 2 09/23/08 | WP-SB-03 5 - 6 09/23/08 |
|---|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|-----------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Styrene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| tert-Butylbenzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Toluene | 143 J | 63.5 J | 868 U | 1,090 U | 46.6 U | 16.8 J | 21.5 J | 126 U | 61.5 J | 12.3 J | 1.60 J | 4.98 U |
| trans-1,4-Dichloro-2-butene | 1,020 U | 3,530 U | 4,340 U | 5,460 U | 233 U | 525 U | 413 U | 628 U | 960 U | 360 U | 24.4 U | 24.9 U |
| Xylenes (total) | 408 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 327 | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,1,2,2-Tetrachloroethane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,1-Dichloroethane | 65.3 J | 705 U | 868 U | 1,090 U | 46.6 U | 33.6 J | 82.6 U | 215 | 192 U | 118 | 7.32 | 4.98 U |
| 1,1-Dichloroethene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 124 J | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,2,4-Trichlorobenzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,2-Dibromo-3-chloropropane | 1,020 U | 3,530 U | 4,340 U | 5,460 U | 233 U | 525 U | 413 U | 628 U | 960 U | 360 U | 24.4 U | 24.9 U |
| 1,2-Dichlorobenzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,2-Dichloroethane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,2-Dichloropropane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,3-Dichlorobenzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| 1,4-Dichlorobenzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Bromodichloromethane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Carbon Tetrachloride | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Chlorobenzene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | |
| Chloroethane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Chloroform | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Chloromethane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| cis-1,3-Dichloropropene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Dibromochloromethane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Dichlorodifluoromethane | 1,020 U | 3,530 U | 4,340 U | 5,460 U | 233 U | 525 U | 413 U | 628 U | 960 U | 360 U | 4.87 U | 4.98 U |
| Methylene Chloride | 1,020 U | 233 J | 304 J | 1,460 J | 114 J | 73.4 J | 152 J | 230 J | 334 J | 143 J | 19.5 U | 1.70 J |
| trans-1,3-Dichloropropene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Trichlorofluoromethane | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| cis-1,2-Dichloroethene | 6,670 | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 2,200 | 192 U | 393 | 4.87 U | 4.98 U |
| Tetrachloroethene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U |
| trans-1,2-Dichloroethene | 204 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 33.9 J | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Trichloroethene | 11,400 | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 22.6 J | 192 U | 72.1 U | 4.87 U | 4.98 U |
| Vinyl Chloride | 147 J | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 476 | 192 U | 518 | 4.87 U | 4.98 U |
| Total Chlorinated VOCs | 18,600 J | 233 J | 304 J | 1,460 J | 114 J | 107 J | 152 J | 3,300 J | 334 J | 1,170 J | 7.32 | 1.70 J |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | WP-SB-04 0.5 - 1.5 09/23/08 | WP-SB-04 3 - 4 09/23/08 | WP-SB-05 0.5 - 1.5 09/23/08 | WP-SB-05 3 - 4 09/23/08 | WP-SB-06 0.5 - 1.5 09/23/08 | WP-SB-06 3 - 4 09/23/08 | WP-SB-07 0.5 - 1.5 09/23/08 | WP-SB-07 3 - 4 09/23/08 | WP-SB-08 0.5 - 1.5 09/23/08 | WP-SB-08 4 - 5 09/23/08 |
|---|-----------------------------------|-------------------------------|-----------------------------------|-------------------------------|-----------------------------------|-------------------------------|-----------------------------------|-------------------------------|-----------------------------------|-------------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,1-Dichloropropene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,2,3-Trichlorobenzene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,2,3-Trichloropropane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,2,4-Trimethylbenzene | 5.37 | 6.44 J | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,2-Dibromoethane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,3,5-Trimethylbenzene | 3.66 J | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,3-Dichloropropane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 2,2-Dichloropropane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 2-Butanone | 26.4 U | 1,240 U | 21.6 U | 25.5 U | 3,160 U | 22.8 U | 36.4 U | 26.4 U | 4,840 U | 28.8 U |
| 2-Chlorotoluene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 2-Hexanone | 13.2 U | 248 U | 10.8 U | 12.7 U | 632 U | 11.4 U | 18.2 U | 13.2 U | 967 U | 14.4 U |
| 4-Chlorotoluene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 4-Methyl-2-pentanone | 13.2 U | 248 U | 10.8 U | 12.7 U | 632 U | 11.4 U | 18.2 U | 13.2 U | 967 U | 14.4 U |
| Acetone | 44.8 J | 1,240 U | 34.7 J | 44.1 J | 3,160 U | 45.6 U | 84.6 | 33.0 J | 4,840 U | 57.7 U |
| Benzene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Bromobenzene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Bromochloromethane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Bromoform | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Bromomethane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Carbon Disulfide | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Diisopropyl ether (DIPE) | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 21.6 | 1,280 | 5.42 | 3.98 J | 911 | 1.59 J | 7.28 U | 5.28 U | 867 | 9.00 |
| Hexachlorobutadiene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Iodomethane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Isopropylbenzene | 1.07 J | 15.4 J | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| m-,p-Xylene | 48.4 | 54.0 J | 7.99 J | 4.75 J | 7,060 | 3.09 J | 14.6 U | 10.6 U | 6,680 | 35.3 |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| n-Butylbenzene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| n-Propylbenzene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 150 | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| o-Xylene | 13.7 | 91.1 | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 2.33 J |
| p-Isopropyltoluene | 2.61 J | 14.9 J | 4.31 U | 5.10 U | 97.3 J | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| sec-Butylbenzene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | WP-SB-04 0.5 - 1.5 09/23/08 | WP-SB-04 3 - 4 09/23/08 | WP-SB-05 0.5 - 1.5 09/23/08 | WP-SB-05 3 - 4 09/23/08 | WP-SB-06 0.5 - 1.5 09/23/08 | WP-SB-06 3 - 4 09/23/08 | WP-SB-07 0.5 - 1.5 09/23/08 | WP-SB-07 3 - 4 09/23/08 | WP-SB-08 0.5 - 1.5 09/23/08 | WP-SB-08 4 - 5 09/23/08 |
|---|-----------------------------------|-------------------------------|-----------------------------------|-------------------------------|-----------------------------------|-------------------------------|-----------------------------------|-------------------------------|-----------------------------------|-------------------------------|
| Styrene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| tert-Butylbenzene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Toluene | 8.65 | 17.3 J | 4.31 U | 5.10 U | 32.8 J | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| trans-1,4-Dichloro-2-butene | 26.4 U | 248 U | 21.6 U | 25.5 U | 632 U | 22.8 U | 36.4 U | 26.4 U | 967 U | 28.8 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,1,2,2-Tetrachloroethane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,1-Dichloroethane | 24.1 | 311 | 4.35 | 7.87 | 20.2 J | 7.10 | 6.16 J | 5.56 | 54.2 J | 76.3 |
| 1,1-Dichloroethene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,2,4-Trichlorobenzene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,2-Dibromo-3-chloropropane | 26.4 U | 248 U | 21.6 U | 25.5 U | 632 U | 22.8 U | 36.4 U | 26.4 U | 967 U | 28.8 U |
| 1,2-Dichlorobenzene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,2-Dichloroethane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,2-Dichloropropane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,3-Dichlorobenzene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| 1,4-Dichlorobenzene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Bromodichloromethane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Carbon Tetrachloride | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Chlorobenzene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | |
| Chloroethane | 5.28 U | 73.8 | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Chloroform | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Chloromethane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| cis-1,3-Dichloropropene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Dibromochloromethane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Dichlorodifluoromethane | 5.28 U | 248 U | 4.31 U | 5.10 U | 632 U | 4.56 U | 7.28 U | 5.28 U | 967 U | 5.77 U |
| Methylene Chloride | 2.09 J | 98.6 J | 1.56 J | 20.4 U | 225 J | 18.2 U | 29.1 U | 21.1 U | 230 J | 23.1 U |
| trans-1,3-Dichloropropene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Trichlorofluoromethane | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| cis-1,2-Dichloroethene | 5.28 U | 21.3 J | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 15.4 |
| Tetrachloroethene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| trans-1,2-Dichloroethene | 3.97 J | 49.5 U | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Trichloroethene | 5.28 U | 49.5 U | 4.31 U | 5.10 U | 80.9 J | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U |
| Vinyl Chloride | 5.28 U | 111 | 4.31 U | 5.10 U | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 21.2 |
| Total Chlorinated VOCs | 30.2 J | 616 J | 5.91 J | 7.87 | 326 J | 7.10 | 6.16 J | 5.56 | 284 J | 113 |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | WP-SB-09 | WP-SB-10 | WP-SB-11 | WP-SB-12 | WP-SB-13 | WP-SB-14 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 |
| Date Collected: | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 |
| Volatile Organic Compounds (µg/kg) | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,1-Dichloropropene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2,3-Trichlorobenzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2,3-Trichloropropane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2,4-Trimethylbenzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2-Dibromoethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,3,5-Trimethylbenzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,3-Dichloropropane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 2,2-Dichloropropane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 2-Butanone | 23.5 U | 25.1 U | 22.1 U | 19.2 U | 26.1 U | 22.6 U |
| 2-Chlorotoluene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 2-Hexanone | 11.7 U | 12.5 U | 11.0 U | 9.62 U | 13.1 U | 11.3 U |
| 4-Chlorotoluene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 4-Methyl-2-pentanone | 11.7 U | 12.5 U | 11.0 U | 9.62 U | 13.1 U | 11.3 U |
| Acetone | 27.0 J | 28.2 J | 30.6 J | 21.3 J | 24.6 J | 18.0 J |
| Benzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromobenzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromochloromethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromoform | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromomethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Carbon Disulfide | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Diisopropyl ether (DIPE) | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Hexachlorobutadiene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Iodomethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Isopropylbenzene | 0.958 J | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| m-,p-Xylene | 9.39 U | 10.0 U | 8.83 U | 7.69 U | 10.5 U | 9.05 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| n-Butylbenzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| n-Propylbenzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| o-Xylene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| p-Isopropyltoluene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| sec-Butylbenzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | WP-SB-09 0.5 - 1.5 09/23/08 | WP-SB-10 0.5 - 1.5 09/23/08 | WP-SB-11 0.5 - 1.5 09/23/08 | WP-SB-12 0.5 - 1.5 09/23/08 | WP-SB-13 0.5 - 1.5 09/23/08 | WP-SB-14 0.5 - 1.5 09/23/08 |
|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Styrene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| tert-Butylbenzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Toluene | 4.70 U | 5.02 U | 4.42 U | 1.15 J | 5.23 U | 4.52 U |
| trans-1,4-Dichloro-2-butene | 23.5 U | 25.1 U | 22.1 U | 19.2 U | 26.1 U | 22.6 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,1,2,2-Tetrachloroethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,1-Dichloroethane | 4.70 U | 5.02 U | 4.42 U | 2.57 J | 1.41 J | 4.52 U |
| 1,1-Dichloroethene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2,4-Trichlorobenzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2-Dibromo-3-chloropropane | 23.5 U | 25.1 U | 22.1 U | 19.2 U | 26.1 U | 22.6 U |
| 1,2-Dichlorobenzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2-Dichloroethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2-Dichloropropane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,3-Dichlorobenzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,4-Dichlorobenzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromodichloromethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Carbon Tetrachloride | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Chlorobenzene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Volatile Organic Compounds (µg/kg) | | | | | | |
| Chloroethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Chloroform | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Chloromethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| cis-1,3-Dichloropropene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Dibromochloromethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Dichlorodifluoromethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Methylene Chloride | 1.62 J | 1.73 J | 1.85 J | 15.4 U | 20.9 U | 18.1 U |
| trans-1,3-Dichloropropene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Trichlorofluoromethane | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| cis-1,2-Dichloroethene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Tetrachloroethene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| trans-1,2-Dichloroethene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Trichloroethene | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Vinyl Chloride | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Total Chlorinated VOCs | 1.62 J | 1.73 J | 1.85 J | 2.57 J | 1.41 J | ND |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA |

Table 1
Summary of Soil Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

Notes:

% = percent

NA = not applicable

µg/kg = micrograms per kilogram

µg/L = micrograms per Liter

Laboratory Qualifiers:

B = Analyte was found in the associated blank, as well as in the sample.

J = Indicates an estimated value.

ND = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | DPW-1D | DPW-1D | DPW-1D | DPW-1D | DPW-1D | DPW-1D | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-4SD | DPW-4SD | DPW-4SD | DPW-4SD |
|--|----------|----------|----------|----------|----------|----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Sample Depth (Feet): | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 |
| Date Collected: | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,1-Dichloropropene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,2,3-Trichlorobenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,2,3-Trichloropropane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,2,4-Trimethylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,2-Dibromoethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,3,5-Trimethylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,3-Dichloropropane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 2,2-Dichloropropane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 2-Butanone | 260 J | 250 U | 1,000 U | 100 U | 5.00 U | 5.00 U | 4.39 J | 25.0 U | 25.0 U | 25.0 U | 5.00 U | 5.00 U | 6,250 U | 5,000 U | 5,000 U | 4,000 U |
| 2-Chlorotoluene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 2-Hexanone | 250 U | 50.0 U | 200 U | 20.0 U | 10.0 U | 10.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 10.0 U | 10.0 U | 1,250 U | 1,000 U | 1,000 U | 800 U |
| 4-Chlorotoluene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 4-Methyl-2-pentanone | 250 U | 50.0 U | 200 U | 20.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 1,250 U | 1,000 U | 1,000 U | 800 U |
| Acetone | 1,250 U | 47.4 J | 1,000 U | 100 U | 25.0 U | 25.0 U | 32.0 | 7.94 J | 2.30 J | 25.0 U | 25.0 U | 25.0 U | 6,250 U | 5,000 U | 5,000 U | 4,000 U |
| Benzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 0.120 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Bromobenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Bromochloromethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Bromoform | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Bromomethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U |
| Carbon Disulfide | 50.0 U | 10.0 U | 40.0 U | 4.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 35.0 J | 200 U | 200 U | 160 U |
| Dibromomethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 250 U | 200 U | 200 U | 160 U |
| Diisopropyl ether (DIPE) | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Ethyl Alcohol | NA | NA | NA | NA | 200 U | NA | NA | NA | NA | NA | 200 U | NA | NA | NA | NA | NA |
| Ethylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Hexachlorobutadiene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | NA | 0.770 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 250 U | 200 U | 200 U | 160 U |
| Iodomethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | NA | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Isopropylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| m-,p-Xylene | 100 U | 20.0 U | 80.0 U | 8.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 500 U | 400 U | 400 U | 320 U |
| Methyl tert-butyl ether | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 0.130 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Naphthalene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 5.00 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 5.00 U | 250 U | 200 U | 200 U | 160 U |
| n-Butylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| n-Propylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| o-Xylene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| p-Isopropyltoluene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| sec-Butylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Styrene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| tert-Butylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Toluene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 0.150 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| trans-1,4-Dichloro-2-butene | 250 U | 50.0 U | 200 U | 20.0 U | NA | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | NA | 1,250 U | 1,000 U | 1,000 U | 800 U |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | DPW-1D | DPW-1D | DPW-1D | DPW-1D | DPW-1D | DPW-1D | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-4SD | DPW-4SD | DPW-4SD | DPW-4SD |
|--------------------------------------|----------|----------|----------|----------|----------|----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Sample Depth (Feet): | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 |
| Date Collected: | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 |
| Vinyl Acetate | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,1,2,2-Tetrachloroethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,1,2-Trichloroethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,1-Dichloroethane | 50.0 U | 3.60 J | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 0.280 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 118 J | 52.0 J | 72.0 J | 56.0 J |
| 1,1-Dichloroethene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 103 J | 44.0 J | 68.0 J | 68.8 J |
| 1,2,4-Trichlorobenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,2-Dibromo-3-chloropropane | 250 U | 50.0 U | 200 U | 20.0 U | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | 5.00 U | 1,250 U | 1,000 U | 1,000 U | 800 U |
| 1,2-Dichlorobenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,2-Dichloroethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,2-Dichloropropane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,3-Dichlorobenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| 1,4-Dichlorobenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Bromodichloromethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Carbon Tetrachloride | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Chlorobenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Chloroethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U |
| Chloroform | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Chloromethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U |
| cis-1,3-Dichloropropene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Dibromochloromethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Dichlorodifluoromethane | 250 U | 50.0 U | 200 U | 20.0 U | 2.00 U | 2.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 1,250 U | 1,000 U | 1,000 U | 800 U |
| Methylene Chloride | 250 U | 50.0 U | 200 U | 20.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 1,250 U | 1,000 U | 1,000 U | 800 U |
| trans-1,3-Dichloropropene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| Trichlorofluoromethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U |
| cis-1,2-Dichloroethene | 874 | 134 | 416 | 27.3 | 1.00 U | 13.4 | 0.790 J | 0.390 J | 0.730 J | 0.580 J | 0.880 J | 1.20 | 10,400 | 3,300 | 3,180 | 2,760 |
| Tetrachloroethene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U |
| trans-1,2-Dichloroethene | 9.50 J | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 90.0 J | 200 U | 200 U | 160 U |
| Trichloroethene | 50.0 U | 10.0 U | 40.0 U | 2.92 J | 1.00 | 18.7 | 0.660 J | 0.250 J | 0.650 J | 0.410 J | 0.630 J | 0.810 J | 2,980 | 786 | 860 | 1,340 |
| Vinyl Chloride | 1,890 | 233 | 242 | 94.6 | 1.60 | 1.00 U | 3.22 | 1.43 | 0.550 J | 1.39 | 1.20 | 3.50 | 1,490 | 602 | 598 | 637 |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 16 |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | DPW-4SD | DPW-4SD | DPW-5SD | DPW-5SD | DPW-5SD | DPW-5SD | DPW-5SD | DPW-5SD | MW-2S | MW-2S | MW-2S | MW-2S | MW-2S | MW-2S | MW-9D | MW-9D | MW-9D | MW-9D | MW-9D |
|--|-------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 19.5 - 29.5 | 19.5 - 29.5 | 19 - 24 | 19 - 24 | 19 - 24 | 19 - 24 | 19 - 24 | 19 - 24 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 35 - 45 | 35 - 45 | 35 - 45 | 35 - 45 | 35 - 45 |
| Date Collected: | 04/11/17 | 04/18/18 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/11/17 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloropropene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 2.00 U | 2.00 U |
| 1,2,3-Trichloropropane | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 2.00 U | 2.00 U |
| 1,2,4-Trimethylbenzene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromoethane | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 2.00 U | 2.00 U |
| 1,3,5-Trimethylbenzene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| 1,3-Dichloropropane | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| 2,2-Dichloropropane | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| 2-Butanone | 500 U | 500 UJ | 20,000 U | 20,000 U | 20,000 U | 500 U | 500 UJ | 500 U | 500 U | 1,250 U | 250 U | 100 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 100 U | 5.00 U | 5.00 U |
| 2-Chlorotoluene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| 2-Hexanone | 1,000 U | 1,000 UJ | 4,000 U | 4,000 U | 4,000 U | 1,000 U | 1,000 UJ | 100 U | 100 U | 250 U | 50.0 U | 200 U | 50.0 U | 5.00 U | 5.00 U | 5.00 U | 20.0 U | 10.0 U | 10.0 U |
| 4-Chlorotoluene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| 4-Methyl-2-pentanone | 500 U | 500 UJ | 4,000 U | 4,000 U | 4,000 U | 500 U | 500 UJ | 100 U | 100 U | 250 U | 50.0 U | 100 U | 25.0 U | 5.00 U | 5.00 U | 5.00 U | 20.0 U | 5.00 U | 5.00 U |
| Acetone | 2,500 U | 2,500 UJ | 20,000 U | 20,000 U | 20,000 U | 2,500 U | 2,500 UJ | 500 U | 500 U | 1,250 U | 250 U | 500 U | 130 U | 25.0 U | 3.10 J | 25.0 U | 100 U | 25.0 U | 25.0 U |
| Benzene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| Bromobenzene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| Bromochloromethane | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| Bromoform | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| Bromomethane | 200 U | 200 UJ | 800 U | 800 U | 800 UJ | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 2.00 U | 2.00 U |
| Carbon Disulfide | NA | 200 UJ | 800 U | 800 U | 800 U | NA | 200 UJ | 2.80 J | 20.0 U | 50.0 U | 10.0 U | NA | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | NA | NA |
| Dibromomethane | NA | 200 UJ | 800 U | 800 U | 800 U | NA | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | NA | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | NA | NA |
| Diisopropyl ether (DIPE) | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| Ethyl Alcohol | 20,000 U | NA | NA | NA | NA | 20,000 U | NA | NA | NA | NA | NA | 4,000 U | NA | NA | NA | NA | NA | NA | 200 U |
| Ethylbenzene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 UJ | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| Hexachlorobutadiene | NA | 200 UJ | 800 U | 800 U | 800 U | NA | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | NA | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | NA | NA |
| Iodomethane | NA | 100 UJ | 800 U | 800 U | 800 U | NA | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | NA | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | NA | NA |
| Isopropylbenzene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| m-,p-Xylene | 200 U | 200 UJ | 1,600 U | 1,600 U | 1,600 U | 200 U | 200 UJ | 40.0 U | 40.0 U | 100 U | 20.0 U | 40.0 U | 10.0 U | 2.00 U | 2.00 U | 2.00 U | 8.00 U | 2.00 U | 2.00 U |
| Methyl tert-butyl ether | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 0.380 J | 0.270 J | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| Naphthalene | 500 U | 500 UJ | 800 U | 800 U | 800 U | 500 U | 500 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 100 U | 25.0 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 5.00 U | 5.00 U |
| n-Butylbenzene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 UJ | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| n-Propylbenzene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| o-Xylene | 100 U | 100 UJ | 800 U | 800 U | 800 UJ | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| p-Isopropyltoluene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| sec-Butylbenzene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| Styrene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| tert-Butylbenzene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| Toluene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 33.3 J | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | 1.00 U |
| trans-1,4-Dichloro-2-butene | NA | NA | 4,000 U | 4,000 U | 4,000 U | NA | NA | 100 U | 100 U | 250 U | 50.0 U | NA | NA | 5.00 U | 5.00 U | 5.00 U | 20.0 U | NA | NA |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | DPW-4SD | DPW-4SD | DPW-5SD | DPW-5SD | DPW-5SD | DPW-5SD | DPW-5SD | DPW-5SD | MW-2S | MW-2S | MW-2S | MW-2S | MW-2S | MW-2S | MW-9D | MW-9D | MW-9D | MW-9D | MW-9D |
|--------------------------------------|-------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 19.5 - 29.5 | 19.5 - 29.5 | 19 - 24 | 19 - 24 | 19 - 24 | 19 - 24 | 19 - 24 | 19 - 24 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 35 - 45 | 35 - 45 | 35 - 45 | 35 - 45 | 35 - 45 |
| Date Collected: | 04/11/17 | 04/18/18 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/11/17 |
| Vinyl Acetate | 1,000 U | 1,000 UJ | NA | NA | NA | 1,000 U | 1,000 UJ | NA | NA | NA | NA | 200 U | 50.0 U | NA | NA | NA | NA | 10.0 U | |
| Xylenes (total) | 300 U | NA | NA | NA | NA | 300 U | NA | NA | NA | NA | NA | 60.0 U | NA | NA | NA | NA | NA | 3.00 U | |
| 1,1,1-Trichloroethane | 100 U | 100 UJ | 800 U | 800 U | 800 U | 49.1 J | 61.2 J | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| 1,1,2,2-Tetrachloroethane | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| 1,1,2-Trichloroethane | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| 1,1-Dichloroethane | 57.2 J | 71.4 J | 800 U | 800 U | 136 J | 108 | 72.9 J | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 0.400 J | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| 1,1-Dichloroethene | 87.4 J | 83.9 J | 800 U | 800 U | 800 U | 69.2 J | 61.3 J | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 2.40 J | 0.540 J | 0.320 J | 0.380 J | 4.00 U | 1.00 U | |
| 1,2,4-Trichlorobenzene | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 2.00 U | |
| 1,2-Dibromo-3-chloropropane | NA | 500 UJ | 4,000 U | 4,000 U | 4,000 U | NA | 500 UJ | 100 U | 100 U | 250 U | 50.0 U | NA | 25.0 U | 5.00 U | 5.00 U | 5.00 U | 20.0 U | NA | |
| 1,2-Dichlorobenzene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| 1,2-Dichloroethane | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| 1,2-Dichloropropane | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| 1,3-Dichlorobenzene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| 1,4-Dichlorobenzene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| Bromodichloromethane | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| Carbon Tetrachloride | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| Chlorobenzene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| Chloroethane | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 2.00 U | |
| Chloroform | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| Chloromethane | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 2.00 U | |
| cis-1,3-Dichloropropene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| Dibromochloromethane | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| Dichlorodifluoromethane | 200 U | 200 UJ | 4,000 U | 4,000 U | 4,000 U | 200 U | 200 UJ | 100 U | 100 U | 250 U | 50.0 U | 40.0 U | 10.0 U | 5.00 U | 5.00 U | 5.00 U | 20.0 U | 2.00 U | |
| Methylene Chloride | 500 U | 500 UJ | 4,000 U | 4,000 U | 4,000 U | 500 U | 500 UJ | 100 U | 100 U | 250 U | 50.0 U | 100 U | 25.0 U | 5.00 U | 5.00 U | 5.00 U | 20.0 U | 5.00 U | |
| trans-1,3-Dichloropropene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| Trichlorofluoromethane | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 2.00 U | |
| cis-1,2-Dichloroethene | 5,040 | 5,760 J | 13,600 | 12,100 | 13,900 | 8,800 | 8,040 J | 1,030 | 354 | 1,020 | 266 | 1,080 | 659 | 63.2 | 51.1 | 56.3 | 77.1 | 47.9 | |
| Tetrachloroethene | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 4.00 U | 1.00 U | |
| trans-1,2-Dichloroethene | 34.9 J | 100 UJ | 800 U | 800 U | 800 U | 27.6 J | 100 UJ | 5.80 J | 20.0 U | 50.0 U | 10.0 U | 8.40 J | 4.20 J | 1.00 U | 0.220 J | 1.00 U | 4.00 U | 0.340 J | |
| Trichloroethene | 1,210 | 1,230 J | 4,110 | 6,920 | 1,340 | 7,000 | 9,230 J | 473 | 149 | 407 | 159 | 527 | 275 | 1.00 U | 0.260 J | 1.00 U | 4.00 U | 1.00 U | |
| Vinyl Chloride | 470 | 385 J | 1,220 | 968 | 1,320 | 713 | 501 J | 20.0 U | 4.60 J | 50.0 U | 10.0 U | 20.0 U | 3.50 J | 1.74 | 1.01 | 1.69 | 1.96 J | 1.10 | |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | 13 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MW-9D | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-17D | MW-17D | MW-17D | MW-17D | MW-17D | MW-17D | MW-19S | MW-19S | MW-19S | MW-19S | MW-19S | MW-19S |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| Sample Depth (Feet): | 35 - 45 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 |
| Date Collected: | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloropropene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U |
| 1,2,3-Trichloropropane | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U |
| 1,2,4-Trimethylbenzene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.20 | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.19 | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromoethane | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U |
| 1,3,5-Trimethylbenzene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichloropropane | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2,2-Dichloropropane | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Butanone | 5.00 U | 250 U | 1,250 U | 250 U | 25.0 U | 5.00 U | 5.00 U | 25.0 U | 25.0 U | 25.0 U | 500 U | 5.00 U | 5.00 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 5.00 U | 5.00 U |
| 2-Chlorotoluene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Hexanone | 10.0 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 10.0 U | 10.0 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 10.0 U | 10.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 10.0 U | 10.0 U |
| 4-Chlorotoluene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 4-Methyl-2-pentanone | 5.00 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Acetone | 25.0 U | 250 U | 1,250 U | 250 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 3.46 J | 25.0 U | 572 | 120 | 25.0 U | 1.21 J | 3.30 J | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U |
| Benzene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 0.220 J | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 0.770 J | 1.53 | 2.06 | 0.860 J | 1.00 U | 1.00 U |
| Bromobenzene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromochloromethane | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromoform | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromomethane | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U |
| Carbon Disulfide | 2.00 U | 1.50 J | 50.0 U | 10.0 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U |
| Dibromomethane | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U |
| Diisopropyl ether (DIPE) | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | 200 U | NA | NA | NA | NA | NA | 200 U | NA | NA | NA | NA | NA | NA | 200 U | NA |
| Ethylbenzene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.79 | 0.410 J | 1.00 U | 1.00 U |
| Hexachlorobutadiene | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U |
| Iodomethane | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | NA | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | NA | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 1.00 U |
| Isopropylbenzene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| m-,p-Xylene | 2.00 U | 20.0 U | 100 U | 20.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.32 | 40.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.42 | 2.00 U | 2.00 U | 2.00 U |
| Methyl tert-butyl ether | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Naphthalene | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 5.00 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 5.00 U | 0.530 J | 9.50 | 43.3 | 39.8 | 5.00 U | 5.00 U |
| n-Butylbenzene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| n-Propylbenzene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| o-Xylene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.210 J | 2.17 | 0.660 J | 1.00 U |
| p-Isopropyltoluene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 0.450 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| sec-Butylbenzene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Styrene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| tert-Butylbenzene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 0.450 J | 0.480 J | 1.00 U | 0.990 J | 1.05 | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Toluene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 UB | 1.00 U | 1.00 U | 1.00 U | 0.230 J | 0.700 J | 1.00 UB | 1.00 U | 1.00 U |
| trans-1,4-Dichloro-2-butene | NA | 50.0 U | 250 U | 50.0 U | 5.00 U | NA | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | NA | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | NA |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MW-9D | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-17D | MW-17D | MW-17D | MW-17D | MW-17D | MW-17D | MW-19S | MW-19S | MW-19S | MW-19S | MW-19S | MW-19S |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| Sample Depth (Feet): | 35 - 45 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 |
| Date Collected: | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | |
| Vinyl Acetate | 10.0 U | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA | 10.0 U | 10.0 U | |
| Xylenes (total) | NA | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA | 3.00 U | NA | |
| 1,1,1-Trichloroethane | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 3.50 | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| 1,1,2,2-Tetrachloroethane | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| 1,1,2-Trichloroethane | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| 1,1-Dichloroethane | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 0.240 J | 0.520 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.80 | 1.00 U | 0.220 J | 0.330 J | 0.120 J | 1.00 U | 0.700 J | 0.540 J | |
| 1,1-Dichloroethene | 0.470 J | 8.10 J | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 0.230 J | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| 1,2,4-Trichlorobenzene | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | |
| 1,2-Dibromo-3-chloropropane | 5.00 U | 50.0 U | 250 U | 50.0 U | 5.00 U | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | 5.00 U | |
| 1,2-Dichlorobenzene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| 1,2-Dichloroethane | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| 1,2-Dichloropropane | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| 1,3-Dichlorobenzene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| 1,4-Dichlorobenzene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| Bromodichloromethane | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| Carbon Tetrachloride | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| Chlorobenzene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| Chloroethane | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | |
| Chloroform | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| Chloromethane | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | |
| cis-1,3-Dichloropropene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| Dibromochloromethane | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| Dichlorodifluoromethane | 2.00 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 2.00 U | 2.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 2.00 U | 2.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | |
| Methylene Chloride | 5.00 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 0.580 J | 5.00 U | |
| trans-1,3-Dichloropropene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| Trichlorofluoromethane | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | |
| cis-1,2-Dichloroethene | 70.1 | 512 | 1,060 | 198 | 17.3 | 7.30 | 2.80 | 7.95 | 4.51 | 4.74 | 389 | 30.9 | 0.620 J | 0.220 J | 1.96 | 2.35 | 3.54 | 5.70 | 0.610 J | |
| Tetrachloroethene | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | |
| trans-1,2-Dichloroethene | 1.00 U | 1.50 J | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 0.150 J | 1.00 U | 1.00 U | 5.00 J | 0.450 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.350 J | 1.00 U | | |
| Trichloroethene | 1.00 U | 63.7 | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 22.1 | 13.2 | 5.56 | 239 | 4.30 | 1.00 U | 1.00 U | 0.450 J | 1.45 | 2.35 | 0.360 J | 1.00 U | |
| Vinyl Chloride | 2.10 | 79.9 | 85.5 | 15.8 | 5.37 | 3.50 | 4.50 | 1.00 U | 1.00 U | 1.00 U | 36.0 | 1.00 U | 1.00 U | 1.00 U | 0.480 J | 0.300 J | 1.52 | 0.700 J | 1.00 U | |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | PW-1S | PW-1S | PW-1S | PW-1S | PW-1S | PW-1S | PW-7S | PW-7S | PW-7S | PW-7S | PW-7S | PW-7S | PW-7S | MW-105D | MW-105S | MW-201D | MW-202D | HPT-01 | HPT-02 |
|--|--------------|--------------|--------------|--------------|--------------|--------------|----------|----------|----------|----------|----------|----------|----------|-------------|-------------|----------|----------|----------|---------|
| Sample Depth (Feet): | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 39.3 - 46.3 | 13.5 - 23.5 | 25 - 40 | 25 - 40 | 18 - 20 | 10 - 12 |
| Date Collected: | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 01/06/13 | 01/06/13 | 01/06/13 | 01/06/13 | 10/26/15 | 12/05/15 | |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 1,1-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,4-Trimethylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.110 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 1,2-Dibromoethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3,5-Trimethylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 1,3-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 2,2-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 2-Butanone | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 5.00 U | 5.00 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 5.00 U | 5.00 U | 250 U | 25.0 U | 20,000 U | 10,000 U | 25.0 U | 25.0 U | 25.0 U |
| 2-Chlorotoluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Hexanone | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 10.0 U | 10.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 10.0 U | 10.0 U | 50.0 U | 5.00 U | 4,000 U | 2,000 U | 5.00 U | 5.00 U | 5.00 U |
| 4-Chlorotoluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| 4-Methyl-2-pentanone | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 50.0 U | 5.00 U | 4,000 U | 2,000 U | 5.00 U | 5.00 U | 5.00 U |
| Acetone | 2.03 J | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 250 U | 25.0 U | 20,000 U | 10,000 U | 25.0 U | 25.0 U | 25.0 U |
| Benzene | 0.200 J | 0.550 J | 0.360 J | 0.260 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| Bromobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| Bromochloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| Bromoform | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| Bromomethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| Carbon Disulfide | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| Dibromomethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| Diisopropyl ether (DIPE) | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| Ethyl Alcohol | NA | NA | NA | NA | 200 U | NA | NA | NA | NA | NA | 200 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.220 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| Hexachlorobutadiene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| Iodomethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| Isopropylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| m-,p-Xylene | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 0.360 J | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 20.0 U | 2.00 U | 1,600 U | 800 U | 2.00 U | 2.00 U | 2.00 U |
| Methyl tert-butyl ether | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| Naphthalene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 5.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| n-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| n-Propylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| o-Xylene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.110 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| p-Isopropyltoluene | 1.00 U | 1.00 U | 1.00 U | 0.160 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| sec-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| Styrene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| tert-Butylbenzene | 1.00 U | 1.00 U | 1.52 | 0.160 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 1.00 U |
| Toluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 0.260 J |
| trans-1,4-Dichloro-2-butene | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | NA | 50.0 U | 5.00 U | 4,000 U | 2,000 U | 5.00 U | 5.00 U | 5.00 U |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | PW-1S | PW-1S | PW-1S | PW-1S | PW-1S | PW-1S | PW-7S | PW-7S | PW-7S | PW-7S | PW-7S | PW-7S | PW-7S | MW-105D | MW-105S | MW-201D | MW-202D | HPT-01 | HPT-02 |
|--------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------|----------|----------|----------|----------|----------|----------|-------------|-------------|----------|----------|----------|---------|
| Sample Depth (Feet): | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 39.3 - 46.3 | 13.5 - 23.5 | 25 - 40 | 25 - 40 | 18 - 20 | 10 - 12 |
| Date Collected: | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 01/06/13 | 01/06/13 | 01/06/13 | 01/06/13 | 10/26/15 | 12/05/15 | |
| Vinyl Acetate | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 1,1,2,2-Tetrachloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 1,1,2-Trichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 1,1-Dichloroethane | 1.87 | 0.620 J | 0.450 J | 0.810 J | 1.10 | 0.420 J | 0.260 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 1,1-Dichloroethene | 0.640 J | 0.720 J | 0.720 J | 0.560 J | 0.480 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 11.5 | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 1,2,4-Trichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | |
| 1,2-Dibromo-3-chloropropane | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | 5.00 U | 50.0 U | 5.00 U | 4,000 U | 2,000 U | 5.00 U | 5.00 U | |
| 1,2-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 1,2-Dichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 1,2-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 1,3-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| 1,4-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| Bromodichloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| Carbon Tetrachloride | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| Chlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| Chloroethane | 2.27 | 0.460 J | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | |
| Chloroform | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| Chloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | |
| cis-1,3-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| Dibromochloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| Dichlorodifluoromethane | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 50.0 U | 5.00 U | 4,000 U | 2,000 U | 5.00 U | 5.00 U | |
| Methylene Chloride | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 50.0 U | 5.00 U | 4,000 U | 2,000 U | 5.00 U | 5.00 U | |
| trans-1,3-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| Trichlorofluoromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | |
| cis-1,2-Dichloroethene | 29.7 | 31.7 | 31.3 | 27.3 | 33.9 | 32.7 | 3.06 | 1.74 | 0.910 J | 1.00 U | 1.00 U | 1.00 U | 399 | 1.00 U | 13,200 | 400 U | 26.2 | 1.00 U | |
| Tetrachloroethene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U |
| trans-1,2-Dichloroethene | 0.170 J | 1.00 U | 0.220 J | 1.00 U | 0.230 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 124 J | 0.620 J | 1.00 U | |
| Trichloroethene | 2.28 | 1.61 | 1.07 | 1.21 | 0.710 J | 1.00 U | 0.840 J | 0.230 J | 0.250 J | 1.00 U | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 4,530 | 400 U | 1.00 U | 0.850 J | |
| Vinyl Chloride | 28.7 | 17.8 | 16.0 | 22.6 | 22.2 | 35.0 | 2.83 | 1.66 | 0.990 J | 1.00 U | 1.00 U | 1.00 U | 51.3 | 1.00 U | 800 U | 4,680 | 0.550 J | 1.00 U | |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 500 | 5,100 | 5,500 | 17,000 | NA | NA | |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 58.0 | 21.0 | 69.0 | 440 | NA | NA | |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 180 | 820 | 2,300 | 16,000 | NA | NA | |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 65.0 | 13.0 J | 62.0 | 480 | NA | NA | |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2.9 | 6 | 2.3 | 760 | NA | NA | |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-02 | HPT-02 | HPT-03 | HPT-03 | HPT-03 | HPT-03 | HPT-04 | HPT-05 | HPT-22 | HPT-22 | HPT-22 | HPT-24 | HPT-24 | HPT-24 | HPT-24 | |
|--|----------|----------|----------|----------|----------|----------|----------|----------|---------------------|-------------------|----------|-----------|----------|----------|----------|--|
| Sample Depth (Feet): | 16 - 18 | 16 - 18 | 9 - 11 | 16 - 18 | 22 - 24 | 30 - 32 | 16 - 18 | 17 - 21 | 16 - 18 | 27 - 29 | 38 - 40 | 12 - 14 | 18 - 20 | 24 - 26 | 40 - 42 | |
| Date Collected: | 10/27/15 | 12/05/15 | 12/05/15 | 12/05/15 | 10/27/15 | 12/05/15 | 10/28/15 | 10/28/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/02/15 | 12/02/15 | 12/03/15 | 12/03/15 | |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| 1,1-Dichloropropene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| 1,2,3-Trichlorobenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| 1,2,3-Trichloropropane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| 1,2,4-Trimethylbenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| 1,2-Dibromoethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| 1,3,5-Trimethylbenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| 1,3-Dichloropropane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| 2,2-Dichloropropane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| 2-Butanone | 125 U | 400 U | 125 U | 2,000 U | 2,500 U | 125 U | 5,000 U | 1,000 U | 25,000 U [25,000 U] | 5,000 U [5,000 U] | 10,000 U | 125,000 U | 5,000 U | 125 U | 50,000 U | |
| 2-Chlorotoluene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| 2-Hexanone | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 25.0 U | 1,000 U | 200 U | 5,000 U [5,000 U] | 1,000 U [1,000 U] | 2,000 U | 25,000 U | 1,000 U | 25.0 U | 10,000 U | |
| 4-Chlorotoluene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| 4-Methyl-2-pentanone | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 25.0 U | 1,000 U | 200 U | 5,000 U [5,000 U] | 1,000 U [1,000 U] | 2,000 U | 25,000 U | 1,000 U | 25.0 U | 10,000 U | |
| Acetone | 125 U | 400 U | 125 U | 2,000 U | 2,500 U | 125 U | 5,000 U | 1,000 U | 25,000 U [25,000 U] | 5,000 U [5,000 U] | 10,000 U | 125,000 U | 5,000 U | 125 U | 50,000 U | |
| Benzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| Bromobenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| Bromochloromethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| Bromoform | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| Bromomethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| Carbon Disulfide | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 3.75 J | 2,000 U | |
| Dibromomethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| Diisopropyl ether (DIPE) | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Ethylbenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| Hexachlorobutadiene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| Iodomethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| Isopropylbenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| m-,p-Xylene | 10.0 U | 32.0 U | 10.0 U | 160 U | 200 U | 10.0 U | 400 U | 80.0 U | 2,000 U [2,000 U] | 400 U [400 U] | 800 U | 10,000 U | 400 U | 10.0 U | 4,000 U | |
| Methyl tert-butyl ether | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| Naphthalene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| n-Butylbenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| n-Propylbenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| o-Xylene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| p-Isopropyltoluene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| sec-Butylbenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| Styrene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| tert-Butylbenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | |
| Toluene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 0.550 J | 2,000 U | |
| trans-1,4-Dichloro-2-butene | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 25.0 U | 1,000 U | 200 U | 5,000 U [5,000 U] | 1,000 U [1,000 U] | 2,000 U | 25,000 U | 1,000 U | 25.0 U | 10,000 U | |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-02 | HPT-02 | HPT-03 | HPT-03 | HPT-03 | HPT-03 | HPT-04 | HPT-05 | HPT-22 | HPT-22 | HPT-22 | HPT-24 | HPT-24 | HPT-24 | HPT-24 |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|-------------------|-------------------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 16 - 18 | 16 - 18 | 9 - 11 | 16 - 18 | 22 - 24 | 30 - 32 | 16 - 18 | 17 - 21 | 16 - 18 | 27 - 29 | 38 - 40 | 12 - 14 | 18 - 20 | 24 - 26 | 40 - 42 |
| Date Collected: | 10/27/15 | 12/05/15 | 12/05/15 | 12/05/15 | 10/27/15 | 12/05/15 | 10/28/15 | 10/28/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/02/15 | 12/02/15 | 12/03/15 | 12/03/15 |
| Vinyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| 1,1,2,2-Tetrachloroethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| 1,1,2-Trichloroethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| 1,1-Dichloroethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 800 J [810 J] | 200 U [200 U] | 400 U | 2,100 J | 164 J | 1.05 J | 2,000 U |
| 1,1-Dichloroethene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 42.0 J | 5.00 U | 200 U | 40.0 U | 920 J [1,030] | 200 U [200 U] | 400 U | 1,950 J | 60.0 J | 0.650 J | 280 J |
| 1,2,4-Trichlorobenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| 1,2-Dibromo-3-chloropropane | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 25.0 U | 1,000 U | 200 U | 5,000 U [5,000 U] | 1,000 U [1,000 U] | 2,000 U | 25,000 U | 1,000 U | 25.0 U | 10,000 U |
| 1,2-Dichlorobenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| 1,2-Dichloroethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| 1,2-Dichloropropane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| 1,3-Dichlorobenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| 1,4-Dichlorobenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| Bromodichloromethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| Carbon Tetrachloride | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| Chlorobenzene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| Chloroethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| Chloroform | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| Chloromethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| cis-1,3-Dichloropropene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| Dibromochloromethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| Dichlorodifluoromethane | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 25.0 U | 1,000 U | 200 U | 5,000 U [5,000 U] | 1,000 U [1,000 U] | 2,000 U | 25,000 U | 1,000 U | 25.0 U | 10,000 U |
| Methylene Chloride | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 25.0 U | 1,000 U | 200 U | 5,000 U [5,000 U] | 1,000 U [1,000 U] | 2,000 U | 25,000 U | 1,000 U | 25.0 U | 10,000 U |
| trans-1,3-Dichloropropene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| Trichlorofluoromethane | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| cis-1,2-Dichloroethene | 33.0 | 331 | 124 | 1,560 | 1,190 | 123 | 4,150 | 40.0 U | 4,910 [5,120] | 200 U [40.0 J] | 8,960 | 11,600 | 4,080 | 26.0 | 20,300 |
| Tetrachloroethene | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U |
| trans-1,2-Dichloroethene | 1.55 J | 30.9 | 9.75 | 43.2 J | 100 U | 5.00 U | 142 J | 40.0 U | 1,000 U [1,000 U] | 24.0 J [200 U] | 72.0 J | 5,000 U | 200 U | 0.850 J | 2,000 U |
| Trichloroethene | 57.9 | 38.7 | 61.0 | 259 | 375 | 6.20 | 286 | 484 | 28,600 [34,600] | 200 U [68.0 J] | 464 | 261,000 | 3,030 | 41.3 | 41,700 |
| Vinyl Chloride | 5.00 U | 19.7 | 5.00 U | 175 | 239 | 6.70 | 1,540 | 40.0 U | 240 J [250 J] | 4,240 [4,200] | 1,740 | 5,000 U | 200 U | 8.60 | 1,800 J |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-25 | HPT-25 | HPT-25 | HPT-25 | HPT-25 | HPT-26 | HPT-26 | HPT-26 | HPT-26 | HPT-26 | HPT-26 | HPT-27 | HPT-27 | HPT-27 | HPT-27 | |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|
| Sample Depth (Feet): | 13 - 15 | 20 - 22 | 24 - 26 | 27 - 29 | 40 - 42 | 14 - 16 | 19 - 21 | 24 - 26 | 27 - 29 | 41 - 43 | 44 - 46 | 12 - 14 | 18 - 20 | 22 - 24 | 27 - 29 | |
| Date Collected: | 12/02/15 | 12/02/15 | 12/02/15 | 12/03/15 | 12/03/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloropropene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichloropropane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,4-Trimethylbenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromoethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3,5-Trimethylbenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichloropropane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2,2-Dichloropropane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Butanone | 1,000 U | 500 U | 25.0 U | 5,000 U | 1,250 U | 25.0 U | 25.0 U | 0.940 J | 12,500 U | 500 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U |
| 2-Chlorotoluene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Hexanone | 200 U | 100 U | 5.00 U | 1,000 U | 250 U | 5.00 U | 5.00 U | 5.00 U | 2,500 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 4-Chlorotoluene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 4-Methyl-2-pentanone | 200 U | 100 U | 5.00 U | 1,000 U | 250 U | 5.00 U | 5.00 U | 5.00 U | 2,500 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Acetone | 1,000 U | 500 U | 3.40 J | 5,000 U | 1,250 U | 25.0 U | 2.62 J | 2.13 J | 12,500 U | 500 U | 2.09 J | 3.90 J | 2.49 J | 25.0 U | 25.0 U | 25.0 U |
| Benzene | 40.0 U | 20.0 U | 0.210 J | 200 U | 50.0 U | 1.00 U | 1.00 U | 0.270 J | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.05 |
| Bromobenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromochloromethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromoform | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromomethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Carbon Disulfide | 40.0 U | 20.0 U | 0.630 J | 200 U | 50.0 U | 1.00 U | 1.14 | 2.92 | 500 U | 2.60 J | 0.520 J | 1.00 U | 1.00 U | 0.450 J | 1.00 U | 1.00 U |
| Dibromomethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Diisopropyl ether (DIPE) | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 0.160 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Hexachlorobutadiene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Iodomethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Isopropylbenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| m-,p-Xylene | 80.0 U | 40.0 U | 2.00 U | 400 U | 100 U | 2.00 U | 0.150 J | 0.130 J | 1,000 U | 40.0 U | 0.370 J | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Methyl tert-butyl ether | 40.0 U | 20.0 U | 0.670 J | 200 U | 50.0 U | 1.00 U | 1.00 U | 0.320 J | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.370 J |
| Naphthalene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.04 | 500 U | 20.0 U | 0.120 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| n-Butylbenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| n-Propylbenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| o-Xylene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 0.180 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| p-Isopropyltoluene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| sec-Butylbenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Styrene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| tert-Butylbenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Toluene | 40.0 U | 20.0 U | 0.210 J | 200 U | 50.0 U | 1.00 U | 0.340 J | 0.450 J | 500 U | 20.0 U | 0.680 J | 1.00 U | 0.220 J | 1.00 U | 1.00 U | 0.490 J |
| trans-1,4-Dichloro-2-butene | 200 U | 100 U | 5.00 U | 1,000 U | 250 U | 5.00 U | 5.00 U | 5.00 U | 2,500 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-25 | HPT-25 | HPT-25 | HPT-25 | HPT-25 | HPT-26 | HPT-26 | HPT-26 | HPT-26 | HPT-26 | HPT-26 | HPT-27 | HPT-27 | HPT-27 | HPT-27 |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 13 - 15 | 20 - 22 | 24 - 26 | 27 - 29 | 40 - 42 | 14 - 16 | 19 - 21 | 24 - 26 | 27 - 29 | 41 - 43 | 44 - 46 | 12 - 14 | 18 - 20 | 22 - 24 | 27 - 29 |
| Date Collected: | 12/02/15 | 12/02/15 | 12/02/15 | 12/03/15 | 12/03/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 |
| Vinyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2,2-Tetrachloroethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2-Trichloroethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloroethane | 11.2 J | 12.8 J | 1.85 | 200 U | 50.0 U | 1.00 U | 0.260 J | 3.13 | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 0.440 J | 1.06 |
| 1,1-Dichloroethene | 40.0 U | 20.0 U | 0.400 J | 200 U | 7.50 J | 1.00 U | 0.250 J | 1.12 | 500 U | 5.00 J | 0.480 J | 1.00 U | 0.320 J | 1.00 U | 1.00 U |
| 1,2,4-Trichlorobenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromo-3-chloropropane | 200 U | 100 U | 5.00 U | 1,000 U | 250 U | 5.00 U | 5.00 U | 5.00 U | 2,500 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,2-Dichlorobenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloroethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloropropane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichlorobenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,4-Dichlorobenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromodichloromethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Carbon Tetrachloride | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chlorobenzene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloroethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloroform | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloromethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| cis-1,3-Dichloropropene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dibromochloromethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dichlorodifluoromethane | 200 U | 100 U | 5.00 U | 1,000 U | 250 U | 5.00 U | 5.00 U | 5.00 U | 2,500 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Methylene Chloride | 200 U | 100 U | 5.00 U | 1,000 U | 250 U | 5.00 U | 5.00 U | 5.00 U | 2,500 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| trans-1,3-Dichloropropene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Trichlorofluoromethane | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| cis-1,2-Dichloroethene | 770 | 607 | 12.3 | 200 U | 1,640 | 1.00 U | 1.00 U | 5.85 | 500 U | 533 | 34.3 | 1.00 U | 1.00 U | 1.75 | 0.110 J |
| Tetrachloroethene | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| trans-1,2-Dichloroethene | 13.6 J | 9.00 J | 0.910 J | 200 U | 50.0 U | 1.00 U | 1.00 U | 0.460 J | 500 U | 20.0 U | 0.240 J | 1.00 U | 1.00 U | 0.140 J | 0.200 J |
| Trichloroethene | 54.4 | 46.8 | 7.74 | 200 U | 50.0 U | 1.00 U | 1.00 U | 0.620 J | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.54 | 1.00 U |
| Vinyl Chloride | 40.0 U | 20.0 U | 8.50 | 4,250 | 749 | 1.00 U | 1.00 U | 0.590 J | 7,000 | 161 | 54.9 | 1.00 U | 1.00 U | 0.250 J | 1.00 U |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-27 | HPT-28 | HPT-28 | HPT-28 | HPT-28 | HPT-28 | HPT-29 | HPT-29 | HPT-29 | HPT-29 | HPT-29 | HPT-29 | HPT-30 | HPT-30 | HPT-30 |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 41 - 44 | 13 - 15 | 18 - 20 | 24 - 26 | 30 - 33 | 37 - 40 | 13 - 15 | 19 - 21 | 25 - 27 | 29 - 31 | 36 - 38 | 39 - 41 | 13 - 15 | 17 - 19 | 24 - 26 |
| Date Collected: | 12/02/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 11/30/15 | 11/30/15 | 12/01/15 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,4-Trimethylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 0.420 J | 1.00 U | 1.00 U |
| 1,2-Dibromoethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3,5-Trimethylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2,2-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Butanone | 12.3 J | 25.0 U | 25.0 U | 25.0 U | 20,000 U | 14.6 J | 25.0 U | 25.0 U | 25.0 U | 500 U | 125 U | 36.4 | 25.0 U | 25.0 U | 25.0 U |
| 2-Chlorotoluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Hexanone | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 4,000 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 25.0 U | 5.00 U | 5.00 U | 5.00 U |
| 4-Chlorotoluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| 4-Methyl-2-pentanone | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 4,000 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 25.0 U | 5.00 U | 5.00 U | 5.00 U |
| Acetone | 38.4 | 8.16 J | 3.59 J | 25.0 U | 20,000 U | 9.86 J | 25.0 U | 25.0 U | 25.0 U | 500 U | 125 U | 49.6 | 25.0 U | 25.0 U | 25.0 U |
| Benzene | 0.300 J | 1.00 U | 1.00 U | 0.620 J | 800 U | 0.180 J | 1.00 U | 1.00 U | 0.820 J | 20.0 U | 0.750 J | 0.450 J | 1.00 U | 1.00 U | 0.750 J |
| Bromobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromochloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromoform | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromomethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| Carbon Disulfide | 0.510 J | 1.00 U | 1.00 U | 2.00 | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dibromomethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| Diisopropyl ether (DIPE) | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 1.00 U | 1.00 U | 1.00 U | 0.430 J | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| Hexachlorobutadiene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| Iodomethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| Isopropylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| m-,p-Xylene | 0.160 J | 0.550 J | 2.00 U | 2.00 U | 1,600 U | 2.00 U | 2.00 U | 0.620 J | 0.560 J | 40.0 U | 10.0 U | 0.640 J | 2.00 U | 2.00 U | 0.670 J |
| Methyl tert-butyl ether | 1.00 U | 1.00 U | 1.00 U | 1.02 | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| Naphthalene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 0.690 J | 1.00 U | 1.00 U |
| n-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| n-Propylbenzene | 1.00 U | 1.00 U | 1.00 U | 0.290 J | 800 U | 1.00 U | 1.00 U | 1.00 U | 0.300 J | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| o-Xylene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 0.450 J | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 0.480 J |
| p-Isopropyltoluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| sec-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| Styrene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| tert-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U |
| Toluene | 0.420 J | 0.150 J | 1.00 U | 0.650 J | 800 U | 13.4 | 1.00 U | 0.190 J | 2.18 | 88.8 | 110 | 43.6 | 1.00 U | 1.00 U | 0.270 J |
| trans-1,4-Dichloro-2-butene | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 4,000 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 25.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-27 | HPT-28 | HPT-28 | HPT-28 | HPT-28 | HPT-28 | HPT-28 | HPT-29 | HPT-29 | HPT-29 | HPT-29 | HPT-29 | HPT-29 | HPT-30 | HPT-30 | HPT-30 |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 41 - 44 | 13 - 15 | 18 - 20 | 24 - 26 | 30 - 33 | 37 - 40 | 13 - 15 | 19 - 21 | 25 - 27 | 29 - 31 | 36 - 38 | 39 - 41 | 13 - 15 | 17 - 19 | 24 - 26 | |
| Date Collected: | 12/02/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 11/30/15 | 11/30/15 | 12/01/15 |
| Vinyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2,2-Tetrachloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2-Trichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloroethane | 3.99 | 1.00 U | 1.00 U | 0.720 J | 800 U | 1.36 | 1.00 U | 1.00 U | 1.00 U | 1.78 | 20.0 U | 5.00 U | 0.370 J | 1.00 U | 0.280 J | 3.84 |
| 1,1-Dichloroethene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 0.750 J | 1.00 U |
| 1,2,4-Trichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromo-3-chloropropane | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 4,000 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 25.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,2-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,4-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromodichloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Carbon Tetrachloride | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloroform | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| cis-1,3-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dibromochloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dichlorodifluoromethane | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 4,000 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 25.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Methylene Chloride | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 4,000 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 25.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| trans-1,3-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Trichlorofluoromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| cis-1,2-Dichloroethene | 30.0 | 1.00 U | 1.00 U | 1.00 U | 11,400 | 1.11 | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 3.34 | 1.00 U | 0.930 J | 3.66 |
| Tetrachloroethene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 2.88 | 1.00 U | 1.00 U | 1.00 U |
| trans-1,2-Dichloroethene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.98 | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Trichloroethene | 0.790 J | 1.00 U | 0.630 J | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 0.250 J | 1.00 U | 20.0 U | 5.00 U | 1.39 | 1.00 U | 0.960 J | 0.320 J |
| Vinyl Chloride | 32.1 | 1.00 U | 1.00 U | 7.27 | 14,900 | 2.02 | 1.00 U | 1.00 U | 1.04 | 426 | 3.40 J | 2.27 | 1.00 U | 1.00 U | 1.00 U | 2.54 |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-30 | HPT-30 | HPT-30 | HPT-31 | HPT-31 | HPT-31 | HPT-31 | HPT-31 | HPT-31 | HPT-32 | HPT-32 | HPT-32 | HPT-32 | HPT-32 | HPT-33 | HPT-33 |
|--|----------|----------|----------|-------------------|----------|----------|----------|----------|----------|-------------------|----------|----------|----------|----------|-----------|----------|
| Sample Depth (Feet): | 30 - 32 | 33 - 35 | 40 - 42 | 12 - 14 | 18 - 20 | 23 - 25 | 29 - 31 | 32 - 34 | 9 - 11 | 15 - 17 | 22 - 24 | 28 - 30 | 32 - 34 | 8 - 10 | 14 - 16 | |
| Date Collected: | 12/01/15 | 12/01/15 | 12/01/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,1-Dichloropropene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,2,3-Trichlorobenzene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,2,3-Trichloropropane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,2,4-Trimethylbenzene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 28.8 J | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,2-Dibromoethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,3,5-Trimethylbenzene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,3-Dichloropropane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 2,2-Dichloropropane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 2-Butanone | 3,130 U | 500 U | 25.0 U | 2.26 J [1.38 J] | 500 U | 100 U | 2,000 U | 1,000 U | 4,000 U | 5,000 U [6,250 U] | 250 U | 1,000 U | 25.0 U | 5,000 U | 125,000 U | |
| 2-Chlorotoluene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 2-Hexanone | 625 U | 100 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 400 U | 200 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 200 U | 5.00 U | 1,000 U | 25,000 U | |
| 4-Chlorotoluene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 4-Methyl-2-pentanone | 625 U | 100 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 400 U | 200 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 200 U | 5.00 U | 1,000 U | 25,000 U | |
| Acetone | 3,130 U | 500 U | 25.0 U | 4.06 J [2.19 J] | 500 U | 100 U | 2,000 U | 1,000 U | 4,000 U | 5,000 U [6,250 U] | 250 U | 1,000 U | 25.0 U | 5,000 U | 125,000 U | |
| Benzene | 125 U | 20.0 U | 0.200 J | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 0.300 J | 200 U | 5,000 U | |
| Bromobenzene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Bromochloromethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Bromoform | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Bromomethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Carbon Disulfide | 125 U | 20.0 U | 1.00 U | 0.510 J [0.160 J] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Dibromomethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Diisopropyl ether (DIPE) | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 125 U | 20.0 U | 0.500 J | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Hexachlorobutadiene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Iodomethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Isopropylbenzene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| m-,p-Xylene | 250 U | 40.0 U | 0.830 J | 2.00 U [2.00 U] | 40.0 U | 8.00 U | 160 U | 80.0 U | 320 U | 400 U [500 U] | 20.0 U | 80.0 U | 2.00 U | 400 U | 10,000 U | |
| Methyl tert-butyl ether | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Naphthalene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 1,140 | 200 U [250 U] | 10.0 U | 40.0 U | 0.700 J | 200 U | 5,000 U | |
| n-Butylbenzene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| n-Propylbenzene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| o-Xylene | 125 U | 20.0 U | 0.540 J | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| p-Isopropyltoluene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| sec-Butylbenzene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Styrene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| tert-Butylbenzene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.89 | 200 U | 5,000 U | |
| Toluene | 125 U | 20.0 U | 1.30 | 0.330 J [0.250 J] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 0.330 J | 200 U | 5,000 U | |
| trans-1,4-Dichloro-2-butene | 625 U | 100 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 400 U | 200 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 200 U | 5.00 U | 1,000 U | 25,000 U | |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-30 | HPT-30 | HPT-30 | HPT-31 | HPT-31 | HPT-31 | HPT-31 | HPT-31 | HPT-31 | HPT-32 | HPT-32 | HPT-32 | HPT-32 | HPT-32 | HPT-33 | HPT-33 |
|--------------------------------------|----------|----------|----------|------------------|----------|----------|----------|----------|----------|-------------------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 30 - 32 | 33 - 35 | 40 - 42 | 12 - 14 | 18 - 20 | 23 - 25 | 29 - 31 | 32 - 34 | 32 - 34 | 9 - 11 | 15 - 17 | 22 - 24 | 28 - 30 | 32 - 34 | 8 - 10 | 14 - 16 |
| Date Collected: | 12/01/15 | 12/01/15 | 12/01/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 |
| Vinyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,1,2,2-Tetrachloroethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,1,2-Trichloroethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,1-Dichloroethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 471 | 7.24 | 80.0 U | 40.0 U | 160 U | 78.0 J [95.0 J] | 10.0 U | 40.0 U | 0.170 J | 1,090 | 5,000 U | |
| 1,1-Dichloroethene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 41.6 | 11.2 | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 1,070 | 5,000 U | |
| 1,2,4-Trichlorobenzene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,2-Dibromo-3-chloropropane | 625 U | 100 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 400 U | 200 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 200 U | 5.00 U | 1,000 U | 25,000 U | |
| 1,2-Dichlorobenzene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,2-Dichloroethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,2-Dichloropropane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,3-Dichlorobenzene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| 1,4-Dichlorobenzene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Bromodichloromethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Carbon Tetrachloride | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Chlorobenzene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Chloroethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Chloroform | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Chloromethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| cis-1,3-Dichloropropene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Dibromochloromethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Dichlorodifluoromethane | 625 U | 100 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 400 U | 200 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 200 U | 5.00 U | 1,000 U | 25,000 U | |
| Methylene Chloride | 625 U | 100 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 400 U | 200 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 200 U | 5.00 U | 1,000 U | 25,000 U | |
| trans-1,3-Dichloropropene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Trichlorofluoromethane | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| cis-1,2-Dichloroethene | 2,270 | 381 | 9.21 | 1.00 U [1.00 U] | 15.2 J | 82.6 | 2,390 | 801 | 160 U | 4,650 [6,140] | 217 | 1,000 | 16.5 | 1,780 | 109,000 | |
| Tetrachloroethene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| trans-1,2-Dichloroethene | 125 U | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 2.16 J | 12.0 J | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | 5,000 U | |
| Trichloroethene | 125 U | 20.0 U | 0.370 J | 0.380 J [1.00 U] | 20.0 U | 18.0 | 80.0 U | 40.0 U | 160 U | 268 [363] | 5.20 J | 832 | 4.95 | 200 U | 164,000 | |
| Vinyl Chloride | 125 U | 134 | 1.68 | 1.00 U [1.00 U] | 20.0 U | 3.84 J | 80.0 U | 40.0 U | 160 U | 844 [1,130] | 33.5 | 40.0 | 1.19 | 4,620 | 3,200 J | |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-33 | HPT-33 | HPT-33 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 20 - 22 | 28 - 30 | 32 - 34 | 11 - 13 | 17 - 19 | 21 - 23 | 30 - 32 | 37 - 39 | 38 - 40 | 39 - 41 | 42 - 44 |
| Date Collected: | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,1-Dichloropropene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,2,3-Trichloropropane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,2,4-Trimethylbenzene | 50.0 U | 40.0 U | 1.00 U | 0.460 J | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 0.410 J |
| 1,2-Dibromoethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,3,5-Trimethylbenzene | 50.0 U | 40.0 U | 1.00 U | 0.420 J | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,3-Dichloropropane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 2,2-Dichloropropane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 2-Butanone | 1,250 U | 1,000 U | 25.0 U | 25.0 U | 50,000 U | 1,000 U | 1,000 U | 25.0 U | 1,000 U | 10,000 U | 25.0 U |
| 2-Chlorotoluene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 2-Hexanone | 250 U | 200 U | 5.00 U | 5.00 U | 10,000 U | 200 U | 200 U | 5.00 U | 200 U | 2,000 U | 5.00 U |
| 4-Chlorotoluene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 4-Methyl-2-pentanone | 250 U | 200 U | 5.00 U | 5.00 U | 10,000 U | 200 U | 200 U | 5.00 U | 200 U | 2,000 U | 5.00 U |
| Acetone | 1,250 U | 1,000 U | 25.0 U | 25.0 U | 50,000 U | 1,000 U | 1,000 U | 25.0 U | 1,000 U | 10,000 U | 25.0 U |
| Benzene | 50.0 U | 40.0 U | 0.540 J | 0.280 J | 2,000 U | 40.0 U | 40.0 U | 0.260 J | 40.0 U | 400 U | 0.170 J |
| Bromobenzene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Bromochloromethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Bromoform | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Bromomethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Carbon Disulfide | 50.0 U | 40.0 U | 1.00 U | 0.700 J | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Dibromomethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Diisopropyl ether (DIPE) | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 50.0 U | 40.0 U | 1.00 U | 0.520 J | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 0.500 J |
| Hexachlorobutadiene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Iodomethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Isopropylbenzene | 50.0 U | 40.0 U | 1.00 U | 0.560 J | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| m-,p-Xylene | 100 U | 80.0 U | 0.560 J | 0.980 J | 4,000 U | 80.0 U | 80.0 U | 0.550 J | 80.0 U | 800 U | 0.690 J |
| Methyl tert-butyl ether | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Naphthalene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 383 | 1.00 U | 31.2 J | 400 U | 0.710 J |
| n-Butylbenzene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| n-Propylbenzene | 50.0 U | 40.0 U | 1.00 U | 0.240 J | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| o-Xylene | 50.0 U | 40.0 U | 1.00 U | 0.850 J | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| p-Isopropyltoluene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| sec-Butylbenzene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Styrene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| tert-Butylbenzene | 50.0 U | 40.0 U | 0.810 J | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Toluene | 50.0 U | 40.0 U | 1.00 U | 0.730 J | 2,000 U | 40.0 U | 40.0 U | 0.160 J | 40.0 U | 400 U | 0.820 J |
| trans-1,4-Dichloro-2-butene | 250 U | 200 U | 5.00 U | 5.00 U | 10,000 U | 200 U | 200 U | 5.00 U | 200 U | 2,000 U | 5.00 U |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-33 | HPT-33 | HPT-33 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 20 - 22 | 28 - 30 | 32 - 34 | 11 - 13 | 17 - 19 | 21 - 23 | 30 - 32 | 37 - 39 | 38 - 40 | 39 - 41 | 42 - 44 |
| Date Collected: | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 |
| Vinyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,1,2,2-Tetrachloroethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,1,2-Trichloroethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,1-Dichloroethane | 50.0 U | 40.0 U | 1.00 U | 1.77 | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,1-Dichloroethene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,2,4-Trichlorobenzene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,2-Dibromo-3-chloropropane | 250 U | 200 U | 5.00 U | 5.00 U | 10,000 U | 200 U | 200 U | 5.00 U | 200 U | 2,000 U | 5.00 U |
| 1,2-Dichlorobenzene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,2-Dichloroethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,2-Dichloropropane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,3-Dichlorobenzene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,4-Dichlorobenzene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Bromodichloromethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Carbon Tetrachloride | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Chlorobenzene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Chloroethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Chloroform | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Chloromethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| cis-1,3-Dichloropropene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Dibromochloromethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Dichlorodifluoromethane | 250 U | 200 U | 5.00 U | 5.00 U | 10,000 U | 200 U | 200 U | 5.00 U | 200 U | 2,000 U | 5.00 U |
| Methylene Chloride | 250 U | 200 U | 5.00 U | 5.00 U | 10,000 U | 200 U | 200 U | 5.00 U | 200 U | 2,000 U | 5.00 U |
| trans-1,3-Dichloropropene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Trichlorofluoromethane | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| cis-1,2-Dichloroethene | 1,090 | 494 | 1.83 | 0.840 J | 52,700 | 1,080 | 90.8 | 2.39 | 578 | 576 | 22.9 |
| Tetrachloroethene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| trans-1,2-Dichloroethene | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Trichloroethene | 473 | 908 | 1.74 | 1.00 U | 64,200 | 114 | 79.6 | 5.42 | 685 | 7,400 | 46.8 |
| Vinyl Chloride | 55.5 | 42.8 | 1.00 U | 6.69 | 2,640 | 83.2 | 40.0 U | 1.00 U | 40.0 U | 400 U | 0.670 J |
| Inorganics - Total (µg/L) | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 2
Summary of Groundwater Sample Analytical Results
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

Notes:

mg/L = milligrams per liter
NA = not applicable
µg/L = micrograms per liter

Laboratory Qualifiers:

B = Analyte was found in the associated blank, as well as in the sample.
J = Indicates an estimated value.
ND = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | DPW-1D | DPW-1D | DPW-1D | DPW-1D | DPW-1D | DPW-1D | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-4SD | DPW-4SD | DPW-4SD |
|--|----------|----------|----------|----------|----------|----------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------------|----------------------------|----------------------------|
| Sample Depth (Feet): | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 |
| Date Collected: | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 1,1-Dichloropropene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 1,2,3-Trichlorobenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U |
| 1,2,3-Trichloropropane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U |
| 1,2,4-Trimethylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 1,2-Dibromoethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U |
| 1,3,5-Trimethylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 1,3-Dichloropropane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 2,2-Dichloropropane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 2-Butanone | 260 J | 250 U | 1,000 U | 100 U | 5.00 U | 5.00 U | 4.39 J | 25.0 U | 25.0 U | 25.0 U | 5.00 U | 5.00 U | 6,250 U | 5,000 U | 5,000 U |
| 2-Chlorotoluene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 2-Hexanone | 250 U | 50.0 U | 200 U | 20.0 U | 10.0 U | 10.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 10.0 U | 10.0 U | 1,250 U | 1,000 U | 1,000 U |
| 4-Chlorotoluene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 4-Methyl-2-pentanone | 250 U | 50.0 U | 200 U | 20.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 1,250 U | 1,000 U | 1,000 U |
| Acetone | 1,250 U | 47.4 J | 1,000 U | 100 U | 25.0 U | 25.0 U | 32.0 | 7.94 J | 2.30 J | 25.0 U | 25.0 U | 25.0 U | 6,250 U | 5,000 U | 5,000 U |
| Benzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 0.120 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Bromobenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Bromochloromethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Bromoform | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Bromomethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U |
| Carbon Disulfide | 50.0 U | 10.0 U | 40.0 U | 4.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 35.0 J | 200 U |
| Dibromomethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 250 U | 200 U |
| Diisopropyl ether (DIPE) | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Ethyl Alcohol | NA | NA | NA | NA | 200 U | NA | NA | NA | NA | NA | 200 U | NA | NA | NA | NA |
| Ethylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Hexachlorobutadiene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | NA | 0.770 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 250 U | 200 U |
| Iodomethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | NA | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 1.00 U | 250 U | 200 U |
| Isopropylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| m-,p-Xylene | 100 U | 20.0 U | 80.0 U | 8.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 500 U | 400 U | 400 U |
| Methyl tert-butyl ether | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 0.130 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Naphthalene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 5.00 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 5.00 U | 250 U | 200 U | 200 U |
| n-Butylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| n-Propylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| o-Xylene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| p-Isopropyltoluene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| sec-Butylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Styrene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| tert-Butylbenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Toluene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 0.150 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | DPW-1D | DPW-1D | DPW-1D | DPW-1D | DPW-1D | DPW-1D | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-4SD | DPW-4SD | DPW-4SD |
|--------------------------------------|--------------|---------------|------------|-------------|-------------|-------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------------|----------------------------|----------------------------|
| Sample Depth (Feet): | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 |
| Date Collected: | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 |
| trans-1,4-Dichloro-2-butene | 250 U | 50.0 U | 200 U | 20.0 U | NA | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | NA | 1,250 U | 1,000 U | 1,000 U |
| Vinyl Acetate | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 1,1,2,2-Tetrachloroethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 1,1,2-Trichloroethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 1,1-Dichloroethane | 50.0 U | 3.60 J | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 0.280 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 118 J | 52.0 J | 72.0 J |
| 1,1-Dichloroethene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 103 J | 44.0 J | 68.0 J |
| 1,2,4-Trichlorobenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U |
| 1,2-Dibromo-3-chloropropane | 250 U | 50.0 U | 200 U | 20.0 U | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | 5.00 U | 1,250 U | 1,000 U | 1,000 U |
| 1,2-Dichlorobenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 1,2-Dichloroethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 1,2-Dichloropropane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 1,3-Dichlorobenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| 1,4-Dichlorobenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Bromodichloromethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Carbon Tetrachloride | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Chlorobenzene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Chloroethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U |
| Chloroform | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Chloromethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U |
| cis-1,3-Dichloropropene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Dibromochloromethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Dichlorodifluoromethane | 250 U | 50.0 U | 200 U | 20.0 U | 2.00 U | 2.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 1,250 U | 1,000 U | 1,000 U |
| Methylene Chloride | 250 U | 50.0 U | 200 U | 20.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 1,250 U | 1,000 U | 1,000 U |
| trans-1,3-Dichloropropene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| Trichlorofluoromethane | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U |
| cis-1,2-Dichloroethene | 874 | 134 | 416 | 27.3 | 1.00 U | 13.4 | 0.790 J | 0.390 J | 0.730 J | 0.580 J | 0.880 J | 1.20 | 10,400 | 3,300 | 3,180 |
| Tetrachloroethene | 50.0 U | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U |
| trans-1,2-Dichloroethene | 9.50 J | 10.0 U | 40.0 U | 4.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 90.0 J | 200 U | 200 U |
| Trichloroethene | 50.0 U | 10.0 U | 40.0 U | 2.92 J | 1.00 | 18.7 | 0.660 J | 0.250 J | 0.650 J | 0.410 J | 0.630 J | 0.810 J | 2,980 | 786 | 860 |
| Vinyl Chloride | 1,890 | 233 | 242 | 94.6 | 1.60 | 1.00 U | 3.22 | 1.43 | 0.550 J | 1.39 | 1.20 | 3.50 | 1,490 | 602 | 598 |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | DPW-4SD | DPW-4SD | DPW-4SD | DPW-5SD | DPW-5SD | DPW-5SD | DPW-5SD | DPW-5SD | MW-2S | MW-2S | MW-2S | MW-2S | MW-2S | MW-2S | MW-9D | MW-9D |
|--|----------------------------|----------------------------|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 35 - 45 | 35 - 45 |
| Date Collected: | 04/12/16 | 04/11/17 | 04/18/18 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloropropene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U |
| 1,2,3-Trichloropropane | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U |
| 1,2,4-Trimethylbenzene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromoethane | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U |
| 1,3,5-Trimethylbenzene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 1,3-Dichloropropane | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 2,2-Dichloropropane | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 2-Butanone | 4,000 U | 500 U | 500 UJ | 20,000 U | 20,000 U | 20,000 U | 500 U | 500 UJ | 500 U | 500 U | 1,250 U | 250 U | 100 U | 25.0 U | 25.0 U | 25.0 U |
| 2-Chlorotoluene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 2-Hexanone | 800 U | 1,000 U | 1,000 UJ | 4,000 U | 4,000 U | 4,000 U | 1,000 U | 1,000 UJ | 100 U | 100 U | 250 U | 50.0 U | 200 U | 50.0 U | 5.00 U | 5.00 U |
| 4-Chlorotoluene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 4-Methyl-2-pentanone | 800 U | 500 U | 500 UJ | 4,000 U | 4,000 U | 4,000 U | 500 U | 500 UJ | 100 U | 100 U | 250 U | 50.0 U | 100 U | 25.0 U | 5.00 U | 5.00 U |
| Acetone | 4,000 U | 2,500 U | 2,500 UJ | 20,000 U | 20,000 U | 20,000 U | 2,500 U | 2,500 UJ | 500 U | 500 U | 1,250 U | 250 U | 500 U | 130 U | 25.0 U | 3.10 J |
| Benzene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Bromobenzene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Bromochloromethane | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Bromoform | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Bromomethane | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 UJ | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U |
| Carbon Disulfide | 160 U | NA | 200 UJ | 800 U | 800 U | 800 U | NA | 200 UJ | 2.80 J | 20.0 U | 50.0 U | 10.0 U | NA | 10.0 U | 1.00 U | 1.00 U |
| Dibromomethane | 160 U | NA | 200 UJ | 800 U | 800 U | 800 U | NA | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | NA | 10.0 U | 1.00 U | 1.00 U |
| Diisopropyl ether (DIPE) | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Ethyl Alcohol | NA | 20,000 U | NA | NA | NA | NA | 20,000 U | NA | NA | NA | NA | NA | 4,000 U | NA | NA | NA |
| Ethylbenzene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 UJ | 1.00 U |
| Hexachlorobutadiene | 160 U | NA | 200 UJ | 800 U | 800 U | 800 U | NA | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | NA | 10.0 U | 1.00 U | 1.00 U |
| Iodomethane | 160 U | NA | 100 UJ | 800 U | 800 U | 800 U | NA | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | NA | 5.00 U | 1.00 U | 1.00 U |
| Isopropylbenzene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| m-,p-Xylene | 320 U | 200 U | 200 UJ | 1,600 U | 1,600 U | 1,600 U | 200 U | 200 UJ | 40.0 U | 40.0 U | 100 U | 20.0 U | 40.0 U | 10.0 U | 2.00 U | 2.00 U |
| Methyl tert-butyl ether | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 0.380 J | 0.270 J |
| Naphthalene | 160 U | 500 U | 500 UJ | 800 U | 800 U | 800 U | 500 U | 500 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 100 U | 25.0 U | 1.00 U | 1.00 U |
| n-Butylbenzene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 UJ | 1.00 U |
| n-Propylbenzene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| o-Xylene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 UJ | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| p-Isopropyltoluene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| sec-Butylbenzene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Styrene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| tert-Butylbenzene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Toluene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 33.3 J | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | DPW-4SD | DPW-4SD | DPW-4SD | DPW-5SD | DPW-5SD | DPW-5SD | DPW-5SD | DPW-5SD | MW-2S | MW-2S | MW-2S | MW-2S | MW-2S | MW-2S | MW-9D | MW-9D |
|--------------------------------------|----------------------------|----------------------------|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------|---------------|--------------|------------|--------------|---------------|-------------|-------------|
| Sample Depth (Feet): | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 35 - 45 | 35 - 45 |
| Date Collected: | 04/12/16 | 04/11/17 | 04/18/18 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 |
| trans-1,4-Dichloro-2-butene | 800 U | NA | NA | 4,000 U | 4,000 U | 4,000 U | NA | NA | 100 U | 100 U | 250 U | 50.0 U | NA | NA | 5.00 U | 5.00 U |
| Vinyl Acetate | NA | 1,000 U | 1,000 UJ | NA | NA | NA | 1,000 U | 1,000 UJ | NA | NA | NA | NA | 200 U | 50.0 U | NA | NA |
| Xylenes (total) | NA | 300 U | NA | NA | NA | NA | 300 U | NA | NA | NA | NA | NA | 60.0 U | NA | NA | NA |
| 1,1,1-Trichloroethane | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 49.1 J | 61.2 J | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 1,1,2,2-Tetrachloroethane | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 1,1,2-Trichloroethane | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloroethane | 56.0 J | 57.2 J | 71.4 J | 800 U | 800 U | 136 J | 108 | 72.9 J | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 0.400 J | 1.00 U |
| 1,1-Dichloroethene | 68.8 J | 87.4 J | 83.9 J | 800 U | 800 U | 800 U | 69.2 J | 61.3 J | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 2.40 J | 0.540 J | 0.320 J |
| 1,2,4-Trichlorobenzene | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U |
| 1,2-Dibromo-3-chloropropane | 800 U | NA | 500 UJ | 4,000 U | 4,000 U | 4,000 U | NA | 500 UJ | 100 U | 100 U | 250 U | 50.0 U | NA | 25.0 U | 5.00 U | 5.00 U |
| 1,2-Dichlorobenzene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloroethane | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloropropane | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 1,3-Dichlorobenzene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| 1,4-Dichlorobenzene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Bromodichloromethane | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Carbon Tetrachloride | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Chlorobenzene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Chloroethane | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U |
| Chloroform | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Chloromethane | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U |
| cis-1,3-Dichloropropene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Dibromochloromethane | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Dichlorodifluoromethane | 800 U | 200 U | 200 UJ | 4,000 U | 4,000 U | 4,000 U | 200 U | 200 UJ | 100 U | 100 U | 250 U | 50.0 U | 40.0 U | 10.0 U | 5.00 U | 5.00 U |
| Methylene Chloride | 800 U | 500 U | 500 UJ | 4,000 U | 4,000 U | 4,000 U | 500 U | 500 UJ | 100 U | 100 U | 250 U | 50.0 U | 100 U | 25.0 U | 5.00 U | 5.00 U |
| trans-1,3-Dichloropropene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| Trichlorofluoromethane | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 1.00 U | 1.00 U |
| cis-1,2-Dichloroethene | 2,760 | 5,040 | 5,760 J | 13,600 | 12,100 | 13,900 | 8,800 | 8,040 J | 1,030 | 354 | 1,020 | 266 | 1,080 | 659 | 63.2 | 51.1 |
| Tetrachloroethene | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U |
| trans-1,2-Dichloroethene | 160 U | 34.9 J | 100 UJ | 800 U | 800 U | 800 U | 27.6 J | 100 UJ | 5.80 J | 20.0 U | 50.0 U | 10.0 U | 8.40 J | 4.20 J | 1.00 U | 0.220 J |
| Trichloroethene | 1,340 | 1,210 | 1,230 J | 4,110 | 6,920 | 1,340 | 7,000 | 9,230 J | 473 | 149 | 407 | 159 | 527 | 275 | 1.00 U | 0.260 J |
| Vinyl Chloride | 637 | 470 | 385 J | 1,220 | 968 | 1,320 | 713 | 501 J | 20.0 U | 4.60 J | 50.0 U | 10.0 U | 20.0 U | 3.50 J | 1.74 | 1.01 |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | | |
| Total Organic Carbon | 16 | NA | NA | NA | NA | 13 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MW-9D | MW-9D | MW-9D | MW-9D | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-17D | MW-17D | MW-17D | MW-17D | MW-17D | MW-17D | MW-19S |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------------|
| Sample Depth (Feet): | 35 - 45 | 35 - 45 | 35 - 45 | 35 - 45 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 10 - 20 |
| Date Collected: | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloropropene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 1.00 U | 4.00 U | 2.00 U | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U |
| 1,2,3-Trichloropropane | 1.00 U | 4.00 U | 2.00 U | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U |
| 1,2,4-Trimethylbenzene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.20 | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromoethane | 1.00 U | 4.00 U | 2.00 U | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U |
| 1,3,5-Trimethylbenzene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichloropropane | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 2,2-Dichloropropane | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Butanone | 25.0 U | 100 U | 5.00 U | 5.00 U | 250 U | 1,250 U | 250 U | 25.0 U | 5.00 U | 5.00 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 500 U | 5.00 U | 5.00 U | 25.0 U |
| 2-Chlorotoluene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Hexanone | 5.00 U | 20.0 U | 10.0 U | 10.0 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 10.0 U | 10.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 10.0 U | 10.0 U | 5.00 U |
| 4-Chlorotoluene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 4-Methyl-2-pentanone | 5.00 U | 20.0 U | 5.00 U | 5.00 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 5.00 U | 5.00 U | 5.00 U |
| Acetone | 25.0 U | 100 U | 25.0 U | 25.0 U | 250 U | 1,250 U | 250 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 3.46 J | 25.0 U | 572 | 120 | 25.0 U | 1.21 J | |
| Benzene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 0.220 J | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Bromobenzene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Bromochloromethane | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Bromoform | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Bromomethane | 1.00 U | 4.00 U | 2.00 U | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U |
| Carbon Disulfide | 1.00 U | 4.00 U | NA | 2.00 U | 1.50 J | 50.0 U | 10.0 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | NA | 2.00 U | 1.00 U |
| Dibromomethane | 1.00 U | 4.00 U | NA | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | NA | 2.00 U | 1.00 U |
| Diisopropyl ether (DIPE) | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Ethyl Alcohol | NA | NA | 200 U | NA | NA | NA | NA | NA | 200 U | NA | NA | NA | NA | NA | 200 U | NA | NA | NA |
| Ethylbenzene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Hexachlorobutadiene | 1.00 U | 4.00 U | NA | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | NA | 2.00 U | 1.00 U |
| Iodomethane | 1.00 U | 4.00 U | NA | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | NA | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | NA | 1.00 U | 1.00 U |
| Isopropylbenzene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| m-,p-Xylene | 2.00 U | 8.00 U | 2.00 U | 2.00 U | 20.0 U | 100 U | 20.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.32 | 40.0 U | 2.00 U | 2.00 U | 2.00 U |
| Methyl tert-butyl ether | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Naphthalene | 1.00 U | 4.00 U | 5.00 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 5.00 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 5.00 U | 0.530 J |
| n-Butylbenzene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| n-Propylbenzene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| o-Xylene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| p-Isopropyltoluene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 0.450 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| sec-Butylbenzene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Styrene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| tert-Butylbenzene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 0.450 J | 0.480 J | 1.00 U | 0.990 J | 1.05 | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Toluene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 UB | 1.00 U | 1.00 U | 1.00 U |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MW-9D | MW-9D | MW-9D | MW-9D | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-17D | MW-17D | MW-17D | MW-17D | MW-17D | MW-19S |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 35 - 45 | 35 - 45 | 35 - 45 | 35 - 45 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 36 - 46 | 10 - 20 |
| Date Collected: | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 |
| trans-1,4-Dichloro-2-butene | 5.00 U | 20.0 U | NA | NA | 50.0 U | 250 U | 50.0 U | 5.00 U | NA | NA | 5.00 U | 5.00 U | 5.00 U | 100 U | NA | NA | 5.00 U |
| Vinyl Acetate | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA | 10.0 U | 10.0 U | NA |
| Xylenes (total) | NA | NA | 3.00 U | NA | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA | 3.00 U | NA | NA |
| 1,1,1-Trichloroethane | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 3.50 | 1.00 U | 1.00 U |
| 1,1,2,2-Tetrachloroethane | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2-Trichloroethane | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloroethane | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 0.240 J | 0.520 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.80 | 1.00 U | 0.220 J |
| 1,1-Dichloroethene | 0.380 J | 4.00 U | 1.00 U | 0.470 J | 8.10 J | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 0.230 J | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,4-Trichlorobenzene | 1.00 U | 4.00 U | 2.00 U | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U |
| 1,2-Dibromo-3-chloropropane | 5.00 U | 20.0 U | NA | 5.00 U | 50.0 U | 250 U | 50.0 U | 5.00 U | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | NA | 5.00 U | 5.00 U |
| 1,2-Dichlorobenzene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloroethane | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloropropane | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichlorobenzene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| 1,4-Dichlorobenzene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Bromodichloromethane | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Carbon Tetrachloride | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Chlorobenzene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Chloroethane | 1.00 U | 4.00 U | 2.00 U | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U |
| Chloroform | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Chloromethane | 1.00 U | 4.00 U | 2.00 U | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U |
| cis-1,3-Dichloropropene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Dibromochloromethane | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Dichlorodifluoromethane | 5.00 U | 20.0 U | 2.00 U | 2.00 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 2.00 U | 2.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 2.00 U | 2.00 U | 5.00 U |
| Methylene Chloride | 5.00 U | 20.0 U | 5.00 U | 5.00 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 5.00 U | 5.00 U | 5.00 U |
| trans-1,3-Dichloropropene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| Trichlorofluoromethane | 1.00 U | 4.00 U | 2.00 U | 2.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 2.00 U | 2.00 U | 1.00 U |
| cis-1,2-Dichloroethene | 56.3 | 77.1 | 47.9 | 70.1 | 512 | 1,060 | 198 | 17.3 | 7.30 | 2.80 | 7.95 | 4.51 | 4.74 | 389 | 30.9 | 0.620 J | 0.220 J |
| Tetrachloroethene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U |
| trans-1,2-Dichloroethene | 1.00 U | 4.00 U | 0.340 J | 1.00 U | 1.50 J | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 0.150 J | 1.00 U | 1.00 U | 5.00 J | 0.450 J | 1.00 U | 1.00 U |
| Trichloroethene | 1.00 U | 4.00 U | 1.00 U | 1.00 U | 63.7 | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 22.1 | 13.2 | 5.56 | 239 | 4.30 | 1.00 U | 1.00 U |
| Vinyl Chloride | 1.69 | 1.96 J | 1.10 | 2.10 | 79.9 | 85.5 | 15.8 | 5.37 | 3.50 | 4.50 | 1.00 U | 1.00 U | 1.00 U | 36.0 | 1.00 U | 1.00 U | 1.00 U |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MW-19S | MW-19S | MW-19S | MW-19S | MW-19S | PW-1S | PW-1S | PW-1S | PW-1S | PW-1S | PW-1S | PW-1S | PW-7S | PW-7S | PW-7S | PW-7S |
|--|----------------|-------------|-------------|----------------|----------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|----------|----------|----------|----------|
| Sample Depth (Feet): | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 |
| Date Collected: | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/12/16 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichloropropane | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,4-Trimethylbenzene | 1.00 U | 1.19 | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.110 J | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromoethane | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3,5-Trimethylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2,2-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Butanone | 25.0 U | 25.0 U | 25.0 U | 5.00 U | 5.00 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 5.00 U | 5.00 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U |
| 2-Chlorotoluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Hexanone | 5.00 U | 5.00 U | 5.00 U | 10.0 U | 10.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 10.0 U | 10.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 4-Chlorotoluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 4-Methyl-2-pentanone | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Acetone | 3.30 J | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 2.03 J | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U |
| Benzene | 0.770 J | 1.53 | 2.06 | 0.860 J | 1.00 U | 0.200 J | 0.550 J | 0.360 J | 0.260 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromochloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromoform | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromomethane | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Carbon Disulfide | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dibromomethane | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Diisopropyl ether (DIPE) | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Ethyl Alcohol | NA | NA | NA | 200 U | NA | NA | NA | NA | NA | NA | 200 U | NA | NA | NA | NA | NA |
| Ethylbenzene | 1.00 U | 1.79 | 0.410 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.220 J | 1.00 U | 1.00 U | 1.00 U |
| Hexachlorobutadiene | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Iodomethane | 1.00 U | 1.00 U | 1.00 U | NA | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Isopropylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| m-,p-Xylene | 2.00 U | 2.42 | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 0.360 J | 2.00 U | 2.00 U | 2.00 U |
| Methyl tert-butyl ether | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Naphthalene | 9.50 | 43.3 | 39.8 | 5.00 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| n-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| n-Propylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| o-Xylene | 0.210 J | 2.17 | 0.660 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.110 J | 1.00 U | 1.00 U | 1.00 U |
| p-Isopropyltoluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.160 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| sec-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Styrene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| tert-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.52 | 0.160 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Toluene | 0.230 J | 0.700 J | 1.00 UB | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MW-19S | MW-19S | MW-19S | MW-19S | MW-19S | PW-1S | PW-1S | PW-1S | PW-1S | PW-1S | PW-1S | PW-7S | PW-7S | PW-7S | PW-7S |
|--------------------------------------|----------------|----------------|----------|----------------|----------|--------------|--------------|--------------|--------------|----------------|--------------|----------------|-------------|----------------|----------|
| Sample Depth (Feet): | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 |
| Date Collected: | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 |
| trans-1,4-Dichloro-2-butene | 5.00 U | 5.00 U | 5.00 U | NA | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Vinyl Acetate | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2,2-Tetrachloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2-Trichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloroethane | 0.330 J | 0.120 J | 1.00 U | 0.700 J | 0.540 J | 1.87 | 0.620 J | 0.450 J | 0.810 J | 1.10 | 0.420 J | 0.260 J | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloroethene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.640 J | 0.720 J | 0.720 J | 0.560 J | 0.480 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,4-Trichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromo-3-chloropropane | 5.00 U | 5.00 U | 5.00 U | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,2-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,4-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromodichloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Carbon Tetrachloride | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloroethane | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 2.27 | 0.460 J | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloroform | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloromethane | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| cis-1,3-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dibromochloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dichlorodifluoromethane | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Methylene Chloride | 5.00 U | 5.00 U | 0.580 J | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| trans-1,3-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Trichlorofluoromethane | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| cis-1,2-Dichloroethene | 1.96 | 2.35 | 3.54 | 5.70 | 0.610 J | 29.7 | 31.7 | 31.3 | 27.3 | 33.9 | 32.7 | 3.06 | 1.74 | 0.910 J | 1.00 U |
| Tetrachloroethene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| trans-1,2-Dichloroethene | 1.00 U | 1.00 U | 0.350 J | 1.00 U | 1.00 U | 0.170 J | 1.00 U | 0.220 J | 1.00 U | 0.230 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Trichloroethene | 0.450 J | 1.45 | 2.35 | 0.360 J | 1.00 U | 2.28 | 1.61 | 1.07 | 1.21 | 0.710 J | 1.00 U | 0.840 J | 0.230 J | 0.250 J | 1.00 U |
| Vinyl Chloride | 0.480 J | 0.300 J | 1.52 | 0.700 J | 1.00 U | 28.7 | 17.8 | 16.0 | 22.6 | 22.2 | 35.0 | 2.83 | 1.66 | 0.990 J | 1.00 U |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | PW-7S | PW-7S | MW-105D | MW-105S | MW-201D | MW-202D | HPT-01 | HPT-02 | HPT-02 | HPT-02 | HPT-03 | HPT-03 | HPT-03 | HPT-03 | HPT-04 |
|--|----------|----------|-------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 15 - 22 | 15 - 22 | 39.3 - 46.3 | 13.5 - 23.5 | 25 - 40 | 25 - 40 | 18 - 20 | 10 - 12 | 16 - 18 | 16 - 18 | 9 - 11 | 16 - 18 | 22 - 24 | 30 - 32 | 16 - 18 |
| Date Collected: | 04/11/17 | 04/18/18 | 01/06/13 | 01/06/13 | 01/06/13 | 01/06/13 | 10/26/15 | 12/05/15 | 10/27/15 | 12/05/15 | 12/05/15 | 12/05/15 | 10/27/15 | 12/05/15 | 10/28/15 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,1-Dichloropropene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,2,3-Trichlorobenzene | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,2,3-Trichloropropane | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,2,4-Trimethylbenzene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,2-Dibromoethane | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,3,5-Trimethylbenzene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,3-Dichloropropane | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 2,2-Dichloropropane | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 2-Butanone | 5.00 U | 5.00 U | 250 U | 25.0 U | 20,000 U | 10,000 U | 25.0 U | 25.0 U | 125 U | 400 U | 125 U | 2,000 U | 2,500 U | 125 U | 5,000 U |
| 2-Chlorotoluene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 2-Hexanone | 10.0 U | 10.0 U | 50.0 U | 5.00 U | 4,000 U | 2,000 U | 5.00 U | 5.00 U | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 25.0 U | 1,000 U |
| 4-Chlorotoluene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 4-Methyl-2-pentanone | 5.00 U | 5.00 U | 50.0 U | 5.00 U | 4,000 U | 2,000 U | 5.00 U | 5.00 U | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 25.0 U | 1,000 U |
| Acetone | 25.0 U | 25.0 U | 250 U | 25.0 U | 20,000 U | 10,000 U | 25.0 U | 25.0 U | 125 U | 400 U | 125 U | 2,000 U | 2,500 U | 125 U | 5,000 U |
| Benzene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Bromobenzene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Bromochloromethane | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Bromoform | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Bromomethane | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Carbon Disulfide | NA | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Dibromomethane | NA | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Diisopropyl ether (DIPE) | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Ethyl Alcohol | 200 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Hexachlorobutadiene | NA | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Iodomethane | NA | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Isopropylbenzene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| m-,p-Xylene | 2.00 U | 2.00 U | 20.0 U | 2.00 U | 1,600 U | 800 U | 2.00 U | 2.00 U | 10.0 U | 32.0 U | 10.0 U | 160 U | 200 U | 10.0 U | 400 U |
| Methyl tert-butyl ether | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Naphthalene | 5.00 U | 5.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| n-Butylbenzene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| n-Propylbenzene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| o-Xylene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| p-Isopropyltoluene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| sec-Butylbenzene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Styrene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| tert-Butylbenzene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Toluene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 0.260 J | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |

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Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | PW-7S | PW-7S | MW-105D | MW-105S | MW-201D | MW-202D | HPT-01 | HPT-02 | HPT-02 | HPT-02 | HPT-03 | HPT-03 | HPT-03 | HPT-03 | HPT-04 |
|--------------------------------------|----------|----------|-------------|-------------|---------------|---------------|----------|----------|-------------|-------------|-------------|--------------|---------------|-------------|--------------|
| Sample Depth (Feet): | 15 - 22 | 15 - 22 | 39.3 - 46.3 | 13.5 - 23.5 | 25 - 40 | 25 - 40 | 18 - 20 | 10 - 12 | 16 - 18 | 16 - 18 | 9 - 11 | 16 - 18 | 22 - 24 | 30 - 32 | 16 - 18 |
| Date Collected: | 04/11/17 | 04/18/18 | 01/06/13 | 01/06/13 | 01/06/13 | 01/06/13 | 10/26/15 | 12/05/15 | 10/27/15 | 12/05/15 | 12/05/15 | 12/05/15 | 10/27/15 | 12/05/15 | 10/28/15 |
| trans-1,4-Dichloro-2-butene | NA | NA | 50.0 U | 5.00 U | 4,000 U | 2,000 U | 5.00 U | 5.00 U | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 25.0 U | 1,000 U |
| Vinyl Acetate | 10.0 U | 10.0 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | 3.00 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,1,2,2-Tetrachloroethane | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,1,2-Trichloroethane | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,1-Dichloroethane | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,1-Dichloroethene | 1.00 U | 1.00 U | 11.5 | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 42.0 J | 5.00 U | 200 U |
| 1,2,4-Trichlorobenzene | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,2-Dibromo-3-chloropropane | NA | 5.00 U | 50.0 U | 5.00 U | 4,000 U | 2,000 U | 5.00 U | 5.00 U | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 25.0 U | 1,000 U |
| 1,2-Dichlorobenzene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,2-Dichloroethane | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,2-Dichloropropane | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,3-Dichlorobenzene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| 1,4-Dichlorobenzene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Bromodichloromethane | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Carbon Tetrachloride | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Chlorobenzene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Chloroethane | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Chloroform | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Chloromethane | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| cis-1,3-Dichloropropene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Dibromochloromethane | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Dichlorodifluoromethane | 2.00 U | 2.00 U | 50.0 U | 5.00 U | 4,000 U | 2,000 U | 5.00 U | 5.00 U | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 25.0 U | 1,000 U |
| Methylene Chloride | 5.00 U | 5.00 U | 50.0 U | 5.00 U | 4,000 U | 2,000 U | 5.00 U | 5.00 U | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 25.0 U | 1,000 U |
| trans-1,3-Dichloropropene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| Trichlorofluoromethane | 2.00 U | 2.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| cis-1,2-Dichloroethene | 1.00 U | 1.00 U | 399 | 1.00 U | 13,200 | 400 U | 26.2 | 1.00 U | 33.0 | 331 | 124 | 1,560 | 1,190 | 123 | 4,150 |
| Tetrachloroethene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 400 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 5.00 U | 200 U |
| trans-1,2-Dichloroethene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 800 U | 124 J | 0.620 J | 1.00 U | 1.55 J | 30.9 | 9.75 | 43.2 J | 100 U | 5.00 U | 142 J |
| Trichloroethene | 1.00 U | 1.00 U | 10.0 U | 1.00 U | 4,530 | 400 U | 1.00 U | 0.850 J | 57.9 | 38.7 | 61.0 | 259 | 375 | 6.20 | 286 |
| Vinyl Chloride | 1.00 U | 1.00 U | 51.3 | 1.00 U | 800 U | 4,680 | 0.550 J | 1.00 U | 5.00 U | 19.7 | 5.00 U | 175 | 239 | 6.70 | 1,540 |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | |
| Iron | NA | NA | 500 | 5,100 | 5,500 | 17,000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | 58.0 | 21.0 | 69.0 | 440 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | |
| Iron | NA | NA | 180 | 820 | 2,300 | 16,000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | 65.0 | 13.0 J | 62.0 | 480 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | 2.9 | 6 | 2.3 | 760 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-05 | HPT-22 | HPT-22 | HPT-22 | HPT-24 | HPT-24 | HPT-24 | HPT-24 | HPT-25 | HPT-25 | HPT-25 | HPT-25 | HPT-25 |
|--|----------|---------------------|-------------------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 17 - 21 | 16 - 18 | 27 - 29 | 38 - 40 | 12 - 14 | 18 - 20 | 24 - 26 | 40 - 42 | 13 - 15 | 20 - 22 | 24 - 26 | 27 - 29 | 40 - 42 |
| Date Collected: | 10/28/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/02/15 | 12/02/15 | 12/03/15 | 12/03/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/03/15 | 12/03/15 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,1-Dichloropropene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,2,3-Trichlorobenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,2,3-Trichloropropane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,2,4-Trimethylbenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,2-Dibromoethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,3,5-Trimethylbenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,3-Dichloropropane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 2,2-Dichloropropane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 2-Butanone | 1,000 U | 25,000 U [25,000 U] | 5,000 U [5,000 U] | 10,000 U | 125,000 U | 5,000 U | 125 U | 50,000 U | 1,000 U | 500 U | 25.0 U | 5,000 U | 1,250 U |
| 2-Chlorotoluene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 2-Hexanone | 200 U | 5,000 U [5,000 U] | 1,000 U [1,000 U] | 2,000 U | 25,000 U | 1,000 U | 25.0 U | 10,000 U | 200 U | 100 U | 5.00 U | 1,000 U | 250 U |
| 4-Chlorotoluene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 4-Methyl-2-pentanone | 200 U | 5,000 U [5,000 U] | 1,000 U [1,000 U] | 2,000 U | 25,000 U | 1,000 U | 25.0 U | 10,000 U | 200 U | 100 U | 5.00 U | 1,000 U | 250 U |
| Acetone | 1,000 U | 25,000 U [25,000 U] | 5,000 U [5,000 U] | 10,000 U | 125,000 U | 5,000 U | 125 U | 50,000 U | 1,000 U | 500 U | 3.40 J | 5,000 U | 1,250 U |
| Benzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 0.210 J | 200 U | 50.0 U |
| Bromobenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Bromochloromethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Bromoform | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Bromomethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Carbon Disulfide | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 3.75 J | 2,000 U | 40.0 U | 20.0 U | 0.630 J | 200 U | 50.0 U |
| Dibromomethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Diisopropyl ether (DIPE) | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Hexachlorobutadiene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Iodomethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Isopropylbenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| m-,p-Xylene | 80.0 U | 2,000 U [2,000 U] | 400 U [400 U] | 800 U | 10,000 U | 400 U | 10.0 U | 4,000 U | 80.0 U | 40.0 U | 2.00 U | 400 U | 100 U |
| Methyl tert-butyl ether | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 0.670 J | 200 U | 50.0 U |
| Naphthalene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| n-Butylbenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| n-Propylbenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| o-Xylene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| p-Isopropyltoluene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| sec-Butylbenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Styrene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| tert-Butylbenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Toluene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 0.550 J | 2,000 U | 40.0 U | 20.0 U | 0.210 J | 200 U | 50.0 U |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-05 | HPT-22 | HPT-22 | HPT-22 | HPT-24 | HPT-24 | HPT-24 | HPT-24 | HPT-25 | HPT-25 | HPT-25 | HPT-25 | HPT-25 |
|--------------------------------------|------------|------------------------|-----------------------|---------------|----------------|---------------|-------------|----------------|---------------|---------------|-------------|--------------|---------------|
| Sample Depth (Feet): | 17 - 21 | 16 - 18 | 27 - 29 | 38 - 40 | 12 - 14 | 18 - 20 | 24 - 26 | 40 - 42 | 13 - 15 | 20 - 22 | 24 - 26 | 27 - 29 | 40 - 42 |
| Date Collected: | 10/28/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/02/15 | 12/02/15 | 12/03/15 | 12/03/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/03/15 | 12/03/15 |
| trans-1,4-Dichloro-2-butene | 200 U | 5,000 U [5,000 U] | 1,000 U [1,000 U] | 2,000 U | 25,000 U | 1,000 U | 25.0 U | 10,000 U | 200 U | 100 U | 5.00 U | 1,000 U | 250 U |
| Vinyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,1,2,2-Tetrachloroethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,1,2-Trichloroethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,1-Dichloroethane | 40.0 U | 800 J [810 J] | 200 U [200 U] | 400 U | 2,100 J | 164 J | 1.05 J | 2,000 U | 11.2 J | 12.8 J | 1.85 | 200 U | 50.0 U |
| 1,1-Dichloroethene | 40.0 U | 920 J [1,030] | 200 U [200 U] | 76.0 J | 1,950 J | 60.0 J | 0.650 J | 280 J | 40.0 U | 20.0 U | 0.400 J | 200 U | 7.50 J |
| 1,2,4-Trichlorobenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,2-Dibromo-3-chloropropane | 200 U | 5,000 U [5,000 U] | 1,000 U [1,000 U] | 2,000 U | 25,000 U | 1,000 U | 25.0 U | 10,000 U | 200 U | 100 U | 5.00 U | 1,000 U | 250 U |
| 1,2-Dichlorobenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,2-Dichloroethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,2-Dichloropropane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,3-Dichlorobenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| 1,4-Dichlorobenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Bromodichloromethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Carbon Tetrachloride | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Chlorobenzene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Chloroethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Chloroform | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Chloromethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| cis-1,3-Dichloropropene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Dibromochloromethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Dichlorodifluoromethane | 200 U | 5,000 U [5,000 U] | 1,000 U [1,000 U] | 2,000 U | 25,000 U | 1,000 U | 25.0 U | 10,000 U | 200 U | 100 U | 5.00 U | 1,000 U | 250 U |
| Methylene Chloride | 200 U | 5,000 U [5,000 U] | 1,000 U [1,000 U] | 2,000 U | 25,000 U | 1,000 U | 25.0 U | 10,000 U | 200 U | 100 U | 5.00 U | 1,000 U | 250 U |
| trans-1,3-Dichloropropene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| Trichlorofluoromethane | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| cis-1,2-Dichloroethene | 40.0 U | 4,910 [5,120] | 200 U [40.0 J] | 8,960 | 11,600 | 4,080 | 26.0 | 20,300 | 770 | 607 | 12.3 | 200 U | 1,640 |
| Tetrachloroethene | 40.0 U | 1,000 U [1,000 U] | 200 U [200 U] | 400 U | 5,000 U | 200 U | 5.00 U | 2,000 U | 40.0 U | 20.0 U | 1.00 U | 200 U | 50.0 U |
| trans-1,2-Dichloroethene | 40.0 U | 1,000 U [1,000 U] | 24.0 J [200 U] | 72.0 J | 5,000 U | 200 U | 0.850 J | 2,000 U | 13.6 J | 9.00 J | 0.910 J | 200 U | 50.0 U |
| Trichloroethene | 484 | 28,600 [34,600] | 200 U [68.0 J] | 464 | 261,000 | 3,030 | 41.3 | 41,700 | 54.4 | 46.8 | 7.74 | 200 U | 50.0 U |
| Vinyl Chloride | 40.0 U | 240 J [250 J] | 4,240 [4,200] | 1,740 | 5,000 U | 200 U | 8.60 | 1,800 J | 40.0 U | 20.0 U | 8.50 | 4,250 | 749 |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-26 | HPT-26 | HPT-26 | HPT-26 | HPT-26 | HPT-26 | HPT-27 | HPT-27 | HPT-27 | HPT-27 | HPT-27 | HPT-28 | HPT-28 |
|--|----------|----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 14 - 16 | 19 - 21 | 24 - 26 | 27 - 29 | 41 - 43 | 44 - 46 | 12 - 14 | 18 - 20 | 22 - 24 | 27 - 29 | 41 - 44 | 13 - 15 | 18 - 20 |
| Date Collected: | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/01/15 | 12/01/15 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichloropropane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,4-Trimethylbenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromoethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3,5-Trimethylbenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2,2-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Butanone | 25.0 U | 25.0 U | 0.940 J | 12,500 U | 500 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 12.3 J | 25.0 U |
| 2-Chlorotoluene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Hexanone | 5.00 U | 5.00 U | 5.00 U | 2,500 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 4-Chlorotoluene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 4-Methyl-2-pentanone | 5.00 U | 5.00 U | 5.00 U | 2,500 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Acetone | 25.0 U | 2.62 J | 2.13 J | 12,500 U | 500 U | 2.09 J | 3.90 J | 2.49 J | 25.0 U | 25.0 U | 38.4 | 8.16 J | 3.59 J |
| Benzene | 1.00 U | 1.00 U | 0.270 J | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.05 | 0.300 J | 1.00 U | 1.00 U |
| Bromobenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromochloromethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromoform | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromomethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Carbon Disulfide | 1.00 U | 1.14 | 2.92 | 500 U | 2.60 J | 0.520 J | 1.00 U | 1.00 U | 0.450 J | 1.00 U | 0.510 J | 1.00 U | 1.00 U |
| Dibromomethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Diisopropyl ether (DIPE) | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 0.160 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Hexachlorobutadiene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Iodomethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Isopropylbenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| m-,p-Xylene | 2.00 U | 0.150 J | 0.130 J | 1,000 U | 40.0 U | 0.370 J | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 0.160 J | 0.550 J |
| Methyl tert-butyl ether | 1.00 U | 1.00 U | 0.320 J | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.370 J | 1.00 U | 1.00 U | 1.00 U |
| Naphthalene | 1.00 U | 1.00 U | 1.04 | 500 U | 20.0 U | 0.120 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| n-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| n-Propylbenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| o-Xylene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 0.180 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| p-Isopropyltoluene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| sec-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Styrene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| tert-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Toluene | 1.00 U | 0.340 J | 0.450 J | 500 U | 20.0 U | 0.680 J | 1.00 U | 0.220 J | 1.00 U | 0.490 J | 0.420 J | 0.150 J | 1.00 U |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-26 | HPT-26 | HPT-26 | HPT-26 | HPT-26 | HPT-26 | HPT-27 | HPT-27 | HPT-27 | HPT-27 | HPT-27 | HPT-28 | HPT-28 |
|--------------------------------------|----------|----------|-------------|--------------|------------|-------------|----------|----------|----------|----------|-------------|----------|----------|
| Sample Depth (Feet): | 14 - 16 | 19 - 21 | 24 - 26 | 27 - 29 | 41 - 43 | 44 - 46 | 12 - 14 | 18 - 20 | 22 - 24 | 27 - 29 | 41 - 44 | 13 - 15 | 18 - 20 |
| Date Collected: | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/01/15 | 12/01/15 |
| trans-1,4-Dichloro-2-butene | 5.00 U | 5.00 U | 5.00 U | 2,500 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Vinyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2,2-Tetrachloroethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2-Trichloroethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloroethane | 1.00 U | 0.260 J | 3.13 | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 0.440 J | 1.06 | 3.99 | 1.00 U | 1.00 U |
| 1,1-Dichloroethene | 1.00 U | 0.250 J | 1.12 | 500 U | 5.00 J | 0.480 J | 1.00 U | 0.320 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,4-Trichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromo-3-chloropropane | 5.00 U | 5.00 U | 5.00 U | 2,500 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,2-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloroethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,4-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromodichloromethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Carbon Tetrachloride | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chlorobenzene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloroethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloroform | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloromethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| cis-1,3-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dibromochloromethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dichlorodifluoromethane | 5.00 U | 5.00 U | 5.00 U | 2,500 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Methylene Chloride | 5.00 U | 5.00 U | 5.00 U | 2,500 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| trans-1,3-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Trichlorofluoromethane | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| cis-1,2-Dichloroethene | 1.00 U | 1.00 U | 5.85 | 500 U | 533 | 34.3 | 1.00 U | 1.00 U | 1.75 | 0.110 J | 30.0 | 1.00 U | 1.00 U |
| Tetrachloroethene | 1.00 U | 1.00 U | 1.00 U | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| trans-1,2-Dichloroethene | 1.00 U | 1.00 U | 0.460 J | 500 U | 20.0 U | 0.240 J | 1.00 U | 1.00 U | 0.140 J | 0.200 J | 1.00 U | 1.00 U | 1.00 U |
| Trichloroethene | 1.00 U | 1.00 U | 0.620 J | 500 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.54 | 1.00 U | 0.790 J | 1.00 U | 0.630 J |
| Vinyl Chloride | 1.00 U | 1.00 U | 0.590 J | 7,000 | 161 | 54.9 | 1.00 U | 1.00 U | 0.250 J | 1.00 U | 32.1 | 1.00 U | 1.00 U |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-28 | HPT-28 | HPT-28 | HPT-29 | HPT-29 | HPT-29 | HPT-29 | HPT-29 | HPT-29 | HPT-29 | HPT-30 | HPT-30 | HPT-30 | HPT-30 |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 24 - 26 | 30 - 33 | 37 - 40 | 13 - 15 | 19 - 21 | 25 - 27 | 29 - 31 | 36 - 38 | 39 - 41 | 13 - 15 | 17 - 19 | 24 - 26 | 30 - 32 | |
| Date Collected: | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 11/30/15 | 11/30/15 | 12/01/15 | 12/01/15 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 1,1-Dichloropropene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 1,2,3-Trichlorobenzene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 1,2,3-Trichloropropane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 1,2,4-Trimethylbenzene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 0.420 J | 1.00 U | 1.00 U | 0.420 J | 1.00 U | 125 U |
| 1,2-Dibromoethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 1,3,5-Trimethylbenzene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 1,3-Dichloropropane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 2,2-Dichloropropane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 2-Butanone | 25.0 U | 20,000 U | 14.6 J | 25.0 U | 25.0 U | 25.0 U | 500 U | 125 U | 36.4 | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 3,130 U |
| 2-Chlorotoluene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 2-Hexanone | 5.00 U | 4,000 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 25.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 625 U |
| 4-Chlorotoluene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 4-Methyl-2-pentanone | 5.00 U | 4,000 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 25.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 625 U |
| Acetone | 25.0 U | 20,000 U | 9.86 J | 25.0 U | 25.0 U | 25.0 U | 500 U | 125 U | 49.6 | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 3,130 U |
| Benzene | 0.620 J | 800 U | 0.180 J | 1.00 U | 1.00 U | 0.820 J | 20.0 U | 0.750 J | 0.450 J | 1.00 U | 1.00 U | 0.750 J | 1.00 U | 125 U |
| Bromobenzene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Bromochloromethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Bromoform | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Bromomethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Carbon Disulfide | 2.00 | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Dibromomethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Diisopropyl ether (DIPE) | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 0.430 J | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Hexachlorobutadiene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Iodomethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Isopropylbenzene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| m-,p-Xylene | 2.00 U | 1,600 U | 2.00 U | 2.00 U | 0.620 J | 0.560 J | 40.0 U | 10.0 U | 0.640 J | 2.00 U | 2.00 U | 0.670 J | 2.00 U | 250 U |
| Methyl tert-butyl ether | 1.02 | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Naphthalene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 0.690 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| n-Butylbenzene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| n-Propylbenzene | 0.290 J | 800 U | 1.00 U | 1.00 U | 1.00 U | 0.300 J | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| o-Xylene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 0.450 J | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 0.480 J | 1.00 U | 125 U |
| p-Isopropyltoluene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| sec-Butylbenzene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Styrene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| tert-Butylbenzene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Toluene | 0.650 J | 800 U | 13.4 | 1.00 U | 0.190 J | 2.18 | 88.8 | 110 | 43.6 | 1.00 U | 1.00 U | 0.270 J | 1.00 U | 125 U |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-28 | HPT-28 | HPT-28 | HPT-29 | HPT-29 | HPT-29 | HPT-29 | HPT-29 | HPT-29 | HPT-29 | HPT-30 | HPT-30 | HPT-30 | HPT-30 |
|--------------------------------------|-------------|---------------|-------------|----------|----------|----------|------------|---------------|-------------|----------|----------|-------------|--------------|----------|
| Sample Depth (Feet): | 24 - 26 | 30 - 33 | 37 - 40 | 13 - 15 | 19 - 21 | 25 - 27 | 29 - 31 | 36 - 38 | 39 - 41 | 13 - 15 | 17 - 19 | 24 - 26 | 30 - 32 | |
| Date Collected: | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 11/30/15 | 11/30/15 | 12/01/15 | 12/01/15 |
| trans-1,4-Dichloro-2-butene | 5.00 U | 4,000 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 25.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 625 U |
| Vinyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 1,1,2,2-Tetrachloroethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 1,1,2-Trichloroethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 1,1-Dichloroethane | 0.720 J | 800 U | 1.36 | 1.00 U | 1.00 U | 1.78 | 20.0 U | 5.00 U | 0.370 J | 1.00 U | 0.280 J | 3.84 | 1.00 U | 125 U |
| 1,1-Dichloroethene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 0.750 J | 1.00 U | 1.00 U | 125 U |
| 1,2,4-Trichlorobenzene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 1,2-Dibromo-3-chloropropane | 5.00 U | 4,000 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 25.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 625 U |
| 1,2-Dichlorobenzene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 1,2-Dichloroethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 1,2-Dichloropropane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 1,3-Dichlorobenzene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| 1,4-Dichlorobenzene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Bromodichloromethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Carbon Tetrachloride | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Chlorobenzene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Chloroethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Chloroform | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Chloromethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| cis-1,3-Dichloropropene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Dibromochloromethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Dichlorodifluoromethane | 5.00 U | 4,000 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 25.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 625 U |
| Methylene Chloride | 5.00 U | 4,000 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 100 U | 25.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 625 U |
| trans-1,3-Dichloropropene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Trichlorofluoromethane | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| cis-1,2-Dichloroethene | 1.00 U | 11,400 | 1.11 | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 3.34 | 1.00 U | 0.930 J | 3.66 | 2,270 | |
| Tetrachloroethene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 20.0 U | 5.00 U | 2.88 | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| trans-1,2-Dichloroethene | 1.00 U | 800 U | 1.00 U | 1.00 U | 1.00 U | 2.98 | 20.0 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 125 U |
| Trichloroethene | 1.00 U | 800 U | 1.00 U | 1.00 U | 0.250 J | 1.00 U | 20.0 U | 5.00 U | 1.39 | 1.00 U | 0.960 J | 0.320 J | 1.00 U | 125 U |
| Vinyl Chloride | 7.27 | 14,900 | 2.02 | 1.00 U | 1.00 U | 1.04 | 426 | 3.40 J | 2.27 | 1.00 U | 1.00 U | 2.54 | 1.00 U | 125 U |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-30 | HPT-30 | HPT-31 | HPT-31 | HPT-31 | HPT-31 | HPT-31 | HPT-31 | HPT-32 | HPT-32 | HPT-32 | HPT-32 | HPT-32 | HPT-33 |
|--|----------|----------|-------------------|----------|----------|----------|----------|----------|-------------------|----------|----------|----------|----------|--------|
| Sample Depth (Feet): | 33 - 35 | 40 - 42 | 12 - 14 | 18 - 20 | 23 - 25 | 29 - 31 | 32 - 34 | 9 - 11 | 15 - 17 | 22 - 24 | 28 - 30 | 32 - 34 | 8 - 10 | |
| Date Collected: | 12/01/15 | 12/01/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| 1,1-Dichloropropene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| 1,2,3-Trichlorobenzene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| 1,2,3-Trichloropropane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| 1,2,4-Trimethylbenzene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 28.8 J | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| 1,2-Dibromoethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| 1,3,5-Trimethylbenzene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| 1,3-Dichloropropane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| 2,2-Dichloropropane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| 2-Butanone | 500 U | 25.0 U | 2.26 J [1.38 J] | 500 U | 100 U | 2,000 U | 1,000 U | 4,000 U | 5,000 U [6,250 U] | 250 U | 1,000 U | 25.0 U | 5,000 U | |
| 2-Chlorotoluene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| 2-Hexanone | 100 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 400 U | 200 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 200 U | 5.00 U | 1,000 U | |
| 4-Chlorotoluene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| 4-Methyl-2-pentanone | 100 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 400 U | 200 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 200 U | 5.00 U | 1,000 U | |
| Acetone | 500 U | 25.0 U | 4.06 J [2.19 J] | 500 U | 100 U | 2,000 U | 1,000 U | 4,000 U | 5,000 U [6,250 U] | 250 U | 1,000 U | 25.0 U | 5,000 U | |
| Benzene | 20.0 U | 0.200 J | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 0.300 J | 200 U | |
| Bromobenzene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| Bromochloromethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| Bromoform | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| Bromomethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| Carbon Disulfide | 20.0 U | 1.00 U | 0.510 J [0.160 J] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| Dibromomethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| Diisopropyl ether (DIPE) | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Ethylbenzene | 20.0 U | 0.500 J | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| Hexachlorobutadiene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| Iodomethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| Isopropylbenzene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| m-,p-Xylene | 40.0 U | 0.830 J | 2.00 U [2.00 U] | 40.0 U | 8.00 U | 160 U | 80.0 U | 320 U | 400 U [500 U] | 20.0 U | 80.0 U | 2.00 U | 400 U | |
| Methyl tert-butyl ether | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| Naphthalene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 1,140 | 200 U [250 U] | 10.0 U | 40.0 U | 0.700 J | 200 U | |
| n-Butylbenzene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| n-Propylbenzene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| o-Xylene | 20.0 U | 0.540 J | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| p-Isopropyltoluene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| sec-Butylbenzene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| Styrene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U | |
| tert-Butylbenzene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.89 | 200 U | |
| Toluene | 20.0 U | 1.30 | 0.330 J [0.250 J] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 0.330 J | 200 U | |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-30 | HPT-30 | HPT-31 | HPT-31 | HPT-31 | HPT-31 | HPT-31 | HPT-32 | HPT-32 | HPT-32 | HPT-32 | HPT-32 | HPT-33 |
|--------------------------------------|------------|----------|------------------|-------------|---------------|--------------|------------|----------|------------------------|---------------|--------------|----------|--------------|
| Sample Depth (Feet): | 33 - 35 | 40 - 42 | 12 - 14 | 18 - 20 | 23 - 25 | 29 - 31 | 32 - 34 | 9 - 11 | 15 - 17 | 22 - 24 | 28 - 30 | 32 - 34 | 8 - 10 |
| Date Collected: | 12/01/15 | 12/01/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 |
| trans-1,4-Dichloro-2-butene | 100 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 400 U | 200 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 200 U | 5.00 U | 1,000 U |
| Vinyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| 1,1,2,2-Tetrachloroethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| 1,1,2-Trichloroethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| 1,1-Dichloroethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 471 | 7.24 | 80.0 U | 40.0 U | 160 U | 78.0 J [95.0 J] | 10.0 U | 40.0 U | 0.170 J | 1,090 |
| 1,1-Dichloroethene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 41.6 | 11.2 | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 1,070 |
| 1,2,4-Trichlorobenzene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| 1,2-Dibromo-3-chloropropane | 100 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 400 U | 200 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 200 U | 5.00 U | 1,000 U |
| 1,2-Dichlorobenzene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| 1,2-Dichloroethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| 1,2-Dichloropropane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| 1,3-Dichlorobenzene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| 1,4-Dichlorobenzene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| Bromodichloromethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| Carbon Tetrachloride | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| Chlorobenzene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| Chloroethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| Chloroform | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| Chloromethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| cis-1,3-Dichloropropene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| Dibromochloromethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| Dichlorodifluoromethane | 100 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 400 U | 200 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 200 U | 5.00 U | 1,000 U |
| Methylene Chloride | 100 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 400 U | 200 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 200 U | 5.00 U | 1,000 U |
| trans-1,3-Dichloropropene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| Trichlorofluoromethane | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| cis-1,2-Dichloroethene | 381 | 9.21 | 1.00 U [1.00 U] | 15.2 J | 82.6 | 2,390 | 801 | 160 U | 4,650 [6,140] | 217 | 1,000 | 16.5 | 1,780 |
| Tetrachloroethene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 80.0 U | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| trans-1,2-Dichloroethene | 20.0 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 2.16 J | 12.0 J | 40.0 U | 160 U | 200 U [250 U] | 10.0 U | 40.0 U | 1.00 U | 200 U |
| Trichloroethene | 20.0 U | 0.370 J | 0.380 J [1.00 U] | 20.0 U | 18.0 | 80.0 U | 40.0 U | 160 U | 268 [363] | 5.20 J | 832 | 4.95 | 200 U |
| Vinyl Chloride | 134 | 1.68 | 1.00 U [1.00 U] | 20.0 U | 3.84 J | 80.0 U | 40.0 U | 160 U | 844 [1,130] | 33.5 | 40.0 | 1.19 | 4,620 |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-33 | HPT-33 | HPT-33 | HPT-33 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 |
|--|-----------|----------|----------|----------|----------|----------|----------|------------|----------|---------------|----------|----------------|
| Sample Depth (Feet): | 14 - 16 | 20 - 22 | 28 - 30 | 32 - 34 | 11 - 13 | 17 - 19 | 21 - 23 | 30 - 32 | 37 - 39 | 38 - 40 | 39 - 41 | 42 - 44 |
| Date Collected: | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,1-Dichloropropene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,2,3-Trichloropropane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,2,4-Trimethylbenzene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 0.460 J | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 0.410 J |
| 1,2-Dibromoethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,3,5-Trimethylbenzene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 0.420 J | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,3-Dichloropropane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 2,2-Dichloropropane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 2-Butanone | 125,000 U | 1,250 U | 1,000 U | 25.0 U | 25.0 U | 50,000 U | 1,000 U | 1,000 U | 25.0 U | 1,000 U | 10,000 U | 25.0 U |
| 2-Chlorotoluene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 2-Hexanone | 25,000 U | 250 U | 200 U | 5.00 U | 5.00 U | 10,000 U | 200 U | 200 U | 5.00 U | 200 U | 2,000 U | 5.00 U |
| 4-Chlorotoluene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 4-Methyl-2-pentanone | 25,000 U | 250 U | 200 U | 5.00 U | 5.00 U | 10,000 U | 200 U | 200 U | 5.00 U | 200 U | 2,000 U | 5.00 U |
| Acetone | 125,000 U | 1,250 U | 1,000 U | 25.0 U | 25.0 U | 50,000 U | 1,000 U | 1,000 U | 25.0 U | 1,000 U | 10,000 U | 25.0 U |
| Benzene | 5,000 U | 50.0 U | 40.0 U | 0.540 J | 0.280 J | 2,000 U | 40.0 U | 40.0 U | 0.260 J | 40.0 U | 400 U | 0.170 J |
| Bromobenzene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Bromochloromethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Bromoform | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Bromomethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Carbon Disulfide | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 0.700 J | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Dibromomethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Diisopropyl ether (DIPE) | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 0.520 J | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 0.500 J |
| Hexachlorobutadiene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Iodomethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Isopropylbenzene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 0.560 J | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| m-,p-Xylene | 10,000 U | 100 U | 80.0 U | 0.560 J | 0.980 J | 4,000 U | 80.0 U | 80.0 U | 0.550 J | 80.0 U | 800 U | 0.690 J |
| Methyl tert-butyl ether | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Naphthalene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 383 | 1.00 U | 31.2 J | 400 U | 0.710 J |
| n-Butylbenzene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| n-Propylbenzene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 0.240 J | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| o-Xylene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 0.850 J | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| p-Isopropyltoluene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| sec-Butylbenzene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Styrene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| tert-Butylbenzene | 5,000 U | 50.0 U | 40.0 U | 0.810 J | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Toluene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 0.730 J | 2,000 U | 40.0 U | 40.0 U | 0.160 J | 40.0 U | 400 U | 0.820 J |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-33 | HPT-33 | HPT-33 | HPT-33 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 | HPT-34 |
|--------------------------------------|----------------|--------------|-------------|----------|-------------|---------------|--------------|-------------|-------------|------------|--------------|-------------|
| Sample Depth (Feet): | 14 - 16 | 20 - 22 | 28 - 30 | 32 - 34 | 11 - 13 | 17 - 19 | 21 - 23 | 30 - 32 | 37 - 39 | 38 - 40 | 39 - 41 | 42 - 44 |
| Date Collected: | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 |
| trans-1,4-Dichloro-2-butene | 25,000 U | 250 U | 200 U | 5.00 U | 5.00 U | 10,000 U | 200 U | 200 U | 5.00 U | 200 U | 2,000 U | 5.00 U |
| Vinyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,1,2,2-Tetrachloroethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,1,2-Trichloroethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,1-Dichloroethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.77 | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,1-Dichloroethene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,2,4-Trichlorobenzene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,2-Dibromo-3-chloropropane | 25,000 U | 250 U | 200 U | 5.00 U | 5.00 U | 10,000 U | 200 U | 200 U | 5.00 U | 200 U | 2,000 U | 5.00 U |
| 1,2-Dichlorobenzene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,2-Dichloroethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,2-Dichloropropane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,3-Dichlorobenzene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| 1,4-Dichlorobenzene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Bromodichloromethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Carbon Tetrachloride | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Chlorobenzene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Chloroethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Chloroform | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Chloromethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| cis-1,3-Dichloropropene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Dibromochloromethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Dichlorodifluoromethane | 25,000 U | 250 U | 200 U | 5.00 U | 5.00 U | 10,000 U | 200 U | 200 U | 5.00 U | 200 U | 2,000 U | 5.00 U |
| Methylene Chloride | 25,000 U | 250 U | 200 U | 5.00 U | 5.00 U | 10,000 U | 200 U | 200 U | 5.00 U | 200 U | 2,000 U | 5.00 U |
| trans-1,3-Dichloropropene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Trichlorofluoromethane | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| cis-1,2-Dichloroethene | 109,000 | 1,090 | 494 | 1.83 | 0.840 J | 52,700 | 1,080 | 90.8 | 2.39 | 578 | 576 | 22.9 |
| Tetrachloroethene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| trans-1,2-Dichloroethene | 5,000 U | 50.0 U | 40.0 U | 1.00 U | 1.00 U | 2,000 U | 40.0 U | 40.0 U | 1.00 U | 40.0 U | 400 U | 1.00 U |
| Trichloroethene | 164,000 | 473 | 908 | 1.74 | 1.00 U | 64,200 | 114 | 79.6 | 5.42 | 685 | 7,400 | 46.8 |
| Vinyl Chloride | 3,200 J | 55.5 | 42.8 | 1.00 U | 6.69 | 2,640 | 83.2 | 40.0 U | 1.00 U | 40.0 U | 400 U | 0.670 J |
| Inorganics - Total (µg/L) | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 3
Summary of Groundwater Sample Analytical Results from 2013-2018
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

Notes:

mg/L = milligrams per liter
NA = not applicable
µg/L = micrograms per liter

Laboratory Qualifiers:

B = Analyte was found in the associated blank, as well as in the sample.
J = Indicates an estimated value.
ND = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | Corp-01 1.5-2 05/06/15 | Corp-02 1.5-2 05/06/15 | Corp-03 1.5-2 05/06/15 | Corp-04 1.5-2 05/06/15 | Corp-05 1.5-2 05/06/15 | Corp-06 1.5-2 05/06/15 | MB1-01 0.5 - 1.0 07/14/15 | MB1-02 1.0 - 1.5 07/14/15 | MB1-03 1.5 - 2.0 07/14/15 | MB1-04 1.0 - 1.5 07/14/15 | MB1-05 1.5 - 2.0 07/14/15 |
|---|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,1-Dichloropropene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,2,3-Trichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,2,3-Trichloropropane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,2,4-Trimethylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,2-Dibromoethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,3,5-Trimethylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,3-Dichloropropane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 2,2-Dichloropropane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 2-Butanone | 1.88 J | 14.2 J | 21.0 U | 23.3 U | 4.54 J | 23.8 U | 2.55 J | 1.82 J | 2.64 J | 3.14 J | 24.1 U |
| 2-Chlorotoluene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 2-Hexanone | 11.0 U | 10.8 U | 10.5 U | 11.7 U | 10.3 U | 11.9 U | 12.0 U | 11.6 U | 11.2 U | 12.6 U | 12.1 U |
| 4-Chlorotoluene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 4-Methyl-2-pentanone | 11.0 U | 10.8 U | 10.5 U | 11.7 U | 10.3 U | 11.9 U | 12.0 U | 11.6 U | 11.2 U | 12.6 U | 12.1 U |
| Acetone | 15.0 J | 60.0 | 7.30 J | 5.67 J | 44.7 | 6.90 J | 18.9 J | 14.4 J | 17.9 J | 17.9 J | 8.97 J |
| Benzene | 4.41 U | 4.34 U | 4.21 U | 2.35 J | 4.12 U | 2.31 J | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Bromobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Bromochloromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Bromoform | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Bromomethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Carbon Disulfide | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Diisopropyl ether (DIPE) | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Ethylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Hexachlorobutadiene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Iodomethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Isopropylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| m-,p-Xylene | 8.83 U | 8.67 U | 8.41 U | 9.34 U | 8.24 U | 9.51 U | 9.58 U | 9.28 U | 8.98 U | 10.0 U | 9.65 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| n-Butylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| n-Propylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| o-Xylene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| p-Isopropyltoluene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| sec-Butylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | Corp-01 1.5-2 05/06/15 | Corp-02 1.5-2 05/06/15 | Corp-03 1.5-2 05/06/15 | Corp-04 1.5-2 05/06/15 | Corp-05 1.5-2 05/06/15 | Corp-06 1.5-2 05/06/15 | MB1-01 0.5 - 1.0 07/14/15 | MB1-02 1.0 - 1.5 07/14/15 | MB1-03 1.5 - 2.0 07/14/15 | MB1-04 1.0 - 1.5 07/14/15 | MB1-05 1.5 - 2.0 07/14/15 |
|---|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Styrene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 1.42 J | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| tert-Butylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Toluene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 0.925 J | 5.02 U | 0.974 J |
| trans-1,4-Dichloro-2-butene | 22.1 U | 21.7 U | 21.0 U | 23.3 U | 20.6 U | 23.8 U | 23.9 U | 23.2 U | 22.4 U | 25.1 U | 24.1 U |
| Xylenes (total) | 8.83 U | 8.67 U | 8.41 U | 9.34 U | 8.24 U | 9.51 U | 9.58 U | 9.28 U | 8.98 U | 10.0 U | 9.65 U |
| 1,1,1-Trichloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 15.0 | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,1,2,2-Tetrachloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,1-Dichloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,1-Dichloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,2,4-Trichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,2-Dibromo-3-chloropropane | 26.5 U | 26.0 U | 25.2 U | 28.0 U | 24.7 U | 28.5 U | 28.7 U | 27.8 U | 26.9 U | 30.1 U | 28.9 U |
| 1,2-Dichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,2-Dichloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,2-Dichloropropane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,3-Dichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| 1,4-Dichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Bromodichloromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Carbon Tetrachloride | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Chlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Chloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Chloroform | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Chloromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| cis-1,3-Dichloropropene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Dibromochloromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Dichlorodifluoromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Methylene Chloride | 17.7 U | 17.3 U | 16.8 U | 18.7 U | 16.5 U | 19.0 U | 19.2 U | 18.6 U | 18.0 U | 20.1 U | 19.3 U |
| trans-1,3-Dichloropropene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Trichlorofluoromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| cis-1,2-Dichloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Tetrachloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| trans-1,2-Dichloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Trichloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.17 J | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Vinyl Chloride | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-06 | MB1-07 | MB1-08 | MB1-09 | MB1-10 | MB1-11 | MB1-12 | MB1-13 | MB1-14 | MB1-15 | MB1-16 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.0 - 1.5 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 |
| Date Collected: | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,1-Dichloropropene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,2,3-Trichlorobenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,2,3-Trichloropropane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,2,4-Trimethylbenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,2-Dibromoethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,3,5-Trimethylbenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,3-Dichloropropane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 2,2-Dichloropropane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 2-Butanone | 24.3 U | 23.7 U | 23.3 U | 22.6 U | 26.0 U | 24.3 U | 24.7 U | 23.4 U | 23.7 U | 26.5 U | 25.3 U |
| 2-Chlorotoluene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 2-Hexanone | 12.2 U | 11.9 U | 11.6 U | 11.3 U | 13.0 U | 12.1 U | 12.4 U | 11.7 U | 11.9 U | 13.3 U | 12.6 U |
| 4-Chlorotoluene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 4-Methyl-2-pentanone | 12.2 U | 11.9 U | 11.6 U | 11.3 U | 13.0 U | 12.1 U | 12.4 U | 11.7 U | 11.9 U | 13.3 U | 12.6 U |
| Acetone | 6.66 J | 6.45 J | 10.8 J | 9.43 J | 51.9 U | 11.2 J | 10.6 J | 15.7 J | 18.1 J | 17.8 J | 15.0 J |
| Benzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Bromobenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Bromochloromethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Bromoform | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Bromomethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Carbon Disulfide | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Diisopropyl ether (DIPE) | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Ethylbenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Hexachlorobutadiene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Iodomethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Isopropylbenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| m-,p-Xylene | 9.73 U | 9.49 U | 9.30 U | 9.03 U | 10.4 U | 9.71 U | 9.90 U | 9.38 U | 9.48 U | 10.6 U | 10.1 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| n-Butylbenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| n-Propylbenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| o-Xylene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| p-Isopropyltoluene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| sec-Butylbenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-06 | MB1-07 | MB1-08 | MB1-09 | MB1-10 | MB1-11 | MB1-12 | MB1-13 | MB1-14 | MB1-15 | MB1-16 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.0 - 1.5 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 |
| Date Collected: | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 |
| Styrene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| tert-Butylbenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Toluene | 1.27 J | 4.75 U | 4.65 U | 0.966 J | 1.17 J | 1.20 J | 1.19 J | 1.15 J | 4.74 U | 5.30 U | 5.06 U |
| trans-1,4-Dichloro-2-butene | 24.3 U | 23.7 U | 23.3 U | 22.6 U | 26.0 U | 24.3 U | 24.7 U | 23.4 U | 23.7 U | 26.5 U | 25.3 U |
| Xylenes (total) | 9.73 U | 9.49 U | 9.30 U | 9.03 U | 10.4 U | 9.71 U | 9.90 U | 9.38 U | 9.48 U | 10.6 U | 10.1 U |
| 1,1,1-Trichloroethane | 4.86 U | 1.67 J | 32.2 | 12.9 | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 1.36 J |
| 1,1,2,2-Tetrachloroethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,1-Dichloroethane | 4.86 U | 4.75 U | 4.72 | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,1-Dichloroethene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,2,4-Trichlorobenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,2-Dibromo-3-chloropropane | 29.2 U | 28.5 U | 27.9 U | 27.1 U | 31.1 U | 29.1 U | 29.7 U | 28.1 U | 28.4 U | 31.8 U | 30.3 U |
| 1,2-Dichlorobenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,2-Dichloroethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,2-Dichloropropane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,3-Dichlorobenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| 1,4-Dichlorobenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Bromodichloromethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Carbon Tetrachloride | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Chlorobenzene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Chloroethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Chloroform | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Chloromethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| cis-1,3-Dichloropropene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Dibromochloromethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Dichlorodifluoromethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Methylene Chloride | 19.5 U | 19.0 U | 18.6 U | 18.1 U | 20.8 U | 19.4 U | 19.8 U | 18.8 U | 19.0 U | 21.2 U | 20.2 U |
| trans-1,3-Dichloropropene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Trichlorofluoromethane | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| cis-1,2-Dichloroethene | 4.86 U | 4.75 U | 1.99 J | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Tetrachloroethene | 4.86 U | 4.75 U | 1.52 J | 1.18 J | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| trans-1,2-Dichloroethene | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Trichloroethene | 4.86 U | 4.75 U | 8.11 | 1.26 J | 5.19 U | 4.86 U | 1.04 J | 4.69 U | 4.74 U | 3.43 J | 14.9 |
| Vinyl Chloride | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U | 5.30 U | 5.06 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-17 | MB1-18 | MB1-19 | MB1-20 | MB1-21 | MB1-22 | MB1-23 | MB1-24 | MB1-25 | MB1-26 | MB1-27 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.5 - 2.0 | 0.5 - 1.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 |
| Date Collected: | 07/14/15 | 07/14/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,1-Dichloropropene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,2,3-Trichlorobenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,2,3-Trichloropropane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,2,4-Trimethylbenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,2-Dibromoethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,3,5-Trimethylbenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,3-Dichloropropane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 2,2-Dichloropropane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 2-Butanone | 21.8 U | 3.71 J | 21.8 U | 22.6 U | 27.0 U | 28.7 U | 22.9 U | 4.52 J | 26.9 U | 26.3 U | 26,900 U |
| 2-Chlorotoluene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 2-Hexanone | 10.9 U | 12.6 U | 10.9 U | 11.3 U | 13.5 U | 14.3 U | 11.5 U | 13.0 U | 13.4 U | 13.1 U | 5,380 U |
| 4-Chlorotoluene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 4-Methyl-2-pentanone | 10.9 U | 12.6 U | 10.9 U | 11.3 U | 13.5 U | 14.3 U | 11.5 U | 13.0 U | 13.4 U | 13.1 U | 5,380 U |
| Acetone | 13.7 J | 35.2 J | 14.4 J | 20.2 J | 17.2 J | 15.7 J | 9.01 J | 40.7 J | 30.9 J | 14.0 J | 26,900 U |
| Benzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 1.26 J | 1.34 J | 5.25 U | 1,080 U |
| Bromobenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Bromochloromethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Bromoform | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Bromomethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Carbon Disulfide | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Diisopropyl ether (DIPE) | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Ethylbenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Hexachlorobutadiene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Iodomethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Isopropylbenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| m-,p-Xylene | 8.71 U | 10.1 U | 8.74 U | 9.06 U | 10.8 U | 11.5 U | 9.18 U | 10.4 U | 10.7 U | 10.5 U | 2,150 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| n-Butylbenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| n-Propylbenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| o-Xylene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| p-Isopropyltoluene | 1.35 J | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| sec-Butylbenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-17 | MB1-18 | MB1-19 | MB1-20 | MB1-21 | MB1-22 | MB1-23 | MB1-24 | MB1-25 | MB1-26 | MB1-27 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------|
| Sample Depth (Feet): | 1.5 - 2.0 | 0.5 - 1.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 |
| Date Collected: | 07/14/15 | 07/14/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| Styrene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| tert-Butylbenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Toluene | 4.36 U | 1.23 J | 1.18 J | 1.23 J | 1.40 J | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| trans-1,4-Dichloro-2-butene | 21.8 U | 25.2 U | 21.8 U | 22.6 U | 27.0 U | 28.7 U | 22.9 U | 26.1 U | 26.9 U | 26.3 U | 5,380 U |
| Xylenes (total) | 8.71 U | 10.1 U | 8.74 U | 9.06 U | 10.8 U | 11.5 U | 9.18 U | 10.4 U | 10.7 U | 10.5 U | 2,150 U |
| 1,1,1-Trichloroethane | 4.36 U | 1.08 J | 4.37 U | 4.53 U | 5.39 U | 11.6 | 2.32 J | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,1,2,2-Tetrachloroethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,1-Dichloroethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 7.61 | 1.94 J | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,1-Dichloroethene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,2,4-Trichlorobenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,2-Dibromo-3-chloropropane | 26.1 U | 30.2 U | 26.2 U | 27.2 U | 32.3 U | 34.4 U | 27.5 U | 31.3 U | 32.2 U | 31.5 U | 5,380 U |
| 1,2-Dichlorobenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,2-Dichloroethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,2-Dichloropropane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,3-Dichlorobenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| 1,4-Dichlorobenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Bromodichloromethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Carbon Tetrachloride | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Chlorobenzene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Chloroethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Chloroform | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Chloromethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| cis-1,3-Dichloropropene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Dibromochloromethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Dichlorodifluoromethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 5,380 U |
| Methylene Chloride | 17.4 U | 20.1 U | 17.5 U | 18.1 U | 21.6 U | 23.0 U | 18.4 U | 20.9 U | 21.5 U | 21.0 U | 5,380 U |
| trans-1,3-Dichloropropene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Trichlorofluoromethane | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| cis-1,2-Dichloroethene | 4.36 U | 5.04 U | 27.1 | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 7,210 |
| Tetrachloroethene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| trans-1,2-Dichloroethene | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,230 |
| Trichloroethene | 1.14 J | 4.97 J | 43.9 | 1.38 J | 5.39 U | 21.8 | 13.7 | 5.22 U | 1.21 J | 2.51 J | 30,100 |
| Vinyl Chloride | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-28 | MB1-29 | MB1-30 | MB1-31 | MB1-32 | MB1-33 | MB1-34 | MB1-35 | MB1-36 | MB1-37A | MB1-37B |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 0.5 - 1.0 | 1.5 - 2.0 | 1.0 - 1.5 | 1.0 - 1.5 | 1.5 - 2.0 | 1.5 - 2.0 | 0.0 - 0.5 | 0.5 - 1.0 |
| Date Collected: | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 1,1-Dichloropropene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 1,2,3-Trichlorobenzene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 1,2,3-Trichloropropane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 1,2,4-Trimethylbenzene | 170 | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 210 | 57.2 U | 989 U |
| 1,2-Dibromoethane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 1,3,5-Trimethylbenzene | 41.2 J | 0.974 J | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 1,100 | 57.2 U | 989 U |
| 1,3-Dichloropropane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 2,2-Dichloropropane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 2-Butanone | 73.0 J | 24.6 U | 24.7 U | 22.9 J | 22.7 U | 24.2 U | 28,900 U | 21.7 J | 38.0 J | 1,430 U | 24,700 U |
| 2-Chlorotoluene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 2-Hexanone | 312 U | 12.3 U | 12.3 U | 14.2 U | 11.3 U | 12.1 U | 5,790 U | 11.0 U | 247 U | 286 U | 4,940 U |
| 4-Chlorotoluene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 4-Methyl-2-pentanone | 312 U | 12.3 U | 12.3 U | 5.13 J | 2.25 J | 12.1 U | 5,790 U | 11.0 U | 247 U | 286 U | 4,940 U |
| Acetone | 1,560 U | 11.1 J | 23.2 J | 119 | 7.76 J | 6.33 J | 28,900 U | 87.3 | 1,230 U | 1,430 U | 24,700 U |
| Benzene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Bromobenzene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Bromochloromethane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Bromoform | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Bromomethane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Carbon Disulfide | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Diisopropyl ether (DIPE) | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Ethylbenzene | 48.7 J | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 1.56 J | 6.90 J | 57.2 U | 989 U |
| Hexachlorobutadiene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Iodomethane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Isopropylbenzene | 23.7 J | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 401 | 57.2 U | 989 U |
| m-,p-Xylene | 287 | 9.84 U | 9.87 U | 1.75 J | 9.07 U | 9.69 U | 2,320 U | 3.64 J | 11.8 J | 114 U | 1,980 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 187 | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 68.0 | 57.2 U | 989 U |
| n-Butylbenzene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| n-Propylbenzene | 31.2 J | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 165 | 57.2 U | 989 U |
| o-Xylene | 137 | 4.92 U | 4.94 U | 0.978 J | 4.53 U | 4.84 U | 1,160 U | 1.66 J | 15.3 J | 57.2 U | 989 U |
| p-Isopropyltoluene | 118 | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,370 | 2.28 J | 106 | 57.2 U | 989 U |
| sec-Butylbenzene | 33.7 J | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 105 | 57.2 U | 989 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-28 | MB1-29 | MB1-30 | MB1-31 | MB1-32 | MB1-33 | MB1-34 | MB1-35 | MB1-36 | MB1-37A | MB1-37B |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|---------------|
| Sample Depth (Feet): | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 0.5 - 1.0 | 1.5 - 2.0 | 1.0 - 1.5 | 1.0 - 1.5 | 1.5 - 2.0 | 1.5 - 2.0 | 0.0 - 0.5 | 0.5 - 1.0 |
| Date Collected: | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| Styrene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| tert-Butylbenzene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Toluene | 497 | 4.92 U | 1.05 J | 3.19 J | 5.66 | 11.4 | 8,280 | 36.1 | 49.3 U | 57.2 U | 989 U |
| trans-1,4-Dichloro-2-butene | 312 U | 24.6 U | 24.7 U | 28.4 U | 22.7 U | 24.2 U | 5,790 U | 21.9 U | 247 U | 286 U | 4,940 U |
| Xylenes (total) | 424 | 9.84 U | 9.87 U | 2.73 J | 9.07 U | 9.69 U | 2,320 U | 5.30 J | 27.1 J | 114 U | 1,980 U |
| 1,1,1-Trichloroethane | 691 | 16.6 | 28.0 | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 191 | 41,600 |
| 1,1,2,2-Tetrachloroethane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 1,1-Dichloroethane | 12.5 J | 7.78 | 18.5 | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 1,1-Dichloroethene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 1,2,4-Trichlorobenzene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 1,2-Dibromo-3-chloropropane | 312 U | 29.5 U | 29.6 U | 34.1 U | 27.2 U | 29.1 U | 5,790 U | 26.3 U | 247 U | 286 U | 4,940 U |
| 1,2-Dichlorobenzene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 1,2-Dichloroethane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 1,2-Dichloropropane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 1,3-Dichlorobenzene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| 1,4-Dichlorobenzene | 62.4 U | 4.92 U | 4.94 U | 1.02 J | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Bromodichloromethane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Carbon Tetrachloride | 62.4 U | 2.33 J | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Chlorobenzene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Chloroethane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 13.4 | 49.3 U | 57.2 U | 989 U |
| Chloroform | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Chloromethane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| cis-1,3-Dichloropropene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Dibromochloromethane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Dichlorodifluoromethane | 312 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 5,790 U | 4.38 U | 247 U | 286 U | 4,940 U |
| Methylene Chloride | 312 U | 19.7 U | 19.7 U | 22.7 U | 18.1 U | 19.4 U | 5,790 U | 17.5 U | 247 U | 286 U | 4,940 U |
| trans-1,3-Dichloropropene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Trichlorofluoromethane | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| cis-1,2-Dichloroethene | 9.98 J | 3.75 J | 7.23 | 1.84 J | 4.53 U | 4.84 U | 1,160 U | 2.66 J | 178 | 57.2 U | 326 J |
| Tetrachloroethene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| trans-1,2-Dichloroethene | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Trichloroethene | 150 | 41.4 | 34.5 | 6.33 | 3.84 J | 3.30 J | 1,160 U | 1.70 J | 35.5 J | 449 | 16,400 |
| Vinyl Chloride | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U | 57.2 U | 989 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-37C | MB1-37D | MB1-38 | MB1-39 | MB1-40 | MB1-41 | MB1-42 | MB1-43 | MB1-44 | MB1-45 | MB1-46 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.0 - 1.5 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 |
| Date Collected: | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 1,1-Dichloropropene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 1,2,3-Trichlorobenzene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 1,2,3-Trichloropropane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 1,2,4-Trimethylbenzene | 329 | 318 | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 1,2-Dibromoethane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 1,3,5-Trimethylbenzene | 170 | 145 | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 1,3-Dichloropropane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 2,2-Dichloropropane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 2-Butanone | 1,190 U | 37.1 J | 1,160 U | 2,850 U | 22.5 U | 23.0 U | 22.5 U | 21.8 U | 23.4 U | 25.0 U | 7.74 J |
| 2-Chlorotoluene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 2-Hexanone | 238 U | 251 U | 231 U | 570 U | 11.2 U | 11.5 U | 11.2 U | 10.9 U | 11.7 U | 12.5 U | 11.2 U |
| 4-Chlorotoluene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 4-Methyl-2-pentanone | 238 U | 231 U | 231 U | 570 U | 11.2 U | 11.5 U | 11.2 U | 10.9 U | 11.7 U | 12.5 U | 11.2 U |
| Acetone | 1,190 U | 54.7 J | 1,160 U | 2,850 U | 10.8 J | 14.6 J | 8.05 J | 15.7 J | 9.76 J | 12.1 J | 49.2 |
| Benzene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Bromobenzene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Bromochloromethane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Bromoform | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Bromomethane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Carbon Disulfide | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Diisopropyl ether (DIPE) | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Ethylbenzene | 10.9 J | 33.1 J | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Hexachlorobutadiene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Iodomethane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Isopropylbenzene | 9.51 J | 12.0 J | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| m-,p-Xylene | 23.8 J | 37.6 J | 92.5 U | 228 U | 9.00 U | 9.21 U | 8.99 U | 8.71 U | 9.35 U | 10.0 U | 8.93 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 17.1 J | 80.8 | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| n-Butylbenzene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| n-Propylbenzene | 47.1 J | 64.2 | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| o-Xylene | 18.1 J | 25.1 J | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| p-Isopropyltoluene | 43.3 J | 161 | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| sec-Butylbenzene | 47.5 U | 29.1 J | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-37C | MB1-37D | MB1-38 | MB1-39 | MB1-40 | MB1-41 | MB1-42 | MB1-43 | MB1-44 | MB1-45 | MB1-46 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.0 - 1.5 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 |
| Date Collected: | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| Styrene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| tert-Butylbenzene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Toluene | 16.6 J | 132 | 46.3 U | 114 U | 0.828 J | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| trans-1,4-Dichloro-2-butene | 238 U | 251 U | 231 U | 570 U | 22.5 U | 23.0 U | 22.5 U | 21.8 U | 23.4 U | 25.0 U | 22.3 U |
| Xylenes (total) | 41.8 J | 62.7 J | 92.5 U | 228 U | 9.00 U | 9.21 U | 8.99 U | 8.71 U | 9.35 U | 10.0 U | 8.93 U |
| 1,1,1-Trichloroethane | 526 | 152 | 219 | 156 | 3.39 J | 4.61 U | 4.49 U | 4.36 U | 59.7 | 21.8 | 4.47 U |
| 1,1,2,2-Tetrachloroethane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 1,1-Dichloroethane | 47.5 U | 130 | 35.2 J | 22.8 J | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.81 | 4.47 U |
| 1,1-Dichloroethene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 1.15 J | 4.47 U |
| 1,2,4-Trichlorobenzene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 1,2-Dibromo-3-chloropropane | 238 U | 251 U | 231 U | 570 U | 27.0 U | 27.6 U | 27.0 U | 26.1 U | 28.1 U | 30.0 U | 26.8 U |
| 1,2-Dichlorobenzene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 1,2-Dichloroethane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 1,2-Dichloropropane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 1,3-Dichlorobenzene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| 1,4-Dichlorobenzene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Bromodichloromethane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Carbon Tetrachloride | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 8.41 | 5.00 U | 4.47 U |
| Chlorobenzene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Chloroethane | 47.5 U | 52.2 | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Chloroform | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Chloromethane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| cis-1,3-Dichloropropene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Dibromochloromethane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Dichlorodifluoromethane | 238 U | 251 U | 231 U | 570 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Methylene Chloride | 238 U | 251 U | 231 U | 570 U | 18.0 U | 18.4 U | 18.0 U | 17.4 U | 18.7 U | 20.0 U | 17.9 U |
| trans-1,3-Dichloropropene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Trichlorofluoromethane | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| cis-1,2-Dichloroethene | 16.6 J | 58.7 | 124 | 216 | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 8.02 | 4.47 U |
| Tetrachloroethene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| trans-1,2-Dichloroethene | 47.5 U | 50.2 U | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Trichloroethene | 418 | 178 | 201 | 823 | 16.6 | 4.61 U | 4.49 U | 4.36 U | 19.8 | 21.5 | 4.47 U |
| Vinyl Chloride | 47.5 U | 12.5 J | 46.3 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-47 | MB1-48 | MB1-49 | MB1-50 | MB1-51 | MB1-52 | MB1-53 | MB1-54 | MB1-55 | MB1-56 | MB1-57 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.0 - 1.5 | 1.5 - 2.0 | 1.5 - 2.0 |
| Date Collected: | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,1-Dichloropropene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,2,3-Trichlorobenzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,2,3-Trichloropropane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,2,4-Trimethylbenzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,2-Dibromoethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,3,5-Trimethylbenzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,3-Dichloropropane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 2,2-Dichloropropane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 2-Butanone | 23.5 U | 6.23 J | 25.1 U | 22.7 U | 26.2 U | 23.5 U | 1,410 U | 23.8 U | 21.5 U | 21.8 U | 2.98 J |
| 2-Chlorotoluene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 2-Hexanone | 11.8 U | 10.6 U | 12.6 U | 11.3 U | 13.1 U | 11.7 U | 282 U | 11.9 U | 10.8 U | 10.9 U | 12.2 U |
| 4-Chlorotoluene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 4-Methyl-2-pentanone | 11.8 U | 10.6 U | 12.6 U | 11.3 U | 13.1 U | 11.7 U | 282 U | 11.9 U | 10.8 U | 10.9 U | 12.2 U |
| Acetone | 23.6 J | 32.0 J | 7.83 J | 9.88 J | 12.8 J | 14.8 J | 1,410 U | 15.6 J | 9.71 J | 14.5 J | 19.6 J |
| Benzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Bromobenzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Bromochloromethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Bromoform | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Bromomethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Carbon Disulfide | 4.70 U | 2.27 J | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 1.65 J |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Diisopropyl ether (DIPE) | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Ethylbenzene | 4.70 U | 0.767 J | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Hexachlorobutadiene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Iodomethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Isopropylbenzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| m-,p-Xylene | 9.41 U | 8.52 U | 10.0 U | 9.08 U | 10.5 U | 9.39 U | 113 U | 9.52 U | 8.62 U | 8.70 U | 9.75 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| n-Butylbenzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| n-Propylbenzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| o-Xylene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| p-Isopropyltoluene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| sec-Butylbenzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-47 | MB1-48 | MB1-49 | MB1-50 | MB1-51 | MB1-52 | MB1-53 | MB1-54 | MB1-55 | MB1-56 | MB1-57 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.0 - 1.5 | 1.5 - 2.0 | 1.5 - 2.0 |
| Date Collected: | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| Styrene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| tert-Butylbenzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Toluene | 4.70 U | 1.01 J | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| trans-1,4-Dichloro-2-butene | 23.5 U | 21.3 U | 25.1 U | 22.7 U | 26.2 U | 23.5 U | 282 U | 23.8 U | 21.5 U | 21.8 U | 24.4 U |
| Xylenes (total) | 9.41 U | 8.52 U | 10.0 U | 9.08 U | 10.5 U | 9.39 U | 113 U | 9.52 U | 8.62 U | 8.70 U | 9.75 U |
| 1,1,1-Trichloroethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 0.940 J | 4.87 U |
| 1,1,2,2-Tetrachloroethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,1-Dichloroethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,1-Dichloroethene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,2,4-Trichlorobenzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,2-Dibromo-3-chloropropane | 28.2 U | 25.6 U | 30.1 U | 27.2 U | 31.4 U | 28.2 U | 282 U | 28.6 U | 25.9 U | 26.1 U | 29.2 U |
| 1,2-Dichlorobenzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,2-Dichloroethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,2-Dichloropropane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,3-Dichlorobenzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| 1,4-Dichlorobenzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Bromodichloromethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Carbon Tetrachloride | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Chlorobenzene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Chloroethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Chloroform | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Chloromethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| cis-1,3-Dichloropropene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Dibromochloromethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Dichlorodifluoromethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 282 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Methylene Chloride | 18.8 U | 0.869 J | 1.11 J | 18.2 U | 1.08 J | 0.929 J | 282 U | 19.0 U | 17.2 U | 17.4 U | 19.5 U |
| trans-1,3-Dichloropropene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Trichlorofluoromethane | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 1.16 J | 4.87 U |
| cis-1,2-Dichloroethene | 1.03 J | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Tetrachloroethene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 1.99 J | 56.3 U | 4.76 U | 4.31 U | 1.04 J | 4.87 U |
| trans-1,2-Dichloroethene | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Trichloroethene | 7.32 | 1.71 J | 8.79 | 9.85 | 5.23 U | 4.69 U | 157 | 4.16 J | 4.31 U | 6.53 | 4.10 J |
| Vinyl Chloride | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U | 4.76 U | 4.31 U | 4.35 U | 4.87 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-58 | MB1-59 | MB1-60 | MB1-61 | MB1-62 | MB1-63 | MB1-64 | ME-01 | ME-02 | ME-03 | ME-04 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 1.5 - 2.0 | 1.5 - 2.0 | 0.5 - 1.0 | 0.5 - 1.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 |
| Date Collected: | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,1-Dichloropropene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,2,3-Trichlorobenzene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,2,3-Trichloropropane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,2,4-Trimethylbenzene | 4.28 U | 42.3 J | 45.4 U | 4.26 U | 77.1 J | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,2-Dibromoethane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,3,5-Trimethylbenzene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,3-Dichloropropane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 2,2-Dichloropropane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 2-Butanone | 21.4 U | 49.2 J | 1,130 U | 21.3 U | 2,380 U | 22.2 U | 21.9 U | 5.46 J | 22.9 U | 21.7 U | 21.7 U |
| 2-Chlorotoluene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 2-Hexanone | 10.7 U | 265 U | 227 U | 10.6 U | 476 U | 11.1 U | 10.9 U | 10.7 U | 11.4 U | 10.9 U | 10.8 U |
| 4-Chlorotoluene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 4-Methyl-2-pentanone | 10.7 U | 265 U | 227 U | 10.6 U | 476 U | 11.1 U | 10.9 U | 10.7 U | 11.4 U | 10.9 U | 10.8 U |
| Acetone | 11.4 J | 1,320 U | 1,130 U | 9.71 J | 148 J | 14.3 J | 8.75 J | 48.3 | 7.03 J | 5.52 J | 4.15 J |
| Benzene | 4.28 U | 12.2 J | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Bromobenzene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Bromochloromethane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Bromoform | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Bromomethane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Carbon Disulfide | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Diisopropyl ether (DIPE) | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Ethylbenzene | 4.28 U | 95.3 | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Hexachlorobutadiene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Iodomethane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Isopropylbenzene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| m-,p-Xylene | 8.56 U | 106 U | 90.7 U | 8.52 U | 190 U | 8.89 U | 8.74 U | 8.52 U | 9.15 U | 8.69 U | 8.67 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| n-Butylbenzene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| n-Propylbenzene | 4.28 U | 9.00 J | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| o-Xylene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| p-Isopropyltoluene | 4.28 U | 88.9 | 45.4 U | 4.26 U | 89.5 J | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| sec-Butylbenzene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-58 | MB1-59 | MB1-60 | MB1-61 | MB1-62 | MB1-63 | MB1-64 | ME-01 | ME-02 | ME-03 | ME-04 |
|---|-----------|-----------|-----------|-----------|--------------|-----------|-----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 1.5 - 2.0 | 1.5 - 2.0 | 0.5 - 1.0 | 0.5 - 1.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 |
| Date Collected: | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 |
| Styrene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| tert-Butylbenzene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Toluene | 4.28 U | 175 | 45.4 U | 4.26 U | 13.3 J | 1.08 J | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| trans-1,4-Dichloro-2-butene | 21.4 U | 265 U | 227 U | 21.3 U | 476 U | 22.2 U | 21.9 U | 21.3 U | 22.9 U | 21.7 U | 21.7 U |
| Xylenes (total) | 8.56 U | 106 U | 90.7 U | 8.52 U | 190 U | 8.89 U | 8.74 U | 8.52 U | 9.15 U | 8.69 U | 8.67 U |
| 1,1,1-Trichloroethane | 4.28 U | 52.9 U | 9.07 J | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,1,2,2-Tetrachloroethane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,1-Dichloroethane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,1-Dichloroethene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,2,4-Trichlorobenzene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,2-Dibromo-3-chloropropane | 25.7 U | 265 U | 227 U | 25.6 U | 476 U | 26.7 U | 26.2 U | 25.6 U | 27.4 U | 26.1 U | 26.0 U |
| 1,2-Dichlorobenzene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,2-Dichloroethane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,2-Dichloropropane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,3-Dichlorobenzene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| 1,4-Dichlorobenzene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Bromodichloromethane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Carbon Tetrachloride | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Chlorobenzene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Chloroethane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Chloroform | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Chloromethane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| cis-1,3-Dichloropropene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Dibromochloromethane | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Dichlorodifluoromethane | 4.28 U | 265 U | 227 U | 4.26 U | 476 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Methylene Chloride | 17.1 U | 265 U | 227 U | 17.0 U | 476 U | 17.8 U | 17.5 U | 17.0 U | 18.3 U | 17.4 U | 17.3 U |
| trans-1,3-Dichloropropene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Trichlorofluoromethane | 4.28 U | 52.9 U | 33.6 J | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| cis-1,2-Dichloroethene | 4.28 U | 52.9 U | 45.4 U | 3.02 J | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Tetrachloroethene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 18.1 J | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| trans-1,2-Dichloroethene | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Trichloroethene | 2.82 J | 52.9 U | 45.4 U | 10.9 | 1,010 | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Vinyl Chloride | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | ME-05 | ME-06 | ME-07 | ME-08 | ME-09 | ME-10 | MIS-01 | MIS-02 | MIS-03 | MIS-04 | MIS-05 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 |
| Date Collected: | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/04/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,1-Dichloropropene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,2,3-Trichlorobenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,2,3-Trichloropropane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,2,4-Trimethylbenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,2-Dibromoethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,3,5-Trimethylbenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,3-Dichloropropane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 2,2-Dichloropropane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 2-Butanone | 22.2 U | 22.2 U | 21.9 U | 22.5 U | 21.7 U | 1.37 J | 20.9 U | 21.7 U | 22.1 U | 21.3 U | 21.5 U |
| 2-Chlorotoluene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 2-Hexanone | 11.1 U | 11.1 U | 10.9 U | 11.2 U | 10.9 U | 10.8 U | 10.5 U | 10.8 U | 11.1 U | 10.6 U | 10.8 U |
| 4-Chlorotoluene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 4-Methyl-2-pentanone | 11.1 U | 11.1 U | 10.9 U | 11.2 U | 10.9 U | 10.8 U | 10.5 U | 10.8 U | 11.1 U | 10.6 U | 10.8 U |
| Acetone | 7.83 J | 4.96 J | 3.93 J | 4.80 J | 8.77 J | 12.4 J | 3.17 J | 4.18 J | 5.87 J | 3.88 J | 4.05 J |
| Benzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Bromobenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Bromochloromethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Bromoform | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Bromomethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Carbon Disulfide | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Diisopropyl ether (DIPE) | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Ethylbenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Hexachlorobutadiene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Iodomethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Isopropylbenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| m-,p-Xylene | 8.87 U | 8.90 U | 8.74 U | 8.98 U | 8.69 U | 8.67 U | 8.37 U | 8.66 U | 8.85 U | 8.52 U | 8.61 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| n-Butylbenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| n-Propylbenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| o-Xylene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| p-Isopropyltoluene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| sec-Butylbenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | ME-05 | ME-06 | ME-07 | ME-08 | ME-09 | ME-10 | MIS-01 | MIS-02 | MIS-03 | MIS-04 | MIS-05 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 |
| Date Collected: | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/04/15 |
| Styrene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| tert-Butylbenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Toluene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| trans-1,4-Dichloro-2-butene | 22.2 U | 22.2 U | 21.9 U | 22.5 U | 21.7 U | 21.7 U | 20.9 U | 21.7 U | 22.1 U | 21.3 U | 21.5 U |
| Xylenes (total) | 8.87 U | 8.90 U | 8.74 U | 8.98 U | 8.69 U | 8.67 U | 8.37 U | 8.66 U | 8.85 U | 8.52 U | 8.61 U |
| 1,1,1-Trichloroethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,1,2,2-Tetrachloroethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,1-Dichloroethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,1-Dichloroethene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,2,4-Trichlorobenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,2-Dibromo-3-chloropropane | 26.6 U | 26.7 U | 26.2 U | 26.9 U | 26.1 U | 26.0 U | 25.1 U | 26.0 U | 26.5 U | 25.6 U | 25.8 U |
| 1,2-Dichlorobenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,2-Dichloroethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,2-Dichloropropane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,3-Dichlorobenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| 1,4-Dichlorobenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Bromodichloromethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Carbon Tetrachloride | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Chlorobenzene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Chloroethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Chloroform | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Chloromethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| cis-1,3-Dichloropropene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Dibromochloromethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Dichlorodifluoromethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Methylene Chloride | 17.7 U | 17.8 U | 17.5 U | 18.0 U | 17.4 U | 17.3 U | 16.7 U | 17.3 U | 17.7 U | 17.0 U | 17.2 U |
| trans-1,3-Dichloropropene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Trichlorofluoromethane | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| cis-1,2-Dichloroethene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Tetrachloroethene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| trans-1,2-Dichloroethene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Trichloroethene | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Vinyl Chloride | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MIS-06 | MIS-07 | MIS-08 | MIS-09 | MIS-10 | MIS-11 | MIS-12 | MIS-13 | MIS-14 | MIS-15 | MIS-16 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 |
| Date Collected: | 05/04/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,1-Dichloropropene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2,3-Trichlorobenzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2,3-Trichloropropane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2,4-Trimethylbenzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2-Dibromoethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,3,5-Trimethylbenzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,3-Dichloropropane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 2,2-Dichloropropane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 2-Butanone | 21.2 U | 2.44 J | 3.99 J | 20.7 U | 22.4 U | 21.1 U | 2.09 J | 2.24 J | 21.3 U | 22.1 U | 22.1 U |
| 2-Chlorotoluene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 2-Hexanone | 10.6 U | 11.2 U | 11.4 U | 10.3 U | 11.2 U | 10.6 U | 10.8 U | 10.3 U | 10.7 U | 11.1 U | 11.0 U |
| 4-Chlorotoluene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 4-Methyl-2-pentanone | 10.6 U | 11.2 U | 11.4 U | 10.3 U | 11.2 U | 10.6 U | 10.8 U | 10.3 U | 10.7 U | 11.1 U | 11.0 U |
| Acetone | 6.45 J | 11.2 J | 29.5 J | 5.34 J | 4.22 J | 4.92 J | 19.2 J | 19.3 J | 4.78 J | 7.04 J | 4.56 J |
| Benzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Bromobenzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Bromochloromethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Bromoform | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Bromomethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Carbon Disulfide | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Diisopropyl ether (DIPE) | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Ethylbenzene | 4.24 U | 1.02 J | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Hexachlorobutadiene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Iodomethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Isopropylbenzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| m-,p-Xylene | 8.48 U | 8.93 U | 9.15 U | 8.26 U | 8.96 U | 8.44 U | 8.66 U | 8.26 U | 8.54 U | 8.85 U | 8.82 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| n-Butylbenzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| n-Propylbenzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| o-Xylene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| p-Isopropyltoluene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| sec-Butylbenzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MIS-06 | MIS-07 | MIS-08 | MIS-09 | MIS-10 | MIS-11 | MIS-12 | MIS-13 | MIS-14 | MIS-15 | MIS-16 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 |
| Date Collected: | 05/04/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 |
| Styrene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| tert-Butylbenzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Toluene | 4.24 U | 1.09 J | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| trans-1,4-Dichloro-2-butene | 21.2 U | 22.3 U | 22.9 U | 20.7 U | 22.4 U | 21.1 U | 21.7 U | 20.6 U | 21.3 U | 22.1 U | 22.1 U |
| Xylenes (total) | 8.48 U | 8.93 U | 9.15 U | 8.26 U | 8.96 U | 8.44 U | 8.66 U | 8.26 U | 8.54 U | 8.85 U | 8.82 U |
| 1,1,1-Trichloroethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,1,2,2-Tetrachloroethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,1-Dichloroethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,1-Dichloroethene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2,4-Trichlorobenzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2-Dibromo-3-chloropropane | 25.4 U | 26.8 U | 27.5 U | 24.8 U | 26.9 U | 25.3 U | 26.0 U | 24.8 U | 25.6 U | 26.5 U | 26.5 U |
| 1,2-Dichlorobenzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2-Dichloroethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,2-Dichloropropane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,3-Dichlorobenzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| 1,4-Dichlorobenzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Bromodichloromethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Carbon Tetrachloride | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Chlorobenzene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Chloroethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Chloroform | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Chloromethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| cis-1,3-Dichloropropene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Dibromochloromethane | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Dichlorodifluoromethane | 4.24 U | 9.52 | 4.58 U | 1.00 J | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 1.88 J |
| Methylene Chloride | 17.0 U | 17.9 U | 18.3 U | 16.5 U | 17.9 U | 16.9 U | 17.3 U | 16.5 U | 17.1 U | 17.7 U | 17.6 U |
| trans-1,3-Dichloropropene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Trichlorofluoromethane | 4.24 U | 1.45 J | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| cis-1,2-Dichloroethene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Tetrachloroethene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| trans-1,2-Dichloroethene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Trichloroethene | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Vinyl Chloride | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | MIS-17 1.5-2 05/05/15 | MIS-18 1.5-2 05/05/15 | RC-3 2 08/20/18 | RC-5 2 08/20/18 | RC-14 2 08/20/18 | RC-19 2 08/20/18 | RC-73 2 08/20/18 | RC-78 2 08/20/18 | RC-84 1 08/21/18 | RC-98 2 08/20/18 | RC-109 1 08/21/18 |
|---|-----------------------------|-----------------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloropropene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| 1,2,3-Trichloropropane | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trimethylbenzene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromoethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| 1,3,5-Trimethylbenzene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichloropropane | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropane | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Butanone | 22.4 U | 20.9 U | 22.0 U | 22.0 U | 22.0 U | 23.0 U | 22.0 U | 22.0 U | 1,300 U | 24.0 U | 22.0 U |
| 2-Chlorotoluene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 11.2 U | 10.4 U | 22.0 U | 22.0 U | 22.0 U | 23.0 U | 22.0 U | 22.0 U | 1,300 U | 24.0 U | 22.0 U |
| 4-Chlorotoluene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 11.2 U | 10.4 U | 22.0 U | 22.0 U | 22.0 U | 23.0 U | 22.0 U | 22.0 U | 1,300 U | 24.0 U | 22.0 U |
| Acetone | 12.3 J | 6.53 J | 22.0 U | 25.0 | 22.0 U | 23.0 U | 26.0 | 22.0 U | 1,300 U | 28.0 | 22.0 U |
| Benzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Bromobenzene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Bromoform | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Bromomethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Carbon Disulfide | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Cyclohexane | NA | NA | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Dibromomethane | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diisopropyl ether (DIPE) | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 320 | 4.80 U | 4.30 U |
| Hexachlorobutadiene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Iodomethane | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| m-,p-Xylene | 8.95 U | 8.35 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl Acetate | NA | NA | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Methyl tert-butyl ether | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Methylcyclohexane | NA | NA | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Naphthalene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Butylbenzene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Propylbenzene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| p-Isopropyltoluene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | MIS-17 1.5-2 05/05/15 | MIS-18 1.5-2 05/05/15 | RC-3 2 08/20/18 | RC-5 2 08/20/18 | RC-14 2 08/20/18 | RC-19 2 08/20/18 | RC-73 2 08/20/18 | RC-78 2 08/20/18 | RC-84 1 08/21/18 | RC-98 2 08/20/18 | RC-109 1 08/21/18 |
|---|-----------------------------|-----------------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|
| Styrene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| tert-Butylbenzene | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| trans-1,4-Dichloro-2-butene | 22.4 U | 20.9 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | 8.95 U | 8.35 U | 8.70 U | 8.90 U | 8.90 U | 9.30 U | 9.00 U | 9.00 U | 3,200 | 9.50 U | 8.70 U |
| 1,1,1-Trichloroethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| 1,1,2,2-Tetrachloroethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| 1,1,2-Trichloroethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| 1,1-Dichloroethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| 1,1-Dichloroethene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| 1,2,4-Trichlorobenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| 1,2-Dibromo-3-chloropropane | 26.9 U | 25.1 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| 1,2-Dichlorobenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| 1,2-Dichloroethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| 1,2-Dichloropropane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| 1,3-Dichlorobenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| 1,4-Dichlorobenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Bromodichloromethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Carbon Tetrachloride | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Chlorobenzene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Chloroethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Chloroform | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Chloromethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| cis-1,3-Dichloropropene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Dibromochloromethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Dichlorodifluoromethane | 19.0 | 7.64 | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Methylene Chloride | 17.9 U | 16.7 U | 13.0 U | 13.0 U | 13.0 U | 14.0 U | 13.0 U | 13.0 U | 760 U | 14.0 U | 13.0 U |
| trans-1,3-Dichloropropene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Trichlorofluoromethane | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 11.0 | 5.80 | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| cis-1,2-Dichloroethene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Tetrachloroethene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| trans-1,2-Dichloroethene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Trichloroethene | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Vinyl Chloride | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | 4.50 U | 250 U | 4.80 U | 4.30 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | RC-112 | RC-112 | RC-144 | RC-149 | RC-152 | RC-154 | RC-161 | RC-166 | RC-168 | RC-174 | RC-186 |
|---|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|
| Sample Depth (Feet): | .5 | 2 | 2 | 2 | 1 | 2 | 2 | 0.6 | 2 | 0.2 | 2 |
| Date Collected: | 08/16/18 | 10/26/18 | 08/21/18 | 08/20/18 | 08/16/18 | 08/20/18 | 08/16/18 | 08/16/18 | 10/25/18 | 08/16/18 | 08/16/18 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloropropene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| 1,2,3-Trichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromoethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| 1,3,5-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Butanone | 21.0 U | NA | 21.0 U | 25.0 U | 5,100 U | 21.0 U | 22.0 U | 610,000 U | 1,000 U | 1,100 U | 20.0 U |
| 2-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 21.0 U | NA | 21.0 U | 25.0 U | 5,100 U | 21.0 U | 22.0 U | 610,000 U | 1,000 U | 1,100 U | 20.0 U |
| 4-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 21.0 U | NA | 21.0 U | 25.0 U | 5,100 U | 21.0 U | 22.0 U | 610,000 U | 1,000 U | 1,100 U | 20.0 U |
| Acetone | 110 | NA | 21.0 U | 25.0 U | 5,100 U | 21.0 U | 38.0 | 610,000 U | 1,000 U | 1,100 U | 52.0 |
| Benzene | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Bromobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Bromoform | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Bromomethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U* | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Carbon Disulfide | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Cyclohexane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Dibromomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diisopropyl ether (DIPE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Hexachlorobutadiene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Iodomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| m-,p-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl Acetate | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 520 | 4.00 U |
| Methyl tert-butyl ether | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Methylcyclohexane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Naphthalene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Propylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| p-Isopropyltoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RC-112 .5 08/16/18 | RC-112 2 10/26/18 | RC-144 2 08/21/18 | RC-149 2 08/20/18 | RC-152 1 08/16/18 | RC-154 2 08/20/18 | RC-161 2 08/16/18 | RC-166 0.6 08/16/18 | RC-168 2 10/25/18 | RC-174 0.2 08/16/18 | RC-186 2 08/16/18 |
|---|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|
| Styrene | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| tert-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 9.70 | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| trans-1,4-Dichloro-2-butene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | 27.0 | NA | 8.40 U | 10.0 U | 2,000 U | 8.30 U | 8.90 U | 250,000 U | 420 U | 430 U | 8.10 U |
| 1,1,1-Trichloroethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 6,100 | 210 U | 4.00 U |
| 1,1,2-Tetrachloroethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| 1,1,2-Trichloroethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| 1,1-Dichloroethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 12.0 | 5.10 | 120,000 U | 210 | 210 U | 4.00 U |
| 1,1-Dichloroethene | 4.20 U | NA | 4.20 U | 5.00 U | 1,200 | 4.20 U | 4.40 U | 120,000 U | 1,600 | 210 U | 4.00 U |
| 1,2,4-Trichlorobenzene | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| 1,2-Dibromo-3-chloropropane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| 1,2-Dichlorobenzene | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| 1,2-Dichloroethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| 1,2-Dichloropropane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| 1,3-Dichlorobenzene | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| 1,4-Dichlorobenzene | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Bromodichloromethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Carbon Tetrachloride | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Chlorobenzene | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Chloroethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Chloroform | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Chloromethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| cis-1,3-Dichloropropene | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Dibromochloromethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Dichlorodifluoromethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Methylene Chloride | 12.0 U | NA | 13.0 U | 15.0 U | 3,100 U | 12.0 U | 13.0 U | 370,000 U | 630 U | 640 U | 12.0 U |
| trans-1,3-Dichloropropene | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Trichlorofluoromethane | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| cis-1,2-Dichloroethene | 4.20 U | NA | 4.20 U | 5.00 U | 20,000 | 10.0 | 4.40 U | 250,000 | 1,700 | 210 U | 4.00 U |
| Tetrachloroethene | 4.20 U | NA | 4.20 U | 5.00 U | 22,000 | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| trans-1,2-Dichloroethene | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 4.20 U | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Trichloroethene | 4.20 U | NA | 4.20 U | 5.00 U | 51,000 | 4.20 U | 4.40 U | 6,000,000 | 1,200 | 440 | 4.00 U |
| Vinyl Chloride | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 6.30 | 4.40 U | 120,000 U | 210 U | 210 U | 4.00 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | 5,600 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | RC-191 | RC-213 | RC-215 | RC-220 | RC-222 | RC-223 | RC-225 | RC-227 | RC-229 | RC-231 | RC-232 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 2 | 0.5 | 2 | .5 | 2 | 1 | 1 | 1 | 2 | 2 | 2 |
| Date Collected: | 08/16/18 | 08/21/18 | 08/21/18 | 08/21/18 | 10/25/18 | 10/25/18 | 10/25/18 | 10/25/18 | 10/25/18 | 10/26/18 | 10/26/18 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloropropene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| 1,2,3-Trichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromoethane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| 1,3,5-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Butanone | 21.0 U | 24.0 U | 24.0 U | 33.0 U | 23.0 U | 21.0 U | 38.0 U | 21.0 U | 19.0 U | NA | NA |
| 2-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 21.0 U | 24.0 U | 24.0 U | 33.0 U | 23.0 U | 21.0 U | 38.0 U | 21.0 U | 19.0 U | NA | NA |
| 4-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 21.0 U | 24.0 U | 24.0 U | 33.0 U | 23.0 U | 21.0 U | 38.0 U | 21.0 U | 19.0 U | NA | NA |
| Acetone | 29.0 | 28.0 | 27.0 | 33.0 U | 32.0 | 40.0 | 38.0 U | 29.0 | 19.0 U | NA | NA |
| Benzene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Bromobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Bromoform | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Bromomethane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Carbon Disulfide | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Cyclohexane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Dibromomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diisopropyl ether (DIPE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Hexachlorobutadiene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Iodomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| m-,p-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl Acetate | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Methyl tert-butyl ether | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Methylcyclohexane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Naphthalene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Propylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| p-Isopropyltoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RC-191 2 08/16/18 | RC-213 0.5 08/21/18 | RC-215 2 08/21/18 | RC-220 .5 08/21/18 | RC-222 2 10/25/18 | RC-223 1 10/25/18 | RC-225 1 10/25/18 | RC-227 1 10/25/18 | RC-229 2 10/25/18 | RC-231 2 10/26/18 | RC-232 2 10/26/18 |
|---|-------------------------|---------------------------|-------------------------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Styrene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| tert-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| trans-1,4-Dichloro-2-butene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | 8.20 U | 9.70 U | 9.50 U | 13.0 U | 9.20 U | 8.40 U | 15.0 U | 8.40 U | 7.50 U | NA | NA |
| 1,1,1-Trichloroethane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| 1,1,2,2-Tetrachloroethane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| 1,1,2-trichloro-1,2,2-trifluoroethane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| 1,1,2-Trichloroethane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| 1,1-Dichloroethane | 19.0 | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 13.0 | 3.80 U | NA | NA |
| 1,1-Dichloroethene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| 1,2,4-Trichlorobenzene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| 1,2-Dibromo-3-chloropropane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| 1,2-Dichlorobenzene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| 1,2-Dichloroethane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| 1,2-Dichloropropane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| 1,3-Dichlorobenzene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| 1,4-Dichlorobenzene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Bromodichloromethane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Carbon Tetrachloride | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Chlorobenzene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Chloroethane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Chloroform | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Chloromethane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| cis-1,3-Dichloropropene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Dibromochloromethane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Dichlorodifluoromethane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Methylene Chloride | 12.0 U | 15.0 U | 14.0 U | 20.0 U | 14.0 U | 13.0 U | 23.0 U | 13.0 U | 11.0 U | NA | NA |
| trans-1,3-Dichloropropene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Trichlorofluoromethane | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| cis-1,2-Dichloroethene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Tetrachloroethene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| trans-1,2-Dichloroethene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Trichloroethene | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 19.0 | 4.20 U | 3.80 U | NA | NA |
| Vinyl Chloride | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | 5,900 U | 5,400 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | RC-233 | RC-234 | RMM-35 | RMM-40 | RMM-44 | RMM-48 | RMM-106 | RMM-134 | RMM-138 | RMM-143 | RMM-147 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 2 | 2 | 2 | 1 | 1 | 2 | 1.5 | 1 | 2 | 1 | 1 |
| Date Collected: | 10/26/18 | 10/26/18 | 08/21/18 | 08/21/18 | 08/21/18 | 08/21/18 | 08/21/18 | 08/22/18 | 08/22/18 | 08/22/18 | 08/22/18 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloropropene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| 1,2,3-Trichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromoethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,3,5-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Butanone | NA | NA | 2,300 U | 22.0 U | 21.0 U | 24.0 U | 22.0 U | 21.0 U | 24.0 U | 24.0 U | 24.0 U |
| 2-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | NA | NA | 2,300 U | 22.0 U | 21.0 U | 24.0 U | 22.0 U | 21.0 U | 24.0 U | 24.0 U | 24.0 U* |
| 4-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | NA | NA | 2,300 U | 22.0 U | 21.0 U | 24.0 U | 22.0 U | 21.0 U | 24.0 U | 24.0 U | 24.0 U |
| Acetone | NA | NA | 2,300 U | 28.0 | 24.0 | 66.0 | 27.0 | 57.0 | 50.0 | 69.0 | 160 |
| Benzene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 8.60 | 46.0 |
| Bromobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Bromoform | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| Bromomethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Carbon Disulfide | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Cyclohexane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Dibromomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diisopropyl ether (DIPE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Hexachlorobutadiene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Iodomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| m-,p-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl Acetate | NA | NA | 610 | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Methyl tert-butyl ether | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Methylcyclohexane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 6.00 |
| Naphthalene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Propylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| p-Isopropyltoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RC-233 2 10/26/18 | RC-234 2 10/26/18 | RMM-35 2 08/21/18 | RMM-40 1 08/21/18 | RMM-44 1 08/21/18 | RMM-48 2 08/21/18 | RMM-106 1.5 08/21/18 | RMM-134 1 08/22/18 | RMM-138 2 08/22/18 | RMM-143 1 08/22/18 | RMM-147 1 08/22/18 |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Styrene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| tert-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| trans-1,4-Dichloro-2-butene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | 910 U | 9.00 U | 8.50 U | 9.80 U | 8.90 U | 8.20 U | 9.70 U | 9.80 U | 12.0 |
| 1,1,1-Trichloroethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,1,2,2-Tetrachloroethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,1,2-Trichloroethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,1-Dichloroethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,1-Dichloroethene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,2,4-Trichlorobenzene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| 1,2-Dibromo-3-chloropropane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| 1,2-Dichlorobenzene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| 1,2-Dichloroethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,2-Dichloropropane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| 1,3-Dichlorobenzene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| 1,4-Dichlorobenzene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U* |
| Bromodichloromethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Carbon Tetrachloride | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Chlorobenzene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Chloroethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Chloroform | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Chloromethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| cis-1,3-Dichloropropene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Dibromochloromethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Dichlorodifluoromethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Methylene Chloride | NA | NA | 1,400 U | 13.0 U | 13.0 U | 15.0 U | 13.0 U | 12.0 U | 15.0 U | 15.0 U | 14.0 U |
| trans-1,3-Dichloropropene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Trichlorofluoromethane | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 7.70 | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| cis-1,2-Dichloroethene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Tetrachloroethene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| trans-1,2-Dichloroethene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Trichloroethene | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Vinyl Chloride | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | 4.10 U | 4.90 U | 4.90 U | 4.80 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | 5,600 U | 5,600 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RMM-152 2 08/22/18 | RMM-204 1 08/23/18 | RMM-230 1.5 08/22/18 | RMM-240 1 08/23/18 | RMM-243 1 08/23/18 | RMM-248 2 08/23/18 | RMM-263 1 08/23/18 | RMM-279 1 08/23/18 | RMM-298 2 08/22/18 | RMM-310 2 08/23/18 | RMM-314 2 08/23/18 |
|---|--------------------------|--------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloropropene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| 1,2,3-Trichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromoethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| 1,3,5-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Butanone | 27.0 U | 22.0 U | 23.0 U | 21.0 U | 23.0 U | 23.0 U | 25.0 U | 1,200 U | 30.0 U | 23.0 U | 19.0 U |
| 2-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 27.0 U | 22.0 U | 23.0 U* | 21.0 U | 23.0 U | 23.0 U | 25.0 U | 1,200 U | 30.0 U | 23.0 U | 19.0 U |
| 4-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 27.0 U | 22.0 U | 23.0 U | 21.0 U | 23.0 U | 23.0 U | 25.0 U | 2,900 U | 30.0 U | 23.0 U | 19.0 U |
| Acetone | 69.0 | 22.0 U | 51.0 | 30.0 | 23.0 U | 23.0 U | 25.0 U | 1,200 U | 30.0 U | 23.0 U | 19.0 U |
| Benzene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Bromobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Bromoform | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Bromomethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Carbon Disulfide | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Cyclohexane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Dibromomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diisopropyl ether (DIPE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Hexachlorobutadiene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Iodomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| m-,p-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl Acetate | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Methyl tert-butyl ether | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Methylcyclohexane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Naphthalene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Propylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| p-Isopropyltoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RMM-152 2 08/22/18 | RMM-204 1 08/23/18 | RMM-230 1.5 08/22/18 | RMM-240 1 08/23/18 | RMM-243 1 08/23/18 | RMM-248 2 08/23/18 | RMM-263 1 08/23/18 | RMM-279 1 08/23/18 | RMM-298 2 08/22/18 | RMM-310 2 08/23/18 | RMM-314 2 08/23/18 |
|---|--------------------------|--------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Styrene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| tert-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| trans-1,4-Dichloro-2-butene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | 11.0 U | 9.00 U | 9.20 U | 8.30 U | 9.00 U | 9.20 U | 9.80 U | 970 | 12.0 U | 9.00 U | 7.80 U |
| 1,1,1-Trichloroethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| 1,1,2,2-Tetrachloroethane | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| 1,1,2-Trichloroethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| 1,1-Dichloroethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| 1,1-Dichloroethene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| 1,2,4-Trichlorobenzene | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| 1,2-Dibromo-3-chloropropane | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| 1,2-Dichlorobenzene | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| 1,2-Dichloroethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| 1,2-Dichloropropane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| 1,3-Dichlorobenzene | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| 1,4-Dichlorobenzene | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Bromodichloromethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Carbon Tetrachloride | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Chlorobenzene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Chloroethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Chloroform | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Chloromethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| cis-1,3-Dichloropropene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Dibromochloromethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Dichlorodifluoromethane | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Methylene Chloride | 16.0 U | 13.0 U | 14.0 U | 12.0 U | 14.0 U | 14.0 U | 15.0 U | 740 U | 18.0 U | 14.0 U | 12.0 U |
| trans-1,3-Dichloropropene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Trichlorofluoromethane | 5.50 U | 4.50 U | 4.60 U | 4.30 | 4.50 U | 4.60 U | 4.90 U | 2,400 | 6.00 U | 4.50 U | 3.90 U |
| cis-1,2-Dichloroethene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Tetrachloroethene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| trans-1,2-Dichloroethene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Trichloroethene | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Vinyl Chloride | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RMM-318 1 08/23/18 | RMM-333 2 08/23/18 | RMM-355 2 08/23/18 | RMM-359 2 08/23/18 | RMM-363 2 08/23/18 | RMM-374 1 08/22/18 | RMM-379 1 08/22/18 | RMM-396 1 08/22/18 | SB-210 1.5 09/02/15 | SB-307 2 09/03/15 | SB-MB1-01 1.5 - 2 03/12/12 |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|-------------------------|----------------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| 1,1-Dichloropropene | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| 1,2,3-Trichlorobenzene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| 1,2,3-Trichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| 1,2,4-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | 140 J | 4.38 U | 5.33 U |
| 1,2-Dibromoethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| 1,3,5-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| 1,3-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| 2,2-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| 2-Butanone | 21.0 U | 23.0 U | 23.0 U | 22.0 U | 22.0 U | 22.0 U | 24.0 U | 21.0 U | 4,930 U | 21.9 U | 26.7 U |
| 2-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| 2-Hexanone | 21.0 U | 23.0 U | 23.0 U | 22.0 U | 22.0 U | 22.0 U* | 24.0 U | 21.0 U | 987 U | 10.9 U | 13.3 U |
| 4-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| 4-Methyl-2-pentanone | 21.0 U | 23.0 U | 23.0 U | 22.0 U | 22.0 U | 22.0 U | 24.0 U | 21.0 U | 987 U | 10.9 U | 13.3 U |
| Acetone | 93.0 | 23.0 U | 23.0 U | 45.0 | 49.0 | 42.0 | 130 | 21.0 U | 4,930 U | 20.9 J | 4.51 J |
| Benzene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Bromobenzene | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| Bromochloromethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Bromoform | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Bromomethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Carbon Disulfide | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 5.50 | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Cyclohexane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | NA | NA | NA |
| Dibromomethane | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| Diisopropyl ether (DIPE) | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| Ethylbenzene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 23.0 | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Hexachlorobutadiene | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| Iodomethane | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| Isopropylbenzene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 45.4 J | 4.38 U | 5.33 U |
| m-,p-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | 355 J | 8.75 U | 10.7 U |
| Methyl Acetate | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | NA | NA | NA |
| Methyl tert-butyl ether | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Methylcyclohexane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | NA | NA | NA |
| Naphthalene | NA | NA | NA | NA | NA | NA | NA | NA | 136 J | 4.38 U | 5.33 U |
| n-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | 94.8 J | 4.38 U | 5.33 U |
| n-Propylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | 43.4 J | 4.38 U | 5.33 U |
| o-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| p-Isopropyltoluene | NA | NA | NA | NA | NA | NA | NA | NA | 146 J | 4.38 U | 5.33 U |
| sec-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RMM-318 1 08/23/18 | RMM-333 2 08/23/18 | RMM-355 2 08/23/18 | RMM-359 2 08/23/18 | RMM-363 2 08/23/18 | RMM-374 1 08/22/18 | RMM-379 1 08/22/18 | RMM-396 1 08/22/18 | SB-210 1.5 09/02/15 | SB-307 2 09/03/15 | SB-MB1-01 1.5 - 2 03/12/12 |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|-------------------------|----------------------------------|
| Styrene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| tert-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | 197 U | 4.38 U | 5.33 U |
| Toluene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| trans-1,4-Dichloro-2-butene | NA | NA | NA | NA | NA | NA | NA | NA | 987 U | 21.9 U | 26.7 U |
| Xylenes (total) | 8.40 U | 9.20 U | 9.10 U | 8.80 U | 8.80 U | 9.00 U | 9.40 U | 8.20 U | 355 J | 8.75 U | NA |
| 1,1,1-Trichloroethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| 1,1,2,2-Tetrachloroethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| 1,1-Dichloroethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 13.0 | 4.10 U | 989 | 4.38 U | 5.33 U |
| 1,1-Dichloroethene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 88.8 J | 4.38 U | 5.33 U |
| 1,2,4-Trichlorobenzene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| 1,2-Dibromo-3-chloropropane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 987 U | 26.3 U | 32.0 U |
| 1,2-Dichlorobenzene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| 1,2-Dichloroethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| 1,2-Dichloropropane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| 1,3-Dichlorobenzene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| 1,4-Dichlorobenzene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Bromodichloromethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Carbon Tetrachloride | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Chlorobenzene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Chloroethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 6.50 | 35.0 | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Chloroform | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Chloromethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| cis-1,3-Dichloropropene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Dibromochloromethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Dichlorodifluoromethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 987 U | 4.38 U | 5.33 U |
| Methylene Chloride | 13.0 U | 14.0 U | 14.0 U | 13.0 U | 13.0 U | 13.0 U | 14.0 U | 12.0 U | 987 U | 17.5 U | 4.03 J |
| trans-1,3-Dichloropropene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Trichlorofluoromethane | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| cis-1,2-Dichloroethene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4,410 | 1.47 J | 5.33 U |
| Tetrachloroethene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| trans-1,2-Dichloroethene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 197 U | 4.38 U | 5.33 U |
| Trichloroethene | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 12.0 | 197 U | 5.91 | 5.33 U |
| Vinyl Chloride | 4.20 U | 4.60 U | 4.60 U | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 288 | 4.38 U | 5.33 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-MB1-02 | SB-MB1-03 | SB-MB1-04 | SB-MB1-05 | SB-MB1-06 | SB-MB1-07 | SB-MB1-08 | SB-MB1-09 | SB-MB1-10 | SB-MB1-11 | SB-MB1-12 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 0 - 0.5 |
| Date Collected: | 03/12/12 | 03/12/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,1-Dichloropropene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,2,3-Trichlorobenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,2,3-Trichloropropane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,2,4-Trimethylbenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,2-Dibromoethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,3,5-Trimethylbenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,3-Dichloropropane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 2,2-Dichloropropane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 2-Butanone | 27.7 U | 33.0 U | 20.1 U | 19.3 U | 20.0 U | 20.0 U | 20.9 U | 18.9 U | 20.8 U | 19.7 U | 26.2 U |
| 2-Chlorotoluene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 2-Hexanone | 13.9 U | 16.5 U | 10.1 U | 9.66 U | 9.99 U | 10.0 U | 10.4 U | 9.47 U | 10.4 U | 9.84 U | 13.1 U |
| 4-Chlorotoluene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 4-Methyl-2-pentanone | 13.9 U | 16.5 U | 10.1 U | 9.66 U | 9.99 U | 10.0 U | 10.4 U | 9.47 U | 10.4 U | 9.84 U | 13.1 U |
| Acetone | 55.4 U | 8.82 J | 40.3 U | 3.02 J | 39.9 U | 40.1 U | 41.8 U | 2.77 J | 41.6 U | 39.4 U | 52.4 U |
| Benzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Bromobenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Bromochloromethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Bromoform | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Bromomethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Carbon Disulfide | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Diisopropyl ether (DIPE) | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Ethylbenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Hexachlorobutadiene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Iodomethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Isopropylbenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| m-,p-Xylene | 11.1 U | 13.2 U | 8.05 U | 7.73 U | 7.99 U | 8.01 U | 8.36 U | 7.58 U | 8.31 U | 7.87 U | 10.5 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| n-Butylbenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| n-Propylbenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| o-Xylene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| p-Isopropyltoluene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| sec-Butylbenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-MB1-02 1.5 - 2 03/12/12 | SB-MB1-03 1.5 - 2 03/12/12 | SB-MB1-04 1.5 - 2 03/13/12 | SB-MB1-05 1.5 - 2 03/13/12 | SB-MB1-06 1.5 - 2 03/13/12 | SB-MB1-07 1.5 - 2 03/13/12 | SB-MB1-08 1.5 - 2 03/13/12 | SB-MB1-09 1.5 - 2 03/13/12 | SB-MB1-10 1.5 - 2 03/13/12 | SB-MB1-11 1.5 - 2 03/13/12 | SB-MB1-12 0 - 0.5 03/13/12 |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Styrene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| tert-Butylbenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Toluene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| trans-1,4-Dichloro-2-butene | 27.7 U | 33.0 U | 20.1 U | 19.3 U | 20.0 U | 20.0 U | 20.9 U | 18.9 U | 20.8 U | 19.7 U | 26.2 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,1,2,2-Tetrachloroethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,1-Dichloroethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,1-Dichloroethene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,2,4-Trichlorobenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,2-Dibromo-3-chloropropane | 33.3 U | 39.6 U | 24.2 U | 23.2 U | 24.0 U | 24.0 U | 25.1 U | 22.7 U | 24.9 U | 23.6 U | 31.4 U |
| 1,2-Dichlorobenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,2-Dichloroethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,2-Dichloropropane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,3-Dichlorobenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| 1,4-Dichlorobenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Bromodichloromethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Carbon Tetrachloride | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Chlorobenzene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Chloroethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Chloroform | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Chloromethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| cis-1,3-Dichloropropene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Dibromochloromethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Dichlorodifluoromethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Methylene Chloride | 1.18 J | 2.44 J | 1.82 J | 1.04 J | 1.76 J | 0.937 J | 1.51 J | 1.04 J | 1.71 J | 1.03 J | 1.40 J |
| trans-1,3-Dichloropropene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Trichlorofluoromethane | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 2.63 J | 3.79 U | 4.16 U | 1.05 J | 5.24 U |
| cis-1,2-Dichloroethene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Tetrachloroethene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| trans-1,2-Dichloroethene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Trichloroethene | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Vinyl Chloride | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-MB1-13 | SB-MB1-14 | SB-MB1-15 | SB-MB1-16 | SB-MB1-17 | SB-MB1-18 | SB-MB1-19 | SB-MB1-20 | SB-MB1-21 | SB-MB1-22 | SB-MB1-23 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 1.5 - 2 |
| Date Collected: | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,1-Dichloropropene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,2,3-Trichlorobenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,2,3-Trichloropropane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,2,4-Trimethylbenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,2-Dibromoethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,3,5-Trimethylbenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,3-Dichloropropane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 2,2-Dichloropropane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 2-Butanone | 27.3 U | 28.6 U | 23.3 U | 27.1 U | 27.8 U | 28.6 U | 27.0 U | 27.7 U | 23.7 U | 26.9 U | 28.0 U |
| 2-Chlorotoluene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 2-Hexanone | 13.7 U | 14.3 U | 11.6 U | 13.5 U | 13.9 U | 14.3 U | 13.5 U | 13.8 U | 11.8 U | 13.4 U | 14.0 U |
| 4-Chlorotoluene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 4-Methyl-2-pentanone | 13.7 U | 14.3 U | 11.6 U | 13.5 U | 13.9 U | 14.3 U | 13.5 U | 13.8 U | 11.8 U | 13.4 U | 14.0 U |
| Acetone | 4.15 J | 57.2 U | 46.5 U | 54.1 U | 4.12 J | 57.1 U | 54.0 U | 55.4 U | 47.3 U | 53.7 U | 56.0 U |
| Benzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Bromobenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Bromochloromethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Bromoform | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Bromomethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Carbon Disulfide | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Diisopropyl ether (DIPE) | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Ethylbenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Hexachlorobutadiene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Iodomethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Isopropylbenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| m-,p-Xylene | 10.9 U | 11.4 U | 9.30 U | 10.8 U | 11.1 U | 11.4 U | 10.8 U | 11.1 U | 9.46 U | 10.7 U | 11.2 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| n-Butylbenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| n-Propylbenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| o-Xylene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| p-Isopropyltoluene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| sec-Butylbenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-MB1-13 0 - 0.5 03/14/12 | SB-MB1-14 0 - 0.5 03/14/12 | SB-MB1-15 0 - 0.5 03/14/12 | SB-MB1-16 0 - 0.5 03/14/12 | SB-MB1-17 0 - 0.5 03/14/12 | SB-MB1-18 0 - 0.5 03/14/12 | SB-MB1-19 0 - 0.5 03/14/12 | SB-MB1-20 0 - 0.5 03/14/12 | SB-MB1-21 0 - 0.5 03/14/12 | SB-MB1-22 0 - 0.5 03/14/12 | SB-MB1-23 1.5 - 2 03/14/12 |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Styrene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| tert-Butylbenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Toluene | 1.92 J | 0.984 J | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| trans-1,4-Dichloro-2-butene | 27.3 U | 28.6 U | 23.3 U | 27.1 U | 27.8 U | 28.6 U | 27.0 U | 27.7 U | 23.7 U | 26.9 U | 28.0 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 7.84 |
| 1,1,2,2-Tetrachloroethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,1-Dichloroethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,1-Dichloroethene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,2,4-Trichlorobenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,2-Dibromo-3-chloropropane | 32.8 U | 34.3 U | 27.9 U | 32.5 U | 33.4 U | 34.3 U | 32.4 U | 33.2 U | 28.4 U | 32.2 U | 33.6 U |
| 1,2-Dichlorobenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,2-Dichloroethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,2-Dichloropropane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,3-Dichlorobenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| 1,4-Dichlorobenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Bromodichloromethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Carbon Tetrachloride | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Chlorobenzene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Chloroethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Chloroform | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Chloromethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| cis-1,3-Dichloropropene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Dibromochloromethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Dichlorodifluoromethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Methylene Chloride | 14.5 J | 6.16 J | 3.34 J | 4.33 J | 2.62 J | 2.46 J | 6.11 J | 4.17 J | 3.67 J | 3.01 J | 4.45 J |
| trans-1,3-Dichloropropene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Trichlorofluoromethane | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| cis-1,2-Dichloroethene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Tetrachloroethene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| trans-1,2-Dichloroethene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Trichloroethene | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 0.908 J | 1.05 J | 10.4 |
| Vinyl Chloride | 5.46 U | 5.72 U | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-MB1-29 | SB-MB1-30 | SB-MB1-31 | SB-MB1-32 | SB-MB1-33 | SB-MB1-34 | SB-MB1-36 | SB-MB1-37 | SB-MB1-38 | SB-MB1-39 | SB-MB1-40 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 |
| Date Collected: | 03/14/12 | 03/14/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/16/12 | 03/16/12 | 03/16/12 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,1-Dichloropropene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,2,3-Trichlorobenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,2,3-Trichloropropane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,2,4-Trimethylbenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,2-Dibromoethane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,3,5-Trimethylbenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,3-Dichloropropane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 2,2-Dichloropropane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 2-Butanone | 2,320 U | 1,160 U | 28.4 U | 25.7 U | 1,210 U | 25.2 U | 27.3 U | 25.3 U | 26.1 U | 1,080 U | 26.1 U |
| 2-Chlorotoluene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 2-Hexanone | 464 U | 232 U | 14.2 U | 12.9 U | 241 U | 12.6 U | 13.6 U | 12.7 U | 13.1 U | 217 U | 13.0 U |
| 4-Chlorotoluene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 4-Methyl-2-pentanone | 464 U | 232 U | 14.2 U | 12.9 U | 241 U | 12.6 U | 13.6 U | 12.7 U | 13.1 U | 217 U | 13.0 U |
| Acetone | 2,320 U | 1,160 U | 3.02 J | 51.4 U | 1,210 U | 50.5 U | 54.6 U | 50.7 U | 52.3 U | 1,080 U | 52.1 U |
| Benzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Bromobenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Bromochloromethane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Bromoform | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Bromomethane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Carbon Disulfide | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Diisopropyl ether (DIPE) | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Ethylbenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Hexachlorobutadiene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Iodomethane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Isopropylbenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| m-,p-Xylene | 186 U | 92.8 U | 11.4 U | 10.3 U | 96.6 U | 10.1 U | 10.9 U | 10.1 U | 10.5 U | 86.6 U | 10.4 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| n-Butylbenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| n-Propylbenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| o-Xylene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| p-Isopropyltoluene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| sec-Butylbenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-MB1-29 1.5 - 2 03/14/12 | SB-MB1-30 1.5 - 2 03/14/12 | SB-MB1-31 1.5 - 2 03/15/12 | SB-MB1-32 1.5 - 2 03/15/12 | SB-MB1-33 1.5 - 2 03/15/12 | SB-MB1-34 1.5 - 2 03/15/12 | SB-MB1-36 1.5 - 2 03/15/12 | SB-MB1-37 1.5 - 2 03/15/12 | SB-MB1-38 1.5 - 2 03/16/12 | SB-MB1-39 1.5 - 2 03/16/12 | SB-MB1-40 1.5 - 2 03/16/12 |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Styrene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| tert-Butylbenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Toluene | 92.8 U | 46.4 U | 1.37 J | 5.14 U | 48.3 U | 5.05 U | 1.03 J | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| trans-1,4-Dichloro-2-butene | 464 U | 232 U | 28.4 U | 25.7 U | 241 U | 25.2 U | 27.3 U | 25.3 U | 26.1 U | 217 U | 26.1 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 136 | 146 | 5.69 U | 5.14 U | 142 | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,1,2,2-Tetrachloroethane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,1-Dichloroethane | 92.8 U | 53.4 | 5.69 U | 5.14 U | 86.4 | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,1-Dichloroethene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,2,4-Trichlorobenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,2-Dibromo-3-chloropropane | 464 U | 232 U | 34.1 U | 30.9 U | 241 U | 30.3 U | 32.7 U | 30.4 U | 31.4 U | 217 U | 31.3 U |
| 1,2-Dichlorobenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,2-Dichloroethane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,2-Dichloropropane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,3-Dichlorobenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| 1,4-Dichlorobenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Bromodichloromethane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Carbon Tetrachloride | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Chlorobenzene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Chloroethane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Chloroform | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Chloromethane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| cis-1,3-Dichloropropene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Dibromochloromethane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Dichlorodifluoromethane | 464 U | 232 U | 5.69 U | 5.14 U | 241 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 217 U | 5.21 U |
| Methylene Chloride | 75.2 J | 19.0 J | 2.83 J | 2.54 J | 16.4 J | 2.49 J | 2.01 J | 1.88 J | 2.53 J | 217 U | 2.58 J |
| trans-1,3-Dichloropropene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Trichlorofluoromethane | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| cis-1,2-Dichloroethene | 92.8 U | 160 | 5.69 U | 5.14 U | 954 | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 90.1 | 5.21 U |
| Tetrachloroethene | 92.8 U | 36.2 J | 5.69 U | 5.14 U | 24.1 J | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| trans-1,2-Dichloroethene | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 47.8 J | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Trichloroethene | 1,650 | 723 | 5.69 U | 5.14 U | 614 | 5.05 U | 5.06 J | 5.07 U | 5.23 U | 268 | 5.21 U |
| Vinyl Chloride | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U | 5.07 U | 5.23 U | 43.3 U | 5.21 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-MB1-41 | SB-MB1-42 | SB-MB1-43 | SB-MB1-44 | SB-MB1-45 | SB-MB1-46 | SB-MB1-47 | SB-MB1-48 | SB-MB1-49 | SB-MB1-50 | SB-MB1-51 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 |
| Date Collected: | 03/16/12 | 03/16/12 | 03/16/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,1-Dichloropropene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,2,3-Trichlorobenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,2,3-Trichloropropane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,2,4-Trimethylbenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,2-Dibromoethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,3,5-Trimethylbenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,3-Dichloropropane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 2,2-Dichloropropane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 2-Butanone | 1,120 U | 1,120 U | 28.1 U | 25.7 U | 26.4 U | 1,360 U | 28.1 U | 25.8 U | 28.9 U | 26.8 U | 26.9 U |
| 2-Chlorotoluene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 2-Hexanone | 223 U | 224 U | 14.1 U | 12.8 U | 13.2 U | 273 U | 14.1 U | 12.9 U | 14.4 U | 13.4 U | 13.4 U |
| 4-Chlorotoluene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 4-Methyl-2-pentanone | 223 U | 224 U | 14.1 U | 12.8 U | 13.2 U | 273 U | 14.1 U | 12.9 U | 14.4 U | 13.4 U | 13.4 U |
| Acetone | 1,120 U | 1,120 U | 56.2 U | 757 | 3.99 J | 1,360 U | 56.2 U | 22.0 J | 10.9 J | 53.7 U | 53.8 U |
| Benzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Bromobenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Bromochloromethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Bromoform | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Bromomethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Carbon Disulfide | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Diisopropyl ether (DIPE) | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Ethylbenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Hexachlorobutadiene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Iodomethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Isopropylbenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| m-,p-Xylene | 89.3 U | 89.5 U | 11.2 U | 10.3 U | 10.6 U | 109 U | 11.2 U | 10.3 U | 11.6 U | 10.7 U | 10.8 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| n-Butylbenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| n-Propylbenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| o-Xylene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| p-Isopropyltoluene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| sec-Butylbenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-MB1-41 | SB-MB1-42 | SB-MB1-43 | SB-MB1-44 | SB-MB1-45 | SB-MB1-46 | SB-MB1-47 | SB-MB1-48 | SB-MB1-49 | SB-MB1-50 | SB-MB1-51 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 |
| | 03/16/12 | 03/16/12 | 03/16/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 |
| Styrene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| tert-Butylbenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Toluene | 44.7 U | 44.8 U | 3.69 J | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| trans-1,4-Dichloro-2-butene | 223 U | 224 U | 28.1 U | 25.7 U | 26.4 U | 273 U | 28.1 U | 25.8 U | 28.9 U | 26.8 U | 26.9 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 567 | 72.1 | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,1,2,2-Tetrachloroethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,1-Dichloroethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,1-Dichloroethene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 535 | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,2,4-Trichlorobenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,2-Dibromo-3-chloropropane | 223 U | 224 U | 33.7 U | 30.8 U | 31.7 U | 273 U | 33.7 U | 30.9 U | 34.7 U | 32.2 U | 32.3 U |
| 1,2-Dichlorobenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,2-Dichloroethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,2-Dichloropropane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,3-Dichlorobenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| 1,4-Dichlorobenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Bromodichloromethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Carbon Tetrachloride | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Chlorobenzene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Chloroethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Chloroform | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Chloromethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| cis-1,3-Dichloropropene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Dibromochloromethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Dichlorodifluoromethane | 223 U | 224 U | 5.62 U | 5.13 U | 5.28 U | 273 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Methylene Chloride | 223 U | 224 U | 2.69 J | 4.14 J | 3.65 J | 273 U | 6.01 J | 4.27 J | 2.21 J | 21.5 U | 21.5 U |
| trans-1,3-Dichloropropene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Trichlorofluoromethane | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| cis-1,2-Dichloroethene | 130 | 49.2 | 5.62 U | 5.13 U | 5.28 U | 16.9 J | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Tetrachloroethene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| trans-1,2-Dichloroethene | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Trichloroethene | 1,080 | 408 | 4.09 J | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Vinyl Chloride | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 60.0 | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-MB1-52 | SB-MB1-53 | SB-MB1-54 | SB-PDG-1 | SB-PDG-2 | SB-PDG-3 | SB-PDG-4 | SB-PDG-5 | SB-PDG-6 | SB-PDG-7 | SB-PDG-8 |
|---|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1 - 1.5 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 |
| Date Collected: | 03/22/12 | 03/22/12 | 03/27/12 | 06/02/09 | 06/02/09 | 06/02/09 | 06/02/09 | 06/02/09 | 06/02/09 | 06/02/09 | 06/02/09 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,1-Dichloropropene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,2,3-Trichlorobenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,2,3-Trichloropropane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,2,4-Trimethylbenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,2-Dibromoethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,3,5-Trimethylbenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,3-Dichloropropane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 2,2-Dichloropropane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 2-Butanone | 25.0 U | 27.0 U | 29.3 U | 22.0 U | 22.6 U | 22.6 U | 22.0 U | 22.1 U | 21.2 U | 22.2 U | 20.8 U |
| 2-Chlorotoluene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 2-Hexanone | 12.5 U | 13.5 U | 14.7 U | 11.0 U | 11.3 U | 11.3 U | 11.0 U | 11.0 U | 10.6 U | 11.1 U | 10.4 U |
| 4-Chlorotoluene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 4-Methyl-2-pentanone | 12.5 U | 13.5 U | 14.7 U | 11.0 U | 11.3 U | 11.3 U | 11.0 U | 11.0 U | 10.6 U | 11.1 U | 10.4 U |
| Acetone | 12.9 J | 54.0 U | 58.7 U | 12.6 J | 7.14 J | 18.8 J | 24.4 J | 26.0 J | 11.3 J | 24.5 J | 14.7 J |
| Benzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Bromobenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Bromochloromethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Bromoform | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Bromomethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Carbon Disulfide | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Diisopropyl ether (DIPE) | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Ethylbenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Hexachlorobutadiene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Iodomethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Isopropylbenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| m-,p-Xylene | 9.98 U | 10.8 U | 11.7 U | 8.80 U | 9.03 U | 9.05 U | 8.80 U | 8.83 U | 8.50 U | 8.89 U | 8.31 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| n-Butylbenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| n-Propylbenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| o-Xylene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| p-Isopropyltoluene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| sec-Butylbenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-MB1-52 1.5 - 2 03/22/12 | SB-MB1-53 1.5 - 2 03/22/12 | SB-MB1-54 1.5 - 2 03/27/12 | SB-PDG-1 1.5 - 2 06/02/09 | SB-PDG-2 1 - 1.5 06/02/09 | SB-PDG-3 1.5 - 2 06/02/09 | SB-PDG-4 1.5 - 2 06/02/09 | SB-PDG-5 1.5 - 2 06/02/09 | SB-PDG-6 1.5 - 2 06/02/09 | SB-PDG-7 1.5 - 2 06/02/09 | SB-PDG-8 1.5 - 2 06/02/09 |
|---|----------------------------------|----------------------------------|----------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Styrene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| tert-Butylbenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Toluene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| trans-1,4-Dichloro-2-butene | 25.0 U | 27.0 U | 29.3 U | 22.0 U | 22.6 U | 22.6 U | 22.0 U | 22.1 U | 21.2 U | 22.2 U | 20.8 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,1,2,2-Tetrachloroethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,1-Dichloroethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,1-Dichloroethene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 27.4 | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,2,4-Trichlorobenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,2-Dibromo-3-chloropropane | 30.0 U | 32.4 U | 35.2 U | 22.0 U | 22.6 U | 22.6 U | 22.0 U | 22.1 U | 21.2 U | 22.2 U | 20.8 U |
| 1,2-Dichlorobenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,2-Dichloroethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,2-Dichloropropane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,3-Dichlorobenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| 1,4-Dichlorobenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Bromodichloromethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Carbon Tetrachloride | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Chlorobenzene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Chloroethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Chloroform | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Chloromethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| cis-1,3-Dichloropropene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Dibromochloromethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Dichlorodifluoromethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Methylene Chloride | 1.42 J | 4.02 J | 23.5 U | 17.6 U | 18.1 U | 18.1 U | 17.6 U | 17.7 U | 17.0 U | 17.8 U | 16.6 U |
| trans-1,3-Dichloropropene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Trichlorofluoromethane | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| cis-1,2-Dichloroethene | 4.99 U | 5.40 U | 2.44 J | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Tetrachloroethene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| trans-1,2-Dichloroethene | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Trichloroethene | 4.99 U | 2.42 J | 9.75 | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Vinyl Chloride | 4.99 U | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 7.74 | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-PDG-9 | SB-PDG-10 | SB-PDG-11 | SB-PDG-12 | SB-PDG-13 | SB-PDG-14 | SB-PDG-15 | SB-PDG-16 | SB-PDG-17 | SB-PDG-18 | SB-PDG-19 |
|---|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Date Collected: | 06/02/09 | 06/02/09 | 06/02/09 | 01/14/10 | 01/14/10 | 01/15/10 | 01/15/10 | 01/15/10 | 01/19/10 | 01/19/10 | 01/19/10 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,1-Dichloropropene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,2,3-Trichlorobenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,2,3-Trichloropropane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,2,4-Trimethylbenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,2-Dibromoethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,3,5-Trimethylbenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,3-Dichloropropane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 2,2-Dichloropropane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 2-Butanone | 23.1 U | 22.7 U | 23.4 U | 12.8 J | 21.1 U | 21.2 U | 19.4 U | 26.1 U | 33.7 U | 36.2 U | 35.4 U |
| 2-Chlorotoluene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 2-Hexanone | 11.6 U | 11.3 U | 11.7 U | 11.0 U | 10.6 U | 10.6 U | 9.68 U | 13.1 U | 16.9 U | 18.1 U | 17.7 U |
| 4-Chlorotoluene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 4-Methyl-2-pentanone | 11.6 U | 11.3 U | 11.7 U | 11.0 U | 10.6 U | 10.6 U | 9.68 U | 13.1 U | 16.9 U | 18.1 U | 17.7 U |
| Acetone | 46.3 U | 45.4 U | 46.9 U | 73.7 | 14.0 J | 16.2 J | 23.2 J | 10.8 J | 16.5 J | 21.3 J | 70.7 U |
| Benzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Bromobenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Bromochloromethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Bromoform | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Bromomethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Carbon Disulfide | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Diisopropyl ether (DIPE) | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Ethylbenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Hexachlorobutadiene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Iodomethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Isopropylbenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| m-,p-Xylene | 9.26 U | 9.08 U | 9.37 U | 8.80 U | 8.45 U | 8.46 U | 7.75 U | 10.5 U | 13.5 U | 14.5 U | 14.1 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| n-Butylbenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| n-Propylbenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| o-Xylene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| p-Isopropyltoluene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| sec-Butylbenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-PDG-9 1.5 - 2 06/02/09 | SB-PDG-10 1.5 - 2 06/02/09 | SB-PDG-11 1.5 - 2 06/02/09 | SB-PDG-12 2 01/14/10 | SB-PDG-13 2 01/14/10 | SB-PDG-14 2 01/15/10 | SB-PDG-15 2 01/15/10 | SB-PDG-16 2 01/15/10 | SB-PDG-17 2 01/19/10 | SB-PDG-18 2 01/19/10 | SB-PDG-19 2 01/19/10 |
|---|---------------------------------|----------------------------------|----------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Styrene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| tert-Butylbenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Toluene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| trans-1,4-Dichloro-2-butene | 23.1 U | 22.7 U | 23.4 U | 22.0 U | 21.1 U | 21.2 U | 19.4 U | 26.1 U | 33.7 U | 36.2 U | 35.4 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,1,2,2-Tetrachloroethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,1-Dichloroethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,1-Dichloroethene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,2,4-Trichlorobenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,2-Dibromo-3-chloropropane | 23.1 U | 22.7 U | 23.4 U | 22.0 U | 21.1 U | 21.2 U | 19.4 U | 26.1 U | 33.7 U | 36.2 U | 35.4 U |
| 1,2-Dichlorobenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,2-Dichloroethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,2-Dichloropropane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,3-Dichlorobenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| 1,4-Dichlorobenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Bromodichloromethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Carbon Tetrachloride | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Chlorobenzene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Chloroethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Chloroform | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Chloromethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| cis-1,3-Dichloropropene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Dibromochloromethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Dichlorodifluoromethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Methylene Chloride | 18.5 U | 18.2 U | 18.7 U | 17.6 U | 16.9 U | 1.69 JB | 3.01 J | 2.31 JB | 27.0 U | 28.9 U | 2.23 J |
| trans-1,3-Dichloropropene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Trichlorofluoromethane | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| cis-1,2-Dichloroethene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Tetrachloroethene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| trans-1,2-Dichloroethene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Trichloroethene | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Vinyl Chloride | 4.63 U | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-PDG-20 | SB-PDG-21 | SB-PDG-22 | SB-PDG-23 | SB-PDG-24 | SB-PDG-25 | SB-PDG-26 | SB-PDG-27 | SB-PDG-28 | SB-PDG-29 | SB-PDG-RW |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0-0.5 |
| Date Collected: | 01/19/10 | 01/20/10 | 01/20/10 | 01/20/10 | 01/20/10 | 01/20/10 | 01/20/10 | 01/20/10 | 01/20/10 | 01/20/10 | 01/20/10 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,1-Dichloropropene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,2,3-Trichlorobenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,2,3-Trichloropropane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,2,4-Trimethylbenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,2-Dibromoethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,3,5-Trimethylbenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,3-Dichloropropane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 2,2-Dichloropropane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 2-Butanone | 36.5 U | 58.8 U | 36.4 U | 35.3 U | 34.1 U | 32.2 U | 37.2 U | 39.0 U | 44.1 U | 45.3 U | 43.2 U |
| 2-Chlorotoluene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 2-Hexanone | 18.2 U | 29.4 U | 18.2 U | 17.6 U | 17.1 U | 16.1 U | 18.6 U | 19.5 U | 22.0 U | 22.6 U | 21.6 U |
| 4-Chlorotoluene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 4-Methyl-2-pentanone | 18.2 U | 29.4 U | 18.2 U | 17.6 U | 17.1 U | 16.1 U | 18.6 U | 19.5 U | 22.0 U | 22.6 U | 21.6 U |
| Acetone | 18.4 J | 118 U | 24.6 J | 30.3 J | 27.0 J | 23.5 J | 14.5 J | 38.6 J | 44.1 J | 21.9 J | 18.0 J |
| Benzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Bromobenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Bromochloromethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Bromoform | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Bromomethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Carbon Disulfide | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Diisopropyl ether (DIPE) | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Ethylbenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Hexachlorobutadiene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Iodomethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Isopropylbenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| m-,p-Xylene | 14.6 U | 23.5 U | 14.5 U | 14.1 U | 13.7 U | 12.9 U | 14.9 U | 15.6 U | 17.6 U | 18.1 U | 17.3 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| n-Butylbenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| n-Propylbenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| o-Xylene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| p-Isopropyltoluene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| sec-Butylbenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-PDG-20 2 01/19/10 | SB-PDG-21 2 01/20/10 | SB-PDG-22 2 01/20/10 | SB-PDG-23 2 01/20/10 | SB-PDG-24 2 01/20/10 | SB-PDG-25 2 01/20/10 | SB-PDG-26 2 01/20/10 | SB-PDG-27 2 01/20/10 | SB-PDG-28 2 01/20/10 | SB-PDG-29 2 01/20/10 | SB-PDG-RW 0-0.5 01/20/10 |
|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------------------------------|
| Styrene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| tert-Butylbenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Toluene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| trans-1,4-Dichloro-2-butene | 36.5 U | 58.8 U | 36.4 U | 35.3 U | 34.1 U | 32.2 U | 37.2 U | 39.0 U | 44.1 U | 45.3 U | 43.2 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,1,2,2-Tetrachloroethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,1-Dichloroethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,1-Dichloroethene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 4.88 J | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,2,4-Trichlorobenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,2-Dibromo-3-chloropropane | 36.5 U | 58.8 U | 36.4 U | 35.3 U | 34.1 U | 32.2 U | 37.2 U | 39.0 U | 44.1 U | 45.3 U | 43.2 U |
| 1,2-Dichlorobenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,2-Dichloroethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,2-Dichloropropane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,3-Dichlorobenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| 1,4-Dichlorobenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Bromodichloromethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Carbon Tetrachloride | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Chlorobenzene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Chloroethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Chloroform | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Chloromethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| cis-1,3-Dichloropropene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Dibromochloromethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Dichlorodifluoromethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Methylene Chloride | 29.2 U | 47.0 U | 29.1 U | 28.2 U | 27.3 U | 25.8 U | 29.7 U | 31.2 U | 35.3 U | 36.2 U | 34.6 U |
| trans-1,3-Dichloropropene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Trichlorofluoromethane | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| cis-1,2-Dichloroethene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Tetrachloroethene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| trans-1,2-Dichloroethene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Trichloroethene | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Vinyl Chloride | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | WCSS-1 2 10/26/15 | WP-Com-Base 1.5 09/23/08 | WP-Com-East 0.75 09/23/08 | WP-Com-North 0.75 09/23/08 | WP-Com-South 0.75 09/23/08 | WP-Com-West 0.75 09/23/08 | WP-SB-01 0.5 - 1.5 09/23/08 | WP-SB-03 1 - 2 09/23/08 | WP-SB-04 0.5 - 1.5 09/23/08 | WP-SB-05 0.5 - 1.5 09/23/08 | WP-SB-06 0.5 - 1.5 09/23/08 |
|---|-------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|---------------------------------|-----------------------------------|-------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 1,1-Dichloropropene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 1,2,3-Trichlorobenzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 1,2,3-Trichloropropane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 1,2,4-Trimethylbenzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.37 | 4.31 U | 126 U |
| 1,2-Dibromoethane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 1,3,5-Trimethylbenzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 3.66 J | 4.31 U | 126 U |
| 1,3-Dichloropropane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 2,2-Dichloropropane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 2-Butanone | 445 J | 17,600 U | 21,700 U | 27,300 U | 1,170 U | 2,620 U | 2,060 U | 24.4 U | 26.4 U | 21.6 U | 3,160 U |
| 2-Chlorotoluene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 2-Hexanone | 515 U | 3,530 U | 4,340 U | 5,460 U | 233 U | 525 U | 413 U | 12.2 U | 13.2 U | 10.8 U | 632 U |
| 4-Chlorotoluene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 4-Methyl-2-pentanone | 515 U | 3,530 U | 4,340 U | 5,460 U | 233 U | 525 U | 413 U | 12.2 U | 13.2 U | 10.8 U | 632 U |
| Acetone | 2,580 U | 17,600 U | 21,700 U | 27,300 U | 1,170 U | 2,620 U | 2,060 U | 54.5 | 44.8 J | 34.7 J | 3,160 U |
| Benzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Bromobenzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Bromochloromethane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Bromoform | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Bromomethane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Carbon Disulfide | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Diisopropyl ether (DIPE) | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Ethylbenzene | 105 | 2,300 | 3,520 | 3,810 | 301 | 959 | 1,070 | 1.50 J | 21.6 | 5.42 | 911 |
| Hexachlorobutadiene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Iodomethane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Isopropylbenzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 60.3 J | 4.87 U | 1.07 J | 4.31 U | 126 U |
| m-,p-Xylene | 206 U | 9,020 | 13,700 | 15,400 | 803 | 3,190 | 6,200 | 9.75 U | 48.4 | 7.99 J | 7,060 |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| n-Butylbenzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| n-Propylbenzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 30.4 J | 28.1 J | 2.37 J | 5.28 U | 4.31 U | 150 |
| o-Xylene | 103 U | 818 | 677 J | 1,090 U | 46.6 U | 105 U | 408 | 4.87 U | 13.7 | 4.31 U | 126 U |
| p-Isopropyltoluene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 33.6 J | 97.4 | 4.87 U | 2.61 J | 4.31 U | 97.3 J |
| sec-Butylbenzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | WCSS-1 2 10/26/15 | WP-Com-Base 1.5 09/23/08 | WP-Com-East 0.75 09/23/08 | WP-Com-North 0.75 09/23/08 | WP-Com-South 0.75 09/23/08 | WP-Com-West 0.75 09/23/08 | WP-SB-01 0.5 - 1.5 09/23/08 | WP-SB-03 1 - 2 09/23/08 | WP-SB-04 0.5 - 1.5 09/23/08 | WP-SB-05 0.5 - 1.5 09/23/08 | WP-SB-06 0.5 - 1.5 09/23/08 |
|---|-------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|---------------------------------|-----------------------------------|-------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Styrene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| tert-Butylbenzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Toluene | 55.7 J | 63.5 J | 868 U | 1,090 U | 46.6 U | 16.8 J | 21.5 J | 1.60 J | 8.65 | 4.31 U | 32.8 J |
| trans-1,4-Dichloro-2-butene | 515 U | 3,530 U | 4,340 U | 5,460 U | 233 U | 525 U | 413 U | 24.4 U | 26.4 U | 21.6 U | 632 U |
| Xylenes (total) | 206 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 2,730 | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 1,1,2,2-Tetrachloroethane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 1,1-Dichloroethane | 405 | 705 U | 868 U | 1,090 U | 46.6 U | 33.6 J | 82.6 U | 7.32 | 24.1 | 4.35 | 20.2 J |
| 1,1-Dichloroethene | 165 | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 1,2,4-Trichlorobenzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 1,2-Dibromo-3-chloropropane | 515 U | 3,530 U | 4,340 U | 5,460 U | 233 U | 525 U | 413 U | 24.4 U | 26.4 U | 21.6 U | 632 U |
| 1,2-Dichlorobenzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 1,2-Dichloroethane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 1,2-Dichloropropane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 1,3-Dichlorobenzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| 1,4-Dichlorobenzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Bromodichloromethane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Carbon Tetrachloride | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Chlorobenzene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Chloroethane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Chloroform | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Chloromethane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| cis-1,3-Dichloropropene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Dibromochloromethane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Dichlorodifluoromethane | 515 U | 3,530 U | 4,340 U | 5,460 U | 233 U | 525 U | 413 U | 4.87 U | 5.28 U | 4.31 U | 632 U |
| Methylene Chloride | 515 U | 233 J | 304 J | 1,460 J | 114 J | 73.4 J | 152 J | 19.5 U | 2.09 J | 1.56 J | 225 J |
| trans-1,3-Dichloropropene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Trichlorofluoromethane | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| cis-1,2-Dichloroethene | 1,660 | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Tetrachloroethene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| trans-1,2-Dichloroethene | 103 U | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 3.97 J | 4.31 U | 126 U |
| Trichloroethene | 458 | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 80.9 J |
| Vinyl Chloride | 87.6 J | 705 U | 868 U | 1,090 U | 46.6 U | 105 U | 82.6 U | 4.87 U | 5.28 U | 4.31 U | 126 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | WP-SB-07 | WP-SB-08 | WP-SB-09 | WP-SB-10 | WP-SB-11 | WP-SB-12 | WP-SB-13 | WP-SB-14 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 |
| Date Collected: | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,1-Dichloropropene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2,3-Trichlorobenzene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2,3-Trichloropropane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2,4-Trimethylbenzene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2-Dibromoethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,3,5-Trimethylbenzene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,3-Dichloropropane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 2,2-Dichloropropane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 2-Butanone | 36.4 U | 4,840 U | 23.5 U | 25.1 U | 22.1 U | 19.2 U | 26.1 U | 22.6 U |
| 2-Chlorotoluene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 2-Hexanone | 18.2 U | 967 U | 11.7 U | 12.5 U | 11.0 U | 9.62 U | 13.1 U | 11.3 U |
| 4-Chlorotoluene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 4-Methyl-2-pentanone | 18.2 U | 967 U | 11.7 U | 12.5 U | 11.0 U | 9.62 U | 13.1 U | 11.3 U |
| Acetone | 84.6 | 4,840 U | 27.0 J | 28.2 J | 30.6 J | 21.3 J | 24.6 J | 18.0 J |
| Benzene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromobenzene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromochloromethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromoform | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromomethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Carbon Disulfide | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Diisopropyl ether (DIPE) | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Ethylbenzene | 7.28 U | 867 | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Hexachlorobutadiene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Iodomethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Isopropylbenzene | 7.28 U | 193 U | 0.958 J | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| m-,p-Xylene | 14.6 U | 6,680 | 9.39 U | 10.0 U | 8.83 U | 7.69 U | 10.5 U | 9.05 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| n-Butylbenzene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| n-Propylbenzene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| o-Xylene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| p-Isopropyltoluene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| sec-Butylbenzene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | WP-SB-07 | WP-SB-08 | WP-SB-09 | WP-SB-10 | WP-SB-11 | WP-SB-12 | WP-SB-13 | WP-SB-14 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 |
| Date Collected: | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 |
| Styrene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| tert-Butylbenzene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Toluene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 1.15 J | 5.23 U | 4.52 U |
| trans-1,4-Dichloro-2-butene | 36.4 U | 967 U | 23.5 U | 25.1 U | 22.1 U | 19.2 U | 26.1 U | 22.6 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,1,2,2-Tetrachloroethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,1-Dichloroethane | 6.16 J | 54.2 J | 4.70 U | 5.02 U | 4.42 U | 2.57 J | 1.41 J | 4.52 U |
| 1,1-Dichloroethene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2,4-Trichlorobenzene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2-Dibromo-3-chloropropane | 36.4 U | 967 U | 23.5 U | 25.1 U | 22.1 U | 19.2 U | 26.1 U | 22.6 U |
| 1,2-Dichlorobenzene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2-Dichloroethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2-Dichloropropane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,3-Dichlorobenzene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,4-Dichlorobenzene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromodichloromethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Carbon Tetrachloride | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Chlorobenzene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Chloroethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Chloroform | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Chloromethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| cis-1,3-Dichloropropene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Dibromochloromethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Dichlorodifluoromethane | 7.28 U | 967 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Methylene Chloride | 29.1 U | 230 J | 1.62 J | 1.73 J | 1.85 J | 15.4 U | 20.9 U | 18.1 U |
| trans-1,3-Dichloropropene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Trichlorofluoromethane | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| cis-1,2-Dichloroethene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Tetrachloroethene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| trans-1,2-Dichloroethene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Trichloroethene | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Vinyl Chloride | 7.28 U | 193 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA |

Table 4
Surface Soil Sample Analytical Results (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

Notes:

NA = not applicable

µg/kg = micrograms per kilogram

Laboratory Qualifiers:

B = Analyte was found in the associated blank, as well as in the sample.

J = Indicates an estimated value.

ND = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | Corp-01 | Corp-02 | Corp-03 | Corp-04 | Corp-05 | Corp-06 | CPT-02 | CPT-08 | MB1-01 | MB1-02 | MB1-03 | MB1-04 | MB1-05 | MB1-06 | MB1-07 | MB1-08 | MB1-09 | MB1-10 | MB1-11 | MB1-12 | MB1-13 | MB1-14 |
|---|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 8 - 10 | 6 - 8 | 0.5 - 1.0 | 1.0 - 1.5 | 1.5 - 2.0 | 1.0 - 1.5 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.0 - 1.5 | 1.5 - 2.0 | 1.5 - 2.0 |
| Date Collected: | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 10/03/08 | 10/03/08 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,1-Dichloropropene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,2,3-Trichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,2,3-Trichloropropane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,2,4-Trimethylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,2-Dibromoethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,3,5-Trimethylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,3-Dichloropropane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 2,2-Dichloropropane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 2-Butanone | 1.88 J | 14.2 J | 21.0 U | 23.3 U | 4.54 J | 23.8 U | 207,000 U | 124,000 U | 2.55 J | 1.82 J | 2.64 J | 3.14 J | 24.1 U | 24.3 U | 23.7 U | 23.3 U | 22.6 U | 26.0 U | 24.3 U | 24.7 U | 23.4 U | 23.7 U |
| 2-Chlorotoluene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 2-Hexanone | 11.0 U | 10.8 U | 10.5 U | 11.7 U | 10.3 U | 11.9 U | 41,400 U | 24,800 U | 12.0 U | 11.6 U | 11.2 U | 12.6 U | 12.1 U | 12.2 U | 11.9 U | 11.6 U | 11.3 U | 13.0 U | 12.1 U | 12.4 U | 11.7 U | 11.9 U |
| 4-Chlorotoluene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 4-Methyl-2-pentanone | 11.0 U | 10.8 U | 10.5 U | 11.7 U | 10.3 U | 11.9 U | 41,400 U | 24,800 U | 12.0 U | 11.6 U | 11.2 U | 12.6 U | 12.1 U | 12.2 U | 11.9 U | 11.6 U | 11.3 U | 13.0 U | 12.1 U | 12.4 U | 11.7 U | 11.9 U |
| Acetone | 15.0 J | 60.0 | 7.30 J | 5.67 J | 44.7 | 6.90 J | 207,000 U | 124,000 U | 18.9 J | 14.4 J | 17.9 J | 17.9 J | 8.97 J | 6.66 J | 6.45 J | 10.8 J | 9.43 J | 51.9 U | 11.2 J | 10.6 J | 15.7 J | 18.1 J |
| Benzene | 4.41 U | 4.34 U | 4.21 U | 2.35 J | 4.12 U | 2.31 J | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Bromobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Bromochloromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Bromoform | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Bromomethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Carbon Disulfide | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Diisopropyl ether (DIPE) | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Ethylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Hexachlorobutadiene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Iodomethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Isopropylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| m-,p-Xylene | 8.83 U | 8.67 U | 8.41 U | 9.34 U | 8.24 U | 9.51 U | 16,600 U | 9,920 U | 9.58 U | 9.28 U | 8.98 U | 10.0 U | 9.65 U | 9.73 U | 9.49 U | 9.30 U | 9.03 U | 10.4 U | 9.71 U | 9.90 U | 9.38 U | 9.48 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| n-Butylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| n-Propylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| o-Xylene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | Corp-01 1.5-2 05/06/15 | Corp-02 1.5-2 05/06/15 | Corp-03 1.5-2 05/06/15 | Corp-04 1.5-2 05/06/15 | Corp-05 1.5-2 05/06/15 | Corp-06 1.5-2 05/06/15 | CPT-02 8 - 10 10/03/08 | CPT-08 6 - 8 10/03/08 | MB1-01 0.5 - 1.0 07/14/15 | MB1-02 1.0 - 1.5 07/14/15 | MB1-03 1.5 - 2.0 07/14/15 | MB1-04 1.0 - 1.5 07/14/15 | MB1-05 1.5 - 2.0 07/14/15 | MB1-06 1.5 - 2.0 07/14/15 | MB1-07 1.5 - 2.0 07/14/15 | MB1-08 1.5 - 2.0 07/14/15 | MB1-09 1.5 - 2.0 07/14/15 | MB1-10 1.5 - 2.0 07/14/15 | MB1-11 1.5 - 2.0 07/14/15 | MB1-12 1.0 - 1.5 07/14/15 | MB1-13 1.5 - 2.0 07/14/15 | MB1-14 1.5 - 2.0 07/14/15 |
|---|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| p-Isopropyltoluene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| sec-Butylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Styrene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 1.42 J | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| tert-Butylbenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Toluene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 0.925 J | 5.02 U | 0.974 J | 1.27 J | 4.75 U | 4.65 U | 0.966 J | 1.17 J | 1.20 J | 1.19 J | 1.15 J | 4.74 U |
| trans-1,4-Dichloro-2-butene | 22.1 U | 21.7 U | 21.0 U | 23.3 U | 20.6 U | 23.8 U | 41,400 U | 24,800 U | 23.9 U | 23.2 U | 22.4 U | 25.1 U | 24.1 U | 24.3 U | 23.7 U | 23.3 U | 22.6 U | 26.0 U | 24.3 U | 24.7 U | 23.4 U | 23.7 U |
| Xylenes (total) | 8.83 U | 8.67 U | 8.41 U | 9.34 U | 8.24 U | 9.51 U | NA | NA | 9.58 U | 9.28 U | 8.98 U | 10.0 U | 9.65 U | 9.73 U | 9.49 U | 9.30 U | 9.03 U | 10.4 U | 9.71 U | 9.90 U | 9.38 U | 9.48 U |
| 1,1,1-Trichloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 15.0 | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 1.67 J | 32.2 | 12.9 | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,1,2,2-Tetrachloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,1-Dichloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,1-Dichloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,2,4-Trichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,2-Dibromo-3-chloropropane | 26.5 U | 26.0 U | 25.2 U | 28.0 U | 24.7 U | 28.5 U | 41,400 U | 24,800 U | 28.7 U | 27.8 U | 26.9 U | 30.1 U | 28.9 U | 29.2 U | 28.5 U | 27.9 U | 27.1 U | 31.1 U | 29.1 U | 29.7 U | 28.1 U | 28.4 U |
| 1,2-Dichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,2-Dichloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,2-Dichloropropane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,3-Dichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| 1,4-Dichlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Bromodichloromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Carbon Tetrachloride | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Chlorobenzene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Chloroethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Chloroform | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Chloromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| cis-1,3-Dichloropropene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Dibromochloromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Dichlorodifluoromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 41,400 U | 24,800 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Methylene Chloride | 17.7 U | 17.3 U | 16.8 U | 18.7 U | 16.5 U | 19.0 U | 41,400 U | 24,800 U | 19.2 U | 18.6 U | 18.0 U | 20.1 U | 19.3 U | 19.5 U | 19.0 U | 18.6 U | 18.1 U | 20.8 U | 19.4 U | 19.8 U | 18.8 U | 19.0 U |
| trans-1,3-Dichloropropene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Trichlorofluoromethane | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| cis-1,2-Dichloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 59,400 | 46,100 | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 1.99 J | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Tetrachloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 1.52 J | 1.18 J | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| trans-1,2-Dichloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 8,280 U | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Trichloroethene | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 219,000 | 217,000 | 4.17 J | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 8.11 | 1.26 J | 5.19 U | 4.86 U | 1.04 J | 4.69 U | 4.74 U |
| Vinyl Chloride | 4.41 U | 4.34 U | 4.21 U | 4.67 U | 4.12 U | 4.75 U | 4,390 J | 4,960 U | 4.79 U | 4.64 U | 4.49 U | 5.02 U | 4.82 U | 4.86 U | 4.75 U | 4.65 U | 4.51 U | 5.19 U | 4.86 U | 4.95 U | 4.69 U | 4.74 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-15 | MB1-16 | MB1-17 | MB1-18 | MB1-19 | MB1-20 | MB1-21 | MB1-22 | MB1-22A | MB1-23 | MB1-24 | MB1-25 | MB1-26 | MB1-27 | MB1-28 | MB1-29 | MB1-30 | MB1-31 | MB1-32 | MB1-33 | MB1-34 | MB1-35 | MB1-36 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 0.5 - 1.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 3.0 - 3.5 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 0.5 - 1.0 | 1.5 - 2.0 | 1.0 - 1.5 | 1.0 - 1.5 | 1.5 - 2.0 | 1.5 - 2.0 |
| Date Collected: | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/16/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,1-Dichloropropene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,2,3-Trichlorobenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,2,3-Trichloropropane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,2,4-Trimethylbenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 170 | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 210 |
| 1,2-Dibromoethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,3,5-Trimethylbenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 41.2 J | 0.974 J | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 1,100 |
| 1,3-Dichloropropane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 2,2-Dichloropropane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 2-Butanone | 26.5 U | 25.3 U | 21.8 U | 3.71 J | 21.8 U | 22.6 U | 27.0 U | 28.7 U | 1,250 U | 22.9 U | 4.52 J | 26.9 U | 26.3 U | 26,900 U | 73.0 J | 24.6 U | 24.7 U | 22.9 J | 22.7 U | 24.2 U | 28,900 U | 21.7 J | 38.0 J |
| 2-Chlorotoluene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 2-Hexanone | 13.3 U | 12.6 U | 10.9 U | 12.6 U | 10.9 U | 11.3 U | 13.5 U | 14.3 U | 250 U | 11.5 U | 13.0 U | 13.4 U | 13.1 U | 5,380 U | 312 U | 12.3 U | 12.3 U | 14.2 U | 11.3 U | 12.1 U | 5,790 U | 11.0 U | 247 U |
| 4-Chlorotoluene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 4-Methyl-2-pentanone | 13.3 U | 12.6 U | 10.9 U | 12.6 U | 10.9 U | 11.3 U | 13.5 U | 14.3 U | 250 U | 11.5 U | 13.0 U | 13.4 U | 13.1 U | 5,380 U | 312 U | 12.3 U | 12.3 U | 5.13 J | 2.25 J | 12.1 U | 5,790 U | 11.0 U | 247 U |
| Acetone | 17.8 J | 15.0 J | 13.7 J | 35.2 J | 14.4 J | 20.2 J | 17.2 J | 15.7 J | 1,250 U | 9.01 J | 40.7 J | 30.9 J | 14.0 J | 26,900 U | 1,560 U | 11.1 J | 23.2 J | 119 | 7.76 J | 6.33 J | 28,900 U | 87.3 | 1,230 U |
| Benzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 1.26 J | 1.34 J | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Bromobenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Bromochloromethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Bromoform | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Bromomethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Carbon Disulfide | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Diisopropyl ether (DIPE) | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Ethylbenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 48.7 J | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 1.56 J | 6.90 J |
| Hexachlorobutadiene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Iodomethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Isopropylbenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 23.7 J | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 401 |
| m,p-Xylene | 10.6 U | 10.1 U | 8.71 U | 10.1 U | 8.74 U | 9.06 U | 10.8 U | 11.5 U | 100 U | 9.18 U | 10.4 U | 10.7 U | 10.5 U | 2,150 U | 287 | 9.84 U | 9.87 U | 1.75 J | 9.07 U | 9.69 U | 2,320 U | 3.64 J | 11.8 J |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 187 | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 68.0 |
| n-Butylbenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| n-Propylbenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 31.2 J | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 165 |
| o-Xylene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 137 | 4.92 U | 4.94 U | 0.978 J | 4.53 U | 4.84 U | 1,160 U | 1.66 J | 15.3 J |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-15 | MB1-16 | MB1-17 | MB1-18 | MB1-19 | MB1-20 | MB1-21 | MB1-22 | MB1-22A | MB1-23 | MB1-24 | MB1-25 | MB1-26 | MB1-27 | MB1-28 | MB1-29 | MB1-30 | MB1-31 | MB1-32 | MB1-33 | MB1-34 | MB1-35 | MB1-36 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 0.5 - 1.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 3.0 - 3.5 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 0.5 - 1.0 | 1.5 - 2.0 | 1.0 - 1.5 | 1.0 - 1.5 | 1.5 - 2.0 | 1.5 - 2.0 |
| Date Collected: | 07/14/15 | 07/14/15 | 07/14/15 | 07/14/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/16/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| p-Isopropyltoluene | 5.30 U | 5.06 U | 1.35 J | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 118 | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,370 | 2.28 J | 106 |
| sec-Butylbenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 33.7 J | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 105 |
| Styrene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| tert-Butylbenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Toluene | 5.30 U | 5.06 U | 4.36 U | 1.23 J | 1.18 J | 1.23 J | 1.40 J | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 497 | 4.92 U | 1.05 J | 3.19 J | 5.66 | 11.4 | 8,280 | 36.1 | 49.3 U |
| trans-1,4-Dichloro-2-butene | 26.5 U | 25.3 U | 21.8 U | 25.2 U | 21.8 U | 22.6 U | 27.0 U | 28.7 U | 250 U | 22.9 U | 26.1 U | 26.9 U | 26.3 U | 5,380 U | 312 U | 24.6 U | 24.7 U | 28.4 U | 22.7 U | 24.2 U | 5,790 U | 21.9 U | 247 U |
| Xylenes (total) | 10.6 U | 10.1 U | 8.71 U | 10.1 U | 8.74 U | 9.06 U | 10.8 U | 11.5 U | 100 U | 9.18 U | 10.4 U | 10.7 U | 10.5 U | 2,150 U | 424 | 9.84 U | 9.87 U | 2.73 J | 9.07 U | 9.69 U | 2,320 U | 5.30 J | 27.1 J |
| 1,1,1-Trichloroethane | 5.30 U | 1.36 J | 4.36 U | 1.08 J | 4.37 U | 4.53 U | 5.39 U | 11.6 | 31.5 J | 2.32 J | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 691 | 16.6 | 28.0 | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,1,2,2-Tetrachloroethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,1-Dichloroethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 7.61 | 18.0 J | 1.94 J | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 12.5 J | 7.78 | 18.5 | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,1-Dichloroethene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,2,4-Trichlorobenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,2-Dibromo-3-chloropropane | 31.8 U | 30.3 U | 26.1 U | 30.2 U | 26.2 U | 27.2 U | 32.3 U | 34.4 U | 250 U | 27.5 U | 31.3 U | 32.2 U | 31.5 U | 5,380 U | 312 U | 29.5 U | 29.6 U | 34.1 U | 27.2 U | 29.1 U | 5,790 U | 26.3 U | 247 U |
| 1,2-Dichlorobenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,2-Dichloroethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,2-Dichloropropane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,3-Dichlorobenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| 1,4-Dichlorobenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 1.02 J | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Bromodichloromethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Carbon Tetrachloride | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 2.33 J | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Chlorobenzene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Chloroethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 13.4 | 49.3 U |
| Chloroform | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Chloromethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| cis-1,3-Dichloropropene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Dibromochloromethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Dichlorodifluoromethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 250 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 5,380 U | 312 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 5,790 U | 4.38 U | 247 U |
| Methylene Chloride | 21.2 U | 20.2 U | 17.4 U | 20.1 U | 17.5 U | 18.1 U | 21.6 U | 23.0 U | 250 U | 18.4 U | 20.9 U | 21.5 U | 21.0 U | 5,380 U | 312 U | 19.7 U | 19.7 U | 22.7 U | 18.1 U | 19.4 U | 5,790 U | 17.5 U | 247 U |
| trans-1,3-Dichloropropene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Trichlorofluoromethane | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| cis-1,2-Dichloroethene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 27.1 | 4.53 U | 5.39 U | 5.74 U | 18.0 J | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 7,210 | 9.98 J | 3.75 J | 7.23 | 1.84 J | 4.53 U | 4.84 U | 1,160 U | 2.66 J | 178 |
| Tetrachloroethene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| trans-1,2-Dichloroethene | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,230 | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Trichloroethene | 3.43 J | 14.9 | 1.14 J | 4.97 J | 43.9 | 1.38 J | 5.39 U | 21.8 | 235 | 13.7 | 5.22 U | 1.21 J | 2.51 J | 30,100 | 150 | 41.4 | 34.5 | 6.33 | 3.84 J | 3.30 J | 1,160 U | 1.70 J | 35.5 J |
| Vinyl Chloride | 5.30 U | 5.06 U | 4.36 U | 5.04 U | 4.37 U | 4.53 U | 5.39 U | 5.74 U | 50.0 U | 4.59 U | 5.22 U | 5.37 U | 5.25 U | 1,080 U | 62.4 U | 4.92 U | 4.94 U | 5.68 U | 4.53 U | 4.84 U | 1,160 U | 4.38 U | 49.3 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-37A | MB1-37B | MB1-37C | MB1-37D | MB1-37E | MB1-38 | MB1-38A | MB1-39 | MB1-40 | MB1-41 | MB1-42 | MB1-43 | MB1-44 | MB1-45 | MB1-46 | MB1-47 | MB1-48 | MB1-49 | MB1-50 | MB1-51 | MB1-52 | MB1-53 |
|---|-----------|-----------|-----------|-----------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 0.0 - 0.5 | 0.5 - 1.0 | 1.0 - 1.5 | 1.5 - 2.0 | 2.5 - 3.0 | 1.5 - 2.0 | 2.0 - 2.5 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 |
| Date Collected: | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/16/15 | 07/15/15 | 07/16/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,1-Dichloropropene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,2,3-Trichlorobenzene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,2,3-Trichloropropane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,2,4-Trimethylbenzene | 57.2 U | 989 U | 329 | 318 | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,2-Dibromoethane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,3,5-Trimethylbenzene | 57.2 U | 989 U | 170 | 145 | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,3-Dichloropropane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 2,2-Dichloropropane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 2-Butanone | 1,430 U | 24,700 U | 1,190 U | 37.1 J | 1,940,000 U | 1,160 U | 4,730 U | 2,850 U | 22.5 U | 23.0 U | 22.5 U | 21.8 U | 23.4 U | 25.0 U | 7.74 J | 23.5 U | 6.23 J | 25.1 U | 22.7 U | 26.2 U | 23.5 U | 1,410 U |
| 2-Chlorotoluene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 2-Hexanone | 286 U | 4,940 U | 238 U | 251 U | 389,000 U | 231 U | 946 U | 570 U | 11.2 U | 11.5 U | 11.2 U | 10.9 U | 11.7 U | 12.5 U | 11.2 U | 11.8 U | 10.6 U | 12.6 U | 11.3 U | 13.1 U | 11.7 U | 282 U |
| 4-Chlorotoluene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 4-Methyl-2-pentanone | 286 U | 4,940 U | 238 U | 251 U | 389,000 U | 231 U | 946 U | 570 U | 11.2 U | 11.5 U | 11.2 U | 10.9 U | 11.7 U | 12.5 U | 11.2 U | 11.8 U | 10.6 U | 12.6 U | 11.3 U | 13.1 U | 11.7 U | 282 U |
| Acetone | 1,430 U | 24,700 U | 1,190 U | 54.7 J | 1,940,000 U | 1,160 U | 4,730 U | 2,850 U | 10.8 J | 14.6 J | 8.05 J | 15.7 J | 9.76 J | 12.1 J | 49.2 | 23.6 J | 32.0 J | 7.83 J | 9.88 J | 12.8 J | 14.8 J | 1,410 U |
| Benzene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Bromobenzene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Bromochloromethane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Bromoform | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Bromomethane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Carbon Disulfide | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 2.27 J | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Diisopropyl ether (DIPE) | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Ethylbenzene | 57.2 U | 989 U | 10.9 J | 33.1 J | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 0.767 J | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Hexachlorobutadiene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Iodomethane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Isopropylbenzene | 57.2 U | 989 U | 9.51 J | 12.0 J | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| m-,p-Xylene | 114 U | 1,980 U | 23.8 J | 37.6 J | 155,000 U | 92.5 U | 378 U | 228 U | 9.00 U | 9.21 U | 8.99 U | 8.71 U | 9.35 U | 10.0 U | 8.93 U | 9.41 U | 8.52 U | 10.0 U | 9.08 U | 10.5 U | 9.39 U | 113 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 57.2 U | 989 U | 17.1 J | 80.8 | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| n-Butylbenzene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| n-Propylbenzene | 57.2 U | 989 U | 47.1 J | 64.2 | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| o-Xylene | 57.2 U | 989 U | 18.1 J | 25.1 J | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-37A | MB1-37B | MB1-37C | MB1-37D | MB1-37E | MB1-38 | MB1-38A | MB1-39 | MB1-40 | MB1-41 | MB1-42 | MB1-43 | MB1-44 | MB1-45 | MB1-46 | MB1-47 | MB1-48 | MB1-49 | MB1-50 | MB1-51 | MB1-52 | MB1-53 |
|---|------------|---------------|------------|-----------|-----------------|-----------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 0.0 - 0.5 | 0.5 - 1.0 | 1.0 - 1.5 | 1.5 - 2.0 | 2.5 - 3.0 | 1.5 - 2.0 | 2.0 - 2.5 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 |
| Date Collected: | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/16/15 | 07/15/15 | 07/16/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 |
| p-Isopropyltoluene | 57.2 U | 989 U | 43.3 J | 161 | 71,500 J | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| sec-Butylbenzene | 57.2 U | 989 U | 47.5 U | 29.1 J | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Styrene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| tert-Butylbenzene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Toluene | 57.2 U | 989 U | 16.6 J | 132 | 77,700 U | 46.3 U | 189 U | 114 U | 0.828 J | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 1.01 J | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| trans-1,4-Dichloro-2-butene | 286 U | 4,940 U | 238 U | 251 U | 389,000 U | 231 U | 946 U | 570 U | 22.5 U | 23.0 U | 22.5 U | 21.8 U | 23.4 U | 25.0 U | 22.3 U | 23.5 U | 21.3 U | 25.1 U | 22.7 U | 26.2 U | 23.5 U | 282 U |
| Xylenes (total) | 114 U | 1,980 U | 41.8 J | 62.7 J | 155,000 U | 92.5 U | 378 U | 228 U | 9.00 U | 9.21 U | 8.99 U | 8.71 U | 9.35 U | 10.0 U | 8.93 U | 9.41 U | 8.52 U | 10.0 U | 9.08 U | 10.5 U | 9.39 U | 113 U |
| 1,1,1-Trichloroethane | 191 | 41,600 | 526 | 152 | 159,000 | 219 | 1,710 | 156 | 3.39 J | 4.61 U | 4.49 U | 4.36 U | 59.7 | 21.8 | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,1,2,2-Tetrachloroethane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,1-Dichloroethane | 57.2 U | 989 U | 47.5 U | 130 | 77,700 U | 35.2 J | 410 | 22.8 J | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.81 | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,1-Dichloroethene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 134 J | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 1.15 J | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,2,4-Trichlorobenzene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,2-Dibromo-3-chloropropane | 286 U | 4,940 U | 238 U | 251 U | 389,000 U | 231 U | 946 U | 570 U | 27.0 U | 27.6 U | 27.0 U | 26.1 U | 28.1 U | 30.0 U | 26.8 U | 28.2 U | 25.6 U | 30.1 U | 27.2 U | 31.4 U | 28.2 U | 282 U |
| 1,2-Dichlorobenzene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,2-Dichloroethane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,2-Dichloropropane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,3-Dichlorobenzene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| 1,4-Dichlorobenzene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Bromodichloromethane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Carbon Tetrachloride | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 8.41 | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Chlorobenzene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Chloroethane | 57.2 U | 989 U | 47.5 U | 52.2 | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Chloroform | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Chloromethane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| cis-1,3-Dichloropropene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Dibromochloromethane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Dichlorodifluoromethane | 286 U | 4,940 U | 238 U | 251 U | 389,000 U | 231 U | 946 U | 570 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 282 U |
| Methylene Chloride | 286 U | 4,940 U | 238 U | 251 U | 389,000 U | 231 U | 946 U | 570 U | 18.0 U | 18.4 U | 18.0 U | 17.4 U | 18.7 U | 20.0 U | 17.9 U | 18.8 U | 0.869 J | 1.11 J | 18.2 U | 1.08 J | 0.929 J | 282 U |
| trans-1,3-Dichloropropene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Trichlorofluoromethane | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| cis-1,2-Dichloroethene | 57.2 U | 326 J | 16.6 J | 58.7 | 252,000 | 124 | 594 | 216 | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 8.02 | 4.47 U | 1.03 J | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Tetrachloroethene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 1.99 J | 56.3 U |
| trans-1,2-Dichloroethene | 57.2 U | 989 U | 47.5 U | 50.2 U | 77,700 U | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Trichloroethene | 449 | 16,400 | 418 | 178 | 557,000 | 201 | 518 | 823 | 16.6 | 4.61 U | 4.49 U | 4.36 U | 19.8 | 21.5 | 4.47 U | 7.32 | 1.71 J | 8.79 | 9.85 | 5.23 U | 4.69 U | 157 |
| Vinyl Chloride | 57.2 U | 989 U | 47.5 U | 12.5 J | 10,100 J | 46.3 U | 189 U | 114 U | 4.50 U | 4.61 U | 4.49 U | 4.36 U | 4.68 U | 5.00 U | 4.47 U | 4.70 U | 4.26 U | 5.02 U | 4.54 U | 5.23 U | 4.69 U | 56.3 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-54 | MB1-55 | MB1-56 | MB1-57 | MB1-58 | MB1-59 | MB1-60 | MB1-61 | MB1-62 | MB1-63 | MB1-64 | MB1-65A | MB1-65B | ME-01 | ME-02 | ME-03 | ME-04 | ME-05 | ME-06 | ME-07 | ME-08 | ME-09 | ME-10 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 1.5 - 2.0 | 1.0 - 1.5 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 0.5 - 1.0 | 0.5 - 1.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 2.5 - 3.0 | 3.0 - 3.5 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 |
| Date Collected: | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/16/15 | 07/16/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,1-Dichloropropene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,2,3-Trichlorobenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,2,3-Trichloropropane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,2,4-Trimethylbenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 42.3 J | 45.4 U | 4.26 U | 77.1 J | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,2-Dibromoethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,3,5-Trimethylbenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,3-Dichloropropane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 2,2-Dichloropropane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 2-Butanone | 23.8 U | 21.5 U | 21.8 U | 2.98 J | 21.4 U | 49.2 J | 1,130 U | 21.3 U | 2,380 U | 22.2 U | 21.9 U | 2,510 U | 2,720 U | 5.46 J | 22.9 U | 21.7 U | 21.7 U | 22.2 U | 22.2 U | 21.9 U | 22.5 U | 21.7 U | 1.37 J |
| 2-Chlorotoluene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 2-Hexanone | 11.9 U | 10.8 U | 10.9 U | 12.2 U | 10.7 U | 265 U | 227 U | 10.6 U | 476 U | 11.1 U | 10.9 U | 503 U | 544 U | 10.7 U | 11.4 U | 10.9 U | 10.8 U | 11.1 U | 11.1 U | 10.9 U | 11.2 U | 10.9 U | 10.8 U |
| 4-Chlorotoluene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 4-Methyl-2-pentanone | 11.9 U | 10.8 U | 10.9 U | 12.2 U | 10.7 U | 265 U | 227 U | 10.6 U | 476 U | 11.1 U | 10.9 U | 503 U | 544 U | 10.7 U | 11.4 U | 10.9 U | 10.8 U | 11.1 U | 11.1 U | 10.9 U | 11.2 U | 10.9 U | 10.8 U |
| Acetone | 15.6 J | 9.71 J | 14.5 J | 19.6 J | 11.4 J | 1,320 U | 1,130 U | 9.71 J | 148 J | 14.3 J | 8.75 J | 2,510 U | 2,720 U | 48.3 | 7.03 J | 5.52 J | 4.15 J | 7.83 J | 4.96 J | 3.93 J | 4.80 J | 8.77 J | 12.4 J |
| Benzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 12.2 J | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Bromobenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Bromochloromethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Bromoform | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Bromomethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Carbon Disulfide | 4.76 U | 4.31 U | 4.35 U | 1.65 J | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Diisopropyl ether (DIPE) | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Ethylbenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 95.3 | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Hexachlorobutadiene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Iodomethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Isopropylbenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| m-,p-Xylene | 9.52 U | 8.62 U | 8.70 U | 9.75 U | 8.56 U | 106 U | 90.7 U | 8.52 U | 190 U | 8.89 U | 8.74 U | 201 U | 218 U | 8.52 U | 9.15 U | 8.69 U | 8.67 U | 8.87 U | 8.90 U | 8.74 U | 8.98 U | 8.69 U | 8.67 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| n-Butylbenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| n-Propylbenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 9.00 J | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| o-Xylene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MB1-54 | MB1-55 | MB1-56 | MB1-57 | MB1-58 | MB1-59 | MB1-60 | MB1-61 | MB1-62 | MB1-63 | MB1-64 | MB1-65A | MB1-65B | ME-01 | ME-02 | ME-03 | ME-04 | ME-05 | ME-06 | ME-07 | ME-08 | ME-09 | ME-10 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 1.5 - 2.0 | 1.0 - 1.5 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 0.5 - 1.0 | 0.5 - 1.0 | 1.5 - 2.0 | 1.5 - 2.0 | 1.5 - 2.0 | 2.5 - 3.0 | 3.0 - 3.5 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 |
| Date Collected: | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/15/15 | 07/16/15 | 07/16/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 | 05/06/15 |
| p-Isopropyltoluene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 88.9 | 45.4 U | 4.26 U | 89.5 J | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| sec-Butylbenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Styrene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| tert-Butylbenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Toluene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 175 | 45.4 U | 4.26 U | 13.3 J | 1.08 J | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| trans-1,4-Dichloro-2-butene | 23.8 U | 21.5 U | 21.8 U | 24.4 U | 21.4 U | 265 U | 227 U | 21.3 U | 476 U | 22.2 U | 21.9 U | 503 U | 544 U | 21.3 U | 22.9 U | 21.7 U | 21.7 U | 22.2 U | 22.2 U | 21.9 U | 22.5 U | 21.7 U | 21.7 U |
| Xylenes (total) | 9.52 U | 8.62 U | 8.70 U | 9.75 U | 8.56 U | 106 U | 90.7 U | 8.52 U | 190 U | 8.89 U | 8.74 U | 201 U | 218 U | 8.52 U | 9.15 U | 8.69 U | 8.67 U | 8.87 U | 8.90 U | 8.74 U | 8.98 U | 8.69 U | 8.67 U |
| 1,1,1-Trichloroethane | 4.76 U | 4.31 U | 0.940 J | 4.87 U | 4.28 U | 52.9 U | 9.07 J | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 1,120 | 558 | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,1,2,2-Tetrachloroethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,1-Dichloroethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 875 | 609 | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,1-Dichloroethene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 99.5 J | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,2,4-Trichlorobenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,2-Dibromo-3-chloropropane | 28.6 U | 25.9 U | 26.1 U | 29.2 U | 25.7 U | 265 U | 227 U | 25.6 U | 476 U | 26.7 U | 26.2 U | 503 U | 544 U | 25.6 U | 27.4 U | 26.1 U | 26.0 U | 26.6 U | 26.7 U | 26.2 U | 26.9 U | 26.1 U | 26.0 U |
| 1,2-Dichlorobenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,2-Dichloroethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,2-Dichloropropane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,3-Dichlorobenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| 1,4-Dichlorobenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Bromodichloromethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Carbon Tetrachloride | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Chlorobenzene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Chloroethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Chloroform | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Chloromethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| cis-1,3-Dichloropropene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Dibromochloromethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Dichlorodifluoromethane | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 265 U | 227 U | 4.26 U | 476 U | 4.44 U | 4.37 U | 503 U | 544 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Methylene Chloride | 19.0 U | 17.2 U | 17.4 U | 19.5 U | 17.1 U | 265 U | 227 U | 17.0 U | 476 U | 17.8 U | 17.5 U | 503 U | 544 U | 17.0 U | 18.3 U | 17.4 U | 17.3 U | 17.7 U | 17.8 U | 17.5 U | 18.0 U | 17.4 U | 17.3 U |
| trans-1,3-Dichloropropene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Trichlorofluoromethane | 4.76 U | 4.31 U | 1.16 J | 4.87 U | 4.28 U | 52.9 U | 33.6 J | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| cis-1,2-Dichloroethene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 3.02 J | 95.2 U | 4.44 U | 4.37 U | 438 | 278 | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Tetrachloroethene | 4.76 U | 4.31 U | 1.04 J | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 18.1 J | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| trans-1,2-Dichloroethene | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Trichloroethene | 4.16 J | 4.31 U | 6.53 | 4.10 J | 2.82 J | 52.9 U | 45.4 U | 10.9 | 1,010 | 4.44 U | 4.37 U | 385 | 145 | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Vinyl Chloride | 4.76 U | 4.31 U | 4.35 U | 4.87 U | 4.28 U | 52.9 U | 45.4 U | 4.26 U | 95.2 U | 4.44 U | 4.37 U | 101 U | 109 U | 4.26 U | 4.57 U | 4.34 U | 4.34 U | 4.44 U | 4.45 U | 4.37 U | 4.49 U | 4.34 U | 4.33 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MIS-01 | MIS-02 | MIS-03 | MIS-04 | MIS-05 | MIS-06 | MIS-07 | MIS-08 | MIS-09 | MIS-10 | MIS-11 | MIS-12 | MIS-13 | MIS-14 | MIS-15 | MIS-16 | MIS-17 | MIS-18 | RC-3 | RC-5 | RC-14 | RC-19 | RC-73 | |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--|
| Sample Depth (Feet): | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 1.5-2 | 08/20/18 | 08/20/18 | 08/20/18 | 08/20/18 | 08/20/18 | |
| Date Collected: | 05/04/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/04/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 05/05/15 | 08/20/18 | 08/20/18 | 08/20/18 | 08/20/18 | 08/20/18 | |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| 1,1-Dichloropropene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| 1,2,3-Trichlorobenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | |
| 1,2,3-Trichloropropane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| 1,2,4-Trimethylbenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| 1,2-Dibromoethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | |
| 1,3,5-Trimethylbenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| 1,3-Dichloropropane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| 2,2-Dichloropropane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| 2-Butanone | 20.9 U | 21.7 U | 22.1 U | 21.3 U | 21.5 U | 21.2 U | 2.44 J | 3.99 J | 20.7 U | 22.4 U | 21.1 U | 2.09 J | 2.24 J | 21.3 U | 22.1 U | 22.1 U | 22.4 U | 20.9 U | 22.0 U | 22.0 U | 22.0 U | 23.0 U | 22.0 U | |
| 2-Chlorotoluene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| 2-Hexanone | 10.5 U | 10.8 U | 11.1 U | 10.6 U | 10.8 U | 10.6 U | 11.2 U | 11.4 U | 10.3 U | 11.2 U | 10.6 U | 10.8 U | 10.3 U | 10.7 U | 11.1 U | 11.0 U | 11.2 U | 10.4 U | 22.0 U | 22.0 U | 22.0 U | 23.0 U | 22.0 U | |
| 4-Chlorotoluene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| 4-Methyl-2-pentanone | 10.5 U | 10.8 U | 11.1 U | 10.6 U | 10.8 U | 10.6 U | 11.2 U | 11.4 U | 10.3 U | 11.2 U | 10.6 U | 10.8 U | 10.3 U | 10.7 U | 11.1 U | 11.0 U | 11.2 U | 10.4 U | 22.0 U | 22.0 U | 22.0 U | 23.0 U | 22.0 U | |
| Acetone | 3.17 J | 4.18 J | 5.87 J | 3.88 J | 4.05 J | 6.45 J | 11.2 J | 29.5 J | 5.34 J | 4.22 J | 4.92 J | 19.2 J | 19.3 J | 4.78 J | 7.04 J | 4.56 J | 12.3 J | 6.53 J | 22.0 U | 25.0 | 22.0 U | 23.0 U | 26.0 | |
| Benzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | |
| Bromobenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| Bromochloromethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | |
| Bromoform | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | |
| Bromomethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | |
| Carbon Disulfide | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | |
| Dibromomethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| Diisopropyl ether (DIPE) | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| Ethylbenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 1.02 J | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | |
| Hexachlorobutadiene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| Iodomethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| Isopropylbenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | |
| m-,p-Xylene | 8.37 U | 8.66 U | 8.85 U | 8.52 U | 8.61 U | 8.48 U | 8.93 U | 9.15 U | 8.26 U | 8.96 U | 8.44 U | 8.66 U | 8.26 U | 8.54 U | 8.85 U | 8.82 U | 8.95 U | 8.35 U | NA | NA | NA | NA | NA | |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | |
| Methyl tert-butyl ether | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U | |
| Naphthalene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| n-Butylbenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| n-Propylbenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |
| o-Xylene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA | |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | MIS-01 1.5-2 05/04/15 | MIS-02 1.5-2 05/04/15 | MIS-03 1.5-2 05/04/15 | MIS-04 1.5-2 05/04/15 | MIS-05 1.5-2 05/04/15 | MIS-06 1.5-2 05/04/15 | MIS-07 1.5-2 05/05/15 | MIS-08 1.5-2 05/05/15 | MIS-09 1.5-2 05/05/15 | MIS-10 1.5-2 05/05/15 | MIS-11 1.5-2 05/05/15 | MIS-12 1.5-2 05/05/15 | MIS-13 1.5-2 05/05/15 | MIS-14 1.5-2 05/05/15 | MIS-15 1.5-2 05/05/15 | MIS-16 1.5-2 05/05/15 | MIS-17 1.5-2 05/05/15 | MIS-18 1.5-2 05/05/15 | RC-3 08/20/18 | RC-5 08/20/18 | RC-14 08/20/18 | RC-19 08/20/18 | RC-73 08/20/18 |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|------------------|------------------|-------------------|-------------------|-------------------|
| p-Isopropyltoluene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA |
| sec-Butylbenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA |
| Styrene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| tert-Butylbenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | NA | NA | NA | NA | NA |
| Toluene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 1.09 J | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| trans-1,4-Dichloro-2-butene | 20.9 U | 21.7 U | 22.1 U | 21.3 U | 21.5 U | 21.2 U | 22.3 U | 22.9 U | 20.7 U | 22.4 U | 21.1 U | 21.7 U | 20.6 U | 21.3 U | 22.1 U | 22.1 U | 22.4 U | 20.9 U | NA | NA | NA | NA | NA |
| Xylenes (total) | 8.37 U | 8.66 U | 8.85 U | 8.52 U | 8.61 U | 8.48 U | 8.93 U | 9.15 U | 8.26 U | 8.96 U | 8.44 U | 8.66 U | 8.26 U | 8.54 U | 8.85 U | 8.82 U | 8.95 U | 8.35 U | 8.70 U | 8.90 U | 8.90 U | 9.30 U | 9.00 U |
| 1,1,1-Trichloroethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| 1,1,2,2-Tetrachloroethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| 1,1,2-Trichloroethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| 1,1-Dichloroethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| 1,1-Dichloroethene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| 1,2,4-Trichlorobenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| 1,2-Dibromo-3-chloropropane | 25.1 U | 26.0 U | 26.5 U | 25.6 U | 25.8 U | 25.4 U | 26.8 U | 27.5 U | 24.8 U | 26.9 U | 25.3 U | 26.0 U | 24.8 U | 25.6 U | 26.5 U | 26.5 U | 26.9 U | 25.1 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| 1,2-Dichlorobenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| 1,2-Dichloroethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| 1,2-Dichloropropane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| 1,3-Dichlorobenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| 1,4-Dichlorobenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| Bromodichloromethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| Carbon Tetrachloride | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| Chlorobenzene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| Chloroethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| Chloroform | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| Chloromethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| cis-1,3-Dichloropropene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| Dibromochloromethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| Dichlorodifluoromethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 9.52 | 4.58 U | 1.00 J | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 1.88 J | 19.0 | 7.64 | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| Methylene Chloride | 16.7 U | 17.3 U | 17.7 U | 17.0 U | 17.2 U | 17.0 U | 17.9 U | 18.3 U | 16.5 U | 17.9 U | 16.9 U | 17.3 U | 16.5 U | 17.1 U | 17.7 U | 17.6 U | 17.9 U | 16.7 U | 13.0 U | 13.0 U | 13.0 U | 14.0 U | 13.0 U |
| trans-1,3-Dichloropropene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| Trichlorofluoromethane | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 1.45 J | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 11.0 | 5.80 | 4.50 U |
| cis-1,2-Dichloroethene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| Tetrachloroethene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| trans-1,2-Dichloroethene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| Trichloroethene | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| Vinyl Chloride | 4.18 U | 4.33 U | 4.42 U | 4.26 U | 4.30 U | 4.24 U | 4.47 U | 4.58 U | 4.13 U | 4.48 U | 4.22 U | 4.33 U | 4.13 U | 4.27 U | 4.42 U | 4.41 U | 4.48 U | 4.18 U | 4.40 U | 4.40 U | 4.40 U | 4.70 U | 4.50 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RC-78 | RC-84 | RC-98 | RC-109 | RC-112 | RC-112 | RC-144 | RC-149 | RC-152 | RC-152 | RC-152 | RC-152 | RC-154 | RC-161 | RC-166 | RC-166 | RC-166 | RC-166 | RC-166 | RC-168 | |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|----------|----------|----------|----------|
| | 08/20/18 | 08/21/18 | 08/20/18 | 08/21/18 | 08/16/18 | 10/26/18 | 08/21/18 | 08/20/18 | 08/16/18 | 10/25/18 | 10/25/18 | 10/25/18 | 08/20/18 | 08/16/18 | 08/16/18 | 10/26/18 | 10/26/18 | 10/26/18 | 10/26/18 | 10/26/18 | 10/25/18 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloropropene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | NA |
| 1,2,3-Trichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromoethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | NA |
| 1,3,5-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Butanone | 22.0 U | 1,300 U | 24.0 U | 22.0 U | 21.0 U | NA | 21.0 U | 25.0 U | 5,100 U | 2,000 U | 21,000 U | 4,600 U | 21.0 U | 22.0 U | 610,000 U | 660,000 U | 440,000 U | 25,000 U | 15,000 U | 1,000 U | NA |
| 2-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 22.0 U | 1,300 U | 24.0 U | 22.0 U | 21.0 U | NA | 21.0 U | 25.0 U | 5,100 U | 2,000 U | 21,000 U | 4,600 U | 21.0 U | 22.0 U | 610,000 U | 660,000 U | 440,000 U | 25,000 U | 15,000 U | 1,000 U | NA |
| 4-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 22.0 U | 1,300 U | 24.0 U | 22.0 U | 21.0 U | NA | 21.0 U | 25.0 U | 5,100 U | 2,000 U | 21,000 U | 4,600 U | 21.0 U | 22.0 U | 610,000 U | 660,000 U | 440,000 U | 25,000 U | 15,000 U | 1,000 U | NA |
| Acetone | 22.0 U | 1,300 U | 28.0 | 22.0 U | 110 | NA | 21.0 U | 25.0 U | 5,100 U | 2,000 U | 21,000 U | 4,600 U | 21.0 U | 38.0 | 610,000 U | 660,000 U | 440,000 U | 25,000 U | 15,000 U | 1,000 U | NA |
| Benzene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | NA |
| Bromobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | NA |
| Bromoform | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | NA |
| Bromomethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U* | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | NA |
| Carbon Disulfide | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | NA |
| Cyclohexane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | NA |
| Dibromomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diisopropyl ether (DIPE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.50 U | 320 | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | NA |
| Hexachlorobutadiene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Iodomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | NA |
| m-,p-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl Acetate | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | NA |
| Methyl tert-butyl ether | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | NA |
| Methylcyclohexane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | NA |
| Naphthalene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Propylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RC-78 | RC-84 | RC-98 | RC-109 | RC-112 | RC-112 | RC-144 | RC-149 | RC-152 | RC-152 | RC-152 | RC-152 | RC-154 | RC-161 | RC-166 | RC-166 | RC-166 | RC-166 | RC-166 | RC-168 | |
|---|----------|----------|----------|----------|----------|----------|----------|----------|---------------|--------------|---------------|---------------|----------|----------|------------------|------------------|------------------|----------------|----------------|--------------|----------|
| | 08/20/18 | 08/21/18 | 08/20/18 | 08/21/18 | 08/16/18 | 10/26/18 | 08/21/18 | 08/20/18 | 08/16/18 | 10/25/18 | 10/25/18 | 10/25/18 | 08/20/18 | 08/16/18 | 08/16/18 | 10/26/18 | 10/26/18 | 10/26/18 | 10/26/18 | 10/26/18 | 10/25/18 |
| p-Isopropyltoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| tert-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 4.50 U | 250 U | 4.80 U | 4.30 U | 9.70 | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| trans-1,4-Dichloro-2-butene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | 9.00 U | 3,200 | 9.50 U | 8.70 U | 27.0 | NA | 8.40 U | 10.0 U | 2,000 U | 820 U | 8,400 U | 1,800 U | 8.30 U | 8.90 U | 250,000 U | 270,000 U | 180,000 U | 9,800 U | 6,000 U | 420 U | |
| 1,1,1-Trichloroethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 2,000 | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 6,100 | |
| 1,1,2,2-Tetrachloroethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| 1,1,2-trichloro-1,2,2-trifluoroethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| 1,1,2-Trichloroethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| 1,1-Dichloroethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 12.0 | 5.10 | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 | |
| 1,1-Dichloroethene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,200 | 610 | 4,200 | 1,200 | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 1,600 | |
| 1,2,4-Trichlorobenzene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| 1,2-Dibromo-3-chloropropane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| 1,2-Dichlorobenzene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| 1,2-Dichloroethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| 1,2-Dichloropropane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| 1,3-Dichlorobenzene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| 1,4-Dichlorobenzene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| Bromodichloromethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| Carbon Tetrachloride | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| Chlorobenzene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| Chloroethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| Chloroform | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| Chloromethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| cis-1,3-Dichloropropene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| Dibromochloromethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| Dichlorodifluoromethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| Methylene Chloride | 13.0 U | 760 U | 14.0 U | 13.0 U | 12.0 U | NA | 13.0 U | 15.0 U | 3,100 U | 1,200 U | 13,000 U | 2,800 U | 12.0 U | 13.0 U | 370,000 U | 400,000 U | 260,000 U | 15,000 U | 9,000 U | 630 U | |
| trans-1,3-Dichloropropene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| Trichlorofluoromethane | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| cis-1,2-Dichloroethene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 20,000 | 15,000 | 96,000 | 19,000 | 10.0 | 4.40 U | 250,000 | 130,000 U | 220,000 | 85,000 | 160,000 | 1,700 | |
| Tetrachloroethene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 22,000 | 2,200 | 16,000 | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| trans-1,2-Dichloroethene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 4.20 U | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| Trichloroethene | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 51,000 | 4,800 | 18,000 | 920 U | 4.20 U | 4.40 U | 6,000,000 | 2,900,000 | 3,200,000 | 180,000 | 3,000 U | 1,200 | |
| Vinyl Chloride | 4.50 U | 250 U | 4.80 U | 4.30 U | 4.20 U | NA | 4.20 U | 5.00 U | 1,000 U | 410 U | 4,200 U | 920 U | 6.30 | 4.40 U | 120,000 U | 130,000 U | 88,000 U | 4,900 U | 3,000 U | 210 U | |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | 5,600 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RC-174 | RC-186 | RC-191 | RC-213 | RC-215 | RC-220 | RC-222 | RC-223 | RC-225 | RC-227 | RC-229 | RC-231 | RC-232 | RC-233 | RC-234 | RMM-35 | RMM-40 | RMM-44 | RMM-48 | RMM-106 | |
|---|---------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|---------|----|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloropropene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| 1,2,3-Trichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromoethane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| 1,3,5-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Butanone | 1,100 U | 20.0 U | 21.0 U | 24.0 U | 24.0 U | 33.0 U | 23.0 U | 21.0 U | 38.0 U | 21.0 U | 19.0 U | NA | NA | NA | NA | 2,300 U | 22.0 U | 21.0 U | 24.0 U | 22.0 U | |
| 2-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 1,100 U | 20.0 U | 21.0 U | 24.0 U | 24.0 U | 33.0 U | 23.0 U | 21.0 U | 38.0 U | 21.0 U | 19.0 U | NA | NA | NA | NA | 2,300 U | 22.0 U | 21.0 U | 24.0 U | 22.0 U | |
| 4-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 1,100 U | 20.0 U | 21.0 U | 24.0 U | 24.0 U | 33.0 U | 23.0 U | 21.0 U | 38.0 U | 21.0 U | 19.0 U | NA | NA | NA | NA | 2,300 U | 22.0 U | 21.0 U | 24.0 U | 22.0 U | |
| Acetone | 1,100 U | 52.0 | 29.0 | 28.0 | 27.0 | 33.0 U | 32.0 | 40.0 | 38.0 U | 29.0 | 19.0 U | NA | NA | NA | NA | 2,300 U | 28.0 | 24.0 | 66.0 | 27.0 | |
| Benzene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Bromobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Bromoform | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Bromomethane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U* | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Carbon Disulfide | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Cyclohexane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Dibromomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diisopropyl ether (DIPE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Hexachlorobutadiene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Iodomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| m-,p-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl Acetate | 520 | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 610 | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Methyl tert-butyl ether | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Methylcyclohexane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Naphthalene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Propylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RC-174 | RC-186 | RC-191 | RC-213 | RC-215 | RC-220 | RC-222 | RC-223 | RC-225 | RC-227 | RC-229 | RC-231 | RC-232 | RC-233 | RC-234 | RMM-35 | RMM-40 | RMM-44 | RMM-48 | RMM-106 | |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----|
| | 08/16/18 | 08/16/18 | 08/16/18 | 08/21/18 | 08/21/18 | 08/21/18 | 10/25/18 | 10/25/18 | 10/25/18 | 10/25/18 | 10/25/18 | 10/26/18 | 10/26/18 | 10/26/18 | 10/26/18 | 08/21/18 | 08/21/18 | 08/21/18 | 08/21/18 | 08/21/18 | |
| p-Isopropyltoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| tert-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| trans-1,4-Dichloro-2-butene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | 430 U | 8.10 U | 8.20 U | 9.70 U | 9.50 U | 13.0 U | 9.20 U | 8.40 U | 15.0 U | 8.40 U | 7.50 U | NA | NA | NA | NA | 910 U | 9.00 U | 8.50 U | 9.80 U | 8.90 U | |
| 1,1,1-Trichloroethane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| 1,1,2,2-Tetrachloroethane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| 1,1,2-trichloro-1,2,2-trifluoroethane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| 1,1,2-Trichloroethane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| 1,1-Dichloroethane | 210 U | 4.00 U | 19.0 | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 13.0 | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| 1,1-Dichloroethene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| 1,2,4-Trichlorobenzene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| 1,2-Dibromo-3-chloropropane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| 1,2-Dichlorobenzene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| 1,2-Dichloroethane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| 1,2-Dichloropropane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| 1,3-Dichlorobenzene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| 1,4-Dichlorobenzene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Bromodichloromethane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Carbon Tetrachloride | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Chlorobenzene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Chloroethane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Chloroform | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Chloromethane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| cis-1,3-Dichloropropene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Dibromochloromethane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Dichlorodifluoromethane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Methylene Chloride | 640 U | 12.0 U | 12.0 U | 15.0 U | 14.0 U | 20.0 U | 14.0 U | 13.0 U | 23.0 U | 13.0 U | 11.0 U | NA | NA | NA | NA | 1,400 U | 13.0 U | 13.0 U | 15.0 U | 13.0 U | |
| trans-1,3-Dichloropropene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Trichlorofluoromethane | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 7.70 | |
| cis-1,2-Dichloroethene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Tetrachloroethene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| trans-1,2-Dichloroethene | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Trichloroethene | 440 | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 19.0 | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Vinyl Chloride | 210 U | 4.00 U | 4.10 U | 4.80 U | 4.70 U | 6.60 U | 4.60 U | 4.20 U | 7.50 U | 4.20 U | 3.80 U | NA | NA | NA | NA | 460 U | 4.50 U | 4.30 U | 4.90 U | 4.50 U | |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 5,900 U | 5,400 U | 5,600 U | 5,600 U | NA | NA | NA | NA | NA | |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RMM-134 | RMM-138 | RMM-143 | RMM-147 | RMM-152 | RMM-204 | RMM-230 | RMM-240 | RMM-243 | RMM-248 | RMM-263 | RMM-279 | RMM-298 | RMM-310 | RMM-314 | RMM-318 | RMM-333 | RMM-355 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloropropene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | 4.10 U | 4.90 U | 4.90 U | 4.80 U* | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| 1,2,3-Trichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromoethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| 1,3,5-Trimethylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Butanone | 21.0 U | 24.0 U | 24.0 U | 24.0 U | 27.0 U | 22.0 U | 23.0 U | 21.0 U | 23.0 U | 23.0 U | 25.0 U | 1,200 U | 30.0 U | 23.0 U | 19.0 U | 21.0 U | 23.0 U | 23.0 U |
| 2-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 21.0 U | 24.0 U | 24.0 U | 24.0 U* | 27.0 U | 22.0 U | 23.0 U* | 21.0 U | 23.0 U | 23.0 U | 25.0 U | 1,200 U | 30.0 U | 23.0 U | 19.0 U | 21.0 U | 23.0 U | 23.0 U |
| 4-Chlorotoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 21.0 U | 24.0 U | 24.0 U | 24.0 U | 27.0 U | 22.0 U | 23.0 U | 21.0 U | 23.0 U | 23.0 U | 25.0 U | 2,900 | 30.0 U | 23.0 U | 19.0 U | 21.0 U | 23.0 U | 23.0 U |
| Acetone | 57.0 | 50.0 | 69.0 | 160 | 69.0 | 22.0 U | 51.0 | 30.0 | 23.0 U | 23.0 U | 25.0 U | 1,200 U | 30.0 U | 23.0 U | 19.0 U | 93.0 | 23.0 U | 23.0 U |
| Benzene | 4.10 U | 4.90 U | 8.60 | 46.0 | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Bromobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Bromoform | 4.10 U | 4.90 U | 4.90 U | 4.80 U* | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Bromomethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Carbon Disulfide | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Cyclohexane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Dibromomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diisopropyl ether (DIPE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Hexachlorobutadiene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Iodomethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| m-,p-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl Acetate | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Methyl tert-butyl ether | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Methylcyclohexane | 4.10 U | 4.90 U | 4.90 U | 6.00 | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Naphthalene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Propylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RMM-134 | RMM-138 | RMM-143 | RMM-147 | RMM-152 | RMM-204 | RMM-230 | RMM-240 | RMM-243 | RMM-248 | RMM-263 | RMM-279 | RMM-298 | RMM-310 | RMM-314 | RMM-318 | RMM-333 | RMM-355 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 08/22/18 | 08/22/18 | 08/22/18 | 08/22/18 | 08/22/18 | 08/23/18 | 08/22/18 | 08/23/18 | 08/23/18 | 08/23/18 | 08/23/18 | 08/23/18 | 08/22/18 | 08/23/18 | 08/23/18 | 08/23/18 | 08/23/18 | 08/23/18 |
| p-Isopropyltoluene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| tert-Butylbenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| trans-1,4-Dichloro-2-butene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | 8.20 U | 9.70 U | 9.80 U | 12.0 | 11.0 U | 9.00 U | 9.20 U | 8.30 U | 9.00 U | 9.20 U | 9.80 U | 970 | 12.0 U | 9.00 U | 7.80 U | 8.40 U | 9.20 U | 9.10 U |
| 1,1,1-Trichloroethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| 1,1,2,2-Tetrachloroethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U* | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| 1,1,2-Trichloroethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| 1,1-Dichloroethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| 1,1-Dichloroethene | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| 1,2,4-Trichlorobenzene | 4.10 U | 4.90 U | 4.90 U | 4.80 U* | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| 1,2-Dibromo-3-chloropropane | 4.10 U | 4.90 U | 4.90 U | 4.80 U* | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| 1,2-Dichlorobenzene | 4.10 U | 4.90 U | 4.90 U | 4.80 U* | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| 1,2-Dichloroethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| 1,2-Dichloropropane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| 1,3-Dichlorobenzene | 4.10 U | 4.90 U | 4.90 U | 4.80 U* | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| 1,4-Dichlorobenzene | 4.10 U | 4.90 U | 4.90 U | 4.80 U* | 5.50 U | 4.50 U | 4.60 U* | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Bromodichloromethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Carbon Tetrachloride | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Chlorobenzene | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Chloroethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Chloroform | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Chloromethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| cis-1,3-Dichloropropene | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Dibromochloromethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Dichlorodifluoromethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Methylene Chloride | 12.0 U | 15.0 U | 15.0 U | 14.0 U | 16.0 U | 13.0 U | 14.0 U | 12.0 U | 14.0 U | 14.0 U | 15.0 U | 740 U | 18.0 U | 14.0 U | 12.0 U | 13.0 U | 14.0 U | 14.0 U |
| trans-1,3-Dichloropropene | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Trichlorofluoromethane | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.30 | 4.50 U | 4.60 U | 4.90 U | 2,400 | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| cis-1,2-Dichloroethene | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Tetrachloroethene | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| trans-1,2-Dichloroethene | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Trichloroethene | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Vinyl Chloride | 4.10 U | 4.90 U | 4.90 U | 4.80 U | 5.50 U | 4.50 U | 4.60 U | 4.20 U | 4.50 U | 4.60 U | 4.90 U | 250 U | 6.00 U | 4.50 U | 3.90 U | 4.20 U | 4.60 U | 4.60 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RMM-359 | RMM-363 | RMM-374 | RMM-379 | RMM-396 | SB-100 5 | SB-100 7 | SB-101 4.5 | SB-102 4 | SB-102 6 | SB-103 4 | SB-103 7 | SB-104 4 | SB-104 6 | SB-105 4 | SB-105 6 | SB-106 4 |
|---|---------|---------|---------|---------|---------|-------------|-------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,1-Dichloropropene | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,2,3-Trichlorobenzene | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,2,3-Trichloropropane | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,2,4-Trimethylbenzene | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 15.3 J |
| 1,2-Dibromoethane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,3,5-Trimethylbenzene | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,3-Dichloropropane | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 2,2-Dichloropropane | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 2-Butanone | 22.0 U | 22.0 U | 22.0 U | 24.0 U | 21.0 U | 23.6 U | 24.9 U | 1,070 U | 968 U | 1,060 U | 1,210 U | 1,330 U | 11,100 U | 1,070 U | 5,360 U | 22.8 U | 1,270 U |
| 2-Chlorotoluene | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 2-Hexanone | 22.0 U | 22.0 U | 22.0 U* | 24.0 U | 21.0 U | 11.8 U | 12.5 U | 215 U | 194 U | 212 U | 241 U | 266 U | 2,220 U | 215 U | 1,070 U | 11.4 U | 255 U |
| 4-Chlorotoluene | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 4-Methyl-2-pentanone | 22.0 U | 22.0 U | 22.0 U | 24.0 U | 21.0 U | 11.8 U | 12.5 U | 215 U | 194 U | 212 U | 241 U | 266 U | 2,220 U | 215 U | 1,070 U | 11.4 U | 255 U |
| Acetone | 45.0 | 49.0 | 42.0 | 130 | 21.0 U | 47.1 U | 49.9 U | 1,070 U | 968 U | 1,060 U | 1,210 U | 1,330 U | 11,100 U | 1,070 U | 5,360 U | 45.6 U | 1,270 U |
| Benzene | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 38.2 J |
| Bromobenzene | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Bromochloromethane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Bromoform | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Bromomethane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Carbon Disulfide | 4.40 U | 4.40 U | 4.50 U | 5.50 | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Cyclohexane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Diisopropyl ether (DIPE) | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Ethylbenzene | 4.40 U | 4.40 U | 4.50 U | 23.0 | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Hexachlorobutadiene | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Iodomethane | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Isopropylbenzene | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 11.2 J |
| m-,p-Xylene | NA | NA | NA | NA | NA | 9.42 U | 9.98 U | 85.9 U | 77.5 U | 84.9 U | 96.5 U | 107 U | 889 U | 85.8 U | 429 U | 9.13 U | 102 U |
| Methyl Acetate | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Methylcyclohexane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| n-Butylbenzene | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| n-Propylbenzene | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| o-Xylene | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | RMM-359 08/23/18 | RMM-363 08/23/18 | RMM-374 08/22/18 | RMM-379 08/22/18 | RMM-396 08/22/18 | SB-100 5 08/31/15 | SB-100 7 08/31/15 | SB-101 4.5 09/01/15 | SB-102 4 09/01/15 | SB-102 6 09/01/15 | SB-103 4 09/01/15 | SB-103 7 09/01/15 | SB-104 4 09/01/15 | SB-104 6 09/01/15 | SB-105 4 09/01/15 | SB-105 6 09/01/15 | SB-106 4 09/01/15 |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|-------------------------|-------------------------|---------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| p-Isopropyltoluene | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| sec-Butylbenzene | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Styrene | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| tert-Butylbenzene | NA | NA | NA | NA | NA | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Toluene | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 21.4 J |
| trans-1,4-Dichloro-2-butene | NA | NA | NA | NA | NA | 23.6 U | 24.9 U | 215 U | 194 U | 212 U | 241 U | 266 U | 2,220 U | 215 U | 1,070 U | 22.8 U | 255 U |
| Xylenes (total) | 8.80 U | 8.80 U | 9.00 U | 9.40 U | 8.20 U | 9.42 U | 9.98 U | 85.9 U | 77.5 U | 84.9 U | 96.5 U | 107 U | 889 U | 85.8 U | 429 U | 9.13 U | 102 U |
| 1,1,1-Trichloroethane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,1,2,2-Tetrachloroethane | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,1-Dichloroethane | 4.40 U | 4.40 U | 4.50 U | 13.0 | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,1-Dichloroethene | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,2,4-Trichlorobenzene | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,2-Dibromo-3-chloropropane | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 28.3 U | 29.9 U | 215 U | 194 U | 212 U | 241 U | 266 U | 2,220 U | 215 U | 1,070 U | 27.4 U | 255 U |
| 1,2-Dichlorobenzene | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,2-Dichloroethane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,2-Dichloropropane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,3-Dichlorobenzene | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| 1,4-Dichlorobenzene | 4.40 U | 4.40 U | 4.50 U* | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Bromodichloromethane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Carbon Tetrachloride | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Chlorobenzene | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Chloroethane | 4.40 U | 4.40 U | 6.50 | 35.0 | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Chloroform | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Chloromethane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| cis-1,3-Dichloropropene | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Dibromochloromethane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Dichlorodifluoromethane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 215 U | 194 U | 212 U | 241 U | 266 U | 2,220 U | 215 U | 1,070 U | 4.56 U | 255 U |
| Methylene Chloride | 13.0 U | 13.0 U | 13.0 U | 14.0 U | 12.0 U | 18.8 U | 20.0 U | 215 U | 194 U | 212 U | 241 U | 266 U | 2,220 U | 215 U | 1,070 U | 18.3 U | 14.3 J |
| trans-1,3-Dichloropropene | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| Trichlorofluoromethane | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| cis-1,2-Dichloroethene | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 1.23 J | 9.11 | 44.7 | 29.0 J | 56.9 | 112 | 73.5 | 1,180 | 42.5 J | 603 | 32.5 | 967 |
| Tetrachloroethene | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 9.65 J | 53.3 U | 444 U | 42.9 U | 214 U | 4.56 U | 50.9 U |
| trans-1,2-Dichloroethene | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 83.6 J | 4.56 U | 73.3 |
| Trichloroethene | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 12.0 | 27.1 | 57.8 | 266 | 238 | 394 | 844 | 428 | 8,050 | 278 | 3,920 | 24.8 | 1,230 |
| Vinyl Chloride | 4.40 U | 4.40 U | 4.50 U | 4.70 U | 4.10 U | 4.71 U | 4.99 U | 43.0 U | 38.7 U | 42.4 U | 48.3 U | 53.3 U | 444 U | 42.9 U | 214 U | 9.08 | 108 |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-106 | SB-107 | SB-107 | SB-108 | SB-108 | SB-111 | SB-111 | SB-112 | SB-112 | SB-114 | SB-114 | SB-116 | SB-116 | SB-117 | SB-117 | SB-118 | SB-118 | SB-119 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 6 | 4 | 6 | 4 | 6 | 4 | 6 | 4 | 6 | 3 | 5 | 3 | 6 | 3 | 6 | 3 | 6 | 3 |
| Date Collected: | 09/01/15 | 09/01/15 | 09/01/15 | 09/01/15 | 09/01/15 | 09/01/15 | 09/01/15 | 09/01/15 | 09/01/15 | 09/01/15 | 09/01/15 | 09/01/15 | 09/01/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,1-Dichloropropene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,2,3-Trichlorobenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,2,3-Trichloropropane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,2,4-Trimethylbenzene | 4.59 U | 0.569 J | 9.13 | 379 | 61.2 J | 1,380 | 5.98 | 4.86 U | 2.12 J [6.11 U] | 1,140 | 15.3 | 189 U | 2.01 J | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,2-Dibromoethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,3,5-Trimethylbenzene | 4.59 U | 0.984 J | 4.34 U | 469 | 943 | 498 | 4.26 J | 4.86 U | 0.935 J [6.11 U] | 313 | 10.3 | 189 U | 0.760 J | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,3-Dichloropropane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 2,2-Dichloropropane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 2-Butanone | 23.0 U | 19.2 U | 21.7 U | 2,310 U | 1,560 U | 3,190 U | 24.1 U | 24.3 U | 29.6 U [30.5 U] | 1,280 U | 22.7 U | 4,720 U | 23.8 U | 9,980 U | 21.5 U | 60,700 U | 9,080 U | 2,030 U |
| 2-Chlorotoluene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 2-Hexanone | 11.5 U | 9.61 U | 10.9 U | 463 U | 312 U | 638 U | 12.0 U | 12.2 U | 14.8 U [15.3 U] | 255 U | 11.3 U | 944 U | 11.9 U | 2,000 U | 10.8 U | 12,100 U | 1,820 U | 406 U |
| 4-Chlorotoluene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 4-Methyl-2-pentanone | 11.5 U | 9.61 U | 10.9 U | 463 U | 312 U | 638 U | 12.0 U | 12.2 U | 14.8 U [15.3 U] | 255 U | 11.3 U | 944 U | 11.9 U | 2,000 U | 10.8 U | 12,100 U | 1,820 U | 406 U |
| Acetone | 45.9 U | 10.2 J | 10.1 J | 2,310 U | 1,560 U | 3,190 U | 13.7 J | 17.6 J | 13.4 J [13.1 J] | 1,280 U | 16.8 J | 4,720 U | 8.08 J | 9,980 U | 14.5 J | 60,700 U | 9,080 U | 2,030 U |
| Benzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Bromobenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Bromochloromethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Bromoform | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Bromomethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Carbon Disulfide | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Diisopropyl ether (DIPE) | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Ethylbenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 13.1 J | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Hexachlorobutadiene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Iodomethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Isopropylbenzene | 4.59 U | 3.84 U | 4.34 U | 119 | 259 | 347 | 2.69 J | 4.86 U | 5.92 U [6.11 U] | 67.9 | 4.52 J | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| m-,p-Xylene | 9.18 U | 7.69 U | 8.69 U | 185 U | 125 U | 255 U | 9.63 U | 9.72 U | 11.8 U [12.2 U] | 102 U | 9.07 U | 378 U | 9.50 U | 798 U | 8.61 U | 4,860 U | 727 U | 162 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 17.4 J | 0.780 J | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| n-Butylbenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| n-Propylbenzene | 4.59 U | 3.84 U | 4.34 U | 408 | 639 | 795 | 1.51 J | 4.86 U | 5.92 U [6.11 U] | 152 | 7.48 | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| o-Xylene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 20.0 J | 154 | 1.59 J | 4.86 U | 5.92 U [6.11 U] | 17.4 J | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-106 6 09/01/15 | SB-107 4 09/01/15 | SB-107 6 09/01/15 | SB-108 4 09/01/15 | SB-108 6 09/01/15 | SB-111 4 09/01/15 | SB-111 6 09/01/15 | SB-112 4 09/01/15 | SB-112 6 09/01/15 | SB-114 3 09/01/15 | SB-114 5 09/01/15 | SB-116 3 09/01/15 | SB-116 6 09/01/15 | SB-117 3 09/02/15 | SB-117 6 09/02/15 | SB-118 3 09/02/15 | SB-118 6 09/02/15 | SB-119 3 09/02/15 |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| p-Isopropyltoluene | 4.59 U | 3.84 U | 4.34 U | 19.4 J | 62.5 U | 44.7 J | 0.732 J | 4.86 U | 5.92 U [6.11 U] | 32.2 J | 0.707 J | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 6,210 | 81.1 U |
| sec-Butylbenzene | 4.59 U | 1.65 J | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 61.3 | 0.916 J | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Styrene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| tert-Butylbenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Toluene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 1.11 J | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| trans-1,4-Dichloro-2-butene | 23.0 U | 19.2 U | 21.7 U | 463 U | 312 U | 638 U | 24.1 U | 24.3 U | 29.6 U [30.5 U] | 255 U | 22.7 U | 944 U | 23.8 U | 2,000 U | 21.5 U | 12,100 U | 1,820 U | 406 U |
| Xylenes (total) | 9.18 U | 7.69 U | 8.69 U | 185 U | 20.0 J | 154 J | 9.63 U | 9.72 U | 11.8 U [12.2 U] | 17.4 J | 9.07 U | 378 U | 9.50 U | 798 U | 8.61 U | 4,860 U | 727 U | 162 U |
| 1,1,1-Trichloroethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,1,2,2-Tetrachloroethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,1-Dichloroethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,1-Dichloroethene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,2,4-Trichlorobenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,2-Dibromo-3-chloropropane | 27.5 U | 23.1 U | 26.1 U | 463 U | 312 U | 638 U | 28.9 U | 29.2 U | 35.5 U [36.7 U] | 255 U | 27.2 U | 944 U | 28.5 U | 2,000 U | 25.8 U | 12,100 U | 1,820 U | 406 U |
| 1,2-Dichlorobenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,2-Dichloroethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,2-Dichloropropane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,3-Dichlorobenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| 1,4-Dichlorobenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Bromodichloromethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Carbon Tetrachloride | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Chlorobenzene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Chloroethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Chloroform | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Chloromethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| cis-1,3-Dichloropropene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Dibromochloromethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Dichlorodifluoromethane | 4.59 U | 3.84 U | 4.34 U | 463 U | 312 U | 638 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 255 U | 4.53 U | 944 U | 4.75 U | 2,000 U | 4.30 U | 12,100 U | 1,820 U | 406 U |
| Methylene Chloride | 18.4 U | 15.4 U | 17.4 U | 463 U | 312 U | 638 U | 19.3 U | 2.28 J | 23.7 U [24.4 U] | 255 U | 3.80 J | 944 U | 19.0 U | 2,000 U | 17.2 U | 12,100 U | 1,820 U | 406 U |
| trans-1,3-Dichloropropene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| Trichlorofluoromethane | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| cis-1,2-Dichloroethene | 11.8 | 3.84 U | 4.28 J | 92.6 U | 62.5 U | 568 | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 501 | 4.53 U | 871 | 22.8 | 1,960 | 32.6 | 7,140 | 182 J | 200 |
| Tetrachloroethene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 51.1 U | 4.53 U | 189 U | 4.75 U | 399 U | 4.30 U | 2,430 U | 363 U | 81.1 U |
| trans-1,2-Dichloroethene | 4.59 U | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 128 U | 4.82 U | 4.86 U | 5.92 U [6.11 U] | 26.6 J | 4.53 U | 104 J | 4.75 U | 295 J | 1.87 J | 2,430 U | 363 U | 20.3 J |
| Trichloroethene | 7.38 | 3.84 U | 4.34 U | 92.6 U | 62.5 U | 33.2 J | 4.82 U | 2.22 J | 5.92 U [6.11 U] | 15.8 J | 4.53 U | 6,610 | 73.6 | 7,770 | 95.3 | 43,100 | 363 U | 2,010 |
| Vinyl Chloride | 5.14 | 3.84 U | 10.9 | 92.6 U | 62.5 U | 38.3 J | 3.84 J | 0.992 J | 2.82 J [3.31 J] | 10.7 J | 1.23 J | 189 U | 1.47 J | 399 U | 2.75 J | 2,430 U | 363 U | 81.1 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-119 | SB-201 | SB-201 | SB-202 | SB-202 | SB-203 | SB-203 | SB-204 | SB-204 | SB-205 | SB-205 | SB-206 | SB-206 | SB-207 | SB-207 | SB-208 | SB-208 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|-----------------|-----------------|----------|----------|----------|----------|-----------|----------|----------|
| Sample Depth (Feet): | 5 | 4 | 6 | 3 | 4.5 | 3 | 6 | 4 | 6 | 4 | 6 | 3 | 7 | 3 | 6 | 3 | 5 |
| Date Collected: | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,1-Dichloropropene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,2,3-Trichlorobenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,2,3-Trichloropropane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,2,4-Trimethylbenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,2-Dibromoethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,3,5-Trimethylbenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,3-Dichloropropane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 2,2-Dichloropropane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 2-Butanone | 21.6 U | 21.4 U | 24.5 U | 20.0 U | 3,640 U | 21.3 U | 21.6 U | 1,120 U | 24.8 U [22.9 U] | 22.4 U [22.5 U] | 25.2 U | 21.3 U | 20.7 U | 5,420 U | 140,000 U | 29.1 U | 4,320 U |
| 2-Chlorotoluene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 2-Hexanone | 10.8 U | 10.7 U | 12.3 U | 9.99 U | 728 U | 10.6 U | 10.8 U | 224 U | 12.4 U [11.4 U] | 11.2 U [11.3 U] | 12.6 U | 10.7 U | 10.3 U | 1,080 U | 28,000 U | 14.5 U | 865 U |
| 4-Chlorotoluene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 4-Methyl-2-pentanone | 10.8 U | 10.7 U | 12.3 U | 9.99 U | 728 U | 10.6 U | 10.8 U | 224 U | 12.4 U [11.4 U] | 11.2 U [11.3 U] | 12.6 U | 10.7 U | 10.3 U | 1,080 U | 28,000 U | 14.5 U | 865 U |
| Acetone | 18.1 J | 22.9 J | 26.7 J | 11.4 J | 3,640 U | 9.89 J | 16.6 J | 1,120 U | 25.9 J [15.8 J] | 9.47 J [11.0 J] | 24.6 J | 20.1 J | 41.4 U | 5,420 U | 140,000 U | 77.8 | 4,320 U |
| Benzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 1.13 J | 173 U |
| Bromobenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Bromochloromethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Bromoform | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Bromomethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Carbon Disulfide | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Diisopropyl ether (DIPE) | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Ethylbenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 470 | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 1.19 J | 1.01 J | 217 U | 5,600 U | 1.44 J | 173 U |
| Hexachlorobutadiene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Iodomethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Isopropylbenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 189 | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| m-,p-Xylene | 8.63 U | 8.55 U | 9.81 U | 7.99 U | 291 U | 8.50 U | 8.63 U | 89.8 U | 9.92 U [9.15 U] | 8.96 U [9.02 U] | 10.1 U | 2.64 J | 5.36 J | 434 U | 11,200 U | 11.6 U | 346 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| n-Butylbenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| n-Propylbenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| o-Xylene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 1.12 J | 3.29 J | 217 U | 5,600 U | 5.82 U | 173 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-119 5 09/02/15 | SB-201 4 09/02/15 | SB-201 6 09/02/15 | SB-202 3 09/02/15 | SB-202 4.5 09/02/15 | SB-203 3 09/02/15 | SB-203 6 09/02/15 | SB-204 4 09/02/15 | SB-204 6 09/02/15 | SB-205 4 09/02/15 | SB-205 6 09/02/15 | SB-206 3 09/02/15 | SB-206 7 09/02/15 | SB-207 3 09/02/15 | SB-207 6 09/02/15 | SB-208 3 09/02/15 | SB-208 5 09/02/15 |
|---|-------------------------|-------------------------|-------------------------|-------------------------|---------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| p-Isopropyltoluene | 1.58 J | 4.27 U | 4.91 U | 4.00 U | 686 | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 1.57 J | 173 U |
| sec-Butylbenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Styrene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| tert-Butylbenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Toluene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 121 J | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 2.82 J | 4.14 U | 217 U | 5,600 U | 4.56 J | 173 U |
| trans-1,4-Dichloro-2-butene | 21.6 U | 21.4 U | 24.5 U | 20.0 U | 728 U | 21.3 U | 21.6 U | 224 U | 24.8 U [22.9 U] | 22.4 U [22.5 U] | 25.2 U | 21.3 U | 20.7 U | 1,080 U | 28,000 U | 29.1 U | 865 U |
| Xylenes (total) | 8.63 U | 8.55 U | 9.81 U | 7.99 U | 291 U | 8.50 U | 8.63 U | 89.8 U | 9.92 U [9.15 U] | 8.96 U [9.02 U] | 10.1 U | 3.76 J | 8.66 | 434 U | 11,200 U | 11.6 U | 346 U |
| 1,1,1-Trichloroethane | 4.31 U | 4.27 U | 4.91 U | 29.1 | 146 U | 27.5 | 4.31 U | 556 | 4.96 U [4.58 U] | 8.76 [7.65] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,1,2,2-Tetrachloroethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,1-Dichloroethane | 4.31 U | 4.27 U | 4.91 U | 27.7 | 146 U | 21.3 | 58.0 | 74.5 | 38.5 [32.5] | 2.05 J [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 2.70 J | 173 U |
| 1,1-Dichloroethene | 4.31 U | 4.27 U | 4.91 U | 1.19 J | 146 U | 4.25 U | 4.31 U | 23.8 J | 1.13 J [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,2,4-Trichlorobenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,2-Dibromo-3-chloropropane | 25.9 U | 25.6 U | 29.4 U | 24.0 U | 728 U | 25.5 U | 25.9 U | 224 U | 29.8 U [27.5 U] | 26.9 U [27.0 U] | 30.2 U | 25.6 U | 24.8 U | 1,080 U | 28,000 U | 34.9 U | 865 U |
| 1,2-Dichlorobenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,2-Dichloroethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,2-Dichloropropane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,3-Dichlorobenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| 1,4-Dichlorobenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Bromodichloromethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Carbon Tetrachloride | 4.31 U | 4.27 U | 4.91 U | 4.30 | 146 U | 3.94 J | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Chlorobenzene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Chloroethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 45.0 | 44.9 U | 29.1 [19.7] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Chloroform | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Chloromethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| cis-1,3-Dichloropropene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Dibromochloromethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Dichlorodifluoromethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 728 U | 4.25 U | 4.31 U | 224 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 1,080 U | 28,000 U | 5.82 U | 865 U |
| Methylene Chloride | 17.3 U | 17.1 U | 19.6 U | 16.0 U | 728 U | 17.0 U | 17.3 U | 224 U | 19.8 U [18.3 U] | 17.9 U [18.0 U] | 20.1 U | 17.1 U | 16.6 U | 1,080 U | 28,000 U | 23.3 U | 865 U |
| trans-1,3-Dichloropropene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Trichlorofluoromethane | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| cis-1,2-Dichloroethene | 38.3 | 1.39 J | 4.91 U | 32.6 | 146 U | 19.3 | 1.15 J | 110 | 15.7 [15.6] | 4.48 U [4.51 U] | 5.04 U | 1.95 J | 4.14 U | 3,540 | 40,300 | 1.50 J | 34.6 J |
| Tetrachloroethene | 4.31 U | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 4.96 U [4.58 U] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| trans-1,2-Dichloroethene | 1.52 J | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 4.31 U | 44.9 U | 3.03 J [2.17 J] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 4.14 U | 217 U | 5,600 U | 5.82 U | 173 U |
| Trichloroethene | 47.5 | 4.27 U | 4.91 U | 84.8 | 146 U | 55.0 | 4.31 U | 469 | 4.96 U [4.58 U] | 6.54 [4.56] | 5.04 U | 7.71 | 1.28 J | 547 | 166,000 | 2.96 J | 3,110 |
| Vinyl Chloride | 18.7 | 4.27 U | 4.91 U | 4.00 U | 146 U | 4.25 U | 3.67 J | 44.9 U | 10.4 [8.00] | 4.48 U [4.51 U] | 5.04 U | 4.26 U | 0.836 J | 84.6 J | 2,800 J | 1.45 J | 173 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-209 | SB-209 | SB-210 | SB-210 | SB-211 | SB-211 | SB-212 | SB-212 | SB-213 | SB-214 | SB-215 | SB-215 | SB-216 | SB-216 | SB-217 | SB-217 | SB-218 |
|---|-----------|-----------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|
| Sample Depth (Feet): | 4 | 6 | 1.5 | 4 | 3 | 5 | 3 | 5 | 3 | 2.5 | 3 | 5 | 3 | 7 | 3 | 5 | 3 |
| Date Collected: | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/02/15 | 09/03/15 | 09/03/15 | 09/03/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,1-Dichloropropene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,2,3-Trichlorobenzene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,2,3-Trichloropropane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,2,4-Trimethylbenzene | 9,440 U | 25,600 U | 140 J | 96.5 U | 1,810 U | 9,870 | 4.88 U | 178 U | 4.62 U | 45.0 U | 11.1 J | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 206 |
| 1,2-Dibromoethane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,3,5-Trimethylbenzene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 3,540 J | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 49.1 J |
| 1,3-Dichloropropane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 2,2-Dichloropropane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 2-Butanone | 236,000 U | 639,000 U | 4,930 U | 2,410 U | 45,300 U | 233,000 U | 24.4 U | 4,460 U | 23.1 U | 1,130 U | 1,070 U | 30.3 U | 22.3 U | 314,000 U | 23.1 U | 27.7 U | 3,840 U |
| 2-Chlorotoluene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 2-Hexanone | 47,200 U | 128,000 U | 987 U | 483 U | 9,060 U | 46,600 U | 12.2 U | 892 U | 11.5 U | 225 U | 214 U | 15.1 U | 11.2 U | 62,700 U | 11.6 U | 13.9 U | 768 U |
| 4-Chlorotoluene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 4-Methyl-2-pentanone | 47,200 U | 128,000 U | 987 U | 483 U | 9,060 U | 46,600 U | 12.2 U | 892 U | 11.5 U | 225 U | 214 U | 15.1 U | 11.2 U | 62,700 U | 11.6 U | 13.9 U | 768 U |
| Acetone | 236,000 U | 639,000 U | 4,930 U | 2,410 U | 45,300 U | 233,000 U | 9.26 J | 4,460 U | 17.3 J | 1,130 U | 1,070 U | 28.0 J | 18.6 J | 314,000 U | 23.0 J | 18.0 J | 3,840 U |
| Benzene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 1.28 J | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Bromobenzene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Bromochloromethane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Bromoform | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Bromomethane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Carbon Disulfide | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Diisopropyl ether (DIPE) | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Ethylbenzene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,180 J | 10,100 | 4.88 U | 178 U | 4.62 U | 45.0 U | 121 | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 32.2 J |
| Hexachlorobutadiene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Iodomethane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Isopropylbenzene | 9,440 U | 25,600 U | 45.4 J | 96.5 U | 8,970 | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 11.1 J | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 369 |
| m-,p-Xylene | 18,900 U | 51,100 U | 355 J | 193 U | 3,620 U | 35,700 | 9.76 U | 357 U | 9.23 U | 90.1 U | 195 | 12.1 U | 8.93 U | 25,100 U | 9.25 U | 11.1 U | 3,390 |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 9,440 U | 25,600 U | 136 J | 74.3 J | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 9.84 J | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| n-Butylbenzene | 9,440 U | 25,600 U | 94.8 J | 96.5 U | 1,230 J | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| n-Propylbenzene | 9,440 U | 25,600 U | 43.4 J | 96.5 U | 36,400 | 3,630 J | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 249 |
| o-Xylene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 11,700 | 4.88 U | 178 U | 4.62 U | 45.0 U | 206 | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-209 4 09/02/15 | SB-209 6 09/02/15 | SB-210 1.5 09/02/15 | SB-210 4 09/02/15 | SB-211 3 09/02/15 | SB-211 5 09/02/15 | SB-212 3 09/02/15 | SB-212 5 09/02/15 | SB-213 3 09/02/15 | SB-214 2.5 09/02/15 | SB-215 3 09/02/15 | SB-215 5 09/02/15 | SB-216 3 09/02/15 | SB-216 7 09/02/15 | SB-217 3 09/03/15 | SB-217 5 09/03/15 | SB-218 3 09/03/15 |
|---|-------------------------|-------------------------|---------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|---------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| p-Isopropyltoluene | 9,440 U | 25,600 U | 146 J | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 10.3 J | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 44.5 J |
| sec-Butylbenzene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,540 J | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Styrene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| tert-Butylbenzene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Toluene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 305,000 | 4.88 U | 87.4 J | 4.62 U | 45.0 U | 180 | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| trans-1,4-Dichloro-2-butene | 47,200 U | 128,000 U | 987 U | 483 U | 9,060 U | 46,600 U | 24.4 U | 892 U | 23.1 U | 225 U | 214 U | 30.3 U | 22.3 U | 62,700 U | 23.1 U | 27.7 U | 768 U |
| Xylenes (total) | 18,900 U | 51,100 U | 355 J | 193 U | 3,620 U | 47,400 | 9.76 U | 357 U | 9.23 U | 90.1 U | 400 | 12.1 U | 8.93 U | 25,100 U | 9.25 U | 11.1 U | 3,390 |
| 1,1,1-Trichloroethane | 35,300 | 15,100 J | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,1,2,2-Tetrachloroethane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,1-Dichloroethane | 4,820 J | 9,710 J | 989 | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,1-Dichloroethene | 16,900 | 40,400 | 88.8 J | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,2,4-Trichlorobenzene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,2-Dibromo-3-chloropropane | 47,200 U | 128,000 U | 987 U | 483 U | 9,060 U | 46,600 U | 29.3 U | 892 U | 27.7 U | 225 U | 214 U | 36.3 U | 26.8 U | 62,700 U | 27.7 U | 33.3 U | 768 U |
| 1,2-Dichlorobenzene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,2-Dichloroethane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,2-Dichloropropane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,3-Dichlorobenzene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| 1,4-Dichlorobenzene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Bromodichloromethane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Carbon Tetrachloride | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Chlorobenzene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Chloroethane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Chloroform | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Chloromethane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| cis-1,3-Dichloropropene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Dibromochloromethane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Dichlorodifluoromethane | 47,200 U | 128,000 U | 987 U | 483 U | 9,060 U | 46,600 U | 4.88 U | 892 U | 4.62 U | 225 U | 214 U | 6.05 U | 4.46 U | 62,700 U | 4.62 U | 5.55 U | 768 U |
| Methylene Chloride | 47,200 U | 128,000 U | 987 U | 483 U | 9,060 U | 46,600 U | 19.5 U | 892 U | 18.5 U | 225 U | 214 U | 24.2 U | 17.9 U | 62,700 U | 3.80 J | 4.97 J | 768 U |
| trans-1,3-Dichloropropene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Trichlorofluoromethane | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| cis-1,2-Dichloroethene | 54,400 | 124,000 | 4,410 | 96.5 U | 1,810 U | 85,000 | 111 | 5,220 | 11.8 | 172 | 42.8 U | 6.05 U | 2.15 J | 77,100 | 3.66 J | 5.55 U | 154 U |
| Tetrachloroethene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| trans-1,2-Dichloroethene | 9,440 U | 25,600 U | 197 U | 96.5 U | 1,810 U | 9,320 U | 4.88 U | 178 U | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 4.46 U | 12,500 U | 4.62 U | 5.55 U | 154 U |
| Trichloroethene | 213,000 | 407,000 | 197 U | 147 | 1,810 U | 9,320 U | 81.2 | 178 U | 59.4 | 334 | 42.8 U | 6.05 U | 3.84 J | 234,000 | 8.22 | 4.37 J | 154 U |
| Vinyl Chloride | 2,360 J | 5,110 J | 288 | 96.5 U | 1,810 U | 10,200 | 4.88 U | 6,200 | 4.62 U | 45.0 U | 42.8 U | 6.05 U | 0.661 J | 4,520 J | 4.62 U | 5.55 U | 154 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-218 | SB-219 | SB-219 | SB-301 | SB-301 | SB-302 | SB-302 | SB-303 | SB-303 | SB-304 | SB-304 | SB-305 | SB-306 | SB-307 | SB-308 | SB-308 |
|---|----------|----------|----------|----------|----------|----------|----------|-----------|-------------|-------------|-------------|----------|----------|----------|----------|---------------------------|
| Sample Depth (Feet): | 5 | 4 | 6 | 3 | 4 | 3 | 5 | 4 | 6 | 3 | 5 | 3 | 6 | 2 | 3 | 5 |
| Date Collected: | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 1,1-Dichloropropene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 1,2,3-Trichlorobenzene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 1,2,3-Trichloropropane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 1,2,4-Trimethylbenzene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 105 | 5.17 | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 1,2-Dibromoethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 1,3,5-Trimethylbenzene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 107 | 2.52 J | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 1,3-Dichloropropane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 2,2-Dichloropropane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 2-Butanone | 4,230 U | 20.6 U | 26.4 U | 23.8 U | 28.0 U | 2,280 U | 22.4 U | 223,000 U | 5,490,000 U | 1,180,000 U | 1,420,000 U | 1,250 U | 1,600 U | 21.9 U | 23.1 U | 6,420,000 U [1,010,000 U] |
| 2-Chlorotoluene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 2-Hexanone | 846 U | 10.3 U | 13.2 U | 11.9 U | 14.0 U | 455 U | 11.2 U | 44,600 U | 1,100,000 U | 235,000 U | 284,000 U | 250 U | 320 U | 10.9 U | 11.5 U | 1,280,000 U [202,000 U] |
| 4-Chlorotoluene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 4-Methyl-2-pentanone | 846 U | 10.3 U | 13.2 U | 11.9 U | 14.0 U | 455 U | 11.2 U | 44,600 U | 1,100,000 U | 235,000 U | 284,000 U | 250 U | 320 U | 10.9 U | 11.5 U | 1,280,000 U [202,000 U] |
| Acetone | 4,230 U | 22.9 J | 8.74 J | 32.6 J | 37.1 J | 2,280 U | 18.5 J | 223,000 U | 5,490,000 U | 1,180,000 U | 1,420,000 U | 1,250 U | 1,600 U | 20.9 J | 9.94 J | 6,420,000 U [1,010,000 U] |
| Benzene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 0.850 J | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Bromobenzene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Bromochloromethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Bromoform | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Bromomethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Carbon Disulfide | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Diisopropyl ether (DIPE) | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Ethylbenzene | 129 J | 5.21 | 3.36 J | 4.76 U | 5.61 U | 132 | 12.7 | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Hexachlorobutadiene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Iodomethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Isopropylbenzene | 37.2 J | 2.44 J | 1.74 J | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| m-,p-Xylene | 4,210 | 151 | 10.5 U | 9.51 U | 11.2 U | 1,270 | 20.7 | 17,900 U | 440,000 U | 94,100 U | 114,000 U | 99.9 U | 128 U | 8.75 U | 9.22 U | 513,000 U [80,700 U] |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 2.21 J | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| n-Butylbenzene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| n-Propylbenzene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 0.859 J | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| o-Xylene | 345 | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 477 | 1.61 J | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-218 5 09/03/15 | SB-219 4 09/03/15 | SB-219 6 09/03/15 | SB-301 3 09/03/15 | SB-301 4 09/03/15 | SB-302 3 09/03/15 | SB-302 5 09/03/15 | SB-303 4 09/03/15 | SB-303 6 09/03/15 | SB-304 3 09/03/15 | SB-304 5 09/03/15 | SB-305 3 09/03/15 | SB-306 6 09/03/15 | SB-307 2 09/03/15 | SB-308 3 09/03/15 | SB-308 5 09/03/15 |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------------------|
| p-Isopropyltoluene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 394 | 1.67 J | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| sec-Butylbenzene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Styrene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| tert-Butylbenzene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Toluene | 169 U | 4.12 U | 5.27 U | 1.04 J | 5.61 U | 334 | 2.09 J | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| trans-1,4-Dichloro-2-butene | 846 U | 20.6 U | 26.4 U | 23.8 U | 28.0 U | 455 U | 22.4 U | 44,600 U | 1,100,000 U | 235,000 U | 284,000 U | 250 U | 320 U | 21.9 U | 23.1 U | 1,280,000 U [202,000 U] |
| Xylenes (total) | 4,550 | 151 | 10.5 U | 9.51 U | 11.2 U | 1,740 | 22.3 | 17,900 U | 440,000 U | 94,100 U | 114,000 U | 99.9 U | 128 U | 8.75 U | 9.22 U | 513,000 U [80,700 U] |
| 1,1,1-Trichloroethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 29.1 J | 4.48 U | 222,000 | 796,000 | 488,000 | 674,000 | 1,100 | 63.9 U | 4.38 U | 145 | 1,840,000 [475,000] |
| 1,1,2,2-Tetrachloroethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 1,1-Dichloroethane | 169 U | 4.12 U | 7.82 | 4.76 U | 5.61 U | 61.9 J | 2.43 J | 4,020 J | 220,000 U | 12,200 J | 11,900 J | 212 | 27.5 J | 4.38 U | 124 | 257,000 U [10,900 J] |
| 1,1-Dichloroethene | 169 U | 4.12 U | 0.928 J | 4.76 U | 5.61 U | 107 | 4.48 U | 21,200 | 125,000 J | 12,700 J | 34,600 J | 81.4 | 14.1 J | 4.38 U | 20.4 | 136,000 J [44,800] |
| 1,2,4-Trichlorobenzene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 1,2-Dibromo-3-chloropropane | 846 U | 24.7 U | 31.6 U | 28.5 U | 33.7 U | 455 U | 26.9 U | 44,600 U | 1,100,000 U | 235,000 U | 284,000 U | 250 U | 320 U | 26.3 U | 27.7 U | 1,280,000 U [202,000 U] |
| 1,2-Dichlorobenzene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 1,2-Dichloroethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 1,2-Dichloropropane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 1,3-Dichlorobenzene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| 1,4-Dichlorobenzene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Bromodichloromethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Carbon Tetrachloride | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 21.2 | 257,000 U [40,400 U] |
| Chlorobenzene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Chloroethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 3.32 J | 91.0 U | 6.53 | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 17.3 | 257,000 U [40,400 U] |
| Chloroform | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Chloromethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| cis-1,3-Dichloropropene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Dibromochloromethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Dichlorodifluoromethane | 846 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 455 U | 4.48 U | 44,600 U | 1,100,000 U | 235,000 U | 284,000 U | 250 U | 320 U | 4.38 U | 4.61 U | 1,280,000 U [202,000 U] |
| Methylene Chloride | 846 U | 16.5 U | 21.1 U | 3.46 J | 4.15 J | 455 U | 17.9 U | 44,600 U | 1,100,000 U | 235,000 U | 284,000 U | 250 U | 320 U | 17.5 U | 4.26 J | 1,280,000 U [202,000 U] |
| trans-1,3-Dichloropropene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| Trichlorofluoromethane | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| cis-1,2-Dichloroethene | 169 U | 4.12 U | 11.6 | 4.76 U | 5.61 U | 826 | 3.83 J | 27,900 | 143,000 J | 32,900 J | 16,500 J | 675 | 606 | 1.47 J | 176 | 257,000 U [18,200 J] |
| Tetrachloroethene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 4.61 U | 257,000 U [40,400 U] |
| trans-1,2-Dichloroethene | 169 U | 4.12 U | 5.27 U | 4.76 U | 5.61 U | 91.0 U | 4.48 U | 8,930 U | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 63.9 U | 4.38 U | 2.86 J | 257,000 U [40,400 U] |
| Trichloroethene | 169 U | 0.906 J | 5.27 U | 4.76 U | 5.61 U | 435 | 1.79 J | 288,000 | 4,020,000 | 47,500 | 357,000 | 726 | 67.1 | 5.91 | 58.0 | 2,730,000 [735,000] |
| Vinyl Chloride | 169 U | 1.08 J | 72.8 | 4.76 U | 5.61 U | 454 | 1.31 J | 1,880 J | 220,000 U | 47,000 U | 56,800 U | 50.0 U | 158 | 4.38 U | 12.8 | 257,000 U [40,400 U] |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-309 | SB-309 | SB-310 | SB-310 | SB-311 | SB-311 | SB-312 | SB-312 | SB-313 | SB-313 | SB-314 | SB-314 | SB-315 | SB-315 | SB-316 | SB-316 | SB-317 |
|---|-------------------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 3 | 5 | 3 | 5 | 3 | 5 | 3 | 5 | 3 | 6 | 3 | 6 | 3 | 5 | 3 | 6 | 3 |
| Date Collected: | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/03/15 | 09/04/15 | 09/04/15 | 09/04/15 | 09/04/15 | 09/04/15 | 09/04/15 | 09/04/15 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 1,1-Dichloropropene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 1,2,3-Trichlorobenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 1,2,3-Trichloropropane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 1,2,4-Trimethylbenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 20,900 | 43.5 J | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 1,2-Dibromoethane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 1,3,5-Trimethylbenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 5,770 | 35.7 J | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 1,3-Dichloropropane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 2,2-Dichloropropane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 2-Butanone | 1,100 U [1,110 U] | 4,630 U | 22.6 U | 24.3 U | 21.6 U | 204,000 U | 23.0 U | 5.67 J | 28,700 U | 1,620 U | 21.2 U | 21.9 U | 1,170 U | 26,200 U | 22.4 U | 22.5 U | 22.8 U |
| 2-Chlorotoluene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 2-Hexanone | 219 U [222 U] | 925 U | 11.3 U | 12.1 U | 10.8 U | 40,900 U | 11.5 U | 10.6 U | 5,740 U | 325 U | 10.6 U | 11.0 U | 233 U | 5,240 U | 11.2 U | 11.2 U | 11.4 U |
| 4-Chlorotoluene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 4-Methyl-2-pentanone | 219 U [222 U] | 925 U | 11.3 U | 12.1 U | 10.8 U | 40,900 U | 11.5 U | 10.6 U | 5,740 U | 325 U | 10.6 U | 11.0 U | 233 U | 5,240 U | 11.2 U | 11.2 U | 11.4 U |
| Acetone | 1,100 U [1,110 U] | 4,630 U | 45.2 U | 48.0 J | 43.3 U | 204,000 U | 46.0 U | 34.7 J | 28,700 U | 1,620 U | 42.5 U | 19.0 J | 1,170 U | 26,200 U | 16.6 J | 30.6 J | 45.7 U |
| Benzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 1.06 J | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 0.683 J | 4.57 U |
| Bromobenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Bromochloromethane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Bromoform | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Bromomethane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Carbon Disulfide | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Diisopropyl ether (DIPE) | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Ethylbenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 276 J | 61.7 J | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Hexachlorobutadiene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Iodomethane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Isopropylbenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,680 | 425 | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| m-,p-Xylene | 87.6 U [89.0 U] | 370 U | 9.03 U | 9.71 U | 8.66 U | 16,400 U | 9.21 U | 8.47 U | 540 J | 130 U | 8.50 U | 8.77 U | 93.3 U | 2,100 U | 8.95 U | 8.98 U | 9.14 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 102 | 4.25 U | 4.39 U | 14.5 J | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| n-Butylbenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 425 J | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| n-Propylbenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 5,890 | 1,450 | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| o-Xylene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 942 J | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-309 3 09/03/15 | SB-309 5 09/03/15 | SB-310 3 09/03/15 | SB-310 5 09/03/15 | SB-311 3 09/03/15 | SB-311 5 09/03/15 | SB-312 3 09/03/15 | SB-312 5 09/03/15 | SB-313 3 09/03/15 | SB-313 6 09/03/15 | SB-314 3 09/04/15 | SB-314 6 09/04/15 | SB-315 3 09/04/15 | SB-315 5 09/04/15 | SB-316 3 09/04/15 | SB-316 6 09/04/15 | SB-317 3 09/04/15 |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| p-Isopropyltoluene | 43.8 U [44.5 U] | 157 J | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 0.728 J | 529 J | 59.8 J | 4.25 U | 4.39 U | 41.0 J | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| sec-Butylbenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 24.7 J | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Styrene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| tert-Butylbenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Toluene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 1.23 J | 8,180 U | 4.60 U | 1.30 J | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 28.9 J | 1,050 U | 4.48 U | 0.943 J | 4.57 U |
| trans-1,4-Dichloro-2-butene | 219 U [222 U] | 925 U | 22.6 U | 24.3 U | 21.6 U | 40,900 U | 23.0 U | 21.2 U | 5,740 U | 325 U | 21.2 U | 21.9 U | 233 U | 5,240 U | 22.4 U | 22.5 U | 22.8 U |
| Xylenes (total) | 87.6 U [89.0 U] | 370 U | 9.03 U | 9.71 U | 8.66 U | 16,400 U | 9.21 U | 8.47 U | 1,480 J | 130 U | 8.50 U | 8.77 U | 93.3 U | 2,100 U | 8.95 U | 8.98 U | 9.14 U |
| 1,1,1-Trichloroethane | 458 [402] | 185 U | 88.6 | 4.86 U | 37.9 | 8,180 U | 8.88 | 18.1 | 1,150 U | 65.0 U | 4.09 J | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 1.11 J |
| 1,1,2,2-Tetrachloroethane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 1,1-Dichloroethane | 66.6 [57.8] | 2,510 | 82.9 | 4.86 U | 16.6 | 8,180 U | 5.01 | 4.24 U | 1,150 U | 65.0 U | 8.13 | 4.39 U | 327 | 2,380 | 7.91 | 87.9 | 4.57 U |
| 1,1-Dichloroethene | 28.9 J [23.6 J] | 1,100 | 7.38 | 4.86 U | 3.20 J | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 2,620 | 4.48 U | 4.49 U | 4.57 U |
| 1,2,4-Trichlorobenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 1,2-Dibromo-3-chloropropane | 219 U [222 U] | 925 U | 27.1 U | 29.1 U | 26.0 U | 40,900 U | 27.6 U | 25.4 U | 5,740 U | 325 U | 25.5 U | 26.3 U | 233 U | 5,240 U | 26.9 U | 27.0 U | 27.4 U |
| 1,2-Dichlorobenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 1,2-Dichloroethane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 1,2-Dichloropropane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 1,3-Dichlorobenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| 1,4-Dichlorobenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Bromodichloromethane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Carbon Tetrachloride | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Chlorobenzene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Chloroethane | 43.8 U [44.5 U] | 459 | 1.39 J | 1.81 J | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 26.2 | 4.57 U |
| Chloroform | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Chloromethane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| cis-1,3-Dichloropropene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Dibromochloromethane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Dichlorodifluoromethane | 219 U [222 U] | 925 U | 4.52 U | 4.86 U | 4.33 U | 40,900 U | 4.60 U | 4.24 U | 5,740 U | 325 U | 4.25 U | 4.39 U | 233 U | 5,240 U | 4.48 U | 4.49 U | 4.57 U |
| Methylene Chloride | 219 U [222 U] | 925 U | 18.1 U | 19.4 U | 17.3 U | 40,900 U | 18.4 U | 16.9 U | 5,740 U | 325 U | 17.0 U | 17.5 U | 233 U | 5,240 U | 17.9 U | 18.0 U | 18.3 U |
| trans-1,3-Dichloropropene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| Trichlorofluoromethane | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| cis-1,2-Dichloroethene | 131 [122] | 2,870 | 32.4 | 4.86 U | 7.22 | 99,000 | 0.893 J | 2.41 J | 1,150 U | 65.0 U | 1.36 J | 4.39 U | 46.6 U | 19,300 | 2.46 J | 4.49 U | 1.89 J |
| Tetrachloroethene | 43.8 U [44.5 U] | 185 U | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 4.57 U |
| trans-1,2-Dichloroethene | 43.8 U [44.5 U] | 94.4 J | 4.52 U | 4.86 U | 4.33 U | 8,180 U | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 36.8 J | 241 J | 4.48 U | 1.22 J | 4.57 U |
| Trichloroethene | 267 [250] | 83.3 J | 58.3 | 4.86 U | 49.5 | 8,180 U | 27.7 | 5.57 | 1,150 U | 65.0 U | 8.07 | 4.39 U | 46.6 U | 1,050 U | 4.48 U | 4.49 U | 18.2 |
| Vinyl Chloride | 43.8 U [44.5 U] | 801 | 4.52 U | 4.86 U | 4.33 U | 5,560 J | 4.60 U | 4.24 U | 1,150 U | 65.0 U | 4.25 U | 4.39 U | 513 | 7,240 | 1.07 J | 16.3 | 4.57 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-317 | SB-318 | SB-318 | SB-MB1-01 | SB-MB1-02 | SB-MB1-03 | SB-MB1-04 | SB-MB1-05 | SB-MB1-06 | SB-MB1-07 | SB-MB1-08 | SB-MB1-09 | SB-MB1-10 | SB-MB1-11 | SB-MB1-12 | SB-MB1-13 | SB-MB1-14 |
|---|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 6 | 4 | 6 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 |
| Date Collected: | 09/04/15 | 09/04/15 | 09/04/15 | 03/12/12 | 03/12/12 | 03/12/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/13/12 | 03/14/12 | 03/14/12 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,1-Dichloropropene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,2,3-Trichlorobenzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,2,3-Trichloropropane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,2,4-Trimethylbenzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,2-Dibromoethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,3,5-Trimethylbenzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,3-Dichloropropane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 2,2-Dichloropropane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 2-Butanone | 1,140 U | 24.2 U | 32.1 U | 26.7 U | 27.7 U | 33.0 U | 20.1 U | 19.3 U | 20.0 U | 20.0 U | 20.9 U | 18.9 U | 20.8 U | 19.7 U | 26.2 U | 27.3 U | 28.6 U |
| 2-Chlorotoluene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 2-Hexanone | 227 U | 12.1 U | 16.0 U | 13.3 U | 13.9 U | 16.5 U | 10.1 U | 9.66 U | 9.99 U | 10.0 U | 10.4 U | 9.47 U | 10.4 U | 9.84 U | 13.1 U | 13.7 U | 14.3 U |
| 4-Chlorotoluene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 4-Methyl-2-pentanone | 227 U | 12.1 U | 16.0 U | 13.3 U | 13.9 U | 16.5 U | 10.1 U | 9.66 U | 9.99 U | 10.0 U | 10.4 U | 9.47 U | 10.4 U | 9.84 U | 13.1 U | 13.7 U | 14.3 U |
| Acetone | 1,140 U | 15.3 J | 13.7 J | 4.51 J | 55.4 U | 8.82 J | 40.3 U | 3.02 J | 39.9 U | 40.1 U | 41.8 U | 2.77 J | 41.6 U | 39.4 U | 52.4 U | 4.15 J | 57.2 U |
| Benzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Bromobenzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Bromochloromethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Bromoform | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Bromomethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Carbon Disulfide | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Diisopropyl ether (DIPE) | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Ethylbenzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Hexachlorobutadiene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Iodomethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Isopropylbenzene | 45.4 U | 2.97 J | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| m-,p-Xylene | 90.8 U | 9.69 U | 12.8 U | 10.7 U | 11.1 U | 13.2 U | 8.05 U | 7.73 U | 7.99 U | 8.01 U | 8.36 U | 7.58 U | 8.31 U | 7.87 U | 10.5 U | 10.9 U | 11.4 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| n-Butylbenzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| n-Propylbenzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| o-Xylene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-317 6 09/04/15 | SB-318 4 09/04/15 | SB-318 6 09/04/15 | SB-MB1-01 1.5 - 2 03/12/12 | SB-MB1-02 1.5 - 2 03/12/12 | SB-MB1-03 1.5 - 2 03/12/12 | SB-MB1-04 1.5 - 2 03/13/12 | SB-MB1-05 1.5 - 2 03/13/12 | SB-MB1-06 1.5 - 2 03/13/12 | SB-MB1-07 1.5 - 2 03/13/12 | SB-MB1-08 1.5 - 2 03/13/12 | SB-MB1-09 1.5 - 2 03/13/12 | SB-MB1-10 1.5 - 2 03/13/12 | SB-MB1-11 1.5 - 2 03/13/12 | SB-MB1-12 0 - 0.5 03/13/12 | SB-MB1-13 0 - 0.5 03/14/12 | SB-MB1-14 0 - 0.5 03/14/12 |
|---|-------------------------|-------------------------|-------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| p-Isopropyltoluene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| sec-Butylbenzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Styrene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| tert-Butylbenzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Toluene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 1.92 J | 0.984 J |
| trans-1,4-Dichloro-2-butene | 227 U | 24.2 U | 32.1 U | 26.7 U | 27.7 U | 33.0 U | 20.1 U | 19.3 U | 20.0 U | 20.0 U | 20.9 U | 18.9 U | 20.8 U | 19.7 U | 26.2 U | 27.3 U | 28.6 U |
| Xylenes (total) | 90.8 U | 9.69 U | 12.8 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,1,2,2-Tetrachloroethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,1-Dichloroethane | 12.7 J | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,1-Dichloroethene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,2,4-Trichlorobenzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,2-Dibromo-3-chloropropane | 227 U | 29.1 U | 38.5 U | 32.0 U | 33.3 U | 39.6 U | 24.2 U | 23.2 U | 24.0 U | 24.0 U | 25.1 U | 22.7 U | 24.9 U | 23.6 U | 31.4 U | 32.8 U | 34.3 U |
| 1,2-Dichlorobenzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,2-Dichloroethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,2-Dichloropropane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,3-Dichlorobenzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| 1,4-Dichlorobenzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Bromodichloromethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Carbon Tetrachloride | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Chlorobenzene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Chloroethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Chloroform | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Chloromethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| cis-1,3-Dichloropropene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Dibromochloromethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Dichlorodifluoromethane | 227 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Methylene Chloride | 227 U | 19.4 U | 25.7 U | 4.03 J | 1.18 J | 2.44 J | 1.82 J | 1.04 J | 1.76 J | 0.937 J | 1.51 J | 1.04 J | 1.71 J | 1.03 J | 1.40 J | 14.5 J | 6.16 J |
| trans-1,3-Dichloropropene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Trichlorofluoromethane | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 2.63 J | 3.79 U | 4.16 U | 1.05 J | 5.24 U | 5.46 U | 5.72 U |
| cis-1,2-Dichloroethene | 600 | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Tetrachloroethene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| trans-1,2-Dichloroethene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Trichloroethene | 45.4 U | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Vinyl Chloride | 62.7 | 4.85 U | 6.41 U | 5.33 U | 5.54 U | 6.60 U | 4.03 U | 3.87 U | 3.99 U | 4.01 U | 4.18 U | 3.79 U | 4.16 U | 3.94 U | 5.24 U | 5.46 U | 5.72 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-MB1-15 | SB-MB1-16 | SB-MB1-17 | SB-MB1-18 | SB-MB1-19 | SB-MB1-20 | SB-MB1-21 | SB-MB1-22 | SB-MB1-23 | SB-MB1-29 | SB-MB1-30 | SB-MB1-31 | SB-MB1-32 | SB-MB1-33 | SB-MB1-34 | SB-MB1-36 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 0 - 0.5 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 |
| Date Collected: | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/14/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/15/12 | 03/15/12 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,1-Dichloropropene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,2,3-Trichlorobenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,2,3-Trichloropropane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,2,4-Trimethylbenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,2-Dibromoethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,3,5-Trimethylbenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,3-Dichloropropane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 2,2-Dichloropropane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 2-Butanone | 23.3 U | 27.1 U | 27.8 U | 28.6 U | 27.0 U | 27.7 U | 23.7 U | 26.9 U | 28.0 U | 2,320 U | 1,160 U | 28.4 U | 25.7 U | 1,210 U | 25.2 U | 27.3 U |
| 2-Chlorotoluene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 2-Hexanone | 11.6 U | 13.5 U | 13.9 U | 14.3 U | 13.5 U | 13.8 U | 11.8 U | 13.4 U | 14.0 U | 464 U | 232 U | 14.2 U | 12.9 U | 241 U | 12.6 U | 13.6 U |
| 4-Chlorotoluene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 4-Methyl-2-pentanone | 11.6 U | 13.5 U | 13.9 U | 14.3 U | 13.5 U | 13.8 U | 11.8 U | 13.4 U | 14.0 U | 464 U | 232 U | 14.2 U | 12.9 U | 241 U | 12.6 U | 13.6 U |
| Acetone | 46.5 U | 54.1 U | 4.12 J | 57.1 U | 54.0 U | 55.4 U | 47.3 U | 53.7 U | 56.0 U | 2,320 U | 1,160 U | 3.02 J | 51.4 U | 1,210 U | 50.5 U | 54.6 U |
| Benzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Bromobenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Bromochloromethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Bromoform | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Bromomethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Carbon Disulfide | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Diisopropyl ether (DIPE) | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Ethylbenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Hexachlorobutadiene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Iodomethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Isopropylbenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| m-,p-Xylene | 9.30 U | 10.8 U | 11.1 U | 11.4 U | 10.8 U | 11.1 U | 9.46 U | 10.7 U | 11.2 U | 186 U | 92.8 U | 11.4 U | 10.3 U | 96.6 U | 10.1 U | 10.9 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| n-Butylbenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| n-Propylbenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| o-Xylene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-MB1-15 0 - 0.5 03/14/12 | SB-MB1-16 0 - 0.5 03/14/12 | SB-MB1-17 0 - 0.5 03/14/12 | SB-MB1-18 0 - 0.5 03/14/12 | SB-MB1-19 0 - 0.5 03/14/12 | SB-MB1-20 0 - 0.5 03/14/12 | SB-MB1-21 0 - 0.5 03/14/12 | SB-MB1-22 0 - 0.5 03/14/12 | SB-MB1-23 1.5 - 2 03/14/12 | SB-MB1-29 1.5 - 2 03/14/12 | SB-MB1-30 1.5 - 2 03/14/12 | SB-MB1-31 1.5 - 2 03/15/12 | SB-MB1-32 1.5 - 2 03/15/12 | SB-MB1-33 1.5 - 2 03/15/12 | SB-MB1-34 1.5 - 2 03/15/12 | SB-MB1-36 1.5 - 2 03/15/12 |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| p-Isopropyltoluene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| sec-Butylbenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Styrene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| tert-Butylbenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Toluene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 1.37 J | 5.14 U | 48.3 U | 5.05 U | 1.03 J |
| trans-1,4-Dichloro-2-butene | 23.3 U | 27.1 U | 27.8 U | 28.6 U | 27.0 U | 27.7 U | 23.7 U | 26.9 U | 28.0 U | 464 U | 232 U | 28.4 U | 25.7 U | 241 U | 25.2 U | 27.3 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 7.84 | 136 | 146 | 5.69 U | 5.14 U | 142 | 5.05 U | 5.46 U |
| 1,1,2,2-Tetrachloroethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,1-Dichloroethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 53.4 | 5.69 U | 5.14 U | 86.4 | 5.05 U | 5.46 U |
| 1,1-Dichloroethene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,2,4-Trichlorobenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,2-Dibromo-3-chloropropane | 27.9 U | 32.5 U | 33.4 U | 34.3 U | 32.4 U | 33.2 U | 28.4 U | 32.2 U | 33.6 U | 464 U | 232 U | 34.1 U | 30.9 U | 241 U | 30.3 U | 32.7 U |
| 1,2-Dichlorobenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,2-Dichloroethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,2-Dichloropropane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,3-Dichlorobenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| 1,4-Dichlorobenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Bromodichloromethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Carbon Tetrachloride | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Chlorobenzene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Chloroethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Chloroform | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Chloromethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| cis-1,3-Dichloropropene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Dibromochloromethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Dichlorodifluoromethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 464 U | 232 U | 5.69 U | 5.14 U | 241 U | 5.05 U | 5.46 U |
| Methylene Chloride | 3.34 J | 4.33 J | 2.62 J | 2.46 J | 6.11 J | 4.17 J | 3.67 J | 3.01 J | 4.45 J | 75.2 J | 19.0 J | 2.83 J | 2.54 J | 16.4 J | 2.49 J | 2.01 J |
| trans-1,3-Dichloropropene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Trichlorofluoromethane | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| cis-1,2-Dichloroethene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 160 | 5.69 U | 5.14 U | 954 | 5.05 U | 5.46 U |
| Tetrachloroethene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 36.2 J | 5.69 U | 5.14 U | 24.1 J | 5.05 U | 5.46 U |
| trans-1,2-Dichloroethene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 47.8 J | 5.05 U | 5.46 U |
| Trichloroethene | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 0.908 J | 1.05 J | 10.4 | 1,650 | 723 | 5.69 U | 5.14 U | 614 | 5.05 U | 5.06 J |
| Vinyl Chloride | 4.65 U | 5.41 U | 5.56 U | 5.71 U | 5.40 U | 5.54 U | 4.73 U | 5.37 U | 5.60 U | 92.8 U | 46.4 U | 5.69 U | 5.14 U | 48.3 U | 5.05 U | 5.46 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-MB1-37 | SB-MB1-38 | SB-MB1-39 | SB-MB1-40 | SB-MB1-41 | SB-MB1-42 | SB-MB1-43 | SB-MB1-44 | SB-MB1-45 | SB-MB1-46 | SB-MB1-47 | SB-MB1-48 | SB-MB1-49 | SB-MB1-50 | SB-MB1-51 | SB-MB1-52 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 |
| Date Collected: | 03/15/12 | 03/16/12 | 03/16/12 | 03/16/12 | 03/16/12 | 03/16/12 | 03/16/12 | 03/16/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,1-Dichloropropene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,2,3-Trichlorobenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,2,3-Trichloropropane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,2,4-Trimethylbenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,2-Dibromoethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,3,5-Trimethylbenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,3-Dichloropropane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 2,2-Dichloropropane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 2-Butanone | 25.3 U | 26.1 U | 1,080 U | 26.1 U | 1,120 U | 1,120 U | 28.1 U | 25.7 U | 26.4 U | 1,360 U | 28.1 U | 25.8 U | 28.9 U | 26.8 U | 26.9 U | 25.0 U |
| 2-Chlorotoluene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 2-Hexanone | 12.7 U | 13.1 U | 217 U | 13.0 U | 223 U | 224 U | 14.1 U | 12.8 U | 13.2 U | 273 U | 14.1 U | 12.9 U | 14.4 U | 13.4 U | 13.4 U | 12.5 U |
| 4-Chlorotoluene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 4-Methyl-2-pentanone | 12.7 U | 13.1 U | 217 U | 13.0 U | 223 U | 224 U | 14.1 U | 12.8 U | 13.2 U | 273 U | 14.1 U | 12.9 U | 14.4 U | 13.4 U | 13.4 U | 12.5 U |
| Acetone | 50.7 U | 52.3 U | 1,080 U | 52.1 U | 1,120 U | 1,120 U | 56.2 U | 757 | 3.99 J | 1,360 U | 56.2 U | 22.0 J | 10.9 J | 53.7 U | 53.8 U | 12.9 J |
| Benzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Bromobenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Bromochloromethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Bromoform | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Bromomethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Carbon Disulfide | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Diisopropyl ether (DIPE) | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Ethylbenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Hexachlorobutadiene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Iodomethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Isopropylbenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| m-,p-Xylene | 10.1 U | 10.5 U | 86.6 U | 10.4 U | 89.3 U | 89.5 U | 11.2 U | 10.3 U | 10.6 U | 109 U | 11.2 U | 10.3 U | 11.6 U | 10.7 U | 10.8 U | 9.98 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| n-Butylbenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| n-Propylbenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| o-Xylene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-MB1-37 | SB-MB1-38 | SB-MB1-39 | SB-MB1-40 | SB-MB1-41 | SB-MB1-42 | SB-MB1-43 | SB-MB1-44 | SB-MB1-45 | SB-MB1-46 | SB-MB1-47 | SB-MB1-48 | SB-MB1-49 | SB-MB1-50 | SB-MB1-51 | SB-MB1-52 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 |
| | 03/15/12 | 03/16/12 | 03/16/12 | 03/16/12 | 03/16/12 | 03/16/12 | 03/16/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 | 03/22/12 |
| p-Isopropyltoluene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| sec-Butylbenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Styrene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| tert-Butylbenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Toluene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 3.69 J | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| trans-1,4-Dichloro-2-butene | 25.3 U | 26.1 U | 217 U | 26.1 U | 223 U | 224 U | 28.1 U | 25.7 U | 26.4 U | 273 U | 28.1 U | 25.8 U | 28.9 U | 26.8 U | 26.9 U | 25.0 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 567 | 72.1 | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,1,2,2-Tetrachloroethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,1-Dichloroethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,1-Dichloroethene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 535 | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,2,4-Trichlorobenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,2-Dibromo-3-chloropropane | 30.4 U | 31.4 U | 217 U | 31.3 U | 223 U | 224 U | 33.7 U | 30.8 U | 31.7 U | 273 U | 33.7 U | 30.9 U | 34.7 U | 32.2 U | 32.3 U | 30.0 U |
| 1,2-Dichlorobenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,2-Dichloroethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,2-Dichloropropane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,3-Dichlorobenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| 1,4-Dichlorobenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Bromodichloromethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Carbon Tetrachloride | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Chlorobenzene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Chloroethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Chloroform | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Chloromethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| cis-1,3-Dichloropropene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Dibromochloromethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Dichlorodifluoromethane | 5.07 U | 5.23 U | 217 U | 5.21 U | 223 U | 224 U | 5.62 U | 5.13 U | 5.28 U | 273 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Methylene Chloride | 1.88 J | 2.53 J | 217 U | 2.58 J | 223 U | 224 U | 2.69 J | 4.14 J | 3.65 J | 273 U | 6.01 J | 4.27 J | 2.21 J | 21.5 U | 21.5 U | 1.42 J |
| trans-1,3-Dichloropropene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Trichlorofluoromethane | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| cis-1,2-Dichloroethene | 5.07 U | 5.23 U | 90.1 | 5.21 U | 130 | 49.2 | 5.62 U | 5.13 U | 5.28 U | 16.9 J | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Tetrachloroethene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| trans-1,2-Dichloroethene | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Trichloroethene | 5.07 U | 5.23 U | 268 | 5.21 U | 1,080 | 408 | 4.09 J | 5.13 U | 5.28 U | 54.6 U | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Vinyl Chloride | 5.07 U | 5.23 U | 43.3 U | 5.21 U | 44.7 U | 44.8 U | 5.62 U | 5.13 U | 5.28 U | 60.0 | 5.62 U | 5.16 U | 5.78 U | 5.37 U | 5.38 U | 4.99 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | SB-MB1-53 | SB-MB1-54 | SB-PDG-1 | SB-PDG-2 | SB-PDG-3 | SB-PDG-4 | SB-PDG-5 | SB-PDG-6 | SB-PDG-7 | SB-PDG-8 | SB-PDG-9 |
|---|-----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1 - 1.5 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 | 1.5 - 2 |
| Date Collected: | 03/22/12 | 03/27/12 | 06/02/09 | 06/02/09 | 06/02/09 | 06/02/09 | 06/02/09 | 06/02/09 | 06/02/09 | 06/02/09 | 06/02/09 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,1-Dichloropropene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,2,3-Trichlorobenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,2,3-Trichloropropane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,2,4-Trimethylbenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,2-Dibromoethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,3,5-Trimethylbenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,3-Dichloropropane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 2,2-Dichloropropane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 2-Butanone | 27.0 U | 29.3 U | 22.0 U | 22.6 U | 22.6 U | 22.0 U | 22.1 U | 21.2 U | 22.2 U | 20.8 U | 23.1 U |
| 2-Chlorotoluene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 2-Hexanone | 13.5 U | 14.7 U | 11.0 U | 11.3 U | 11.3 U | 11.0 U | 11.0 U | 10.6 U | 11.1 U | 10.4 U | 11.6 U |
| 4-Chlorotoluene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 4-Methyl-2-pentanone | 13.5 U | 14.7 U | 11.0 U | 11.3 U | 11.3 U | 11.0 U | 11.0 U | 10.6 U | 11.1 U | 10.4 U | 11.6 U |
| Acetone | 54.0 U | 58.7 U | 12.6 J | 7.14 J | 18.8 J | 24.4 J | 26.0 J | 11.3 J | 24.5 J | 14.7 J | 46.3 U |
| Benzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Bromobenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Bromochloromethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Bromoform | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Bromomethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Carbon Disulfide | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Diisopropyl ether (DIPE) | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Ethylbenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Hexachlorobutadiene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Iodomethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Isopropylbenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| m-,p-Xylene | 10.8 U | 11.7 U | 8.80 U | 9.03 U | 9.05 U | 8.80 U | 8.83 U | 8.50 U | 8.89 U | 8.31 U | 9.26 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| n-Butylbenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| n-Propylbenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| o-Xylene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-MB1-53 1.5 - 2 03/22/12 | SB-MB1-54 1.5 - 2 03/27/12 | SB-PDG-1 1.5 - 2 06/02/09 | SB-PDG-2 1 - 1.5 06/02/09 | SB-PDG-3 1.5 - 2 06/02/09 | SB-PDG-4 1.5 - 2 06/02/09 | SB-PDG-5 1.5 - 2 06/02/09 | SB-PDG-6 1.5 - 2 06/02/09 | SB-PDG-7 1.5 - 2 06/02/09 | SB-PDG-8 1.5 - 2 06/02/09 | SB-PDG-9 1.5 - 2 06/02/09 |
|---|----------------------------------|----------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| p-Isopropyltoluene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| sec-Butylbenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Styrene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| tert-Butylbenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Toluene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| trans-1,4-Dichloro-2-butene | 27.0 U | 29.3 U | 22.0 U | 22.6 U | 22.6 U | 22.0 U | 22.1 U | 21.2 U | 22.2 U | 20.8 U | 23.1 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,1,2,2-Tetrachloroethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,1-Dichloroethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,1-Dichloroethene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 27.4 | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,2,4-Trichlorobenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,2-Dibromo-3-chloropropane | 32.4 U | 35.2 U | 22.0 U | 22.6 U | 22.6 U | 22.0 U | 22.1 U | 21.2 U | 22.2 U | 20.8 U | 23.1 U |
| 1,2-Dichlorobenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,2-Dichloroethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,2-Dichloropropane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,3-Dichlorobenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| 1,4-Dichlorobenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Bromodichloromethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Carbon Tetrachloride | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Chlorobenzene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Chloroethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Chloroform | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Chloromethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| cis-1,3-Dichloropropene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Dibromochloromethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Dichlorodifluoromethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Methylene Chloride | 4.02 J | 23.5 U | 17.6 U | 18.1 U | 18.1 U | 17.6 U | 17.7 U | 17.0 U | 17.8 U | 16.6 U | 18.5 U |
| trans-1,3-Dichloropropene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Trichlorofluoromethane | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| cis-1,2-Dichloroethene | 5.40 U | 2.44 J | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Tetrachloroethene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| trans-1,2-Dichloroethene | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Trichloroethene | 2.42 J | 9.75 | 4.40 U | 4.52 U | 4.53 U | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Vinyl Chloride | 5.40 U | 5.87 U | 4.40 U | 4.52 U | 7.74 | 4.40 U | 4.41 U | 4.25 U | 4.44 U | 4.15 U | 4.63 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-PDG-10 | SB-PDG-11 | SB-PDG-12 | SB-PDG-13 | SB-PDG-14 | SB-PDG-15 | SB-PDG-16 | SB-PDG-17 | SB-PDG-18 | SB-PDG-19 | SB-PDG-20 | SB-PDG-21 | SB-PDG-22 | SB-PDG-23 | SB-PDG-24 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 1.5 - 2 | 1.5 - 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 06/02/09 | 06/02/09 | 01/14/10 | 01/14/10 | 01/15/10 | 01/15/10 | 01/15/10 | 01/19/10 | 01/19/10 | 01/19/10 | 01/19/10 | 01/19/10 | 01/20/10 | 01/20/10 | 01/20/10 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,1-Dichloropropene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,2,3-Trichlorobenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,2,3-Trichloropropane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,2,4-Trimethylbenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,2-Dibromoethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,3,5-Trimethylbenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,3-Dichloropropane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 2,2-Dichloropropane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 2-Butanone | 22.7 U | 23.4 U | 12.8 J | 21.1 U | 21.2 U | 19.4 U | 26.1 U | 33.7 U | 36.2 U | 35.4 U | 36.5 U | 58.8 U | 36.4 U | 35.3 U | 34.1 U |
| 2-Chlorotoluene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 2-Hexanone | 11.3 U | 11.7 U | 11.0 U | 10.6 U | 10.6 U | 9.68 U | 13.1 U | 16.9 U | 18.1 U | 17.7 U | 18.2 U | 29.4 U | 18.2 U | 17.6 U | 17.1 U |
| 4-Chlorotoluene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 4-Methyl-2-pentanone | 11.3 U | 11.7 U | 11.0 U | 10.6 U | 10.6 U | 9.68 U | 13.1 U | 16.9 U | 18.1 U | 17.7 U | 18.2 U | 29.4 U | 18.2 U | 17.6 U | 17.1 U |
| Acetone | 45.4 U | 46.9 U | 73.7 | 14.0 J | 16.2 J | 23.2 J | 10.8 J | 16.5 J | 21.3 J | 70.7 U | 18.4 J | 118 U | 24.6 J | 30.3 J | 27.0 J |
| Benzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Bromobenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Bromochloromethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Bromoform | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Bromomethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Carbon Disulfide | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Diisopropyl ether (DIPE) | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Ethylbenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Hexachlorobutadiene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Iodomethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Isopropylbenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| m-,p-Xylene | 9.08 U | 9.37 U | 8.80 U | 8.45 U | 8.46 U | 7.75 U | 10.5 U | 13.5 U | 14.5 U | 14.1 U | 14.6 U | 23.5 U | 14.5 U | 14.1 U | 13.7 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| n-Butylbenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| n-Propylbenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| o-Xylene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-PDG-10 1.5 - 2 06/02/09 | SB-PDG-11 1.5 - 2 06/02/09 | SB-PDG-12 2 01/14/10 | SB-PDG-13 2 01/14/10 | SB-PDG-14 2 01/15/10 | SB-PDG-15 2 01/15/10 | SB-PDG-16 2 01/15/10 | SB-PDG-17 2 01/19/10 | SB-PDG-18 2 01/19/10 | SB-PDG-19 2 01/19/10 | SB-PDG-20 2 01/19/10 | SB-PDG-21 2 01/20/10 | SB-PDG-22 2 01/20/10 | SB-PDG-23 2 01/20/10 | SB-PDG-24 2 01/20/10 |
|---|----------------------------------|----------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| p-Isopropyltoluene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| sec-Butylbenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Styrene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| tert-Butylbenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Toluene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| trans-1,4-Dichloro-2-butene | 22.7 U | 23.4 U | 22.0 U | 21.1 U | 21.2 U | 19.4 U | 26.1 U | 33.7 U | 36.2 U | 35.4 U | 36.5 U | 58.8 U | 36.4 U | 35.3 U | 34.1 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,1,2,2-Tetrachloroethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,1-Dichloroethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,1-Dichloroethene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,2,4-Trichlorobenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,2-Dibromo-3-chloropropane | 22.7 U | 23.4 U | 22.0 U | 21.1 U | 21.2 U | 19.4 U | 26.1 U | 33.7 U | 36.2 U | 35.4 U | 36.5 U | 58.8 U | 36.4 U | 35.3 U | 34.1 U |
| 1,2-Dichlorobenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,2-Dichloroethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,2-Dichloropropane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,3-Dichlorobenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| 1,4-Dichlorobenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Bromodichloromethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Carbon Tetrachloride | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Chlorobenzene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Chloroethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Chloroform | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Chloromethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| cis-1,3-Dichloropropene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Dibromochloromethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Dichlorodifluoromethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Methylene Chloride | 18.2 U | 18.7 U | 17.6 U | 16.9 U | 1.69 JB | 3.01 J | 2.31 JB | 27.0 U | 28.9 U | 2.23 J | 29.2 U | 47.0 U | 29.1 U | 28.2 U | 27.3 U |
| trans-1,3-Dichloropropene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Trichlorofluoromethane | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| cis-1,2-Dichloroethene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Tetrachloroethene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| trans-1,2-Dichloroethene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Trichloroethene | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Vinyl Chloride | 4.54 U | 4.69 U | 4.40 U | 4.22 U | 4.23 U | 3.87 U | 5.23 U | 6.74 U | 7.23 U | 7.07 U | 7.29 U | 11.8 U | 7.27 U | 7.06 U | 6.83 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-PDG-25 2 01/20/10 | SB-PDG-26 2 01/20/10 | SB-PDG-27 2 01/20/10 | SB-PDG-28 2 01/20/10 | SB-PDG-29 2 01/20/10 | SB-PDG-RW 0-0.5 01/20/10 | WCCS-3 8 10/27/15 | WCCS-6 10 10/27/15 | WCCS-8 8 10/28/15 | WCCS-8 10 10/28/15 | WCCS-10 9 10/28/15 | WCSS-1 2 10/26/15 | WCSS-1 10 10/26/15 | WP-Com-Base 1.5 09/23/08 | WP-Com-East 0.75 09/23/08 |
|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------------------------------|-------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------------|---------------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 1,1-Dichloropropene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 1,2,3-Trichlorobenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 1,2,3-Trichloropropane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 1,2,4-Trimethylbenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 1,2-Dibromoethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 1,3,5-Trimethylbenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 1,3-Dichloropropane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 2,2-Dichloropropane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 2-Butanone | 32.2 U | 37.2 U | 39.0 U | 44.1 U | 45.3 U | 43.2 U | 100,000 U | 2,230,000 U | 5,880,000 U | 2,530,000 U | 439 J | 445 J | 641,000 U | 17,600 U | 21,700 U |
| 2-Chlorotoluene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 2-Hexanone | 16.1 U | 18.6 U | 19.5 U | 22.0 U | 22.6 U | 21.6 U | 20,000 U | 446,000 U | 1,180,000 U | 505,000 U | 238 U | 515 U | 128,000 U | 3,530 U | 4,340 U |
| 4-Chlorotoluene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 4-Methyl-2-pentanone | 16.1 U | 18.6 U | 19.5 U | 22.0 U | 22.6 U | 21.6 U | 20,000 U | 446,000 U | 1,180,000 U | 505,000 U | 238 U | 515 U | 128,000 U | 3,530 U | 4,340 U |
| Acetone | 23.5 J | 14.5 J | 38.6 J | 44.1 J | 21.9 J | 18.0 J | 100,000 U | 2,230,000 U | 5,880,000 U | 2,530,000 U | 1,190 U | 2,580 U | 641,000 U | 17,600 U | 21,700 U |
| Benzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Bromobenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Bromochloromethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Bromoform | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Bromomethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Carbon Disulfide | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Diisopropyl ether (DIPE) | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Ethylbenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 99.5 | 105 | 25,600 U | 2,300 | 3,520 |
| Hexachlorobutadiene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Iodomethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Isopropylbenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| m-,p-Xylene | 12.9 U | 14.9 U | 15.6 U | 17.6 U | 18.1 U | 17.3 U | 8,000 U | 179,000 U | 471,000 U | 202,000 U | 10.0 J | 206 U | 51,300 U | 9,020 | 13,700 |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| n-Butylbenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| n-Propylbenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| o-Xylene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 818 | 677 J |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | SB-PDG-25 2 01/20/10 | SB-PDG-26 2 01/20/10 | SB-PDG-27 2 01/20/10 | SB-PDG-28 2 01/20/10 | SB-PDG-29 2 01/20/10 | SB-PDG-RW 0-0.5 01/20/10 | WCCS-3 8 10/27/15 | WCCS-6 10 10/27/15 | WCCS-8 8 10/28/15 | WCCS-8 10 10/28/15 | WCCS-10 9 10/28/15 | WCSS-1 2 10/26/15 | WCSS-1 10 10/26/15 | WP-Com-Base 1.5 09/23/08 | WP-Com-East 0.75 09/23/08 |
|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------------------------------|-------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------------|---------------------------------|
| p-Isopropyltoluene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| sec-Butylbenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Styrene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| tert-Butylbenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Toluene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 1,040 J | 89,300 U | 235,000 U | 101,000 U | 51.9 | 55.7 J | 25,600 U | 63.5 J | 868 U |
| trans-1,4-Dichloro-2-butene | 32.2 U | 37.2 U | 39.0 U | 44.1 U | 45.3 U | 43.2 U | 20,000 U | 446,000 U | 1,180,000 U | 505,000 U | 238 U | 515 U | 128,000 U | 3,530 U | 4,340 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | 8,000 U | 179,000 U | 471,000 U | 202,000 U | 10.0 J | 206 U | 51,300 U | NA | NA |
| 1,1,1-Trichloroethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 2,730 | 66,900 | 705 U | 868 U |
| 1,1,2,2-Tetrachloroethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 1,1-Dichloroethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 10.5 J | 405 | 25,600 U | 705 U | 868 U |
| 1,1-Dichloroethene | 6.44 U | 4.88 J | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 165 | 31,300 | 705 U | 868 U |
| 1,2,4-Trichlorobenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 1,2-Dibromo-3-chloropropane | 32.2 U | 37.2 U | 39.0 U | 44.1 U | 45.3 U | 43.2 U | 20,000 U | 446,000 U | 1,180,000 U | 505,000 U | 238 U | 515 U | 128,000 U | 3,530 U | 4,340 U |
| 1,2-Dichlorobenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 1,2-Dichloroethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 1,2-Dichloropropane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 1,3-Dichlorobenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| 1,4-Dichlorobenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Bromodichloromethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Carbon Tetrachloride | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Chlorobenzene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Chloroethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Chloroform | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Chloromethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| cis-1,3-Dichloropropene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Dibromochloromethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Dichlorodifluoromethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 20,000 U | 446,000 U | 1,180,000 U | 505,000 U | 238 U | 515 U | 128,000 U | 3,530 U | 4,340 U |
| Methylene Chloride | 25.8 U | 29.7 U | 31.2 U | 35.3 U | 36.2 U | 34.6 U | 20,000 U | 446,000 U | 1,180,000 U | 505,000 U | 238 U | 515 U | 128,000 U | 233 J | 304 J |
| trans-1,3-Dichloropropene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Trichlorofluoromethane | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| cis-1,2-Dichloroethene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 69,700 | 89,300 U | 148,000 J | 62,600 J | 482 | 1,660 | 58,500 | 705 U | 868 U |
| Tetrachloroethene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| trans-1,2-Dichloroethene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 4,000 U | 89,300 U | 235,000 U | 101,000 U | 47.6 U | 103 U | 25,600 U | 705 U | 868 U |
| Trichloroethene | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 24,000 | 2,790,000 | 4,380,000 | 2,430,000 | 192 | 458 | 617,000 | 705 U | 868 U |
| Vinyl Chloride | 6.44 U | 7.44 U | 7.80 U | 8.82 U | 9.06 U | 8.64 U | 1,320 J | 89,300 U | 235,000 U | 101,000 U | 64.3 | 87.6 J | 25,600 U | 705 U | 868 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | WP-Com-North 0.75 09/23/08 | WP-Com-South 0.75 09/23/08 | WP-Com-West 0.75 09/23/08 | WP-SB-01 0.5 - 1.5 09/23/08 | WP-SB-01 5 - 6 09/23/08 | WP-SB-02 2 - 3 09/23/08 | WP-SB-02 5 - 6 09/23/08 | WP-SB-03 1 - 2 09/23/08 | WP-SB-03 5 - 6 09/23/08 | WP-SB-04 0.5 - 1.5 09/23/08 | WP-SB-04 3 - 4 09/23/08 | WP-SB-05 0.5 - 1.5 09/23/08 | WP-SB-05 3 - 4 09/23/08 |
|---|----------------------------------|----------------------------------|---------------------------------|-----------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-----------------------------------|-------------------------------|-----------------------------------|-------------------------------|
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 1,1-Dichloropropene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 1,2,3-Trichlorobenzene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 1,2,3-Trichloropropane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 1,2,4-Trimethylbenzene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.37 | 6.44 J | 4.31 U | 5.10 U |
| 1,2-Dibromoethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 1,3,5-Trimethylbenzene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 3.66 J | 49.5 U | 4.31 U | 5.10 U |
| 1,3-Dichloropropane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 2,2-Dichloropropane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 2-Butanone | 27,300 U | 1,170 U | 2,620 U | 2,060 U | 3,140 U | 4,800 U | 1,800 U | 24.4 U | 24.9 U | 26.4 U | 1,240 U | 21.6 U | 25.5 U |
| 2-Chlorotoluene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 2-Hexanone | 5,460 U | 233 U | 525 U | 413 U | 628 U | 960 U | 360 U | 12.2 U | 12.4 U | 13.2 U | 248 U | 10.8 U | 12.7 U |
| 4-Chlorotoluene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 4-Methyl-2-pentanone | 5,460 U | 233 U | 525 U | 413 U | 628 U | 960 U | 360 U | 12.2 U | 12.4 U | 13.2 U | 248 U | 10.8 U | 12.7 U |
| Acetone | 27,300 U | 1,170 U | 2,620 U | 2,060 U | 3,140 U | 4,800 U | 1,800 U | 54.5 | 49.8 U | 44.8 J | 1,240 U | 34.7 J | 44.1 J |
| Benzene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Bromobenzene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Bromochloromethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Bromoform | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Bromomethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Carbon Disulfide | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Diisopropyl ether (DIPE) | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Ethylbenzene | 3,810 | 301 | 959 | 1,070 | 126 U | 2,880 | 941 | 1.50 J | 4.98 U | 21.6 | 1,280 | 5.42 | 3.98 J |
| Hexachlorobutadiene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Iodomethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Isopropylbenzene | 1,090 U | 46.6 U | 105 U | 60.3 J | 126 U | 57.6 J | 55.5 J | 4.87 U | 4.98 U | 1.07 J | 15.4 J | 4.31 U | 5.10 U |
| m-,p-Xylene | 15,400 | 803 | 3,190 | 6,200 | 251 U | 9,820 | 789 | 9.75 U | 4.12 J | 48.4 | 54.0 J | 7.99 J | 4.75 J |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| n-Butylbenzene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| n-Propylbenzene | 1,090 U | 46.6 U | 30.4 J | 28.1 J | 126 U | 192 U | 72.1 U | 2.37 J | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| o-Xylene | 1,090 U | 46.6 U | 105 U | 408 | 126 U | 1,090 | 259 | 4.87 U | 1.53 J | 13.7 | 91.1 | 4.31 U | 5.10 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | WP-Com-North 0.75 09/23/08 | WP-Com-South 0.75 09/23/08 | WP-Com-West 0.75 09/23/08 | WP-SB-01 0.5 - 1.5 09/23/08 | WP-SB-01 5 - 6 09/23/08 | WP-SB-02 2 - 3 09/23/08 | WP-SB-02 5 - 6 09/23/08 | WP-SB-03 1 - 2 09/23/08 | WP-SB-03 5 - 6 09/23/08 | WP-SB-04 0.5 - 1.5 09/23/08 | WP-SB-04 3 - 4 09/23/08 | WP-SB-05 0.5 - 1.5 09/23/08 | WP-SB-05 3 - 4 09/23/08 |
|---|----------------------------------|----------------------------------|---------------------------------|-----------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-----------------------------------|-------------------------------|-----------------------------------|-------------------------------|
| p-Isopropyltoluene | 1,090 U | 46.6 U | 33.6 J | 97.4 | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 2.61 J | 14.9 J | 4.31 U | 5.10 U |
| sec-Butylbenzene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Styrene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| tert-Butylbenzene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Toluene | 1,090 U | 46.6 U | 16.8 J | 21.5 J | 126 U | 61.5 J | 12.3 J | 1.60 J | 4.98 U | 8.65 | 17.3 J | 4.31 U | 5.10 U |
| trans-1,4-Dichloro-2-butene | 5,460 U | 233 U | 525 U | 413 U | 628 U | 960 U | 360 U | 24.4 U | 24.9 U | 26.4 U | 248 U | 21.6 U | 25.5 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 1,1,2,2-Tetrachloroethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 1,1-Dichloroethane | 1,090 U | 46.6 U | 33.6 J | 82.6 U | 215 | 192 U | 118 | 7.32 | 4.98 U | 24.1 | 311 | 4.35 | 7.87 |
| 1,1-Dichloroethene | 1,090 U | 46.6 U | 105 U | 82.6 U | 124 J | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 1,2,4-Trichlorobenzene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 1,2-Dibromo-3-chloropropane | 5,460 U | 233 U | 525 U | 413 U | 628 U | 960 U | 360 U | 24.4 U | 24.9 U | 26.4 U | 248 U | 21.6 U | 25.5 U |
| 1,2-Dichlorobenzene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 1,2-Dichloroethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 1,2-Dichloropropane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 1,3-Dichlorobenzene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| 1,4-Dichlorobenzene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Bromodichloromethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Carbon Tetrachloride | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Chlorobenzene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Chloroethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 73.8 | 4.31 U | 5.10 U |
| Chloroform | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Chloromethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| cis-1,3-Dichloropropene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Dibromochloromethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Dichlorodifluoromethane | 5,460 U | 233 U | 525 U | 413 U | 628 U | 960 U | 360 U | 4.87 U | 4.98 U | 5.28 U | 248 U | 4.31 U | 5.10 U |
| Methylene Chloride | 1,460 J | 114 J | 73.4 J | 152 J | 230 J | 334 J | 143 J | 19.5 U | 1.70 J | 2.09 J | 98.6 J | 1.56 J | 20.4 U |
| trans-1,3-Dichloropropene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Trichlorofluoromethane | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| cis-1,2-Dichloroethene | 1,090 U | 46.6 U | 105 U | 82.6 U | 2,200 | 192 U | 393 | 4.87 U | 4.98 U | 5.28 U | 21.3 J | 4.31 U | 5.10 U |
| Tetrachloroethene | 1,090 U | 46.6 U | 105 U | 82.6 U | 126 U | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| trans-1,2-Dichloroethene | 1,090 U | 46.6 U | 105 U | 82.6 U | 33.9 J | 192 U | 72.1 U | 4.87 U | 4.98 U | 3.97 J | 49.5 U | 4.31 U | 5.10 U |
| Trichloroethene | 1,090 U | 46.6 U | 105 U | 82.6 U | 22.6 J | 192 U | 72.1 U | 4.87 U | 4.98 U | 5.28 U | 49.5 U | 4.31 U | 5.10 U |
| Vinyl Chloride | 1,090 U | 46.6 U | 105 U | 82.6 U | 476 | 192 U | 518 | 4.87 U | 4.98 U | 5.28 U | 111 | 4.31 U | 5.10 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | WP-SB-06 | WP-SB-06 | WP-SB-07 | WP-SB-07 | WP-SB-08 | WP-SB-08 | WP-SB-09 | WP-SB-10 | WP-SB-11 | WP-SB-12 | WP-SB-13 | WP-SB-14 |
|---|-----------|----------|-----------|----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Sample Depth (Feet): | 0.5 - 1.5 | 3 - 4 | 0.5 - 1.5 | 3 - 4 | 0.5 - 1.5 | 4 - 5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 | 0.5 - 1.5 |
| Date Collected: | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 | 09/23/08 |
| Volatile Organic Compounds (µg/kg) | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,1-Dichloropropene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2,3-Trichlorobenzene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2,3-Trichloropropane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2,4-Trimethylbenzene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2-Dibromoethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,3,5-Trimethylbenzene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,3-Dichloropropane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 2,2-Dichloropropane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 2-Butanone | 3,160 U | 22.8 U | 36.4 U | 26.4 U | 4,840 U | 28.8 U | 23.5 U | 25.1 U | 22.1 U | 19.2 U | 26.1 U | 22.6 U |
| 2-Chlorotoluene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 2-Hexanone | 632 U | 11.4 U | 18.2 U | 13.2 U | 967 U | 14.4 U | 11.7 U | 12.5 U | 11.0 U | 9.62 U | 13.1 U | 11.3 U |
| 4-Chlorotoluene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 4-Methyl-2-pentanone | 632 U | 11.4 U | 18.2 U | 13.2 U | 967 U | 14.4 U | 11.7 U | 12.5 U | 11.0 U | 9.62 U | 13.1 U | 11.3 U |
| Acetone | 3,160 U | 45.6 U | 84.6 | 33.0 J | 4,840 U | 57.7 U | 27.0 J | 28.2 J | 30.6 J | 21.3 J | 24.6 J | 18.0 J |
| Benzene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromobenzene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromochloromethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromoform | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromomethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Carbon Disulfide | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Cyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromomethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Diisopropyl ether (DIPE) | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Ethylbenzene | 911 | 1.59 J | 7.28 U | 5.28 U | 867 | 9.00 | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Hexachlorobutadiene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Iodomethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Isopropylbenzene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 0.958 J | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| m-,p-Xylene | 7,060 | 3.09 J | 14.6 U | 10.6 U | 6,680 | 35.3 | 9.39 U | 10.0 U | 8.83 U | 7.69 U | 10.5 U | 9.05 U |
| Methyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Methylcyclohexane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| n-Butylbenzene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| n-Propylbenzene | 150 | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| o-Xylene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 2.33 J | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | WP-SB-06 0.5 - 1.5 09/23/08 | WP-SB-06 3 - 4 09/23/08 | WP-SB-07 0.5 - 1.5 09/23/08 | WP-SB-07 3 - 4 09/23/08 | WP-SB-08 0.5 - 1.5 09/23/08 | WP-SB-08 4 - 5 09/23/08 | WP-SB-09 0.5 - 1.5 09/23/08 | WP-SB-10 0.5 - 1.5 09/23/08 | WP-SB-11 0.5 - 1.5 09/23/08 | WP-SB-12 0.5 - 1.5 09/23/08 | WP-SB-13 0.5 - 1.5 09/23/08 | WP-SB-14 0.5 - 1.5 09/23/08 |
|---|-----------------------------------|-------------------------------|-----------------------------------|-------------------------------|-----------------------------------|-------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| p-Isopropyltoluene | 97.3 J | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| sec-Butylbenzene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Styrene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| tert-Butylbenzene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Toluene | 32.8 J | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 1.15 J | 5.23 U | 4.52 U |
| trans-1,4-Dichloro-2-butene | 632 U | 22.8 U | 36.4 U | 26.4 U | 967 U | 28.8 U | 23.5 U | 25.1 U | 22.1 U | 19.2 U | 26.1 U | 22.6 U |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,1,2,2-Tetrachloroethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,1,2-trichloro-1,2,2-trifluoroethane | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,1-Dichloroethane | 20.2 J | 7.10 | 6.16 J | 5.56 | 54.2 J | 76.3 | 4.70 U | 5.02 U | 4.42 U | 2.57 J | 1.41 J | 4.52 U |
| 1,1-Dichloroethene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2,4-Trichlorobenzene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2-Dibromo-3-chloropropane | 632 U | 22.8 U | 36.4 U | 26.4 U | 967 U | 28.8 U | 23.5 U | 25.1 U | 22.1 U | 19.2 U | 26.1 U | 22.6 U |
| 1,2-Dichlorobenzene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2-Dichloroethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,2-Dichloropropane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,3-Dichlorobenzene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| 1,4-Dichlorobenzene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Bromodichloromethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Carbon Tetrachloride | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Chlorobenzene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Chloroethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Chloroform | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Chloromethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| cis-1,3-Dichloropropene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Dibromochloromethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Dichlorodifluoromethane | 632 U | 4.56 U | 7.28 U | 5.28 U | 967 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Methylene Chloride | 225 J | 18.2 U | 29.1 U | 21.1 U | 230 J | 23.1 U | 1.62 J | 1.73 J | 1.85 J | 15.4 U | 20.9 U | 18.1 U |
| trans-1,3-Dichloropropene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Trichlorofluoromethane | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| cis-1,2-Dichloroethene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 15.4 | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Tetrachloroethene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| trans-1,2-Dichloroethene | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Trichloroethene | 80.9 J | 4.56 U | 7.28 U | 5.28 U | 193 U | 5.77 U | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Vinyl Chloride | 126 U | 4.56 U | 7.28 U | 5.28 U | 193 U | 21.2 | 4.70 U | 5.02 U | 4.42 U | 3.85 U | 5.23 U | 4.52 U |
| Total Petroleum Hydrocarbons (µg/kg) | | | | | | | | | | | | |
| Ethylene Glycol Monobutyl Ether | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 5
Combined Surface and Subsurface Soil Sample Analytical Results (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

Notes:

NA = not applicable

µg/kg = micrograms per kilogram

Laboratory Qualifiers:

B = Analyte was found in the associated blank, as well as in the sample.

J = Indicates an estimated value.

ND = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Table 6
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 15 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MW-2S | MW-2S | MW-2S | MW-2S | MW-2S | MW-2S | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-19S | MW-19S | MW-19S | MW-19S | MW-19S | MW-19S | MW-105S |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|
| Sample Depth (Feet): | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | 13.5 - 23.5 |
| Date Collected: | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 01/06/13 |
| Volatiles Organic Compounds (µg/L) | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloropropene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U |
| 1,2,3-Trichloropropane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U |
| 1,2,4-Trimethylbenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.19 | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromoethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U |
| 1,3,5-Trimethylbenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichloropropane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2,2-Dichloropropane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Butanone | 500 U | 500 U | 1,250 U | 250 U | 100 U | 25.0 U | 250 U | 1,250 U | 250 U | 25.0 U | 5.00 U | 5.00 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 5.00 U | 5.00 U |
| 2-Chlorotoluene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Hexanone | 100 U | 100 U | 250 U | 50.0 U | 200 U | 50.0 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 10.0 U | 10.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 10.0 U | 10.0 U |
| 4-Chlorotoluene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 4-Methyl-2-pentanone | 100 U | 100 U | 250 U | 50.0 U | 100 U | 25.0 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Acetone | 500 U | 500 U | 1,250 U | 250 U | 500 U | 130 U | 250 U | 1,250 U | 250 U | 25.0 U | 25.0 U | 25.0 U | 1.21 J | 3.30 J | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U |
| Benzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.770 J | 1.53 | 2.06 | 0.860 J | 1.00 U | 1.00 U |
| Bromobenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromochloromethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromoform | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromomethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U |
| Carbon Disulfide | 2.80 J | 20.0 U | 50.0 U | 10.0 U | NA | 10.0 U | 1.50 J | 50.0 U | 10.0 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U |
| Dibromomethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | NA | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U |
| Diisopropyl ether (DIPE) | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Ethyl Alcohol | NA | NA | NA | NA | 4,000 U | NA | NA | NA | NA | NA | 200 U | NA | NA | NA | NA | NA | 200 U | NA | NA |
| Ethylbenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.79 | 0.410 J | 1.00 U | 1.00 U |
| Hexachlorobutadiene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | NA | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U |
| Iodomethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | NA | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | NA | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 1.00 U |
| Isopropylbenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| m-,p-Xylene | 40.0 U | 40.0 U | 100 U | 20.0 U | 40.0 U | 10.0 U | 20.0 U | 100 U | 20.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.42 | 2.00 U | 2.00 U | 2.00 U |
| Methyl tert-butyl ether | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Naphthalene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 100 U | 25.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 5.00 U | 5.00 U | 0.530 J | 9.50 | 43.3 | 39.8 | 5.00 U | 5.00 U | 1.00 U |
| n-Butylbenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| n-Propylbenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| o-Xylene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.210 J | 2.17 | 0.660 J | 1.00 U | 1.00 U | 1.00 U |
| p-Isopropyltoluene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 0.450 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| sec-Butylbenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Styrene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| tert-Butylbenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 0.450 J | 0.480 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Toluene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.230 J | 0.700 J | 1.00 UB | 1.00 U | 1.00 U | 1.00 U |

Table 6
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 15 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | MW-2S 10 - 15 04/02/13 | MW-2S 10 - 15 04/29/14 | MW-2S 10 - 15 04/27/15 | MW-2S 10 - 15 04/12/16 | MW-2S 10 - 15 04/11/17 | MW-2S 10 - 15 04/18/18 | MW-14S 10 - 15 04/02/13 | MW-14S 10 - 15 04/29/14 | MW-14S 10 - 15 04/27/15 | MW-14S 10 - 15 04/12/16 | MW-14S 10 - 15 04/11/17 | MW-14S 10 - 15 04/18/18 | MW-19S 10 - 20 04/02/13 | MW-19S 10 - 20 04/29/14 | MW-19S 10 - 20 04/27/15 | MW-19S 10 - 20 04/12/16 | MW-19S 10 - 20 04/11/17 | MW-19S 10 - 20 04/18/18 | MW-105S 13.5 - 23.5 01/06/13 |
|---|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|------------------------------------|
| trans-1,4-Dichloro-2-butene | 100 U | 100 U | 250 U | 50.0 U | NA | NA | 50.0 U | 250 U | 50.0 U | 5.00 U | NA | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | NA | 5.00 U |
| Vinyl Acetate | NA | NA | NA | NA | 200 U | 50.0 U | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA | 10.0 U | 10.0 U | NA |
| Xylenes (total) | NA | NA | NA | NA | 60.0 U | NA | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA | 3.00 U | NA | NA |
| 1,1,1-Trichloroethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2,2-Tetrachloroethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2-Trichloroethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloroethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 0.240 J | 0.520 J | 1.00 U | 0.220 J | 0.330 J | 0.120 J | 1.00 U | 0.700 J | 0.540 J | 1.00 U |
| 1,1-Dichloroethene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 2.40 J | 8.10 J | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,4-Trichlorobenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U |
| 1,2-Dibromo-3-chloropropane | 100 U | 100 U | 250 U | 50.0 U | NA | 25.0 U | 50.0 U | 250 U | 50.0 U | 5.00 U | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | 5.00 U | 5.00 U |
| 1,2-Dichlorobenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloroethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloropropane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichlorobenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,4-Dichlorobenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromodichloromethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Carbon Tetrachloride | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chlorobenzene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloroethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U |
| Chloroform | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloromethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U |
| cis-1,3-Dichloropropene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dibromochloromethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dichlorodifluoromethane | 100 U | 100 U | 250 U | 50.0 U | 40.0 U | 10.0 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 2.00 U | 2.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 5.00 U |
| Methylene Chloride | 100 U | 100 U | 250 U | 50.0 U | 100 U | 25.0 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 0.580 J | 5.00 U | 5.00 U |
| trans-1,3-Dichloropropene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Trichlorofluoromethane | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U |
| cis-1,2-Dichloroethene | 1,030 | 354 | 1,020 | 266 | 1,080 | 659 | 512 | 1,060 | 198 | 17.3 | 7.30 | 2.80 | 0.220 J | 1.96 | 2.35 | 3.54 | 5.70 | 0.610 J | 1.00 U |
| Tetrachloroethene | 20.0 U | 20.0 U | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| trans-1,2-Dichloroethene | 5.80 J | 20.0 U | 50.0 U | 10.0 U | 8.40 J | 4.20 J | 1.50 J | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.350 J | 1.00 U | 1.00 U |
| Trichloroethene | 473 | 149 | 407 | 159 | 527 | 275 | 63.7 | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.450 J | 1.45 | 2.35 | 0.360 J | 1.00 U | 1.00 U |
| Vinyl Chloride | 20.0 U | 4.60 J | 50.0 U | 10.0 U | 20.0 U | 3.50 J | 79.9 | 85.5 | 15.8 | 5.37 | 3.50 | 4.50 | 1.00 U | 0.480 J | 0.300 J | 1.52 | 0.700 J | 1.00 U | 1.00 U |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 5,100 |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 21.0 |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 820 |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 13.0 J |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 6 |

Table 6
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 15 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | HPT-02 10 - 12 12/05/15 | HPT-03 9 - 11 12/05/15 | HPT-24 12 - 14 12/02/15 | HPT-25 13 - 15 12/02/15 | HPT-26 14 - 16 12/02/15 | HPT-27 12 - 14 12/02/15 | HPT-28 13 - 15 12/01/15 | HPT-29 13 - 15 12/01/15 | HPT-30 13 - 15 11/30/15 | HPT-31 12 - 14 12/03/15 | HPT-32 9 - 11 12/04/15 | HPT-33 8 - 10 12/04/15 | HPT-33 14 - 16 12/04/15 | HPT-34 11 - 13 12/04/15 |
|---|-------------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|------------------------------|------------------------------|-------------------------------|-------------------------------|
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 1,1-Dichloropropene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 1,2,3-Trichloropropane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 1,2,4-Trimethylbenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 28.8 J | 200 U | 5,000 U | 0.460 J |
| 1,2-Dibromoethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 1,3,5-Trimethylbenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 0.420 J |
| 1,3-Dichloropropane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 2,2-Dichloropropane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 2-Butanone | 25.0 U | 125 U | 125,000 U | 1,000 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 2.26 J [1.38 J] | 4,000 U | 5,000 U | 125,000 U | 25.0 U |
| 2-Chlorotoluene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 2-Hexanone | 5.00 U | 25.0 U | 25,000 U | 200 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U [5.00 U] | 800 U | 1,000 U | 25,000 U | 5.00 U |
| 4-Chlorotoluene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 4-Methyl-2-pentanone | 5.00 U | 25.0 U | 25,000 U | 200 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U [5.00 U] | 800 U | 1,000 U | 25,000 U | 5.00 U |
| Acetone | 25.0 U | 125 U | 125,000 U | 1,000 U | 25.0 U | 3.90 J | 8.16 J | 25.0 U | 25.0 U | 4.06 J [2.19 J] | 4,000 U | 5,000 U | 125,000 U | 25.0 U |
| Benzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 0.280 J |
| Bromobenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Bromochloromethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Bromoform | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Bromomethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Carbon Disulfide | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.510 J [0.160 J] | 160 U | 200 U | 5,000 U | 0.700 J |
| Dibromomethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Diisopropyl ether (DIPE) | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 0.520 J |
| Hexachlorobutadiene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Iodomethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Isopropylbenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 0.560 J |
| m-,p-Xylene | 2.00 U | 10.0 U | 10,000 U | 80.0 U | 2.00 U | 2.00 U | 0.550 J | 2.00 U | 2.00 U | 2.00 U [2.00 U] | 320 U | 400 U | 10,000 U | 0.980 J |
| Methyl tert-butyl ether | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Naphthalene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 1,140 | 200 U | 5,000 U | 1.00 U |
| n-Butylbenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| n-Propylbenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 0.240 J |
| o-Xylene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 0.850 J |
| p-Isopropyltoluene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| sec-Butylbenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Styrene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| tert-Butylbenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Toluene | 0.260 J | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 0.150 J | 1.00 U | 1.00 U | 0.330 J [0.250 J] | 160 U | 200 U | 5,000 U | 0.730 J |

Table 6
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 15 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: Sample Depth (Feet): Date Collected: | HPT-02 10 - 12 12/05/15 | HPT-03 9 - 11 12/05/15 | HPT-24 12 - 14 12/02/15 | HPT-25 13 - 15 12/02/15 | HPT-26 14 - 16 12/02/15 | HPT-27 12 - 14 12/02/15 | HPT-28 13 - 15 12/01/15 | HPT-29 13 - 15 12/01/15 | HPT-30 13 - 15 11/30/15 | HPT-31 12 - 14 12/03/15 | HPT-32 9 - 11 12/04/15 | HPT-33 8 - 10 12/04/15 | HPT-33 14 - 16 12/04/15 | HPT-34 11 - 13 12/04/15 |
|---|-------------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|------------------------------|------------------------------|-------------------------------|-------------------------------|
| trans-1,4-Dichloro-2-butene | 5.00 U | 25.0 U | 25,000 U | 200 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U [5.00 U] | 800 U | 1,000 U | 25,000 U | 5.00 U |
| Vinyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 1,1,2,2-Tetrachloroethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 1,1,2-Trichloroethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 1,1-Dichloroethane | 1.00 U | 5.00 U | 2,100 J | 11.2 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 1,090 | 5,000 U | 1.77 |
| 1,1-Dichloroethene | 1.00 U | 5.00 U | 1,950 J | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 1,070 | 5,000 U | 1.00 U |
| 1,2,4-Trichlorobenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 1,2-Dibromo-3-chloropropane | 5.00 U | 25.0 U | 25,000 U | 200 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U [5.00 U] | 800 U | 1,000 U | 25,000 U | 5.00 U |
| 1,2-Dichlorobenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 1,2-Dichloroethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 1,2-Dichloropropane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 1,3-Dichlorobenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| 1,4-Dichlorobenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Bromodichloromethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Carbon Tetrachloride | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Chlorobenzene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Chloroethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Chloroform | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Chloromethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| cis-1,3-Dichloropropene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Dibromochloromethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Dichlorodifluoromethane | 5.00 U | 25.0 U | 25,000 U | 200 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U [5.00 U] | 800 U | 1,000 U | 25,000 U | 5.00 U |
| Methylene Chloride | 5.00 U | 25.0 U | 25,000 U | 200 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U [5.00 U] | 800 U | 1,000 U | 25,000 U | 5.00 U |
| trans-1,3-Dichloropropene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Trichlorofluoromethane | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| cis-1,2-Dichloroethene | 1.00 U | 124 | 11,600 | 770 | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 1,780 | 109,000 | 0.840 J |
| Tetrachloroethene | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| trans-1,2-Dichloroethene | 1.00 U | 9.75 | 5,000 U | 13.6 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 200 U | 5,000 U | 1.00 U |
| Trichloroethene | 0.850 J | 61.0 | 261,000 | 54.4 | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.380 J [1.00 U] | 160 U | 200 U | 164,000 | 1.00 U |
| Vinyl Chloride | 1.00 U | 5.00 U | 5,000 U | 40.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 160 U | 4,620 | 3,200 J | 6.69 |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 6
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 15 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

Notes:

mg/L = milligrams per liter

NA = not applicable

µg/L = micrograms per liter

Laboratory Qualifiers:

B = Analyte was found in the associated blank, as well as in the sample.

J = Indicates an estimated value.

ND = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Table 7
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 25 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-4SD | DPW-4SD | DPW-4SD | DPW-4SD | DPW-4SD | DPW-4SD | DPW-4SD | DPW-5SD | DPW-5SD | DPW-5SD | DPW-5SD | DPW-5SD | MW-2S | MW-2S |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------|---------|
| Sample Depth (Feet): | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 10 - 15 | 10 - 15 |
| Date Collected: | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| 1,1-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| 1,2,3-Trichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | |
| 1,2,3-Trichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | |
| 1,2,4-Trimethylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| 1,2-Dibromoethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | |
| 1,3,5-Trimethylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| 1,3-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| 2,2-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| 2-Butanone | 4.39 J | 25.0 U | 25.0 U | 25.0 U | 5.00 U | 5.00 U | 6,250 U | 5,000 U | 5,000 U | 4,000 U | 500 U | 500 UJ | 20,000 U | 20,000 U | 20,000 U | 500 U | 500 UJ | 500 U | 500 U | |
| 2-Chlorotoluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| 2-Hexanone | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 10.0 U | 10.0 U | 1,250 U | 1,000 U | 1,000 U | 800 U | 1,000 U | 1,000 UJ | 4,000 U | 4,000 U | 4,000 U | 1,000 U | 1,000 UJ | 100 U | 100 U | |
| 4-Chlorotoluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| 4-Methyl-2-pentanone | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 1,250 U | 1,000 U | 1,000 U | 800 U | 500 U | 500 UJ | 4,000 U | 4,000 U | 4,000 U | 500 U | 500 UJ | 100 U | 100 U | |
| Acetone | 32.0 | 7.94 J | 2.30 J | 25.0 U | 25.0 U | 25.0 U | 6,250 U | 5,000 U | 5,000 U | 4,000 U | 2,500 U | 2,500 UJ | 20,000 U | 20,000 U | 20,000 U | 2,500 U | 2,500 UJ | 500 U | 500 U | |
| Benzene | 0.120 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Bromobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Bromochloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Bromoform | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Bromomethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 UJ | 200 U | 200 UJ | 20.0 U | 20.0 U | |
| Carbon Disulfide | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 35.0 J | 200 U | 200 U | 160 U | NA | 200 UJ | 800 U | 800 U | 800 U | NA | 200 UJ | 2.80 J | 20.0 U | |
| Dibromomethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 250 U | 200 U | 200 U | 160 U | NA | 200 UJ | 800 U | 800 U | 800 U | NA | 200 UJ | 20.0 U | 20.0 U | |
| Diisopropyl ether (DIPE) | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Ethyl Alcohol | NA | NA | NA | NA | 200 U | NA | NA | NA | NA | NA | 20,000 U | NA | NA | NA | NA | 20,000 U | NA | NA | NA | |
| Ethylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Hexachlorobutadiene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 250 U | 200 U | 200 U | 160 U | NA | 200 UJ | 800 U | 800 U | 800 U | NA | 200 UJ | 20.0 U | 20.0 U | |
| Iodomethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 1.00 U | 250 U | 200 U | 200 U | 160 U | NA | 100 UJ | 800 U | 800 U | 800 U | NA | 100 UJ | 20.0 U | 20.0 U | |
| Isopropylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| m-,p-Xylene | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 500 U | 400 U | 400 U | 320 U | 200 U | 200 UJ | 1,600 U | 1,600 U | 1,600 U | 200 U | 200 UJ | 40.0 U | 40.0 U | |
| Methyl tert-butyl ether | 0.130 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Naphthalene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 5.00 U | 250 U | 200 U | 200 U | 160 U | 500 U | 500 UJ | 800 U | 800 U | 800 U | 500 U | 500 UJ | 20.0 U | 20.0 U | |
| n-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| n-Propylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| o-Xylene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 UJ | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| p-Isopropyltoluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| sec-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Styrene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| tert-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Toluene | 0.150 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 33.3 J | 100 UJ | 20.0 U | 20.0 U | |

Table 7
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 25 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-3SD | DPW-4SD | DPW-4SD | DPW-4SD | DPW-4SD | DPW-4SD | DPW-4SD | DPW-4SD | DPW-5SD | DPW-5SD | DPW-5SD | DPW-5SD | DPW-5SD | MW-2S | MW-2S |
|--------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------|---------|
| Sample Depth (Feet): | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 20 - 30 40 - 45 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19.5 - 29.5 29.6 - 44.5 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 19 - 24 31 - 41 | 10 - 15 | 10 - 15 |
| Date Collected: | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | |
| trans-1,4-Dichloro-2-butene | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | NA | 1,250 U | 1,000 U | 1,000 U | 800 U | NA | NA | 4,000 U | 4,000 U | 4,000 U | NA | NA | 100 U | 100 U | |
| Vinyl Acetate | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA | 1,000 U | 1,000 UJ | NA | NA | NA | 1,000 U | 1,000 UJ | NA | NA | |
| Xylenes (total) | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA | 300 U | NA | NA | NA | NA | 300 U | NA | NA | NA | |
| 1,1,1-Trichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 49.1 J | 61.2 J | 20.0 U | 20.0 U | |
| 1,1,2,2-Tetrachloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| 1,1,2-Trichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| 1,1-Dichloroethane | 0.280 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 118 J | 52.0 J | 72.0 J | 56.0 J | 57.2 J | 71.4 J | 800 U | 800 U | 800 U | 136 J | 108 | 72.9 J | 20.0 U | 20.0 U |
| 1,1-Dichloroethene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 103 J | 44.0 J | 68.0 J | 68.8 J | 87.4 J | 83.9 J | 800 U | 800 U | 800 U | 69.2 J | 61.3 J | 20.0 U | 20.0 U | |
| 1,2,4-Trichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | |
| 1,2-Dibromo-3-chloropropane | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | 5.00 U | 1,250 U | 1,000 U | 1,000 U | 800 U | NA | 500 UJ | 4,000 U | 4,000 U | 4,000 U | NA | 500 UJ | 100 U | 100 U | |
| 1,2-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| 1,2-Dichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| 1,2-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| 1,3-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| 1,4-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Bromodichloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Carbon Tetrachloride | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Chlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Chloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | |
| Chloroform | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Chloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | |
| cis-1,3-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Dibromochloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Dichlorodifluoromethane | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 1,250 U | 1,000 U | 1,000 U | 800 U | 200 U | 200 UJ | 4,000 U | 4,000 U | 4,000 U | 200 U | 200 UJ | 100 U | 100 U | |
| Methylene Chloride | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 1,250 U | 1,000 U | 1,000 U | 800 U | 500 U | 500 UJ | 4,000 U | 4,000 U | 4,000 U | 500 U | 500 UJ | 100 U | 100 U | |
| trans-1,3-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| Trichlorofluoromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 250 U | 200 U | 200 U | 160 U | 200 U | 200 UJ | 800 U | 800 U | 800 U | 200 U | 200 UJ | 20.0 U | 20.0 U | |
| cis-1,2-Dichloroethene | 0.790 J | 0.390 J | 0.730 J | 0.580 J | 0.880 J | 1.20 | 10,400 | 3,300 | 3,180 | 2,760 | 5,040 | 5,760 J | 13,600 | 12,100 | 13,900 | 8,800 | 8,040 J | 1,030 | 354 | |
| Tetrachloroethene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 250 U | 200 U | 200 U | 160 U | 100 U | 100 UJ | 800 U | 800 U | 800 U | 100 U | 100 UJ | 20.0 U | 20.0 U | |
| trans-1,2-Dichloroethene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 90.0 J | 200 U | 200 U | 160 U | 34.9 J | 100 UJ | 800 U | 800 U | 800 U | 27.6 J | 100 UJ | 5.80 J | 20.0 U | |
| Trichloroethene | 0.660 J | 0.250 J | 0.650 J | 0.410 J | 0.630 J | 0.810 J | 2,980 | 786 | 860 | 1,340 | 1,210 | 1,230 J | 4,110 | 6,920 | 1,340 | 7,000 | 9,230 J | 473 | 149 | |
| Vinyl Chloride | 3.22 | 1.43 | 0.550 J | 1.39 | 1.20 | 3.50 | 1,490 | 602 | 598 | 637 | 470 | 385 J | 1,220 | 968 | 1,320 | 713 | 501 J | 20.0 U | 4.60 J | |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | 16 | NA | NA | NA | NA | 13 | NA | NA | NA | NA | NA |

Table 7
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 25 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MW-2S | MW-2S | MW-2S | MW-2S | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-19S | MW-19S | MW-19S | MW-19S | MW-19S | MW-19S | PW-1S | PW-1S | PW-1S | PW-1S | PW-1S |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|--------------|--------------|--------------|--------------|
| Sample Depth (Feet): | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 |
| Date Collected: | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloropropene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U |
| 1,2,3-Trichloropropane | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U |
| 1,2,4-Trimethylbenzene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.19 | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromoethane | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U |
| 1,3,5-Trimethylbenzene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichloropropane | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2,2-Dichloropropane | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Butanone | 1,250 U | 250 U | 100 U | 25.0 U | 250 U | 1,250 U | 250 U | 25.0 U | 5.00 U | 5.00 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 5.00 U | 5.00 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 5.00 U |
| 2-Chlorotoluene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Hexanone | 250 U | 50.0 U | 200 U | 50.0 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 10.0 U | 10.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 10.0 U | 10.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 10.0 U |
| 4-Chlorotoluene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 4-Methyl-2-pentanone | 250 U | 50.0 U | 100 U | 25.0 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Acetone | 1,250 U | 250 U | 500 U | 130 U | 250 U | 1,250 U | 250 U | 25.0 U | 25.0 U | 25.0 U | 1.21 J | 3.30 J | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 2.03 J | 25.0 U | 25.0 U | 25.0 U | 25.0 U |
| Benzene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.770 J | 1.53 | 2.06 | 0.860 J | 1.00 U | 0.200 J | 0.550 J | 0.360 J | 0.260 J | 1.00 U |
| Bromobenzene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromochloromethane | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromoform | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromomethane | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U |
| Carbon Disulfide | 50.0 U | 10.0 U | NA | 10.0 U | 1.50 J | 50.0 U | 10.0 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA |
| Dibromomethane | 50.0 U | 10.0 U | NA | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA |
| Diisopropyl ether (DIPE) | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Ethyl Alcohol | NA | NA | 4,000 U | NA | NA | NA | NA | NA | 200 U | NA | NA | NA | NA | NA | 200 U | NA | NA | NA | NA | NA | 200 U |
| Ethylbenzene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.79 | 0.410 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Hexachlorobutadiene | 50.0 U | 10.0 U | NA | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA |
| Iodomethane | 50.0 U | 10.0 U | NA | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | NA | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA |
| Isopropylbenzene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| m-,p-Xylene | 100 U | 20.0 U | 40.0 U | 10.0 U | 20.0 U | 100 U | 20.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.42 | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Methyl tert-butyl ether | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Naphthalene | 50.0 U | 10.0 U | 100 U | 25.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 5.00 U | 5.00 U | 0.530 J | 9.50 | 43.3 | 39.8 | 5.00 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U |
| n-Butylbenzene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| n-Propylbenzene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| o-Xylene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.210 J | 2.17 | 0.660 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| p-Isopropyltoluene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 0.450 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.160 J |
| sec-Butylbenzene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Styrene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| tert-Butylbenzene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 0.450 J | 0.480 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.52 | 0.160 J |
| Toluene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.230 J | 0.700 J | 1.00 UB | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |

Table 7
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 25 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | MW-2S | MW-2S | MW-2S | MW-2S | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-14S | MW-19S | MW-19S | MW-19S | MW-19S | MW-19S | MW-19S | PW-1S | PW-1S | PW-1S | PW-1S | PW-1S |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|--------------|--------------|--------------|--------------|
| Sample Depth (Feet): | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 15 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | 10 - 20 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 | Assume 15-25 |
| Date Collected: | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 |
| trans-1,4-Dichloro-2-butene | 250 U | 50.0 U | NA | NA | 50.0 U | 250 U | 50.0 U | 5.00 U | NA | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA |
| Vinyl Acetate | NA | NA | 200 U | 50.0 U | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA | 10.0 U |
| Xylenes (total) | NA | NA | 60.0 U | NA | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA | 3.00 U |
| 1,1,1-Trichloroethane | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2,2-Tetrachloroethane | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2-Trichloroethane | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloroethane | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 0.240 J | 0.520 J | 1.00 U | 0.220 J | 0.330 J | 0.120 J | 1.00 U | 0.700 J | 0.540 J | 1.87 | 0.620 J | 0.450 J | 0.810 J | 1.10 |
| 1,1-Dichloroethene | 50.0 U | 10.0 U | 20.0 U | 2.40 J | 8.10 J | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.640 J | 0.720 J | 0.720 J | 0.560 J | 0.480 J | 0.480 J |
| 1,2,4-Trichlorobenzene | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U |
| 1,2-Dibromo-3-chloropropane | 250 U | 50.0 U | NA | 25.0 U | 50.0 U | 250 U | 50.0 U | 5.00 U | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA |
| 1,2-Dichlorobenzene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloroethane | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloropropane | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichlorobenzene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,4-Dichlorobenzene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromodichloromethane | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Carbon Tetrachloride | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chlorobenzene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloroethane | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 2.27 | 0.460 J | 1.00 U | 1.00 U | 2.00 U |
| Chloroform | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloromethane | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U |
| cis-1,3-Dichloropropene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dibromochloromethane | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dichlorodifluoromethane | 250 U | 50.0 U | 40.0 U | 10.0 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 2.00 U | 2.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 2.00 U |
| Methylene Chloride | 250 U | 50.0 U | 100 U | 25.0 U | 50.0 U | 250 U | 50.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 0.580 J | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| trans-1,3-Dichloropropene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Trichlorofluoromethane | 50.0 U | 10.0 U | 40.0 U | 10.0 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U |
| cis-1,2-Dichloroethene | 1,020 | 266 | 1,080 | 659 | 512 | 1,060 | 198 | 17.3 | 7.30 | 2.80 | 0.220 J | 1.96 | 2.35 | 3.54 | 5.70 | 0.610 J | 29.7 | 31.7 | 31.3 | 27.3 | 33.9 |
| Tetrachloroethene | 50.0 U | 10.0 U | 20.0 U | 5.00 U | 10.0 U | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| trans-1,2-Dichloroethene | 50.0 U | 10.0 U | 8.40 J | 4.20 J | 1.50 J | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.350 J | 1.00 U | 1.00 U | 0.170 J | 1.00 U | 0.220 J | 1.00 U |
| Trichloroethene | 407 | 159 | 527 | 275 | 63.7 | 50.0 U | 10.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.450 J | 1.45 | 2.35 | 0.360 J | 1.00 U | 2.28 | 1.61 | 1.07 | 0.710 J |
| Vinyl Chloride | 50.0 U | 10.0 U | 20.0 U | 3.50 J | 79.9 | 85.5 | 15.8 | 5.37 | 3.50 | 4.50 | 1.00 U | 0.480 J | 0.300 J | 1.52 | 0.700 J | 1.00 U | 28.7 | 17.8 | 16.0 | 22.6 | 22.2 |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 7
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 25 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | PW-1S | PW-7S | PW-7S | PW-7S | PW-7S | PW-7S | PW-7S | PW-7S | MW-105S | HPT-01 | HPT-02 | HPT-02 | HPT-02 | HPT-03 | HPT-03 | HPT-03 | HPT-04 | HPT-05 | HPT-22 | HPT-24 |
|---|--------------|----------|----------|----------|----------|----------|----------|----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------------------|-----------|
| Sample Depth (Feet): | Assume 15-25 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 13.5 - 23.5 | 18 - 20 | 10 - 12 | 16 - 18 | 16 - 18 | 9 - 11 | 16 - 18 | 22 - 24 | 16 - 18 | 17 - 21 | 16 - 18 | 12 - 14 |
| Date Collected: | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 01/06/13 | 10/26/15 | 12/05/15 | 10/27/15 | 12/05/15 | 12/05/15 | 12/05/15 | 12/05/15 | 10/27/15 | 10/28/15 | 10/28/15 | 12/03/15 | 12/02/15 |
| Volatiles Organic Compounds (µg/L) | | | | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| 1,1-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| 1,2,3-Trichlorobenzene | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| 1,2,3-Trichloropropane | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| 1,2,4-Trimethylbenzene | 1.00 U | 0.110 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| 1,2-Dibromoethane | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| 1,3,5-Trimethylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| 1,3-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| 2,2-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| 2-Butanone | 5.00 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 5.00 U | 5.00 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 125 U | 400 U | 125 U | 2,000 U | 2,500 U | 5,000 U | 1,000 U | 25,000 U [25,000 U] | 125,000 U |
| 2-Chlorotoluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| 2-Hexanone | 10.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 10.0 U | 10.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 1,000 U | 200 U | 5,000 U [5,000 U] | 25,000 U |
| 4-Chlorotoluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| 4-Methyl-2-pentanone | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 1,000 U | 200 U | 5,000 U [5,000 U] | 25,000 U |
| Acetone | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 125 U | 400 U | 125 U | 2,000 U | 2,500 U | 5,000 U | 1,000 U | 25,000 U [25,000 U] | 125,000 U |
| Benzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| Bromobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| Bromochloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| Bromoform | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| Bromomethane | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| Carbon Disulfide | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| Dibromomethane | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| Diisopropyl ether (DIPE) | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | 200 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 1.00 U | 0.220 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| Hexachlorobutadiene | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| Iodomethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | NA | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| Isopropylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| m-,p-Xylene | 2.00 U | 0.360 J | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 10.0 U | 32.0 U | 10.0 U | 160 U | 200 U | 400 U | 80.0 U | 2,000 U [2,000 U] | 10,000 U |
| Methyl tert-butyl ether | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| Naphthalene | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 5.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| n-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| n-Propylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| o-Xylene | 1.00 U | 0.110 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| p-Isopropyltoluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| sec-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| Styrene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| tert-Butylbenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| Toluene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.260 J | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |

Table 7
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 25 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | PW-1S | PW-7S | PW-7S | PW-7S | PW-7S | PW-7S | PW-7S | MW-105S | HPT-01 | HPT-02 | HPT-02 | HPT-02 | HPT-03 | HPT-03 | HPT-03 | HPT-04 | HPT-05 | HPT-22 | HPT-24 | |
|--------------------------------------|--------------|----------|----------|----------|----------|----------|----------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------------|-------------------|---------|
| Sample Depth (Feet): | Assume 15-25 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 15 - 22 | 13.5 - 23.5 | 18 - 20 | 10 - 12 | 16 - 18 | 16 - 18 | 9 - 11 | 16 - 18 | 22 - 24 | 16 - 18 | 17 - 21 | 16 - 18 | 12 - 14 | |
| Date Collected: | 04/18/18 | 04/02/13 | 04/29/14 | 04/27/15 | 04/12/16 | 04/11/17 | 04/18/18 | 01/06/13 | 10/26/15 | 12/05/15 | 10/27/15 | 12/05/15 | 12/05/15 | 12/05/15 | 10/27/15 | 10/28/15 | 10/28/15 | 12/03/15 | 12/02/15 | |
| trans-1,4-Dichloro-2-butene | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | NA | 5.00 U | 5.00 U | 5.00 U | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 1,000 U | 200 U | 5,000 U [5,000 U] | 25,000 U | |
| Vinyl Acetate | 10.0 U | NA | NA | NA | NA | 10.0 U | 10.0 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Xylenes (total) | NA | NA | NA | NA | NA | 3.00 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,1,1-Trichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| 1,1,2,2-Tetrachloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| 1,1,2-Trichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U |
| 1,1-Dichloroethane | 0.420 J | 0.260 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 800 J [810 J] | 2,100 J |
| 1,1-Dichloroethene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 920 J [1,030] | 1,950 J |
| 1,2,4-Trichlorobenzene | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| 1,2-Dibromo-3-chloropropane | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | NA | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 1,000 U | 200 U | 5,000 U [5,000 U] | 25,000 U | |
| 1,2-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| 1,2-Dichloroethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| 1,2-Dichloropropane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| 1,3-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| 1,4-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| Bromodichloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| Carbon Tetrachloride | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| Chlorobenzene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| Chloroethane | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| Chloroform | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| Chloromethane | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| cis-1,3-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| Dibromochloromethane | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| Dichlorodifluoromethane | 2.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 5.00 U | 5.00 U | 5.00 U | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 1,000 U | 200 U | 5,000 U [5,000 U] | 25,000 U | |
| Methylene Chloride | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 25.0 U | 80.0 U | 25.0 U | 400 U | 500 U | 1,000 U | 200 U | 5,000 U [5,000 U] | 25,000 U | |
| trans-1,3-Dichloropropene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| Trichlorofluoromethane | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 2.00 U | 2.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| cis-1,2-Dichloroethene | 32.7 | 3.06 | 1.74 | 0.910 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 26.2 | 1.00 U | 33.0 | 331 | 124 | 1,560 | 1,190 | 4,150 | 40.0 U | 4,910 [5,120] | 11,600 | |
| Tetrachloroethene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 5.00 U | 16.0 U | 5.00 U | 80.0 U | 100 U | 200 U | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| trans-1,2-Dichloroethene | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.620 J | 1.00 U | 1.55 J | 30.9 | 9.75 | 43.2 J | 100 U | 142 J | 40.0 U | 1,000 U [1,000 U] | 5,000 U | |
| Trichloroethene | 1.00 U | 0.840 J | 0.230 J | 0.250 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 57.9 | 38.7 | 61.0 | 259 | 375 | 286 | 484 | 28,600 [34,600] | 261,000 | |
| Vinyl Chloride | 35.0 | 2.83 | 1.66 | 0.990 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.550 J | 1.00 U | 5.00 U | 19.7 | 5.00 U | 175 | 239 | 1,540 | 40.0 U | 240 J [250 J] | 5,000 U | |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | 5,100 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Manganese | NA | NA | NA | NA | NA | NA | NA | 21.0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | 820 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Manganese | NA | NA | NA | NA | NA | NA | NA | 13.0 J | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | 6 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |

Table 7
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 25 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-24 | HPT-24 | HPT-25 | HPT-25 | HPT-25 | HPT-26 | HPT-26 | HPT-26 | HPT-27 | HPT-27 | HPT-27 | HPT-28 | HPT-28 | HPT-28 | HPT-29 | HPT-29 | HPT-30 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 18 - 20 | 24 - 26 | 13 - 15 | 20 - 22 | 24 - 26 | 14 - 16 | 19 - 21 | 24 - 26 | 12 - 14 | 18 - 20 | 22 - 24 | 13 - 15 | 18 - 20 | 24 - 26 | 13 - 15 | 19 - 21 | 13 - 15 |
| Date Collected: | 12/02/15 | 12/03/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 11/30/15 |
| Volatle Organic Compounds (µg/L) | | | | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloropropene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichlorobenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,3-Trichloropropane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,4-Trimethylbenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromoethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3,5-Trimethylbenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichloropropane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2,2-Dichloropropane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Butanone | 5,000 U | 125 U | 1,000 U | 500 U | 25.0 U | 25.0 U | 25.0 U | 0.940 J | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U | 25.0 U |
| 2-Chlorotoluene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 2-Hexanone | 1,000 U | 25.0 U | 200 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 4-Chlorotoluene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 4-Methyl-2-pentanone | 1,000 U | 25.0 U | 200 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Acetone | 5,000 U | 125 U | 1,000 U | 500 U | 3.40 J | 25.0 U | 2.62 J | 2.13 J | 3.90 J | 2.49 J | 25.0 U | 8.16 J | 3.59 J | 25.0 U | 25.0 U | 25.0 U | 25.0 U |
| Benzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 0.210 J | 1.00 U | 1.00 U | 0.270 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.620 J | 1.00 U | 1.00 U | 1.00 U |
| Bromobenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromochloromethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromoform | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromomethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Carbon Disulfide | 200 U | 3.75 J | 40.0 U | 20.0 U | 0.630 J | 1.00 U | 1.14 | 2.92 | 1.00 U | 1.00 U | 0.450 J | 1.00 U | 1.00 U | 2.00 | 1.00 U | 1.00 U | 1.00 U |
| Dibromomethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Diisopropyl ether (DIPE) | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.430 J | 1.00 U | 1.00 U | 1.00 U |
| Hexachlorobutadiene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Iodomethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Isopropylbenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| m-,p-Xylene | 400 U | 10.0 U | 80.0 U | 40.0 U | 2.00 U | 2.00 U | 0.150 J | 0.130 J | 2.00 U | 2.00 U | 2.00 U | 0.550 J | 2.00 U | 2.00 U | 2.00 U | 0.620 J | 2.00 U |
| Methyl tert-butyl ether | 200 U | 5.00 U | 40.0 U | 20.0 U | 0.670 J | 1.00 U | 1.00 U | 0.320 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.02 | 1.00 U | 1.00 U | 1.00 U |
| Naphthalene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.04 | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| n-Butylbenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| n-Propylbenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 0.290 J | 1.00 U | 1.00 U | 1.00 U |
| o-Xylene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| p-Isopropyltoluene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| sec-Butylbenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Styrene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| tert-Butylbenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Toluene | 200 U | 0.550 J | 40.0 U | 20.0 U | 0.210 J | 1.00 U | 0.340 J | 0.450 J | 1.00 U | 0.220 J | 1.00 U | 0.150 J | 1.00 U | 0.650 J | 1.00 U | 0.190 J | 1.00 U |

Table 7
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 25 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-24 | HPT-24 | HPT-25 | HPT-25 | HPT-25 | HPT-26 | HPT-26 | HPT-26 | HPT-27 | HPT-27 | HPT-27 | HPT-28 | HPT-28 | HPT-28 | HPT-29 | HPT-29 | HPT-30 |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 18 - 20 | 24 - 26 | 13 - 15 | 20 - 22 | 24 - 26 | 14 - 16 | 19 - 21 | 24 - 26 | 12 - 14 | 18 - 20 | 22 - 24 | 13 - 15 | 18 - 20 | 24 - 26 | 13 - 15 | 19 - 21 | 13 - 15 |
| Date Collected: | 12/02/15 | 12/03/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/02/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 12/01/15 | 11/30/15 |
| trans-1,4-Dichloro-2-butene | 1,000 U | 25.0 U | 200 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Vinyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2,2-Tetrachloroethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1,2-Trichloroethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloroethane | 164 J | 1.05 J | 11.2 J | 12.8 J | 1.85 | 1.00 U | 0.260 J | 3.13 | 1.00 U | 1.00 U | 0.440 J | 1.00 U | 1.00 U | 0.720 J | 1.00 U | 1.00 U | 1.00 U |
| 1,1-Dichloroethene | 60.0 J | 0.650 J | 40.0 U | 20.0 U | 0.400 J | 1.00 U | 0.250 J | 1.12 | 1.00 U | 0.320 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2,4-Trichlorobenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dibromo-3-chloropropane | 1,000 U | 25.0 U | 200 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| 1,2-Dichlorobenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloroethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,2-Dichloropropane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,3-Dichlorobenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| 1,4-Dichlorobenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromodichloromethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Carbon Tetrachloride | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chlorobenzene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloroethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloroform | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Chloromethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| cis-1,3-Dichloropropene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dibromochloromethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Dichlorodifluoromethane | 1,000 U | 25.0 U | 200 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Methylene Chloride | 1,000 U | 25.0 U | 200 U | 100 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| trans-1,3-Dichloropropene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Trichlorofluoromethane | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| cis-1,2-Dichloroethene | 4,080 | 26.0 | 770 | 607 | 12.3 | 1.00 U | 1.00 U | 5.85 | 1.00 U | 1.00 U | 1.75 | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Tetrachloroethene | 200 U | 5.00 U | 40.0 U | 20.0 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| trans-1,2-Dichloroethene | 200 U | 0.850 J | 13.6 J | 9.00 J | 0.910 J | 1.00 U | 1.00 U | 0.460 J | 1.00 U | 1.00 U | 0.140 J | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Trichloroethene | 3,030 | 41.3 | 54.4 | 46.8 | 7.74 | 1.00 U | 1.00 U | 0.620 J | 1.00 U | 1.00 U | 1.54 | 1.00 U | 0.630 J | 1.00 U | 1.00 U | 0.250 J | 1.00 U |
| Vinyl Chloride | 200 U | 8.60 | 40.0 U | 20.0 U | 8.50 | 1.00 U | 1.00 U | 0.590 J | 1.00 U | 1.00 U | 0.250 J | 1.00 U | 1.00 U | 7.27 | 1.00 U | 1.00 U | 1.00 U |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 7
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 25 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-30 | HPT-30 | HPT-31 | HPT-31 | HPT-31 | HPT-32 | HPT-32 | HPT-32 | HPT-33 | HPT-33 | HPT-33 | HPT-34 | HPT-34 | HPT-34 |
|--|----------|----------|-------------------|----------|----------|----------|-------------------|----------|----------|-----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 17 - 19 | 24 - 26 | 12 - 14 | 18 - 20 | 23 - 25 | 9 - 11 | 15 - 17 | 22 - 24 | 8 - 10 | 14 - 16 | 20 - 22 | 11 - 13 | 17 - 19 | 21 - 23 |
| Date Collected: | 11/30/15 | 12/01/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 |
| Volatile Organic Compounds (µg/L) | | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 1,1-Dichloropropene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 1,2,3-Trichlorobenzene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 1,2,3-Trichloropropane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 1,2,4-Trimethylbenzene | 1.00 U | 0.420 J | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 28.8 J | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 0.460 J | 2,000 U | 40.0 U |
| 1,2-Dibromoethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 1,3,5-Trimethylbenzene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 0.420 J | 2,000 U | 40.0 U |
| 1,3-Dichloropropane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 2,2-Dichloropropane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 2-Butanone | 25.0 U | 25.0 U | 2.26 J [1.38 J] | 500 U | 100 U | 4,000 U | 5,000 U [6,250 U] | 250 U | 5,000 U | 125,000 U | 1,250 U | 25.0 U | 50,000 U | 1,000 U |
| 2-Chlorotoluene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 2-Hexanone | 5.00 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 1,000 U | 25,000 U | 250 U | 5.00 U | 10,000 U | 200 U |
| 4-Chlorotoluene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 4-Methyl-2-pentanone | 5.00 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 1,000 U | 25,000 U | 250 U | 5.00 U | 10,000 U | 200 U |
| Acetone | 25.0 U | 25.0 U | 4.06 J [2.19 J] | 500 U | 100 U | 4,000 U | 5,000 U [6,250 U] | 250 U | 5,000 U | 125,000 U | 1,250 U | 25.0 U | 50,000 U | 1,000 U |
| Benzene | 1.00 U | 0.750 J | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 0.280 J | 2,000 U | 40.0 U |
| Bromobenzene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Bromochloromethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Bromoform | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Bromomethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Carbon Disulfide | 1.00 U | 1.00 U | 0.510 J [0.160 J] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 0.700 J | 2,000 U | 40.0 U |
| Dibromomethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Diisopropyl ether (DIPE) | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Ethyl Alcohol | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 0.520 J | 2,000 U | 40.0 U |
| Hexachlorobutadiene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Iodomethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Isopropylbenzene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 0.560 J | 2,000 U | 40.0 U |
| m-,p-Xylene | 2.00 U | 0.670 J | 2.00 U [2.00 U] | 40.0 U | 8.00 U | 320 U | 400 U [500 U] | 20.0 U | 400 U | 10,000 U | 100 U | 0.980 J | 4,000 U | 80.0 U |
| Methyl tert-butyl ether | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Naphthalene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 1,140 | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| n-Butylbenzene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| n-Propylbenzene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 0.240 J | 2,000 U | 40.0 U |
| o-Xylene | 1.00 U | 0.480 J | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 0.850 J | 2,000 U | 40.0 U |
| p-Isopropyltoluene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| sec-Butylbenzene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Styrene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| tert-Butylbenzene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Toluene | 1.00 U | 0.270 J | 0.330 J [0.250 J] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 0.730 J | 2,000 U | 40.0 U |

Table 7
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 25 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Location Identification: | HPT-30 | HPT-30 | HPT-31 | HPT-31 | HPT-31 | HPT-32 | HPT-32 | HPT-32 | HPT-33 | HPT-33 | HPT-33 | HPT-34 | HPT-34 | HPT-34 |
|--------------------------------------|----------|----------|------------------|----------|----------|----------|-------------------|----------|----------|----------|----------|----------|----------|----------|
| Sample Depth (Feet): | 17 - 19 | 24 - 26 | 12 - 14 | 18 - 20 | 23 - 25 | 9 - 11 | 15 - 17 | 22 - 24 | 8 - 10 | 14 - 16 | 20 - 22 | 11 - 13 | 17 - 19 | 21 - 23 |
| Date Collected: | 11/30/15 | 12/01/15 | 12/03/15 | 12/03/15 | 12/03/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 | 12/04/15 |
| trans-1,4-Dichloro-2-butene | 5.00 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 1,000 U | 25,000 U | 250 U | 5.00 U | 10,000 U | 200 U |
| Vinyl Acetate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Xylenes (total) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 1,1,2,2-Tetrachloroethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 1,1,2-Trichloroethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 1,1-Dichloroethane | 0.280 J | 3.84 | 1.00 U [1.00 U] | 471 | 7.24 | 160 U | 78.0 J [95.0 J] | 10.0 U | 1,090 | 5,000 U | 50.0 U | 1.77 | 2,000 U | 40.0 U |
| 1,1-Dichloroethene | 0.750 J | 1.00 U | 1.00 U [1.00 U] | 41.6 | 11.2 | 160 U | 200 U [250 U] | 10.0 U | 1,070 | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 1,2,4-Trichlorobenzene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 1,2-Dibromo-3-chloropropane | 5.00 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 1,000 U | 25,000 U | 250 U | 5.00 U | 10,000 U | 200 U |
| 1,2-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 1,2-Dichloroethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 1,2-Dichloropropane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 1,3-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| 1,4-Dichlorobenzene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Bromodichloromethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Carbon Tetrachloride | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Chlorobenzene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Chloroethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Chloroform | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Chloromethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| cis-1,3-Dichloropropene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Dibromochloromethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Dichlorodifluoromethane | 5.00 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 1,000 U | 25,000 U | 250 U | 5.00 U | 10,000 U | 200 U |
| Methylene Chloride | 5.00 U | 5.00 U | 5.00 U [5.00 U] | 100 U | 20.0 U | 800 U | 1,000 U [1,250 U] | 50.0 U | 1,000 U | 25,000 U | 250 U | 5.00 U | 10,000 U | 200 U |
| trans-1,3-Dichloropropene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Trichlorofluoromethane | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| cis-1,2-Dichloroethene | 0.930 J | 3.66 | 1.00 U [1.00 U] | 15.2 J | 82.6 | 160 U | 4,650 [6,140] | 217 | 1,780 | 109,000 | 1,090 | 0.840 J | 52,700 | 1,080 |
| Tetrachloroethene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 4.00 U | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| trans-1,2-Dichloroethene | 1.00 U | 1.00 U | 1.00 U [1.00 U] | 20.0 U | 2.16 J | 160 U | 200 U [250 U] | 10.0 U | 200 U | 5,000 U | 50.0 U | 1.00 U | 2,000 U | 40.0 U |
| Trichloroethene | 0.960 J | 0.320 J | 0.380 J [1.00 U] | 20.0 U | 18.0 | 160 U | 268 [363] | 5.20 J | 200 U | 164,000 | 473 | 1.00 U | 64,200 | 114 |
| Vinyl Chloride | 1.00 U | 2.54 | 1.00 U [1.00 U] | 20.0 U | 3.84 J | 160 U | 844 [1,130] | 33.5 | 4,620 | 3,200 J | 55.5 | 6.69 | 2,640 | 83.2 |
| Inorganics - Total (µg/L) | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Inorganics - Dissolved (µg/L) | | | | | | | | | | | | | | |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon (mg/L) | | | | | | | | | | | | | | |
| Total Organic Carbon | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Table 7
Summary of Groundwater Sample Analytical Results to a Depth of Less than or Equal to 25 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

Notes:

mg/L = milligrams per liter

µg/L = microgram per liter

Laboratory Qualifiers:

B = Analyte was found in the associated blank, as well as in the sample.

J = Indicates an estimated value.

ND = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Table 8
Selection of Constituents of Potential Concern for Surface Soil (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent [a] | Frequency of Detection | | | Detection Limits | | Detected Concentrations | | Location of Maximum Concentration (Depth Interval in Feet) | Exposure Point Concentration [b] (mg/kg) | Screening Levels [c] | | | | Is Constituent a COPC [d]? | | | | | | | | |
|-----------------------------------|------------------------|-------------------|-------|------------------|-----------------|-------------------------|-----------------|--|--|----------------------------------|---------------------------------|--------------------------------------|-------------------------------------|----------------------------|---------|---------|---------|-----|-----|-----|-----|-----|
| | Number of Detections | Number of Samples | % FOD | Minimum (mg/kg) | Maximum (mg/kg) | Minimum (mg/kg) | Maximum (mg/kg) | | | Residential Soil (mg/kg) [basis] | Industrial Soil (mg/kg) [basis] | Residential Soil (YES, no) Rationale | Industrial Soil (YES, no) Rationale | | | | | | | | | |
| Volatile Organic Compounds | | | | | | | | | | | | | | | | | | | | | | |
| Acetone | 164 | - | 256 | 64 | 1.90E-02 | - | 6.10E+02 | 2.77E-03 | - | 7.57E-01 | SB-MB1-44 (1.5 - 2) | 2.61E-02 | UCL | 6.1E+03 | n | 6.7E+04 | n | no | BSL | no | BSL | |
| Benzene | 7 | - | 256 | 3 | 3.79E-03 | - | 1.20E+02 | 1.26E-03 | - | 4.60E-02 | RMM-147 (1) | 2.46E-03 | UCL | 1.2E+00 | c** | 5.1E+00 | c** | no | BSL | no | BSL | |
| 2-Butanone | 26 | - | 256 | 10 | 1.89E-02 | - | 6.10E+02 | 1.37E-03 | - | 4.45E-01 | WCSS-1 (2) | 1.74E-02 | UCL | 2.7E+03 | n | 1.9E+04 | n | no | BSL | no | BSL | |
| n-Butylbenzene | 1 | - | 200 | 1 | 3.79E-03 | - | 1.16E+00 | 9.48E-02 | - | 9.48E-02 | SB-210 (1.5) | 9.48E-02 | max | 3.9E+02 | ns | 5.8E+03 | ns | no | BSL | no | BSL | |
| sec-Butylbenzene | 3 | - | 200 | 2 | 3.79E-03 | - | 1.16E+00 | 2.91E-02 | - | 1.05E-01 | MB1-36 (1.5 - 2.0) | 1.05E-01 | max | 7.8E+02 | ns | 1.2E+04 | ns | no | BSL | no | BSL | |
| Carbon Disulfide | 3 | - | 256 | 1 | 3.79E-03 | - | 1.20E+02 | 1.65E-03 | - | 5.50E-03 | RMM-379 (1) | 5.50E-03 | max | 7.7E+01 | n | 3.5E+02 | n | no | BSL | no | BSL | |
| Carbon Tetrachloride | 2 | - | 256 | 1 | 3.79E-03 | - | 1.20E+02 | 2.33E-03 | - | 8.41E-03 | MB1-44 (1.5 - 2.0) | 8.41E-03 | max | 6.5E-01 | c* | 2.9E+00 | c* | no | BSL | no | BSL | |
| Chloroethane | 4 | - | 256 | 2 | 3.79E-03 | - | 1.20E+02 | 6.50E-03 | - | 5.22E-02 | MB1-37D (1.5 - 2.0) | 5.22E-02 | max | 1.4E+03 | n | 5.7E+03 | ns | no | BSL | no | BSL | |
| 1,4-Dichlorobenzene | 1 | - | 256 | 0.4 | 3.79E-03 | - | 1.20E+02 | 1.02E-03 | - | 1.02E-03 | MB1-31 (0.5 - 1.0) | 1.02E-03 | max | 2.6E+00 | c | 1.1E+01 | c | no | BSL | no | BSL | |
| 1,1-Dichloroethane | 29 | - | 256 | 11 | 3.79E-03 | - | 1.20E+02 | 1.41E-03 | - | 9.89E-01 | SB-210 (1.5) | 4.49E-03 | UCL | 3.6E+00 | c | 1.6E+01 | c | no | BSL | no | BSL | |
| 1,1-Dichloroethene | 8 | - | 256 | 3 | 3.79E-03 | - | 1.20E+02 | 1.15E-03 | - | 1.60E+00 | RC-166 (2) | 4.32E-02 | UCL | 2.3E+01 | n | 1.0E+02 | n | no | BSL | no | BSL | |
| cis-1,2-Dichloroethene | 31 | - | 256 | 12 | 3.79E-03 | - | 1.16E+00 | 1.03E-03 | - | 2.50E+02 | RC-166 (0.6) | 1.49E-02 | UCL | 1.6E+01 | n | 2.3E+02 | n | YES | ASL | YES | ASL | |
| trans-1,2-Dichloroethene | 3 | - | 256 | 1 | 3.79E-03 | - | 1.20E+02 | 3.97E-03 | - | 1.23E+00 | MB1-27 (1.5 - 2.0) | 1.23E+00 | max | 1.6E+02 | n | 2.3E+03 | ns | no | BSL | no | BSL | |
| Dichlorodifluoromethane | 5 | - | 256 | 2 | 3.79E-03 | - | 1.20E+02 | 1.00E-03 | - | 1.90E-02 | MIS-17 (1.5-2) | 2.18E-03 | UCL | 8.7E+00 | n | 3.7E+01 | n | no | BSL | no | BSL | |
| Ethylbenzene | 22 | - | 256 | 9 | 3.79E-03 | - | 1.20E+02 | 7.67E-04 | - | 3.81E+00 | WP-Com-North (0.75) | 1.25E-01 | UCL | 5.8E+00 | c* | 2.5E+01 | c* | no | BSL | no | BSL | |
| Isopropylbenzene | 8 | - | 256 | 3 | 3.79E-03 | - | 1.20E+02 | 9.58E-04 | - | 4.01E-01 | MB1-36 (1.5 - 2.0) | 8.60E-03 | UCL | 1.9E+02 | n | 9.9E+02 | ns | no | BSL | no | BSL | |
| p-Isopropyltoluene | [e] | 14 | - | 200 | 7 | 3.79E-03 | - | 1.09E+00 | - | 1.37E+00 | MB1-34 (1.0 - 1.5) | 4.56E-02 | UCL | 1.9E+02 | n | 9.9E+02 | ns | no | BSL | no | BSL | |
| 4-Methyl-2-pentanone | 3 | - | 256 | 1 | 9.47E-03 | - | 6.10E+02 | 2.25E-03 | - | 2.90E+00 | RMM-279 (1) | 2.90E+00 | max | 3.3E+03 | n | 1.4E+04 | ns | no | BSL | no | BSL | |
| Methyl Acetate | 2 | - | 56 | 4 | 3.80E-03 | - | 1.20E+02 | 5.20E-01 | - | 6.10E-01 | RMM-35 (2) | 6.10E-01 | max | 7.8E+03 | n | 1.2E+05 | nms | no | BSL | no | BSL | |
| Methylcyclohexane | [f] | 1 | - | 56 | 2 | 3.80E-03 | - | 1.20E+02 | 6.00E-03 | - | 6.00E-03 | RMM-147 (1) | 6.00E-03 | max | 6.5E+02 | ns | 2.7E+03 | ns | no | BSL | no | BSL |
| Methylene Chloride | 62 | - | 256 | 24 | 1.10E-02 | - | 3.70E+02 | 8.69E-04 | - | 1.46E+00 | WP-Com-North (0.75) | 4.19E-02 | UCL | 3.5E+01 | n | 3.2E+02 | n | no | BSL | no | BSL | |
| Naphthalene | 5 | - | 200 | 3 | 3.79E-03 | - | 1.16E+00 | 1.71E-02 | - | 1.87E-01 | MB1-28 (1.5 - 2.0) | 8.62E-03 | UCL | 3.8E+00 | c** | 1.7E+01 | c** | no | BSL | no | BSL | |
| n-Propylbenzene | 10 | - | 200 | 5 | 3.79E-03 | - | 1.16E+00 | 2.37E-03 | - | 1.65E-01 | MB1-36 (1.5 - 2.0) | 8.03E-03 | UCL | 3.8E+02 | ns | 2.4E+03 | ns | no | BSL | no | BSL | |
| Styrene | 1 | - | 256 | 0.4 | 3.79E-03 | - | 1.20E+02 | 1.42E-03 | - | 1.42E-03 | MB1-01 (0.5 - 1.0) | 1.42E-03 | max | 6.0E+02 | n | 3.5E+03 | ns | no | BSL | no | BSL | |
| Tetrachloroethene | 8 | - | 256 | 3 | 3.79E-03 | - | 1.20E+02 | 1.04E-03 | - | 2.20E+01 | RC-152 (1) | 2.14E-03 | UCL | 8.1E+00 | n | 3.9E+01 | n | YES | ASL | no | BSL | |
| Toluene | 41 | - | 256 | 16 | 3.79E-03 | - | 1.20E+02 | 8.28E-04 | - | 8.28E+00 | MB1-34 (1.0 - 1.5) | 1.82E-01 | UCL | 4.9E+02 | n | 4.7E+03 | ns | no | BSL | no | BSL | |
| 1,1,1-Trichloroethane | 30 | - | 256 | 12 | 3.79E-03 | - | 1.20E+02 | 9.40E-04 | - | 4.16E+01 | MB1-37B (0.5 - 1.0) | 9.62E-03 | UCL | 8.1E+02 | ns | 3.6E+03 | ns | no | BSL | no | BSL | |
| Trichloroethene | 65 | - | 256 | 25 | 3.79E-03 | - | 1.16E+00 | 9.08E-04 | - | 6.00E+03 | RC-166 (0.6) | 1.27E+02 | UCL | 4.1E-01 | n | 1.9E+00 | n | YES | ASL | YES | ASL | |
| Trichlorofluoromethane | 10 | - | 256 | 4 | 3.79E-03 | - | 1.20E+02 | 1.05E-03 | - | 2.40E+00 | RMM-279 (1) | 2.16E-03 | UCL | 2.3E+03 | ns | 3.5E+04 | ns | no | BSL | no | BSL | |
| 1,2,4-Trimethylbenzene | 8 | - | 200 | 4 | 3.79E-03 | - | 1.16E+00 | 5.37E-03 | - | 3.29E-01 | MB1-37C (1.0 - 1.5) | 1.53E-02 | UCL | 3.0E+01 | n | 1.8E+02 | n | no | BSL | no | BSL | |
| 1,3,5-Trimethylbenzene | 6 | - | 200 | 3 | 3.79E-03 | - | 1.16E+00 | 9.74E-04 | - | 1.10E+00 | MB1-36 (1.5 - 2.0) | 3.05E-02 | UCL | 2.7E+01 | n | 1.5E+02 | n | no | BSL | no | BSL | |
| Vinyl Chloride | 6 | - | 256 | 2 | 3.79E-03 | - | 1.20E+02 | 6.30E-03 | - | 2.88E-01 | SB-210 (1.5) | 7.82E-03 | UCL | 5.9E-02 | c | 1.7E+00 | c* | YES | ASL | no | BSL | |
| m-,p-Xylene | 17 | - | 200 | 9 | 7.58E-03 | - | 2.32E+00 | 1.75E-03 | - | 1.54E+01 | WP-Com-North (0.75) | 6.78E-01 | UCL | 5.5E+01 | n | 2.4E+02 | n | no | BSL | no | BSL | |
| o-Xylene | 10 | - | 200 | 5 | 3.79E-03 | - | 1.16E+00 | 9.78E-04 | - | 8.18E-01 | WP-Com-Base (1.5) | 3.05E-02 | UCL | 6.5E+01 | n | 2.8E+02 | n | no | BSL | no | BSL | |
| Xylenes (total) | 11 | - | 160 | 7 | 7.50E-03 | - | 2.50E+02 | 2.73E-03 | - | 3.20E+00 | RC-84 (1) | 1.15E-01 | UCL | 5.8E+01 | n | 2.5E+02 | n | no | BSL | no | BSL | |

– Not available or not applicable.
% Percent.
* Non-cancer screening values is less than 100x the cancer screening level.
** Non-cancer screening value is less than 10x the cancer screening level.
c Cancer effect.
COPC Constituent of potential concern.
FOD Frequency of detection.
m Concentration may exceed ceiling limit.
mg/kg Milligram per kilogram.
n Non-cancer effect.
s Concentration may exceed residual saturation (C_{sat}) level.

[a] Only detected constituents are presented.
[b] The exposure point concentration (EPC) is the lower concentration of either the upper confidence level on the mean (UCL) or the maximum detected concentration (max), where the UCL was incalculable. The UCLs were calculated using ProUCL version 5.1.00 (USEPA 2016a). The UCL used is the one recommended by ProUCL, unless a greater than 95% UCL was recommended, in which case the 95% UCL was selected.
[c] Screening levels are the United States Environmental Protection Agency (USEPA) residential and industrial soil Regional Screening Levels (RSLs) (USEPA 2018a). All screening levels are based on a target cancer risk of 1x10⁻⁶ and a target non-cancer hazard of 0.1 (to account for potentially additive effects).
[d] A constituent with a maximum detected concentration above the screening level (ASL) was identified as a COPC. A constituent with a maximum detected concentration below the screening level (BSL) was not identified as a COPC.
[e] The screening level for cumene was used as a surrogate.
[f] The screening level for cyclohexane was used as a surrogate.

Table 9
Selection of Constituents of Potential Concern for Combined Surface and Subsurface Soil (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent [a] | Frequency of Detection | | | Detection Limits | | Detected Concentrations | | Location of Maximum Concentration (Depth Interval in Feet) | Exposure Point Concentration [b] | | Screening Levels [c] | | | | | | Is Constituent a COPC [d]? | | | | | | | | | |
|-----------------------------------|------------------------|-------------------|-------|------------------|-----------------|-------------------------|-----------------|--|----------------------------------|----------|--------------------------|-------------------------|------------------|----------------------------|---------------------------|--------------------|----------------------------|-----------|-----------|-----------|-----------|-----------|-----|-----|-----|-----|
| | Number of Detections | Number of Samples | % FOD | Minimum (mg/kg) | Maximum (mg/kg) | Minimum (mg/kg) | Maximum (mg/kg) | | (mg/kg) | (mg/kg) | Residential Soil (mg/kg) | Industrial Soil (mg/kg) | Leaching (mg/kg) | Residential Soil (YES, no) | Industrial Soil (YES, no) | Leaching (YES, no) | Rationale | Rationale | Rationale | Rationale | Rationale | Rationale | | | | |
| Volatile Organic Compounds | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acetone | 204 | - | 383 | 53 | 1.90E-02 | - | 5.88E+03 | 2.77E-03 | - | 7.57E-01 | SB-MB1-44 (1.5 - 2) | 2.49E-02 | UCL | 6.1E+03 | n | 6.7E+04 | n | 2.9E-01 | n | no | BSL | no | BSL | YES | ASL | |
| Benzene | 13 | - | 383 | 3 | 3.79E-03 | - | 2.35E+02 | 6.83E-04 | - | 4.60E-02 | RMM-147 (1) | 2.98E-03 | UCL | 1.2E+00 | c** | 5.1E+00 | c** | 2.6E-03 | c** | no | BSL | no | BSL | YES | ASL | |
| 2-Butanone | 28 | - | 383 | 7 | 1.89E-02 | - | 5.88E+03 | 1.37E-03 | - | 4.45E-01 | WCSS-1 (2) | 1.93E-02 | UCL | 2.7E+03 | n | 1.9E+04 | n | 1.2E-01 | n | no | BSL | no | BSL | YES | ASL | |
| n-Butylbenzene | 3 | - | 320 | 1 | 3.79E-03 | - | 2.35E+02 | 9.48E-02 | - | 1.23E+00 | SB-211 (3) | 1.23E+00 | max | 3.9E+02 | ns | 5.8E+03 | ns | 3.2E-01 | n | no | BSL | no | BSL | YES | ASL | |
| sec-Butylbenzene | 8 | - | 320 | 3 | 3.79E-03 | - | 2.35E+02 | 9.16E-04 | - | 1.54E+00 | SB-211 (3) | 2.83E-02 | UCL | 7.8E+02 | ns | 1.2E+04 | ns | 5.9E-01 | n | no | BSL | no | BSL | YES | ASL | |
| Carbon Disulfide | 3 | - | 383 | 1 | 3.79E-03 | - | 2.35E+02 | 1.65E-03 | - | 5.50E-03 | RMM-379 (1) | 5.50E-03 | max | 7.7E+01 | n | 3.5E+02 | n | 2.4E-02 | n | no | BSL | no | BSL | no | BSL | |
| Carbon Tetrachloride | 5 | - | 383 | 1 | 3.79E-03 | - | 2.35E+02 | 2.33E-03 | - | 2.12E-02 | SB-308 (3) | 2.93E-03 | UCL | 6.5E-01 | c* | 2.9E+00 | c* | 1.9E-03 | c* | no | BSL | no | BSL | YES | ASL | |
| Chloroethane | 14 | - | 383 | 4 | 3.79E-03 | - | 2.35E+02 | 1.39E-03 | - | 4.59E-01 | SB-309 (5) | 7.66E-03 | UCL | 1.4E+03 | n | 5.7E+03 | ns | 5.9E-01 | n | no | BSL | no | BSL | no | BSL | |
| 1,4-Dichlorobenzene | 1 | - | 383 | 0.3 | 3.79E-03 | - | 2.35E+02 | 1.02E-03 | - | 1.02E-03 | MB1-31 (0.5 - 1.0) | 1.02E-03 | max | 2.6E+00 | c | 1.1E+01 | c | 7.2E-02 | c | no | BSL | no | BSL | no | BSL | |
| 1,1-Dichloroethane | 71 | - | 383 | 19 | 3.79E-03 | - | 2.35E+02 | 1.41E-03 | - | 1.22E+01 | SB-304 (3) | 4.53E-01 | UCL | 3.6E+00 | c | 1.6E+01 | c | 7.8E-04 | c | YES | ASL | no | BSL | YES | ASL | |
| 1,1-Dichloroethene | 35 | - | 383 | 9 | 3.79E-03 | - | 2.35E+02 | 9.28E-04 | - | 1.36E+02 | SB-308 (5) | 3.42E+00 | UCL | 2.3E+01 | n | 1.0E+02 | n | 2.5E-03 | n | YES | ASL | YES | ASL | YES | ASL | |
| cis-1,2-Dichloroethene | 121 | - | 383 | 32 | 3.79E-03 | - | 1.30E+02 | 8.93E-04 | - | 2.52E+02 | MB1-37E (2.5 - 3.0) | 1.25E+01 | UCL | 1.6E+01 | n | 2.3E+02 | n | 2.1E-02 | n | YES | ASL | YES | ASL | YES | ASL | |
| trans-1,2-Dichloroethene | 18 | - | 383 | 5 | 3.79E-03 | - | 2.35E+02 | 1.22E-03 | - | 1.23E+00 | MB1-27 (1.5 - 2.0) | 1.89E-02 | UCL | 1.6E+02 | n | 2.3E+03 | ns | 3.1E-02 | n | no | BSL | no | BSL | YES | ASL | |
| Dichlorodifluoromethane | 5 | - | 383 | 1 | 3.79E-03 | - | 1.18E+03 | 1.00E-03 | - | 1.90E-02 | MIS-17 (1.5-2) | 2.14E-03 | UCL | 8.7E+00 | n | 3.7E+01 | n | 3.0E-02 | n | no | BSL | no | BSL | no | BSL | |
| Ethylbenzene | 45 | - | 383 | 12 | 3.79E-03 | - | 2.35E+02 | 7.67E-04 | - | 1.01E+01 | SB-211 (5) | 1.10E-02 | UCL | 5.8E+00 | c* | 2.5E+01 | c* | 7.8E-01 | c* | YES | ASL | no | BSL | YES | ASL | |
| Isopropylbenzene | 28 | - | 383 | 7 | 3.79E-03 | - | 2.35E+02 | 9.58E-04 | - | 8.97E+00 | SB-211 (3) | 5.04E-03 | UCL | 1.9E+02 | n | 9.9E+02 | ns | 7.4E-02 | n | no | BSL | no | BSL | YES | ASL | |
| p-Isopropyltoluene | [e] | 34 | - | 320 | 11 | 3.79E-03 | - | 2.35E+02 | 7.07E-04 | - | 7.15E+01 | MB1-37E (2.5 - 3.0) | 7.49E-03 | UCL | 1.9E+02 | n | 9.9E+02 | ns | 7.4E-02 | n | no | BSL | no | BSL | YES | ASL |
| 4-Methyl-2-pentanone | 3 | - | 383 | 1 | 9.47E-03 | - | 1.18E+03 | 2.25E-03 | - | 2.90E+00 | RMM-279 (1) | 2.90E+00 | max | 3.3E+03 | n | 1.4E+04 | n | 1.4E-01 | n | no | BSL | no | BSL | YES | ASL | |
| Methyl Acetate | [f] | 2 | - | 63 | 3 | 3.80E-03 | - | 1.30E+02 | 5.20E-01 | - | 6.10E-01 | RMM-35 (2) | 6.10E-01 | max | 7.8E+03 | n | 1.2E+05 | nms | 4.1E-01 | n | no | BSL | no | BSL | YES | ASL |
| Methylcyclohexane | 1 | - | 63 | 2 | 3.80E-03 | - | 1.30E+02 | 6.00E-03 | - | 6.00E-03 | RMM-147 (1) | 6.00E-03 | max | 6.5E+02 | ns | 2.7E+03 | ns | 1.3E+00 | n | no | BSL | no | BSL | no | BSL | |
| Methylene Chloride | 75 | - | 383 | 20 | 1.10E-02 | - | 1.18E+03 | 8.69E-04 | - | 1.46E+00 | WP-Com-North (0.75) | 3.54E-02 | UCL | 3.5E+01 | n | 3.2E+02 | n | 1.3E-03 | n | no | BSL | no | BSL | YES | ASL | |
| Naphthalene | 12 | - | 320 | 4 | 3.79E-03 | - | 2.35E+02 | 7.80E-04 | - | 1.87E-01 | MB1-28 (1.5 - 2.0) | 6.02E-03 | UCL | 3.8E+00 | c** | 1.7E+01 | c** | 5.4E-04 | c** | no | BSL | no | BSL | YES | ASL | |
| n-Propylbenzene | 22 | - | 320 | 7 | 3.79E-03 | - | 2.35E+02 | 8.59E-04 | - | 3.64E+01 | SB-211 (3) | 6.51E-03 | UCL | 3.8E+02 | ns | 2.4E+03 | ns | 1.2E-01 | n | no | BSL | no | BSL | YES | ASL | |
| Styrene | 1 | - | 383 | 0.3 | 3.79E-03 | - | 2.35E+02 | 1.42E-03 | - | 1.42E-03 | MB1-01 (0.5 - 1.0) | 1.42E-03 | max | 6.0E+02 | n | 3.5E+03 | ns | 1.1E-01 | n | no | BSL | no | BSL | no | BSL | |
| Tetrachloroethene | 11 | - | 383 | 3 | 3.79E-03 | - | 2.35E+02 | 1.04E-03 | - | 2.20E+01 | RC-152 (1) | 4.47E-01 | UCL | 8.1E+00 | n | 3.9E+01 | n | 2.3E-03 | n | YES | ASL | no | BSL | YES | ASL | |
| Toluene | 61 | - | 383 | 16 | 3.79E-03 | - | 2.35E+02 | 8.28E-04 | - | 3.05E+02 | SB-211 (5) | 4.33E+00 | UCL | 4.9E+02 | n | 4.7E+03 | ns | 6.9E-01 | n | no | BSL | no | BSL | YES | ASL | |
| 1,1,1-Trichloroethane | 58 | - | 383 | 15 | 3.79E-03 | - | 2.35E+02 | 9.40E-04 | - | 1.84E+03 | SB-308 (5) | 3.64E+01 | UCL | 8.1E+02 | ns | 3.6E+03 | ns | 7.0E-02 | n | YES | ASL | no | BSL | YES | ASL | |
| Trichloroethene | 146 | - | 383 | 38 | 3.79E-03 | - | 9.32E+00 | 9.06E-04 | - | 6.00E+03 | RC-166 (0.6) | 2.04E+02 | UCL | 4.1E-01 | n | 1.9E+00 | n | 1.8E-03 | n | YES | ASL | YES | ASL | YES | ASL | |
| Trichlorofluoromethane | 10 | - | 383 | 3 | 3.79E-03 | - | 2.35E+02 | 1.05E-03 | - | 2.40E+00 | RMM-279 (1) | 2.00E-03 | UCL | 2.3E+03 | ns | 3.5E+04 | ns | 3.3E-01 | n | no | BSL | no | BSL | YES | ASL | |
| 1,2,4-Trimethylbenzene | 27 | - | 320 | 8 | 3.79E-03 | - | 2.35E+02 | 5.69E-04 | - | 2.09E+01 | SB-313 (3) | 6.96E-03 | UCL | 3.0E+01 | n | 1.8E+02 | n | 8.1E-03 | n | no | BSL | no | BSL | YES | ASL | |
| 1,3,5-Trimethylbenzene | 21 | - | 320 | 7 | 3.79E-03 | - | 2.35E+02 | 7.60E-04 | - | 5.77E+00 | SB-313 (3) | 1.18E-01 | UCL | 2.7E+01 | n | 1.5E+02 | n | 8.7E-03 | n | no | BSL | no | BSL | YES | ASL | |
| Vinyl Chloride | 53 | - | 383 | 14 | 3.79E-03 | - | 2.35E+02 | 6.61E-04 | - | 1.02E+01 | SB-211 (5) | 1.75E-02 | UCL | 5.9E-02 | c | 1.7E+00 | c* | 6.9E-04 | c | YES | ASL | YES | ASL | YES | ASL | |
| m-,p-Xylene | 35 | - | 320 | 11 | 7.58E-03 | - | 4.71E+02 | 1.75E-03 | - | 3.57E+01 | SB-211 (5) | 3.19E-02 | UCL | 5.5E+01 | n | 2.4E+02 | n | 1.9E-02 | n | no | BSL | no | BSL | YES | ASL | |
| o-Xylene | 27 | - | 320 | 8 | 3.79E-03 | - | 2.35E+02 | 9.78E-04 | - | 1.17E+01 | SB-211 (5) | 2.10E-01 | UCL | 6.5E+01 | n | 2.8E+02 | n | 1.9E-02 | n | no | BSL | no | BSL | YES | ASL | |
| Xylenes (total) | 25 | - | 276 | 9 | 7.50E-03 | - | 4.71E+02 | 2.73E-03 | - | 4.74E+01 | SB-211 (5) | 1.68E-02 | UCL | 5.8E+01 | n | 2.5E+02 | n | 9.9E+00 | n | no | BSL | no | BSL | YES | ASL | |

- Not available or not applicable.
% Percent.
* Non-cancer screening values is less than 100x the cancer screening level.
** Non-cancer screening value is less than 10x the cancer screening level.
c Cancer effect.
COPC Constituent of potential concern.
FOD Frequency of detection.
m Concentration may exceed ceiling limit.
mg/kg Milligram per kilogram.
n Non-cancer effect.
s Concentration may exceed residual saturation (Csat) level.

[a] Only detected constituents are presented.
[b] The exposure point concentration (EPC) was the lower concentration of either the upper confidence level on the mean (UCL) or the maximum detected concentration (max), where the UCL was incalculable. The UCLs were calculated using ProUCL version 5.1.00 (USEPA 2016a). The UCL used is the one recommended by ProUCL, unless a greater than 95% UCL was recommended, in which case the 95% UCL was selected.
[c] Screening levels are the United States Environmental Protection Agency (USEPA) residential and industrial soil Regional Screening Levels (RSLs) (USEPA 2018a). All screening levels are based on a target cancer risk of 1x10⁻⁶ and a target non-cancer hazard of 0.1 (to account for potentially additive effects).
[d] A constituent with a maximum detected concentration above the screening level (ASL) was identified as a COPC. A constituent with a maximum detected concentration below the screening level (BSL) was not identified as a COPC.
[e] The screening level for cumene was used as a surrogate.
[f] The screening level for cyclohexane was used as a surrogate.

Table 10
Selection of Constituents of Potential Concern for All Groundwater
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent [a] | Frequency of Detection | | | Detection Limits | | Detected Concentrations | | Location of Maximum Concentration (Depth Interval in Feet) | Exposure Point Concentration [b] | | Screening Levels [c] | | | | | | Is Constituent a COPC? [d] | | | | | | | | |
|-----------------------------------|------------------------|-------------------|-------|------------------|----------------|-------------------------|----------------|--|----------------------------------|---|-----------------------------------|--------------------------------------|---------------------------------------|-------------------------------------|--------------------------------------|--------------------|----------------------------|---|-----------|--|-----------|-----|-----|-----|-----|
| | Number of Detections | Number of Samples | % FOD | Minimum (mg/L) | Maximum (mg/L) | Minimum (mg/L) | Maximum (mg/L) | | Tapwater (mg/L) | Exposure Point Concentration [b] (mg/L) | Tapwater [basis] | Vapor Intrusion - Residential (mg/L) | Vapor Intrusion - Residential [basis] | Vapor Intrusion - Industrial (mg/L) | Vapor Intrusion - Industrial [basis] | Tapwater (YES, no) | Rationale | Vapor Intrusion - Residential (YES, no) | Rationale | Vapor Intrusion - Industrial (YES, no) | Rationale | | | | |
| Volatile Organic Compounds | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acetone | 23 | - | 142 | 16 | 2.50E-02 | - | 1.25E+02 | 1.21E-03 | - | 5.72E-01 | MW-17D (36 - 46) | 4.12E-02 | UCL | 1.4E+00 | n | 2.25E+03 | NC | 9.45E+03 | NC | no | BSL | no | BSL | no | BSL |
| Benzene | 26 | - | 142 | 18 | 1.00E-03 | - | 5.00E+00 | 1.20E-04 | - | 2.06E-03 | MW-19S (10 - 20) | 5.03E-04 | UCL | 4.6E-04 | c** | 1.59E-03 | CA | 6.93E-03 | CA | YES | ASL | YES | ASL | no | BSL |
| 2-Butanone | 7 | - | 142 | 5 | 5.00E-03 | - | 1.25E+02 | 9.40E-04 | - | 2.60E-01 | DPW-1D (36 - 46) | 1.31E-02 | UCL | 5.6E-01 | n | 2.24E+02 | NC | 9.41E+02 | NC | no | BSL | no | BSL | no | BSL |
| tert-Butylbenzene | 8 | - | 142 | 6 | 1.00E-03 | - | 5.00E+00 | 1.60E-04 | - | 1.89E-03 | HPT-32 (32 - 34) | 8.42E-04 | UCL | 6.9E-02 | n | NA | | NA | | no | BSL | no | NSL | no | NSL |
| Carbon Disulfide | 14 | - | 131 | 11 | 1.00E-03 | - | 5.00E+00 | 4.50E-04 | - | 3.50E-02 | DPW-4SD (19.5 - 29.5 29.6 - 44.5) | 9.09E-04 | UCL | 8.1E-02 | n | 1.24E-01 | NC | 5.21E-01 | NC | no | BSL | no | BSL | no | BSL |
| Chloroethane | 2 | - | 142 | 1 | 1.00E-03 | - | 5.00E+00 | 4.60E-04 | - | 2.27E-03 | PW-1S (Assume 15-25) | 2.27E-03 | max | 2.1E+00 | n | 2.30E+00 | NC | 9.65E+00 | NC | no | BSL | no | BSL | no | BSL |
| 1,1-Dichloroethane | 51 | - | 142 | 36 | 1.00E-03 | - | 5.00E+00 | 1.20E-04 | - | 2.10E+00 | HPT-24 (12 - 14) | 1.20E-01 | UCL | 2.8E-03 | c | 7.64E-03 | CA | 3.34E-02 | CA | YES | ASL | YES | ASL | YES | ASL |
| 1,1-Dichloroethene | 39 | - | 142 | 28 | 1.00E-03 | - | 5.00E+00 | 2.30E-04 | - | 1.95E+00 | HPT-24 (12 - 14) | 1.16E-01 | UCL | 2.8E-02 | n | 1.95E-02 | NC | 8.21E-02 | NC | YES | ASL | YES | ASL | YES | ASL |
| cis-1,2-Dichloroethene | 117 | - | 142 | 82 | 1.00E-03 | - | 5.00E-01 | 1.10E-04 | - | 1.09E+02 | HPT-33 (14 - 16) | 8.71E+01 | UCL | 3.6E-03 | n | NA | | NA | | YES | ASL | no | NSL | no | NSL |
| trans-1,2-Dichloroethene | 37 | - | 142 | 26 | 1.00E-03 | - | 5.00E+00 | 1.40E-04 | - | 1.42E-01 | HPT-04 (16 - 18) | 1.04E-02 | UCL | 3.6E-02 | n | NA | | NA | | YES | ASL | no | NSL | no | NSL |
| Ethylbenzene | 8 | - | 142 | 6 | 1.00E-03 | - | 5.00E+00 | 1.60E-04 | - | 1.79E-03 | MW-19S (10 - 20) | 4.43E-04 | UCL | 1.5E-03 | c* | 3.49E-03 | CA | 1.52E-02 | CA | YES | ASL | no | BSL | no | BSL |
| Hexachlorobutadiene | 1 | - | 131 | 1 | 1.00E-03 | - | 5.00E+00 | 7.70E-04 | - | 7.70E-04 | DPW-1D (36 - 46) | 7.70E-04 | max | 1.4E-04 | c** | 3.03E-04 | CA | 1.32E-03 | CA | YES | ASL | YES | ASL | no | BSL |
| Isopropylbenzene | 1 | - | 142 | 1 | 1.00E-03 | - | 5.00E+00 | 5.60E-04 | - | 5.60E-04 | HPT-34 (11 - 13) | 5.60E-04 | max | 4.5E-02 | n | 8.87E-02 | NC | 3.73E-01 | NC | no | BSL | no | BSL | no | BSL |
| p-Isopropyltoluene [e] | 2 | - | 142 | 1 | 1.00E-03 | - | 5.00E+00 | 1.60E-04 | - | 4.50E-04 | MW-14S (10 - 15) | 4.50E-04 | max | 4.5E-02 | n | 8.87E-02 | NC | 3.73E-01 | NC | no | BSL | no | BSL | no | BSL |
| Methylene Chloride | 1 | - | 142 | 1 | 5.00E-03 | - | 2.50E+01 | 5.80E-04 | - | 5.80E-04 | MW-19S (10 - 20) | 5.80E-04 | max | 1.1E-02 | n | 4.71E-01 | NC | 1.98E+00 | NC | no | BSL | no | BSL | no | BSL |
| Methyl tert-butyl ether | 7 | - | 142 | 5 | 1.00E-03 | - | 5.00E+00 | 1.30E-04 | - | 1.02E-03 | HPT-28 (24 - 26) | 4.85E-04 | UCL | 1.4E-02 | c* | 4.50E-01 | CA | 1.97E+00 | CA | no | BSL | no | BSL | no | BSL |
| Naphthalene | 12 | - | 142 | 8 | 1.00E-03 | - | 5.00E+00 | 1.20E-04 | - | 1.14E+00 | HPT-32 (9 - 11) | 4.87E-02 | UCL | 1.7E-04 | c** | 4.59E-03 | CA | 2.01E-02 | CA | YES | ASL | YES | ASL | YES | ASL |
| n-Propylbenzene | 3 | - | 142 | 2 | 1.00E-03 | - | 5.00E+00 | 2.40E-04 | - | 3.00E-04 | HPT-29 (25 - 27) | 3.00E-04 | max | 6.6E-02 | n | 2.43E-01 | NC | 1.02E+00 | NC | no | BSL | no | BSL | no | BSL |
| Tetrachloroethene | 1 | - | 142 | 1 | 1.00E-03 | - | 5.00E+00 | 2.88E-03 | - | 2.88E-03 | HPT-29 (39 - 41) | 2.88E-03 | max | 4.1E-03 | n | 5.76E-03 | NC | 2.42E-02 | NC | no | BSL | no | BSL | no | BSL |
| Toluene | 28 | - | 142 | 20 | 1.00E-03 | - | 5.00E+00 | 1.50E-04 | - | 1.10E-01 | HPT-29 (36 - 38) | 8.97E-03 | UCL | 1.1E-01 | n | 1.92E+00 | NC | 8.07E+00 | NC | no | BSL | no | BSL | no | BSL |
| 1,1,1-Trichloroethane | 3 | - | 142 | 2 | 1.00E-03 | - | 5.00E+00 | 3.50E-03 | - | 6.12E-02 | DPW-5SD (19 - 24 31 - 41) | 6.12E-02 | max | 8.0E-01 | n | 7.42E-01 | NC | 3.11E+00 | NC | no | BSL | no | BSL | no | BSL |
| Trichloroethene | 91 | - | 142 | 64 | 1.00E-03 | - | 8.00E-01 | 2.30E-04 | - | 2.61E+02 | HPT-24 (12 - 14) | 1.42E+01 | UCL | 2.8E-04 | n | 5.18E-04 | NC | 2.18E-03 | NC | YES | ASL | YES | ASL | YES | ASL |
| 1,2,4-Trimethylbenzene | 8 | - | 142 | 6 | 1.00E-03 | - | 5.00E+00 | 1.10E-04 | - | 2.88E-02 | HPT-32 (9 - 11) | 5.22E-04 | UCL | 5.6E-03 | n | 2.48E-02 | NC | 1.04E-01 | NC | YES | ASL | YES | ASL | no | BSL |
| 1,3,5-Trimethylbenzene | 1 | - | 142 | 1 | 1.00E-03 | - | 5.00E+00 | 4.20E-04 | - | 4.20E-04 | HPT-34 (11 - 13) | 4.20E-04 | max | 6.0E-03 | n | 1.75E-02 | NC | 7.33E-02 | NC | no | BSL | no | BSL | no | BSL |
| Vinyl Chloride | 95 | - | 142 | 67 | 1.00E-03 | - | 5.00E+00 | 2.50E-04 | - | 1.49E+01 | HPT-28 (30 - 33) | 1.06E+00 | UCL | 1.9E-05 | c | 1.47E-04 | CA | 2.45E-03 | CA | YES | ASL | YES | ASL | YES | ASL |
| m-,p-Xylene | 17 | - | 142 | 12 | 2.00E-03 | - | 1.00E+01 | 1.30E-04 | - | 2.42E-03 | MW-19S (10 - 20) | 6.38E-04 | UCL | 1.9E-02 | n | 3.55E-02 | NC | 1.49E-01 | NC | no | BSL | no | BSL | no | BSL |
| o-Xylene | 9 | - | 142 | 6 | 1.00E-03 | - | 5.00E+00 | 1.10E-04 | - | 2.17E-03 | MW-19S (10 - 20) | 6.12E-04 | UCL | 1.9E-02 | n | 4.92E-02 | NC | 2.07E-01 | NC | no | BSL | no | BSL | no | BSL |
| Total Inorganics | | | | | | | | | | | | | | | | | | | | | | | | | |
| Iron | 4 | - | 4 | 100 | - | - | - | 5.00E-01 | - | 1.70E+01 | MW-202D (25 - 40) | 1.70E+01 | max | 1.4E+00 | n | NA | | NA | | YES | ASL | no | NSL | no | NSL |
| Manganese | 4 | - | 4 | 100 | - | - | - | 2.10E-02 | - | 4.40E-01 | MW-202D (25 - 40) | 4.40E-01 | max | 4.3E-02 | n | NA | | NA | | YES | ASL | no | NSL | no | NSL |
| Dissolved Inorganics | | | | | | | | | | | | | | | | | | | | | | | | | |
| Iron | 4 | - | 4 | 100 | - | - | - | 1.80E-01 | - | 1.60E+01 | MW-202D (25 - 40) | 1.60E+01 | max | 1.4E+00 | n | NA | | NA | | YES | ASL | no | NSL | no | NSL |
| Manganese | 4 | - | 4 | 100 | - | - | - | 1.30E-02 | - | 4.80E-01 | MW-202D (25 - 40) | 4.80E-01 | max | 4.3E-02 | n | NA | | NA | | YES | ASL | no | NSL | no | NSL |

- Not available or not applicable.
% Percent.
* Non-cancer screening values is less than 100x the cancer screening level.
** Non-cancer screening value is less than 10x the cancer screening level.
c Cancer effect.
COPC Constituent of potential concern.
FOD Frequency of detection.
mg/L Milligram per liter.
n Non-cancer based screening values.
NA Not available or not applicable.

[a] Only constituents of potential concern are presented.
[b] The exposure point concentration (EPC) was the lower concentration of either the upper confidence level on the mean (UCL) or the maximum detected concentration (max), where the UCL was incalculable. The UCLs were calculated using ProUCL version 5.1.00 (USEPA 2016a). The UCL used is the one recommended by ProUCL, unless a greater than 95% UCL was recommended, in which case the 95% UCL was selected.
[c] The direct contact screening values reflect the United States Environmental Protection Agency (USEPA) tapwater Regional Screening Levels (RSLs) (USEPA 2018a). The USEPA Vapor Intrusion Screening Levels (VISLs) are presented (USEPA 2018b). The USEPA VISLs reflect an excess lifetime cancer risk (ELCR) of 1x10-6 for constituents with cancer based endpoints and an HI of 0.1 for non-cancer endpoints.
[d] A constituent with a maximum or EPC above the screening level (ASL) was identified as a COPC. A constituent with a maximum or exposure point concentration below the screening level (BSL) was not identified as a COPC. Constituents that are not volatile or do not have inhalation toxicity values (no screening levels [NSL]) were not identified as COPCs.
[e] The screening level for cumene was used as a surrogate.

Table 11
Selection of Constituents of Potential Concern for Groundwater to a Depth of Less than or Equal to 15 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent [a] | Frequency of Detection | | | Detection Limits | | Detected Concentrations | | Location of Maximum Concentration (Depth Interval in Feet) | Exposure Point Concentration [b] (mg/L) | Screening Levels [c] | | | | | | Is Constituent a COPC? [d] | | | | | | | | | |
|-----------------------------------|------------------------|-------------------|-------|------------------|----------------|-------------------------|----------------|--|---|-------------------------|--|---|------------------------------|---|--|----------------------------|----|----------|----|-----|-----|-----|-----|-----|-----|
| | Number of Detections | Number of Samples | % FOD | Minimum (mg/L) | Maximum (mg/L) | Minimum (mg/L) | Maximum (mg/L) | | | Tapwater (mg/L) [basis] | Vapor Intrusion - Residential (mg/L) [basis] | Vapor Intrusion - Industrial (mg/L) [basis] | Tapwater (YES, no) Rationale | Vapor Intrusion - Residential (YES, no) Rationale | Vapor Intrusion - Industrial (YES, no) Rationale | | | | | | | | | | |
| Volatile Organic Compounds | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acetone | 5 | - | 33 | 15 | 2.50E-02 | - | 1.25E+02 | 1.21E-03 | - | 8.16E-03 | HPT-28 (13 - 15) | 6.04E-03 | UCL | 1.4E+00 | n | 2.25E+03 | NC | 9.45E+03 | NC | no | BSL | no | BSL | no | BSL |
| Benzene | 5 | - | 33 | 15 | 1.00E-03 | - | 5.00E+00 | 2.80E-04 | - | 2.06E-03 | MW-19S (10 - 20) | 1.06E-03 | UCL | 4.6E-04 | c** | 1.59E-03 | CA | 6.93E-03 | CA | YES | ASL | YES | ASL | no | BSL |
| 2-Butanone | 1 | - | 33 | 3 | 5.00E-03 | - | 1.25E+02 | 2.26E-03 | - | 2.26E-03 | HPT-31 (12 - 14) | 2.26E-03 | max | 5.6E-01 | n | 2.24E+02 | NC | 9.41E+02 | NC | no | BSL | no | BSL | no | BSL |
| tert-Butylbenzene | 2 | - | 33 | 6 | 1.00E-03 | - | 5.00E+00 | 4.50E-04 | - | 4.80E-04 | MW-14S (10 - 15) | 4.80E-04 | max | 6.9E-02 | n | NA | | NA | | no | BSL | no | NSL | no | NSL |
| Carbon Disulfide | 4 | - | 30 | 13 | 1.00E-03 | - | 5.00E+00 | 5.10E-04 | - | 2.80E-03 | MW-2S (10 - 15) | 2.80E-03 | max | 8.1E-02 | n | 1.24E-01 | NC | 5.21E-01 | NC | no | BSL | no | BSL | no | BSL |
| 1,1-Dichloroethane | 11 | - | 33 | 33 | 1.00E-03 | - | 5.00E+00 | 1.20E-04 | - | 2.10E+00 | HPT-24 (12 - 14) | 4.29E-01 | UCL | 2.8E-03 | c | 7.64E-03 | CA | 3.34E-02 | CA | YES | ASL | YES | ASL | YES | ASL |
| 1,1-Dichloroethene | 4 | - | 33 | 12 | 1.00E-03 | - | 5.00E+00 | 2.40E-03 | - | 1.95E+00 | HPT-24 (12 - 14) | 1.95E+00 | max | 2.8E-02 | n | 1.95E-02 | NC | 8.21E-02 | NC | YES | ASL | YES | ASL | YES | ASL |
| cis-1,2-Dichloroethene | 24 | - | 33 | 73 | 1.00E-03 | - | 1.60E-01 | 2.20E-04 | - | 1.09E+02 | HPT-33 (14 - 16) | 1.84E+01 | UCL | 3.6E-03 | n | NA | | NA | | YES | ASL | no | NSL | no | NSL |
| trans-1,2-Dichloroethene | 7 | - | 33 | 21 | 1.00E-03 | - | 5.00E+00 | 3.50E-04 | - | 1.36E-02 | HPT-25 (13 - 15) | 3.31E-03 | UCL | 3.6E-02 | n | NA | | NA | | no | BSL | no | NSL | no | NSL |
| Ethylbenzene | 3 | - | 33 | 9 | 1.00E-03 | - | 5.00E+00 | 4.10E-04 | - | 1.79E-03 | MW-19S (10 - 20) | 1.79E-03 | max | 1.5E-03 | c* | 3.49E-03 | CA | 1.52E-02 | CA | YES | ASL | no | BSL | no | BSL |
| Isopropylbenzene | 1 | - | 33 | 3 | 1.00E-03 | - | 5.00E+00 | 5.60E-04 | - | 5.60E-04 | HPT-34 (11 - 13) | 5.60E-04 | max | 4.5E-02 | n | 8.87E-02 | NC | 3.73E-01 | NC | no | BSL | no | BSL | no | BSL |
| p-Isopropyltoluene [e] | 1 | - | 33 | 3 | 1.00E-03 | - | 5.00E+00 | 4.50E-04 | - | 4.50E-04 | MW-14S (10 - 15) | 4.50E-04 | max | 4.5E-02 | n | 8.87E-02 | NC | 3.73E-01 | NC | no | BSL | no | BSL | no | BSL |
| Methylene Chloride | 1 | - | 33 | 3 | 5.00E-03 | - | 2.50E+01 | 5.80E-04 | - | 5.80E-04 | MW-19S (10 - 20) | 5.80E-04 | max | 1.1E-02 | n | 4.71E-01 | NC | 1.98E+00 | NC | no | BSL | no | BSL | no | BSL |
| Naphthalene | 5 | - | 33 | 15 | 1.00E-03 | - | 5.00E+00 | 5.30E-04 | - | 1.14E+00 | HPT-32 (9 - 11) | 2.65E-01 | UCL | 1.7E-04 | c** | 4.59E-03 | CA | 2.01E-02 | CA | YES | ASL | YES | ASL | YES | ASL |
| n-Propylbenzene | 1 | - | 33 | 3 | 1.00E-03 | - | 5.00E+00 | 2.40E-04 | - | 2.40E-04 | HPT-34 (11 - 13) | 2.40E-04 | max | 6.6E-02 | n | 2.43E-01 | NC | 1.02E+00 | NC | no | BSL | no | BSL | no | BSL |
| Toluene | 6 | - | 33 | 18 | 1.00E-03 | - | 5.00E+00 | 1.50E-04 | - | 7.30E-04 | HPT-34 (11 - 13) | 5.74E-04 | UCL | 1.1E-01 | n | 1.92E+00 | NC | 8.07E+00 | NC | no | BSL | no | BSL | no | BSL |
| Trichloroethene | 17 | - | 33 | 52 | 1.00E-03 | - | 2.00E-01 | 3.60E-04 | - | 2.61E+02 | HPT-24 (12 - 14) | 5.37E+01 | UCL | 2.8E-04 | n | 5.18E-04 | NC | 2.18E-03 | NC | YES | ASL | YES | ASL | YES | ASL |
| 1,2,4-Trimethylbenzene | 3 | - | 33 | 9 | 1.00E-03 | - | 5.00E+00 | 4.60E-04 | - | 2.88E-02 | HPT-32 (9 - 11) | 2.88E-02 | max | 5.6E-03 | n | 2.48E-02 | NC | 1.04E-01 | NC | YES | ASL | YES | ASL | no | BSL |
| 1,3,5-Trimethylbenzene | 1 | - | 33 | 3 | 1.00E-03 | - | 5.00E+00 | 4.20E-04 | - | 4.20E-04 | HPT-34 (11 - 13) | 4.20E-04 | max | 6.0E-03 | n | 1.75E-02 | NC | 7.33E-02 | NC | no | BSL | no | BSL | no | BSL |
| Vinyl Chloride | 15 | - | 33 | 46 | 1.00E-03 | - | 5.00E+00 | 3.00E-04 | - | 4.62E+00 | HPT-33 (8 - 10) | 1.02E+00 | UCL | 1.9E-05 | c | 1.47E-04 | CA | 2.45E-03 | CA | YES | ASL | YES | ASL | YES | ASL |
| m-,p-Xylene | 3 | - | 33 | 9 | 2.00E-03 | - | 1.00E+01 | 5.50E-04 | - | 2.42E-03 | MW-19S (10 - 20) | 2.42E-03 | max | 1.9E-02 | n | 3.55E-02 | NC | 1.49E-01 | NC | no | BSL | no | BSL | no | BSL |
| o-Xylene | 4 | - | 33 | 12 | 1.00E-03 | - | 5.00E+00 | 2.10E-04 | - | 2.17E-03 | MW-19S (10 - 20) | 2.17E-03 | max | 1.9E-02 | n | 4.92E-02 | NC | 2.07E-01 | NC | no | BSL | no | BSL | no | BSL |
| Total Inorganics | | | | | | | | | | | | | | | | | | | | | | | | | |
| Iron | 1 | - | 1 | 100 | - | - | - | 5.10E+00 | - | 5.10E+00 | MW-105S (13.5 - 23.5) | 5.10E+00 | max | 1.4E+00 | n | NA | | NA | | YES | ASL | no | NSL | no | NSL |
| Manganese | 1 | - | 1 | 100 | - | - | - | 2.10E-02 | - | 2.10E-02 | MW-105S (13.5 - 23.5) | 2.10E-02 | max | 4.3E-02 | n | NA | | NA | | no | BSL | no | NSL | no | NSL |
| Dissolved Inorganics | | | | | | | | | | | | | | | | | | | | | | | | | |
| Iron | 1 | - | 1 | 100 | - | - | - | 8.20E-01 | - | 8.20E-01 | MW-105S (13.5 - 23.5) | 8.20E-01 | max | 1.4E+00 | n | NA | | NA | | no | BSL | no | NSL | no | NSL |
| Manganese | 1 | - | 1 | 100 | - | - | - | 1.30E-02 | - | 1.30E-02 | MW-105S (13.5 - 23.5) | 1.30E-02 | max | 4.3E-02 | n | NA | | NA | | no | BSL | no | NSL | no | NSL |

- Not available or not applicable.
% Percent.
* Non-cancer screening values is less than 100x the cancer screening level.
** Non-cancer screening value is less than 10x the cancer screening level.
c Cancer effect.
COPC Constituent of potential concern.
FOD Frequency of detection.
mg/L Milligram per liter.
n Non-cancer based screening values.
NA Not available or not applicable.

[a] Only constituents of potential concern are presented.
[b] The exposure point concentration (EPC) was the lower concentration of either the upper confidence level on the mean (UCL) or the maximum concentration, where the UCL was incalculable. The UCLs were calculated using ProUCL version 5.1.00 (USEPA 2016a). The UCL used is the one recommended by ProUCL, unless a greater than 95% UCL was recommended, in which case the 95% UCL was selected. EPCs marked with "max" are based on the maximum detected concentration.
[c] The direct contact screening values reflect the United States Environmental Protection Agency (USEPA) tapwater Regional Screening Levels (RSLs) (USEPA 2018a). The USEPA Vapor Intrusion Screening Levels (VISLs) are presented (USEPA 2018b). The USEPA VISLs reflect an excess lifetime cancer risk (ELCR) of 1x10⁻⁶ for constituents with cancer based endpoints and an HI of 0.1 for non-cancer endpoints.
[d] A constituent with a maximum or exposure point concentration above the screening level (ASL) was identified as a COPC. A constituent with a maximum or exposure point concentration below the Standard (BSL) was not identified as a COPC. Constituents that are not volatile or do not have inhalation toxicity values (no screening levels [NSL]) were not identified as COPCs.
[e] The screening level for cumene was used as a surrogate.

Table 12
Selection of Constituents of Potential Concern for Groundwater to a Depth of Less than or Equal to 25 Feet
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent [a] | Frequency of Detection | | | Detection Limits | | Detected Concentrations | | Location of Maximum Concentration (Depth Interval in Feet) | Exposure Point Concentration [b] (mg/L) | Screening Levels [c] | | | | | | Is Constituent a COPC? [d] | | | | | | | | | |
|-----------------------------------|------------------------|-------------------|-------|------------------|----------------|-------------------------|----------------|--|---|-------------------------|--|----------|---|---------|------------------------------|---|----|--|----|-----|-----|-----|-----|-----|-----|
| | Number of Detections | Number of Samples | % FOD | Minimum (mg/L) | Maximum (mg/L) | Minimum (mg/L) | Maximum (mg/L) | | | Tapwater (mg/L) [basis] | Vapor Intrusion - Residential (mg/L) [basis] | | Vapor Intrusion - Industrial (mg/L) [basis] | | Tapwater (YES, no) Rationale | Vapor Intrusion - Residential (YES, no) Rationale | | Vapor Intrusion - Industrial (YES, no) Rationale | | | | | | | |
| Volatile Organic Compounds | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acetone | 14 | - | 90 | 16 | 2.50E-02 | - | 1.25E+02 | 1.21E-03 | - | 3.20E-02 | DPW-3SD (20 - 30 40 - 45) | 7.92E-03 | UCL | 1.4E+00 | n | 2.25E+03 | NC | 9.45E+03 | NC | no | BSL | no | BSL | no | BSL |
| Benzene | 14 | - | 90 | 16 | 1.00E-03 | - | 5.00E+00 | 1.20E-04 | - | 2.06E-03 | MW-19S (10 - 20) | 6.32E-04 | UCL | 4.6E-04 | c** | 1.59E-03 | CA | 6.93E-03 | CA | YES | ASL | YES | ASL | no | BSL |
| 2-Butanone | 3 | - | 90 | 3 | 5.00E-03 | - | 1.25E+02 | 9.40E-04 | - | 4.39E-03 | DPW-3SD (20 - 30 40 - 45) | 4.39E-03 | max | 5.6E-01 | n | 2.24E+02 | NC | 9.41E+02 | NC | no | BSL | no | BSL | no | BSL |
| tert-Butylbenzene | 4 | - | 90 | 4 | 1.00E-03 | - | 5.00E+00 | 1.60E-04 | - | 1.52E-03 | PW-1S (Assume 15-25) | 1.52E-03 | max | 6.9E-02 | n | NA | | NA | | no | BSL | no | NSL | no | NSL |
| Carbon Disulfide | 11 | - | 82 | 13 | 1.00E-03 | - | 5.00E+00 | 4.50E-04 | - | 3.50E-02 | DPW-4SD (19.5 - 29.5 29.6 - 44.5) | 1.11E-03 | UCL | 8.1E-02 | n | 1.24E-01 | NC | 5.21E-01 | NC | no | BSL | no | BSL | no | BSL |
| Chloroethane | 2 | - | 90 | 2 | 1.00E-03 | - | 5.00E+00 | 4.60E-04 | - | 2.27E-03 | PW-1S (Assume 15-25) | 2.27E-03 | max | 2.1E+00 | n | 2.30E+00 | NC | 9.65E+00 | NC | no | BSL | no | BSL | no | BSL |
| 1,1-Dichloroethane | 42 | - | 90 | 47 | 1.00E-03 | - | 5.00E+00 | 1.20E-04 | - | 2.10E+00 | HPT-24 (12 - 14) | 1.88E-01 | UCL | 2.8E-03 | c | 7.64E-03 | CA | 3.34E-02 | CA | YES | ASL | YES | ASL | YES | ASL |
| 1,1-Dichloroethene | 28 | - | 90 | 31 | 1.00E-03 | - | 5.00E+00 | 2.50E-04 | - | 1.95E+00 | HPT-24 (12 - 14) | 1.77E-01 | UCL | 2.8E-02 | n | 1.95E-02 | NC | 8.21E-02 | NC | YES | ASL | YES | ASL | YES | ASL |
| cis-1,2-Dichloroethene | 72 | - | 90 | 80 | 1.00E-03 | - | 1.60E-01 | 2.20E-04 | - | 1.09E+02 | HPT-33 (14 - 16) | 9.21E+00 | UCL | 3.6E-03 | n | NA | | NA | | YES | ASL | no | NSL | no | NSL |
| trans-1,2-Dichloroethene | 24 | - | 90 | 27 | 1.00E-03 | - | 5.00E+00 | 1.40E-04 | - | 1.42E-01 | HPT-04 (16 - 18) | 1.21E-02 | UCL | 3.6E-02 | n | NA | | NA | | YES | ASL | no | NSL | no | NSL |
| Ethylbenzene | 5 | - | 90 | 6 | 1.00E-03 | - | 5.00E+00 | 2.20E-04 | - | 1.79E-03 | MW-19S (10 - 20) | 4.68E-04 | UCL | 1.5E-03 | c* | 3.49E-03 | CA | 1.52E-02 | CA | YES | ASL | no | BSL | no | BSL |
| Isopropylbenzene | 1 | - | 90 | 1 | 1.00E-03 | - | 5.00E+00 | 5.60E-04 | - | 5.60E-04 | HPT-34 (11 - 13) | 5.60E-04 | max | 4.5E-02 | n | 8.87E-02 | NC | 3.73E-01 | NC | no | BSL | no | BSL | no | BSL |
| p-Isopropyltoluene [e] | 2 | - | 90 | 2 | 1.00E-03 | - | 5.00E+00 | 1.60E-04 | - | 4.50E-04 | MW-14S (10 - 15) | 4.50E-04 | max | 4.5E-02 | n | 8.87E-02 | NC | 3.73E-01 | NC | no | BSL | no | BSL | no | BSL |
| Methylene Chloride | 1 | - | 90 | 1 | 5.00E-03 | - | 2.50E+01 | 5.80E-04 | - | 5.80E-04 | MW-19S (10 - 20) | 5.80E-04 | max | 1.1E-02 | n | 4.71E-01 | NC | 1.98E+00 | NC | no | BSL | no | BSL | no | BSL |
| Methyl tert-butyl ether | 4 | - | 90 | 4 | 1.00E-03 | - | 5.00E+00 | 1.30E-04 | - | 1.02E-03 | HPT-28 (24 - 26) | 1.02E-03 | max | 1.4E-02 | c* | 4.50E-01 | CA | 1.97E+00 | CA | no | BSL | no | BSL | no | BSL |
| Naphthalene | 6 | - | 90 | 7 | 1.00E-03 | - | 5.00E+00 | 5.30E-04 | - | 1.14E+00 | HPT-32 (9 - 11) | 8.32E-02 | UCL | 1.7E-04 | c** | 4.59E-03 | CA | 2.01E-02 | CA | YES | ASL | YES | ASL | YES | ASL |
| n-Propylbenzene | 2 | - | 90 | 2 | 1.00E-03 | - | 5.00E+00 | 2.40E-04 | - | 2.90E-04 | HPT-28 (24 - 26) | 2.40E-04 | max | 6.6E-02 | n | 2.43E-01 | NC | 1.02E+00 | NC | no | BSL | no | BSL | no | BSL |
| Toluene | 16 | - | 90 | 18 | 1.00E-03 | - | 5.00E+00 | 1.50E-04 | - | 3.33E-02 | DPW-5SD (19 - 24 31 - 41) | 3.23E-03 | UCL | 1.1E-01 | n | 1.92E+00 | NC | 8.07E+00 | NC | no | BSL | no | BSL | no | BSL |
| 1,1,1-Trichloroethane | 2 | - | 90 | 2 | 1.00E-03 | - | 5.00E+00 | 4.91E-02 | - | 6.12E-02 | DPW-5SD (19 - 24 31 - 41) | 6.12E-02 | max | 8.0E-01 | n | 7.42E-01 | NC | 3.11E+00 | NC | no | BSL | no | BSL | no | BSL |
| Trichloroethene | 65 | - | 90 | 72 | 1.00E-03 | - | 2.00E-01 | 2.30E-04 | - | 2.61E+02 | HPT-24 (12 - 14) | 2.15E+01 | UCL | 2.8E-04 | n | 5.18E-04 | NC | 2.18E-03 | NC | YES | ASL | YES | ASL | YES | ASL |
| 1,2,4-Trimethylbenzene | 5 | - | 90 | 6 | 1.00E-03 | - | 5.00E+00 | 1.10E-04 | - | 2.88E-02 | HPT-32 (9 - 11) | 2.02E-03 | UCL | 5.6E-03 | n | 2.48E-02 | NC | 1.04E-01 | NC | YES | ASL | YES | ASL | no | BSL |
| 1,3,5-Trimethylbenzene | 1 | - | 90 | 1 | 1.00E-03 | - | 5.00E+00 | 4.20E-04 | - | 4.20E-04 | HPT-34 (11 - 13) | 4.20E-04 | max | 6.0E-03 | n | 1.75E-02 | NC | 7.33E-02 | NC | no | BSL | no | BSL | no | BSL |
| Vinyl Chloride | 59 | - | 90 | 66 | 1.00E-03 | - | 5.00E+00 | 2.50E-04 | - | 4.62E+00 | HPT-33 (8 - 10) | 5.93E-01 | UCL | 1.9E-05 | c | 1.47E-04 | CA | 2.45E-03 | CA | YES | ASL | YES | ASL | YES | ASL |
| m-,p-Xylene | 8 | - | 90 | 9 | 2.00E-03 | - | 1.00E+01 | 1.30E-04 | - | 2.42E-03 | MW-19S (10 - 20) | 6.12E-04 | UCL | 1.9E-02 | n | 3.55E-02 | NC | 1.49E-01 | NC | no | BSL | no | BSL | no | BSL |
| o-Xylene | 6 | - | 90 | 7 | 1.00E-03 | - | 5.00E+00 | 1.10E-04 | - | 2.17E-03 | MW-19S (10 - 20) | 7.27E-04 | UCL | 1.9E-02 | n | 4.92E-02 | NC | 2.07E-01 | NC | no | BSL | no | BSL | no | BSL |
| Total Inorganics | | | | | | | | | | | | | | | | | | | | | | | | | |
| Iron | 1 | - | 1 | 100 | - | - | - | 5.10E+00 | - | 5.10E+00 | MW-105S (13.5 - 23.5) | 5.10E+00 | max | 1.4E+00 | n | NA | | NA | | YES | ASL | no | NSL | no | NSL |
| Manganese | 1 | - | 1 | 100 | - | - | - | 2.10E-02 | - | 2.10E-02 | MW-105S (13.5 - 23.5) | 2.10E-02 | max | 4.3E-02 | n | NA | | NA | | no | BSL | no | NSL | no | NSL |
| Dissolved Inorganics | | | | | | | | | | | | | | | | | | | | | | | | | |
| Iron | 1 | - | 1 | 100 | - | - | - | 8.20E-01 | - | 8.20E-01 | MW-105S (13.5 - 23.5) | 8.20E-01 | max | 1.4E+00 | n | NA | | NA | | no | BSL | no | NSL | no | NSL |
| Manganese | 1 | - | 1 | 100 | - | - | - | 1.30E-02 | - | 1.30E-02 | MW-105S (13.5 - 23.5) | 1.30E-02 | max | 4.3E-02 | n | NA | | NA | | no | BSL | no | NSL | no | NSL |

- Not available or not applicable.
% Percent.
* Non-cancer screening values is less than 100x the cancer screening level.
** Non-cancer screening values is less than 10x the cancer screening level.
c Cancer effect.

COPC Constituent of potential concern.
FOD Frequency of detection.
mg/L Milligram per liter.
n Non-cancer based screening values.
NA Not available or not applicable.

[a] Only constituents of potential concern are presented.
[b] The exposure point concentration (EPC) was the lower concentration of either the upper confidence level on the mean (UCL) or the maximum concentration, where the UCL was incalculable. The UCLs were calculated using ProUCL version 5.1.00 (USEPA 2016a). The UCL used is the one recommended by ProUCL, unless a greater than 95% UCL was recommended, in which case the 95% UCL was selected. EPCs marked with "max" are based on the maximum detected concentration.
[c] The direct contact screening values reflect the United States Environmental Protection Agency (USEPA) tapwater Regional Screening Levels (RSLs) (USEPA 2018a). The USEPA Vapor Intrusion Screening Levels (VISLs) are presented (USEPA 2018b). The USEPA VISLs reflect an excess lifetime cancer risk (ELCR) of 1x10⁻⁶ for constituents with cancer based endpoints and an HI of 0.1 for non-cancer endpoints.
[d] A constituent with a maximum or exposure point concentration above the Standard (ASL) was identified as a COPC. A constituent with a maximum or exposure point concentration below the Standard (BSL) was not identified as a COPC. Constituents that are not volatile or do not have inhalation toxicity values (no screening levels [NSL]) were not identified as COPCs.
[e] The screening level for cumene was used as a surrogate.

Table 13
 Summary of Constituents of Potential Concern and Exposure Point Concentrations
 Human Health Risk Assessment
 AVX Corporation
 Myrtle Beach, South Carolina

| Constituent [a] | Constituent of Potential Concern (COPC)? | | | | | | | | | | Exposure Point Concentration [b] | | | | | | | | | | | |
|-----------------------------------|--|-------------------------|-------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|----------------------------------|------------------------|------------------|------------------------|------------------|-----------------------|------------------------|-----------------------|------------------------|-----------------------|------------------------|---|
| | Surface Soil (0-2 ft) | Soil (0-10 ft) | | | All Groundwater | | Groundwater (<15 Feet) | | Groundwater (<25 Feet) | | Surface Soil (0-2 ft) | | Soil (0-10 ft) | | All Groundwater | | Groundwater (<15 Feet) | | Groundwater (<25 Feet) | | | |
| | Direct Contact (YES/no) | Direct Contact (YES/no) | Leaching (YES/no) | Direct Contact (YES/no) | Vapor Intrusion (YES/no) | Direct Contact (YES/no) | Vapor Intrusion (YES/no) | Direct Contact (YES/no) | Vapor Intrusion (YES/no) | Direct Contact (YES/no) | Vapor Intrusion (YES/no) | Direct Contact (mg/kg) | Leaching (mg/kg) | Direct Contact (mg/kg) | Leaching (mg/kg) | Direct Contact (mg/L) | Vapor Intrusion (mg/L) | Direct Contact (mg/L) | Vapor Intrusion (mg/L) | Direct Contact (mg/L) | Vapor Intrusion (mg/L) | |
| Volatile Organic Compounds | | | | | | | | | | | | | | | | | | | | | | |
| Acetone | no | no | YES | no | no | no | no | no | no | no | - | 2.61E-02 UCL | - | 2.49E-02 UCL | - | - | - | - | - | - | - | - |
| Benzene | no | no | YES | YES | YES | YES | YES | YES | YES | YES | - | 2.46E-03 UCL | - | 2.98E-03 UCL | 5.03E-04 UCL | 5.03E-04 UCL | 1.06E-03 UCL | 1.06E-03 UCL | 6.32E-04 UCL | 6.32E-04 UCL | 6.32E-04 UCL | |
| 2-Butanone | no | no | YES | no | no | no | no | no | no | no | - | 1.74E-02 UCL | - | 1.93E-02 UCL | - | - | - | - | - | - | - | - |
| n-Butylbenzene | no | no | YES | no | no | no | no | no | no | no | - | - | - | 1.23E+00 max | - | - | - | - | - | - | - | - |
| sec-Butylbenzene | no | no | YES | no | no | no | no | no | no | no | - | - | - | 2.83E-02 UCL | - | - | - | - | - | - | - | - |
| Carbon Tetrachloride | no | no | YES | no | no | no | no | no | no | no | - | 8.41E-03 max | - | 2.93E-03 UCL | - | - | - | - | - | - | - | - |
| 1,1-Dichloroethane | no | YES | YES | YES | YES | YES | YES | YES | YES | YES | - | 4.49E-03 UCL | 4.53E-01 UCL | 4.53E-01 UCL | 1.20E-01 UCL | 1.20E-01 UCL | 4.29E-01 UCL | 4.29E-01 UCL | 1.88E-01 UCL | 1.88E-01 UCL | 1.88E-01 UCL | |
| 1,1-Dichloroethene | no | YES | YES | YES | YES | YES | YES | YES | YES | YES | - | 4.32E-02 UCL | 3.42E+00 UCL | 3.42E+00 UCL | 1.16E-01 UCL | 1.16E-01 UCL | 1.95E+00 max | 1.95E+00 max | 1.77E-01 UCL | 1.77E-01 UCL | 1.77E-01 UCL | |
| cis-1,2-Dichloroethene | YES | YES | YES | YES | no | YES | no | YES | no | no | 1.49E-02 UCL | 1.49E-02 UCL | 1.25E+01 UCL | 1.25E+01 UCL | 8.71E+01 UCL | - | 1.84E+01 UCL | - | 9.21E+00 UCL | - | - | |
| trans-1,2-Dichloroethene | no | no | YES | YES | no | no | no | YES | no | no | - | 1.23E+00 max | - | 1.89E-02 UCL | - | - | - | - | - | 1.21E-02 UCL | - | - |
| Ethylbenzene | no | YES | YES | YES | no | YES | no | YES | no | no | - | 1.25E-01 UCL | 1.10E-02 UCL | 1.10E-02 UCL | 4.43E-04 UCL | - | 1.79E-03 max | - | 4.68E-04 UCL | - | - | |
| Hexachlorobutadiene | no | no | no | YES | YES | no | no | no | no | no | - | - | - | - | 7.70E-04 max | 7.70E-04 max | - | - | - | - | - | - |
| Isopropylbenzene | no | no | YES | no | no | no | no | no | no | no | - | 8.60E-03 UCL | - | 5.04E-03 UCL | - | - | - | - | - | - | - | - |
| p-Isopropyltoluene | no | no | YES | no | no | no | no | no | no | no | - | 4.56E-02 UCL | - | 7.49E-03 UCL | - | - | - | - | - | - | - | - |
| 4-Methyl-2-pentanone | no | no | YES | no | no | no | no | no | no | no | - | 2.90E+00 max | - | 2.90E+00 max | - | - | - | - | - | - | - | - |
| Methyl Acetate | no | no | YES | no | no | no | no | no | no | no | - | 6.10E-01 max | - | 6.10E-01 max | - | - | - | - | - | - | - | - |
| Methylene Chloride | no | no | YES | no | no | no | no | no | no | no | - | 4.19E-02 UCL | - | 3.54E-02 UCL | - | - | - | - | - | - | - | - |
| Naphthalene | no | no | YES | YES | YES | YES | YES | YES | YES | YES | - | 8.62E-03 UCL | - | 6.02E-03 UCL | 4.87E-02 UCL | 4.87E-02 UCL | 2.65E-01 UCL | 2.65E-01 UCL | 8.32E-02 UCL | 8.32E-02 UCL | 8.32E-02 UCL | |
| n-Propylbenzene | no | no | YES | no | no | no | no | no | no | no | - | 8.03E-03 UCL | - | 6.51E-03 UCL | - | - | - | - | - | - | - | - |
| Tetrachloroethene | YES | YES | YES | no | no | no | no | no | no | no | 2.14E-03 UCL | 2.14E-03 UCL | 4.47E-01 UCL | 4.47E-01 UCL | - | - | - | - | - | - | - | - |
| Toluene | no | no | YES | no | no | no | no | no | no | no | - | 1.82E-01 UCL | - | 4.33E+00 UCL | - | - | - | - | - | - | - | - |
| 1,1,1-Trichloroethane | no | YES | YES | no | no | no | no | no | no | no | - | 9.62E-03 UCL | 3.64E+01 UCL | 3.64E+01 UCL | - | - | - | - | - | - | - | - |
| Trichloroethene | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | 1.27E+02 UCL | 1.27E+02 UCL | 2.04E+02 UCL | 2.04E+02 UCL | 1.42E+01 UCL | 1.42E+01 UCL | 5.37E+01 UCL | 5.37E+01 UCL | 2.15E+01 UCL | 2.15E+01 UCL | 2.15E+01 UCL | |
| Trichlorofluoromethane | no | no | YES | no | no | no | no | no | no | no | - | 2.16E-03 UCL | - | 2.00E-03 UCL | - | - | - | - | - | - | - | - |
| 1,2,4-Trimethylbenzene | no | no | YES | YES | YES | YES | YES | YES | YES | YES | - | 1.53E-02 UCL | - | 6.96E-03 UCL | 5.22E-04 UCL | 5.22E-04 UCL | 2.88E-02 max | 2.88E-02 max | 2.02E-03 UCL | 2.02E-03 UCL | 2.02E-03 UCL | |
| 1,3,5-Trimethylbenzene | no | no | YES | no | no | no | no | no | no | no | - | 3.05E-02 UCL | - | 1.18E-01 UCL | - | - | - | - | - | - | - | - |
| Vinyl Chloride | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | 7.82E-03 UCL | 7.82E-03 UCL | 1.75E-02 UCL | 1.75E-02 UCL | 1.06E+00 UCL | 1.06E+00 UCL | 1.02E+00 UCL | 1.02E+00 UCL | 5.93E-01 UCL | 5.93E-01 UCL | 5.93E-01 UCL | |
| m-,p-Xylene | no | no | YES | no | no | no | no | no | no | no | - | 6.78E-01 UCL | - | 3.19E-02 UCL | - | - | - | - | - | - | - | - |
| o-Xylene | no | no | YES | no | no | no | no | no | no | no | - | 3.05E-02 UCL | - | 2.10E-01 UCL | - | - | - | - | - | - | - | - |
| Xylenes (total) | no | no | YES | no | no | no | no | no | no | no | - | - | - | 1.68E-02 UCL | - | - | - | - | - | - | - | - |
| Total Inorganics | | | | | | | | | | | | | | | | | | | | | | |
| Iron | no | no | no | YES | no | YES | no | YES | no | no | - | - | - | - | 1.70E+01 max | - | 5.10E+00 max | - | 5.10E+00 max | - | - | - |
| Manganese | no | no | no | YES | no | no | no | no | no | no | - | - | - | - | 4.40E-01 max | - | - | - | - | - | - | - |
| Dissolved Inorganics | | | | | | | | | | | | | | | | | | | | | | |
| Iron | no | no | no | YES | no | no | no | no | no | no | - | - | - | - | 1.60E+01 max | - | - | - | - | - | - | - |
| Manganese | no | no | no | YES | no | no | no | no | no | no | - | - | - | - | 4.80E-01 max | - | - | - | - | - | - | - |

- Not a constituent of potential concern in this medium.
 avg The EPC for lead is the arithmetic average.
 ft Feet.
 max Maximum.
 mg/kg Milligram per kilogram.
 mg/L Milligram per liter.
 UCL Upper confidence level.

[a] Only detected constituents of potential concern are presented.

[b] The exposure point concentration was the lower concentration of either the 95 percent (%) upper confidence level (UCL) or the maximum concentration (max), where the UCL was incalculable.

The UCLs were calculated using ProUCL version 5.1.00 (USEPA 2016a). The UCL used is the one recommended by ProUCL, unless a greater than 95% UCL was recommended, in which case the 95% UCL was selected.

Table 14
Receptor Exposure Parameters
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Parameter | Symbol | Units | Resident | | | | | | | | | | | | | Site Worker | | Construction Worker | | |
|---|--------|-------------------------|--|---------|-----------|---------|------------|---------|-------------|---------|--------|--|--------|---------------|---------|--|-------------|---------------------|--------|---------|
| | | | For Constituents with a Mutagenic Mode of Action | | | | | | | | | For Constituents with a Non-Mutagenic Mode of Action | | | | Age-Averaged 0 to 26 years Value [ref] | Value [ref] | Value [ref] | [ref] | |
| | | | Child / Youth | | | | | | Adult | | | Child | | Adult | | | | | | |
| | | | 0-2 Years | | 2-6 Years | | 6-16 Years | | 16-26 Years | | | 0 to 6 years | | 6 to 26 years | | | | | | |
| Value | [ref] | Value | [ref] | Value | [ref] | Value | [ref] | Value | [ref] | Value | [ref] | Value | [ref] | | | | | | | |
| <u>General Factors</u> | | | | | | | | | | | | | | | | | | | | |
| Averaging Time (cancer) | ATc | days | 25,550 | [1,2,a] | 25,550 | [1,2,a] | 25,550 | [1,2,a] | 25,550 | [1,2,a] | 25,550 | [1,2,a] | 25,550 | [1,2,a] | 25,550 | [1,2,a] | 25,550 | [1,2,a] | 25,550 | [1,2,a] |
| Averaging Time (non-cancer) | ATnc | days | 730 | [1,2,a] | 1,460 | [1,2,a] | 3,650 | [1,2,a] | 3,650 | [1,2,a] | 2,190 | [1,2,a] | 7,300 | [1,2,a] | – | [1,2,a] | 9,125 | [1,2,a] | 365 | [1,2,a] |
| Body Weight | BW | kg | 15 | [1,2] | 15 | [1,2] | 80 | [1,2] | 80 | [1,2] | 15 | [1,2] | 80 | [1,2] | – | | 80 | [1,2] | 80 | [1,2] |
| Exposure Frequency | EF | days/year | 350 | [1,2] | 350 | [1,2] | 350 | [1,2] | 350 | [1,2] | 350 | [1,2] | 350 | [1,2] | 350 | [1,2] | 250 | [2,4] | 100 | PJ [b] |
| Exposure Duration | ED | years | 2 | [5] | 4 | [5] | 10 | [5] | 10 | [5] | 6 | [1,2] | 20 | [1,2] | 26 | | 25 | [1,2] | 1 | [4] |
| Age-Dependent Adjustment Factor | ADAF | unitless | 10 | [5] | 3 | [5] | 3 | [5] | 1 | [5] | – | | – | | – | | – | | – | |
| <u>Subchronic Exposure</u> | | | | | | | | | | | | | | | | | | | | |
| Exposure Frequency - subchronic | EFsc | days/week | – | | – | | – | | – | | – | | – | | – | | – | | 5 | PJ [b] |
| Exposure Duration - subchronic | EDsc | weeks | – | | – | | – | | – | | – | | – | | – | | – | | 20 | PJ [b] |
| <u>Inhalation</u> | | | | | | | | | | | | | | | | | | | | |
| Mutagenic Age-Adjusted Intake Factor, Soil Inhalation | IFMsi | years | – | | – | | – | | – | | – | | – | | 72 | [7] | – | | – | |
| Exposure Time | ET | hour/day | 24 | [2] | 24 | [2] | 24 | [2] | 24 | [2] | 24 | [2] | 24 | [2] | 24 | PJ | 8 | [2] | 8 | [2] |
| Conversion Factor | CF | day/hour | 0.042 | | 0.042 | | 0.042 | | 0.042 | | 0.042 | | 0.042 | | 0.042 | | 0.042 | | 0.042 | |
| <u>Soil - Ingestion (Oral)</u> | | | | | | | | | | | | | | | | | | | | |
| Age-Adjusted Intake Factor, Soil Oral | IFso | mg-yr/kg/day | – | | – | | – | | – | | – | | – | | 36,750 | [7] | – | | – | |
| Mutagenic Age-Adjusted Intake Factor, Soil Oral | IFMso | mg-yr/kg/day | – | | – | | – | | – | | – | | – | | 166,833 | [7] | – | | – | |
| Incidental Soil Ingestion Rate | IRs | mg/day | 200 | [2,3] | 200 | [2,3] | 100 | [2,3] | 100 | [2,3] | 200 | [2,3] | 100 | [2,3] | – | | 100 | [2,4] | 330 | [4] |
| Fraction Ingested from Source | FI | unitless | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | |
| <u>Soil - Dermal Contact</u> | | | | | | | | | | | | | | | | | | | | |
| Age-Adjusted Intake Factor, Soil Dermal | IFsd | mg-yr/kg/day | – | | – | | – | | – | | – | | – | | 103,390 | [7] | – | | – | |
| Mutagenic Age-Adjusted Intake Factor, Soil Dermal | IFMsd | mg-yr/kg/day | – | | – | | – | | – | | – | | – | | 428,260 | [7] | – | | – | |
| Exposed Skin Surface Area | SSAs | cm ² | 2,373 | [2] | 2,373 | [2] | 6,032 | [2] | 6,032 | [2] | 2,373 | [2] | 6,032 | [2] | – | | 3,527 | [2] | 3,527 | [2] |
| Soil-to-Skin Adherence Rate | SAR | mg/cm ² /day | 0.2 | [2,4] | 0.2 | [2,4] | 0.07 | [2,4] | 0.07 | [2,4] | 0.2 | [2,4] | 0.07 | [2,4] | – | | 0.12 | [2,6] | 0.3 | [6,c] |

References [ref]:

| | | |
|-----------------|-----------------|-----------------|
| [1] USEPA 1989 | [4] USEPA 2002b | [7] USEPA 2018a |
| [2] USEPA 2014 | [5] USEPA 2005b | |
| [3] USEPA 2011a | [6] USEPA 2004 | |

- [a] The averaging time for cancer risk is the expected lifespan of 70 years, expressed in days.
The averaging time for non-cancer hazard is the total exposure duration (ED), expressed in days.
- [b] The construction worker is assumed to work 5 days a week for 26 weeks during one year.
- [c] The soil-to-skin adherence factor for the construction worker is based on the 95th weighted percentile adherence factor for construction workers (USEPA 2004).

| | | | |
|-------------------------|--|--------|--|
| – | Not applicable. | mg/day | Milligram per day. |
| cm ² | Square centimeter. | PJ | Professional judgment. |
| kg | Kilogram. | USEPA | United States Environmental Protection Agency. |
| mg/cm ² /day | Milligram per square centimeter per day. | | |

Table 15
Risk and Hazard Equations for Site Worker Exposure to Soil
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

ROUTE-SPECIFIC RISK/HAZARD:

Oral: $ELCR_o$ or HQ_o = $\frac{EPCs \times FI \times IRs \times EF \times ED \times RBF \times ADAF}{(10^6 \text{ mg/kg}) \times BW \times (AT_C \text{ or } AT_{NC}) \times ([1/CSF_o] \text{ or } RfD_o)}$

Dermal: $ELCR_d$ or HQ_d = $\frac{EPCs \times SSAs \times SAR \times ABSd \times EF \times ED \times ADAF}{(10^6 \text{ mg/kg}) \times BW \times (AT_C \text{ or } AT_{NC}) \times ([1/CSF_d] \text{ or } RfD_d)}$

Inhalation: $ELCR_i$ or HQ_i = $\frac{EPCs \times ET \times CF \times EF \times ED \times ADAF}{(VF-sl) \times (AT_C \text{ or } AT_{NC}) \times ([1/IUR \times 10^{-3} \text{ mg/}\mu\text{g}] \text{ or } RfC)}$

$VF-sl = \frac{Q/C_{vol} \times [3.14 \times D_A \times T]^{1/2}}{2 \times \rho_b \times D_A \times (10,000 \text{ cm}^2/\text{m}^2)}$ used for volatiles

$D_A = \frac{[(\theta_{as}^{10/3} \times D_{air} \times Ho) + (\theta_{ws}^{10/3} \times D_{wat})]}{(\rho_b \times Koc \times Foc) + \theta_{ws} + (\theta_{as} \times Ho)}$

$EPC_s = \text{MINIMUM} [EPCs, C_{sat}]$ OR = $EPCs$ when C_{sat} is not relevant

$C_{sat} = \frac{S}{\rho_b} \times [(Koc \times Foc \times \rho_b) + \theta_{ws} + (Ho \times \theta_{as})]$ C_{sat} is relevant only for organic constituents with melting point below 30°C.

TOTAL CANCER RISK: $ELCR = ELCR_o + ELCR_d + ELCR_i$

TOTAL NON-CANCER HAZARD: $HI = HQ_o + HQ_d + HQ_i$

Variable Definitions:

| | |
|---------------|---|
| θ_{as} | Air-filled porosity of the soil (unitless) (Table 20). |
| θ_T | Total soil porosity (unitless) (Table 20). |
| θ_{ws} | Water-filled porosity of the soil (unitless) (Table 20). |
| ρ_b | Dry soil bulk density (g/cm ³) (Table 20). |
| ABSd | Dermal absorption efficiency (unitless). |
| AT_C | Averaging time for cancer effects (days) (Table 14). |
| AT_{NC} | Averaging time for non-cancer effects (days) (Table 14). |
| BW | Body weight (kg) (Table 14). |
| CF | Conversion factor 0.042 day/hour. |
| C_{sat} | Constituent saturation limit in soil (mg/kg) (Table 20). |
| CSF | Cancer slope factor for oral (CSFo) or dermal (adjusted to an absorbed dose, CSFa) exposure (kg-day/mg [inverse mg/kg/day]) (Table 23). |
| D_A | Apparent diffusivity in soil (cm ² /sec) (Table 20). |
| D_{air} | Constituent diffusivity in air (cm ² /sec) (Table 20). |
| D_{wat} | Constituent diffusivity in water (cm ² /sec) (Table 20). |
| ED | Exposure duration (years) (Table 14). |
| EF | Exposure frequency (days/year) (Table 14). |
| ELCR | Excess lifetime cancer risk (unitless) from the following pathways: oral (o), dermal (d), and inhalation (i). |
| EPCs | Exposure point concentration in soil (mg/kg). |
| ET | Exposure time (hrs/day) (Table 14). |
| FI | Fraction ingested from area of concern (unitless) (Table 14). |
| Foc | Fraction organic carbon in the soil (unitless) (Table 20). |
| HI | Hazard index for non-cancer effects (unitless); sum of the HQs. |
| Ho | Dimensionless Henry's law constant (unitless); calculated as $Ho = H / RT$ (Table 20). |
| HQ | Hazard quotient for non-cancer effects (unitless) from the following pathways: oral (o), dermal (d), and inhalation (i). |
| IRs | Ingestion rate of soil (mg/day) (Table 14). |
| IUR | Inhalation unit risk (m ³ /mg) (Table 24). |
| Koc | Organic carbon partition coefficient (cm ³ /g = mL/g = L/kg) (Table 20). |
| Q/C_{vol} | Volatile emission flux per unit concentration [(g/m ² /sec)/(kg/m ³)] (Table 20). |
| RfC | Reference concentration (mg/m ³) (Table 22). |
| RfD | Reference dose for oral (RfDo) and dermal (adjusted to an absorbed dose, RfDa), exposure (mg/kg/day) (Table 21). |
| S | Constituent solubility limit in water (mg/L). |
| SAR | Soil-to-skin adherence rate (mg/cm ² /day) (Table 14). |
| SSAs | Exposed skin surface area for soil contact (cm ²) (Table 14). |
| T | Exposure interval (sec) (Table 20). |
| VF-sl | Soil volatilization factor (m ³ /kg) (Table 20). |

| | | | |
|-----------------|--------------------|----------------|---------------|
| cm ² | Square centimeter. | m ² | Square meter. |
| g | Gram. | m ³ | Cubic meter. |
| hr | Hour. | mg | Milligram. |
| kg | Kilogram. | µg | Microgram. |
| m | Meter. | sec | Second. |

Table 16
Risk and Hazard Equations for Construction Worker Exposure to Soil
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

ROUTE-SPECIFIC RISK/HAZARD:

Oral: $ELCR_o$ or HQ_o =
$$\frac{EPCs \times FI \times IRs \times EF \times ED \times RBF}{(10^6 \text{ mg/kg}) \times BW \times (AT_C \text{ or } AT_{NC}) \times ([1/CSF_o] \text{ or } RfD_o)}$$

Dermal: $ELCR_d$ or HQ_d =
$$\frac{EPCs \times SSAs \times SAR \times ABSd \times EF \times ED}{(10^6 \text{ mg/kg}) \times BW \times (AT_C \text{ or } AT_{NC}) \times ([1/CSF_d] \text{ or } RfD_d)}$$

Inhalation: $ELCR_i$ or HQ_i =
$$\frac{EPCs \times ET \times CF \times EF \times ED}{(VF-SI_{cons}) \times (AT_C \text{ or } AT_{NC}) \times ([1/IUR \times 10^{-3} \text{ mg/}\mu\text{g}] \text{ or } RfC)}$$

$VF-SI_{cons} = \frac{Q/C_{sa} \times (1/F_D) \times [3.14 \times D_A \times T]^{1/2}}{2 \times \rho_b \times D_A \times (10,000 \text{ cm}^2/\text{m}^2)}$ used for volatiles

$D_A = \frac{[(\theta_{as}^{10/3} \times D_{air} \times Ho) + (\theta_{ws}^{10/3} \times D_{wat})] / \theta_T^2}{(\rho_b \times Koc \times Foc) + \theta_{ws} + (\theta_{as} \times Ho)}$

$EPC_s = \text{MINIMUM} [EPCs, C_{sat}]$ OR = EPCs when C_{sat} is not relevant

$C_{sat} = \frac{S}{\rho_b} \times [(Koc \times Foc \times \rho_b) + \theta_{ws} + (Ho \times \theta_{as})]$

C_{sat} is relevant only for organic constituents with melting point below 30°C.

TOTAL CANCER RISK: $ELCR = ELCR_o + ELCR_d + ELCR_i$

TOTAL NON-CANCER HAZARD: $HI = HQ_o + HQ_d + HQ_i$

Variable Definitions:

| | |
|-------------------|---|
| θ_{as} | Air-filled porosity of the soil (unitless) (Table 20). |
| θ_T | Total soil porosity (unitless) (Table 20). |
| θ_{ws} | Water-filled porosity of the soil (unitless) (Table 20). |
| ρ_b | Dry soil bulk density (g/cm ³) (Table 20). |
| ABSd | Dermal absorption efficiency (unitless). |
| AT _C | Averaging time for cancer effects (days) (Table 14). |
| AT _{NC} | Averaging time for non-cancer effects (days) (Table 14). |
| BW | Body weight (kg) (Table 14). |
| CF | Conversion factor 0.042 day/hour. |
| C _{sat} | Constituent saturation limit in soil (mg/kg) (Table 20). |
| CSF | Cancer slope factor for oral (CSFo) or dermal (adjusted to an absorbed dose, CSFa) exposure (kg-day/mg [inverse mg/kg/day]) (Table 23). |
| D _A | Apparent diffusivity in soil (cm ² /sec) (Table 20). |
| D _{air} | Constituent diffusivity in air (cm ² /sec) (Table 20). |
| D _{wat} | Constituent diffusivity in water (cm ² /sec) (Table 20). |
| ED | Exposure duration (years) (Table 14). |
| EF | Exposure frequency (days/year) (Table 14). |
| ELCR | Excess lifetime cancer risk (unitless) from the following pathways: oral (o), dermal (d), and inhalation (i). |
| EPCs | Exposure point concentration in soil (mg/kg) (Table 13). |
| ET | Exposure time (hrs/day) (Table 14). |
| F _D | Dispersion correction factor (unitless). |
| FI | Fraction ingested from area of concern (unitless) (Table 14). |
| Foc | Fraction organic carbon in the soil (unitless) (Table 20). |
| HI | Hazard index for non-cancer effects (unitless); sum of the HQs. |
| Ho | Dimensionless Henry's law constant (unitless); calculated as Ho = H / RT (Table 20). |
| HQ | Hazard quotient for non-cancer effects (unitless) from the following pathways: oral (o), dermal (d), and inhalation (i). |
| IRs | Ingestion rate of soil (mg/day) (Table 14). |
| IUR | Inhalation unit risk (m ³ /μg) (Table 24). |
| Koc | Organic carbon partition coefficient (cm ³ /g = mL/g = L/kg) (Table 20). |
| Q/C _{sa} | Volatile emission flux per unit concentration [(g/m ² /sec)/(kg/m ³)]. |
| RBF | Relative bioavailability factor; constituent specific; default of 100% (i.e., 1) unless otherwise indicated (unitless). |
| RfC | Reference concentration (mg/m ³) (Table 22). |

Table 16
Risk and Hazard Equations for Construction Worker Exposure to Soil
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| | |
|-----------------------|--|
| RfD | Reference dose for oral (RfDo) and dermal (adjusted to an absorbed dose, RfDa), exposure (mg/kg/day) (Table 21). |
| S | Constituent solubility limit in water (mg/L). |
| SAR | Soil-to-skin adherence rate (mg/cm ² /day) (Table 14). |
| SSAs | Exposed skin surface area for soil contact (cm ²) (Table 14). |
| T | Exposure interval (sec). |
| VF-sl _{cons} | Soil volatilization factor (m ³ /kg) during construction activities (Table 20). |

| | | | |
|-----------------|--------------------|----------------|---------------|
| cm ² | Square centimeter. | m ² | Square meter. |
| g | Gram. | m ³ | Cubic meter. |
| hr | Hour. | mg | Milligram. |
| kg | Kilogram. | µg | Microgram. |
| m | Meter. | sec | Second. |

Table 17
Risk and Hazard Equations for Construction Worker Exposure to Groundwater
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

ROUTE-SPECIFIC RISK/HAZARD:

Inhalation:
$$\text{ELCR}_i \text{ or } \text{HQ}_i = \frac{\text{VF-gw}_{\text{trench}} \times \text{EPCgw} \times \text{ETgw} \times \text{CF} \times \text{EF} \times \text{ED}}{(\text{AT}_C \text{ or } \text{AT}_{\text{NC}}) \times ([1/\text{IUR} \times 10^{-3} \text{ mg}/\mu\text{g}] \text{ or } \text{RfC})}$$

where:
$$\text{VF-gw}_{\text{trench}} = \frac{H \times D_{\text{air}} \times \theta_{\text{as}}^{3.33} \times A \times F \times 10^{-3} \times 10^4 \times 3600}{\text{RT} \times L_d \times \text{ACH} \times V \times \theta_T^2} \quad (\text{VDEQ 2018})$$

groundwater
 does not intersect
 trench bottom

$$L_d = L_{\text{gw}} - D_{\text{trench}}$$

Variable Definitions:

| | |
|-------------------------|---|
| θ_{as} | Air-filled porosity of the soil (unitless) (Table 20). |
| θ_T | Total soil porosity (unitless) (Table 20). |
| A | Area of trench (length x width) (m ²) (Table 19). |
| ACH | Air changes per hour (h-1) (Table 19). |
| AT _C | Averaging time for cancer effects (days) (Table 14). |
| AT _{NC} | Averaging time for non-cancer effects (days) (Table 14). |
| CF | Conversion factor 0.042 day/hour. |
| D _{air} | Constituent diffusivity in air (cm ² /sec) (Table 20). |
| D _{trench} | Depth to trench (cm) (Table 19). |
| ED | Exposure duration (years) (Table 14). |
| EF | Exposure frequency (days/year) (Table 14). |
| ELCR | Excess lifetime cancer risk (unitless) from the following pathways: oral (o), dermal (d), and inhalation (i). |
| EPCgw | Exposure point concentration in groundwater (mg/L) (Table 13). |
| ETgw | Exposure time for groundwater contact (hours/day) (Table 14). |
| F | Fraction of trench floor through which contaminant can enter (unitless) (Table 19). |
| H | Henry's law constant (atm-m ³ /mol) (Table 19). |
| HI | Hazard index for non-cancer effects (unitless); sum of the HQs. |
| HQ | Hazard quotient for non-cancer effects (unitless) from the following pathways: oral (o), dermal (d), and inhalation (i). |
| IUR | Inhalation unit risk (m ³ /μg) (Table 24). |
| L _d | Distance between trench bottom and groundwater (cm) (Table 19). |
| L _{gw} | Depth to groundwater (cm) (Table 19). |
| RfC | Reference concentration (mg/m ³) (Table 22). |
| RT | Product of the universal gas constant (R = 8.206 × 10 ⁻⁵ atm-m ³ /mol/K) and the relevant Kelvin temperature (T = 298.15 K); RT = 0.02447 atm-m ³ /mol (Table 19). |
| V | Volume of trench (m ³) (Table 19). |
| VF-gw _{trench} | Volatilization factor in a trench (L/m ³) (VDEQ 2018) (Table 19). |

| | | | |
|-------------------------|--------------------------------------|----------------|--------------|
| atm-m ³ /mol | Atmosphere per cubic meter per mole. | m ³ | Cubic meter. |
| cm | Centimeter. | mg | Milligram. |
| cm ² | Square centimeter. | μg | Microgram. |
| K | Kelvin. | mol | Mole. |
| L | Liter. | sec | Seconds. |
| m ² | Square meter. | | |

Table 18
Risk and Hazard Equations for Exposure to Soil for a Hypothetical Future Resident
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

ROUTE-SPECIFIC RISK/HAZARD:

Oral: Cancer Risk - based on Age-Averaged Child/Adult Resident Exposure:

$$ELCR_o = \frac{EPCs \times RBF \times [IFS_{adj} \text{ or } IFSM_{adj}] \times FI \times CSF_o}{(10^6 \text{ mg/kg}) \times AT_c}$$

$$IFS_{adj} = \frac{EF_c \times ED_c \times IRS_c}{BW_c} + \frac{EF_a \times ED_a \times IRS_a}{BW_a}$$

$$IFSM_{adj} = \frac{EF_{0-2} \times ED_{0-2} \times IRS_{0-2} \times 10}{BW_{0-2}} + \frac{EF_{2-6} \times ED_{2-6} \times IRS_{2-6} \times 3}{BW_{2-6}} + \frac{EF_{6-16} \times ED_{6-16} \times IRS_{6-16} \times 3}{BW_{6-16}} + \frac{EF_{16-26} \times ED_{16-26} \times IRS_{16-26} \times 1}{BW_{16-26}}$$

Dermal:

$$ELCR_d = \frac{EPCs \times ABSd \times [DFS_{adj} \text{ or } DSFM_{adj}] \times CSF_a}{(10^6 \text{ mg/kg}) \times AT_c}$$

$$DFS_{adj} = \frac{EF_c \times ED_c \times SAR_c \times SSAs_c}{BW_c} + \frac{EF_a \times ED_a \times SAR_a \times SSAs_a}{BW_a}$$

$$DSFM_{adj} = \frac{EF_{0-2} \times ED_{0-2} \times SAR_{0-2} \times SSAs_{0-2} \times 10}{BW_{0-2}} + \frac{EF_{2-6} \times ED_{2-6} \times SAR_{2-6} \times SSAs_{2-6} \times 3}{BW_{2-6}} + \frac{EF_{6-16} \times ED_{6-16} \times SAR_{6-16} \times SSAs_{6-16} \times 3}{BW_{6-16}} + \frac{EF_{16-26} \times ED_{16-26} \times SAR_{16-26} \times SSAs_{16-26} \times 1}{BW_{16-26}}$$

Inhalation:

$$ELCR_i = \frac{EPCi \times ET \times CF \times EF \times ED \times IUR \times (1,000 \text{ } \mu\text{g/mg})}{VF\text{-}sl \times AT_c}$$

$$\text{or } = \frac{EPCi \times INHM_{adj} \times IUR \times (1,000 \text{ } \mu\text{g/mg})}{VF\text{-}sl \times AT_c} \quad \text{Mutagenic constituents only}$$

$$INHM_{adj} = (EF_{0-2} \times ED_{0-2} \times ET_{0-2} \times CF \times 10) + (EF_{2-6} \times ED_{2-6} \times ET_{2-6} \times CF \times 3) + (EF_{6-16} \times ED_{6-16} \times ET_{6-16} \times CF \times 3) + (EF_{16-26} \times ED_{16-26} \times ET_{16-26} \times CF \times 1)$$

$$EPCi = \text{MINIMUM} [EPCs, C_{sat}] \quad \text{OR} = EPCs \text{ when } C_{sat} \text{ is not relevant}$$

TOTAL CANCER RISK: $ELCR = ELCR_o + ELCR_d + ELCR_i$

Non-Cancer Hazard - based on Child Resident Exposure:

$$HQ_o = \frac{EPCs \times RBF \times IR_c \times EF_c \times ED_c}{(10^6 \text{ mg/kg}) \times BW_c \times AT_{NC} \times RfD_o}$$

$$HQ_d = \frac{EPCs \times SSAs_c \times SAR_c \times ABSd \times EF_c \times ED_c}{(10^6 \text{ mg/kg}) \times BW_c \times AT_{NC} \times RfD_a}$$

$$HQ_i = \frac{EPCi \times ET_c \times CF \times EF_c \times ED_c}{VF\text{-}sl \times AT_{NC} \times RfC}$$

$$EPCi = \text{MINIMUM} [EPCs, C_{sat}] \quad \text{OR} = EPCs \text{ when } C_{sat} \text{ is not relevant}$$

TOTAL NON-CANCER HAZARD: $HI = HQ_o + HQ_d + HQ_i$

Table 18
Risk and Hazard Equations for Exposure to Soil for a Hypothetical Future Resident
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

UNIQUE CHEMICAL EVALUATIONS - CARCINOGENIC:

Vinyl Chloride

Oral:

$$ELCR_o = EPCs \times \left(\frac{IFS_{adj} \times RBF \times FI \times CFS_o}{(10^6 \text{ mg/kg}) \times AT_c} + \frac{IRS_c \times RBF \times FI \times CSF_o}{(10^6 \text{ mg/kg}) \times BW_c} \right)$$

$$IFS_{adj} = \frac{EF_c \times ED_c \times IRS_c}{BW_c} + \frac{EF_a \times ED_a \times IRS_a}{BW_a}$$

Dermal:

$$ELCR_d = EPCs \times \left(\frac{DFS_{adj} \times ABS_d \times CSF_a}{(10^6 \text{ mg/kg}) \times AT_c} + \frac{SSAs_c \times SAR_c \times ABS_d \times CSF_a}{(10^6 \text{ mg/kg}) \times BW_c} \right)$$

$$DFS_{adj} = \frac{EF_c \times ED_c \times SSAs_c \times SAR_c}{BW_c} + \frac{EF_a \times ED_a \times SSAs_a \times SAR_a}{BW_a}$$

Inhalation:

$$ELCR_i = EPCi \times \left(\frac{EF \times ED \times ET \times CF \times IUR \times (1,000 \text{ } \mu\text{g/mg})}{VF \times AT_c} + \frac{IUR \times (1,000 \text{ } \mu\text{g/mg})}{VF} \right)$$

EPCi = MINIMUM [EPCs, C_{sat}] **OR** = EPCs when C_{sat} is not relevant

Trichloroethene

Oral:

$$ELCR_o = \frac{EPCs \times RBF \times FI \times CSF_o \times [(CAF_o \times IFS_{adj}) + (MAF_o \times IFSM_{adj})]}{(10^6 \text{ mg/kg}) \times AT_c}$$

$$IFS_{adj} = \frac{EF_c \times ED_c \times IRS_c}{BW_c} + \frac{EF_a \times ED_a \times IRS_a}{BW_a}$$

$$IFSM_{adj} = \frac{EF_{0-2} \times ED_{0-2} \times IRS_{0-2} \times 10}{BW_{0-2}} + \frac{EF_{2-6} \times ED_{2-6} \times IRS_{2-6} \times 3}{BW_{2-6}} + \frac{EF_{6-16} \times ED_{6-16} \times IRS_{6-16} \times 3}{BW_{6-16}} + \frac{EF_{16-26} \times ED_{16-26} \times IRS_{16-26} \times 1}{BW_{16-26}}$$

Dermal:

$$ELCR_d = \frac{EPCs \times [(ABS_d \times CAF_o \times DFS_{adj}) + (ABS_d \times MAF_o \times DSFM_{adj})] \times CSF_a}{(10^6 \text{ mg/kg}) \times AT_c}$$

$$DFS_{adj} = \frac{EF_c \times ED_c \times SSAs_c \times SAR_c}{BW_c} + \frac{EF_a \times ED_a \times SSAs_a \times SAR_a}{BW_a}$$

$$DSFM_{adj} = \frac{EF_{0-2} \times ED_{0-2} \times SSAs_{0-2} \times SAR_{0-2} \times 10}{BW_{0-2}} + \frac{EF_{2-6} \times ED_{2-6} \times SSAs_{2-6} \times SAR_{2-6} \times 3}{BW_{2-6}} + \frac{EF_{6-16} \times ED_{6-16} \times SSAs_{6-16} \times SAR_{6-16} \times 3}{BW_{6-16}} + \frac{EF_{16-26} \times ED_{16-26} \times SSAs_{16-26} \times SAR_{16-26} \times 1}{BW_{16-26}}$$

Inhalation:

$$ELCR_i = \frac{EPCi \times [(CAF_i \times EF \times ED \times ET \times CF) + (MAF_i \times INHM_{adj})] \times IUR \times (1,000 \text{ } \mu\text{g/mg})}{VF \times AT_c}$$

$$INHM_{adj} = (EF_{0-2} \times ED_{0-2} \times ET_{0-2} \times CF \times 10) + (EF_{2-6} \times ED_{2-6} \times ET_{2-6} \times CF \times 3) + (EF_{6-16} \times ED_{6-16} \times ET_{6-16} \times CF \times 3) + (EF_{16-26} \times ED_{16-26} \times ET_{16-26} \times CF \times 1)$$

EPCi = MINIMUM [EPCs, C_{sat}] **OR** = EPCs when C_{sat} is not relevant

Table 18
Risk and Hazard Equations for Exposure to Soil for a Hypothetical Future Resident
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

Variable Definitions:

| | |
|---------------------|---|
| ABS _d | Dermal absorption efficiency (unitless). See risk and hazard tables for exposure to soil. |
| AT _C | Averaging time for cancer effects (days) (Table 14). |
| AT _{NC} | Averaging time for noncancer effects (days) (Table 14). |
| BW | Body weight (kg) (Table 14). |
| CF | Conversion factor = 0.042 day/hour (Table 14). |
| C _{sat} | Constituent saturation limit in soil (mg/kg) (Table 20). |
| CAF _i | Cancer adjustment factor for inhalation = 0.756 (unitless). |
| CAF _o | Cancer adjustment factor for oral and dermal = 0.804 (unitless). |
| CSF | Cancer slope factor for oral (CSF _o) or dermal (adjusted to an absorbed dose, CSF _a) exposure (mg/kg/day) ⁻¹ (Table 25). |
| DFS _{adj} | Age-averaged soil dermal contact factor (Table 14). |
| DSFM _{adj} | Age-averaged mutagenic soil dermal contact factor (Table 14). |
| ED | Exposure duration (years) (Table 14). |
| EF | Exposure frequency (days/year) (Table 14). |
| ELCR | Excess lifetime cancer risk (unitless). |
| EPC _i | Minimum of EPCs and C _{sat} . See risk and hazard tables. |
| EPCs | Exposure point concentration in soil (mg/kg) (Table 13). |
| ET | Exposure time (hrs/day) (Table 14). |
| FI | Fraction ingested from area of concern (unitless) (Table 14). |
| HI | Hazard index for non-cancer effects (unitless); sum of the HQs. See risk and hazard tables for exposure to soil. |
| HQ | Hazard quotient for non-cancer effects (unitless). See risk and hazard tables for exposure to soil. |
| IFS _{adj} | Age-averaged soil ingestion factor (Table 14). |
| IFSM _{adj} | Age-averaged mutagenic soil ingestion factor (Table 14). |
| INHM _{adj} | Age-averaged muagenic inhalation factor (Table 14). |
| IRS | Ingestion rate of soil (mg/day) (Table 14). |
| IUR | Inhalation Unit Risk (µg/m ³) ⁻¹ (Table 26). |
| MAF _i | Mutagenic adjustment factor for inhalation = 0.244 (unitless). |
| MAF _o | Mutagenic adjustment factor for oral and dermal = 0.202 (unitless). |
| RBF | Relative bioavailability factor; constituent specific; default of 100% (i.e., 1) unless otherwise indicated (unitless). |
| RfC | Reference concentration (mg/m ³) (Table 22). |
| RfD | Reference dose for oral (RfDo) and dermal (adjusted to an absorbed dose, RfDa), exposure (mg/kg/day) (Table 21). |
| SAR | Soil-to-skin adherence rate (mg/cm ² /day) (Table 14). |
| SSAs | Exposed skin surface area for soil contact (cm ²) (Table 7). |
| VF-sl | Volatilization factor for soil (m ³ /kg) (Table 20). |

| | | | |
|-----------------|--------------------|----------------|---------------|
| cm ² | Square centimeter. | m ² | Square meter. |
| g | Gram. | m ³ | Cubic meter. |
| hr | Hour. | mg | Milligram. |
| kg | Kilogram. | µg | Microgram. |
| m | Meter. | sec | Second. |

Table 19
Water Volatilization Factors
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent | Constituent-Specific Physical Parameters [a] | | | | | | | Enthalpy of Vaporization at Water Temp. [b] (ΔH_v) (cal/mol) | Henry's Law Constant at Water Temp. [b] (H) (atm-m ³ /mol) | Henry's Law Constant at Water Temp. [b] (H _o) (unitless) | Volatilization Factor [c] No Exposed Water in a Trench (VF-gw _{trench}) (L/m ³) |
|-----------------------------------|--|--------------------------------------|--|---|--|--|--|--|---|--|---|
| | Molecular Weight (MW) (g/mol) | Melting Point (T _m) (°C) | Henry's Law Constant at Ref. Temp. (H) (atm-m ³ /mol) | Diffusivity in Air (D _{air}) (cm ² /sec) | Enthalpy of Vaporization at Boiling Point (ΔH_v) (cal/mol) | Normal Boiling Point (T _b) (K) | Critical Temperature (T _c) (K) | | | | |
| Volatile Organic Compounds | | | | | | | | | | | |
| Benzene | 7.81E+01 | 5.50E+00 | 5.55E-03 | 8.95E-02 | 7.34E+03 | 3.53E+02 | 5.62E+02 | 8.02E+03 | 4.28E-03 | 1.78E-01 | 3.55E-04 |
| 1,1-Dichloroethane | 9.90E+01 | -9.69E+01 | 5.62E-03 | 8.36E-02 | 6.90E+03 | 3.31E+02 | 5.23E+02 | 7.35E+03 | 4.43E-03 | 1.85E-01 | 3.44E-04 |
| 1,1-Dichloroethene | 9.69E+01 | -1.23E+02 | 2.61E-02 | 8.63E-02 | 6.25E+03 | 3.05E+02 | 4.82E+02 | 6.40E+03 | 2.12E-02 | 8.84E-01 | 1.70E-03 |
| cis-1,2-Dichloroethene | 9.69E+01 | -8.00E+01 | 4.08E-03 | 8.84E-02 | 7.22E+03 | 3.33E+02 | 5.36E+02 | 7.69E+03 | 3.18E-03 | 1.33E-01 | 2.61E-04 |
| Ethylbenzene | 1.06E+02 | -9.49E+01 | 7.88E-03 | 6.85E-02 | 8.50E+03 | 4.09E+02 | 6.17E+02 | 1.00E+04 | 5.69E-03 | 2.37E-01 | 3.61E-04 |
| Naphthalene | 1.28E+02 | 8.02E+01 | 4.40E-04 | 6.05E-02 | 1.04E+04 | 4.91E+02 | 7.48E+02 | 1.29E+04 | 2.90E-04 | 1.21E-02 | 1.63E-05 |
| Trichloroethene | 1.31E+02 | -8.47E+01 | 9.85E-03 | 6.87E-02 | 7.51E+03 | 3.60E+02 | 5.71E+02 | 8.28E+03 | 7.53E-03 | 3.14E-01 | 4.80E-04 |
| 1,2,4-Trimethylbenzene | 1.20E+02 | -4.38E+01 | 6.16E-03 | 6.07E-02 | 9.37E+03 | 4.42E+02 | 6.49E+02 | 1.16E+04 | 4.23E-03 | 1.77E-01 | 2.38E-04 |
| Vinyl Chloride | 6.25E+01 | -1.54E+02 | 2.78E-02 | 1.07E-01 | 4.97E+03 | 2.60E+02 | 4.25E+02 | 4.61E+03 | 2.39E-02 | 9.98E-01 | 2.38E-03 |
| Total Inorganics | | | | | | | | | | | |
| Iron | 5.58E+01 | 1.54E+03 | NV | NV | NV | NV | NV | NV | NV | NV | — |

Mass Transfer Coefficient Parameters

Default input parameters, as presented in the table beneath, were used.

| Parameter | Unit | Value | |
|-------------------------------|----------------------------|----------|---|
| MW _{H₂O} | g/mol | 18.02 | Molecular weight of water. |
| MW _{O₂} | g/mol | 32.00 | Molecular weight of oxygen. |
| k _{L,O₂} | cm/sec | 0.002 | Liquid-phase mass transfer coefficient of oxygen at 25°C. |
| k _{G,H₂O} | cm/sec | 0.833 | Gas-phase mass transfer coefficient of water vapor at 25°C. |
| R | atm-m ³ /mole-K | 0.000082 | Ideal gas constant. |
| T _{gw} | °C | 19.4 | Temperature of groundwater (USEPA 2017). |
| T | K | 292.55 | Average system absolute temperature. |

Trench Model Input Parameters:

Default input parameters, as presented in the table beneath, were used.

| Parameter | Unit | Value | |
|---------------------|----------------------------------|-------|--|
| A | m ² | 9.29 | Area of trench (length × width). Assumed to be 10 feet wide and 10 feet long. |
| F | unitless | 1 | Fraction of trench floor through which contaminant can enter (VDEQ default). |
| V | m ³ | 14.16 | Volume of trench (area × depth). |
| ACH | h ⁻¹ | 360 | Air changes per hour (width > depth) (VDEQ default). |
| D _{Trench} | m | 1.524 | Depth of trench which is set at 5 feet based on a potential depth for utilities. |
| θ _{as} | cm ³ /cm ³ | 0.265 | Air-filled porosity in the vadose zone (default for silty clay) (Site-specific). |
| θ _T | cm ³ /cm ³ | 0.481 | Total porosity in the vadose zone (default for silty clay) (Site-specific). |
| L _d | cm | 152.4 | Distance between the bottom of the trench and groundwater (Site-specific). |

| | | | | | |
|-------------------------|--------------------------------------|------------------|------------------------|----------------|---------------|
| — | Not applicable. | cm/sec | Centimeter per second. | m ² | Square meter. |
| atm-m ³ /mol | Atmosphere per meter cubed per mole. | g/mol | Gram per mole. | m ³ | Cubic meter. |
| °C | Degrees Celsius. | h ⁻¹ | Inverse hour. | NV | Not volatile. |
| cal/mol | Calories per mol. | °K | Degrees Kelvin. | | |
| | | L/m ³ | Liter per cubic meter. | | |

[a] Constituent-specific parameters were obtained from the Chemical Specific Parameters Table from the Regional Screening Level Table (USEPA 2018a).
 [b] Enthalpy of vaporization and Henry's Law Constant were adjusted for soil temperature based on USEPA recommended methods (USEPA 2001).
 [c] Volatilization factors for water in a trench were calculated using Virginia Department of Environmental Quality trench model (VDEQ 2018).

Table 20
Soil Volatilization Factors
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent | Constituent Specific Physical Parameters [a] | | | | | | | | | | | Enthalpy of vaporization at soil temp. [b] | Henry's Law Constant at soil temp. [b] | Saturation Limit in Soil [c] | Apparent Diffusivity (D _A) (cm ² /sec) | Soil Volatilization Factor [b] | |
|-----------------------------------|--|--------------------------------------|--|---|---|---|--------------------------------|---|--|--|---|--|--|------------------------------|---|---|--|
| | Molecular Weight (MW) (g/mol) | Melting Point (T _m) (°C) | Henry's Law Constant at 25°C (H) (atm·m ³ /mol) | Diffusivity in Air (D _{air}) (cm ² /sec) | Diffusivity in Water (D _{wat}) (cm ² /sec) | Partition Coefficient (K _{oc}) (mL/g) | Solubility in Water (S) (mg/L) | Enthalpy of vaporization at boiling point, (ΔH _v) (cal/mol) | Normal Boiling Point (T _b) (K) | Critical Temperature (T _c) (K) | Soil Volatilization Factor Passive (VF-sl) (m ³ /kg) | | | | | Soil Volatilization Factor Invasive (VF-sl _{cons}) (m ³ /kg) | |
| | | | | | | | | | | | | | | | | | |
| Volatile Organic Compounds | | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 9.90E+01 | -9.69E+01 | 5.62E-03 | 8.36E-02 | 1.06E-05 | 3.18E+01 | 5.04E+03 | 6.90E+03 | 3.31E+02 | 5.23E+02 | 7.35E+03 | 1.85E-01 | 1.29E+03 | 2.26E-03 | 2.64E+03 | 5.84E+02 | |
| 1,1-Dichloroethene | 9.69E+01 | -1.23E+02 | 2.61E-02 | 8.63E-02 | 1.10E-05 | 3.18E+01 | 2.42E+03 | 6.25E+03 | 3.05E+02 | 4.82E+02 | 6.40E+03 | 8.84E-01 | 9.40E+02 | 7.33E-03 | 1.46E+03 | 3.24E+02 | |
| cis-1,2-Dichloroethene | 9.69E+01 | -8.00E+01 | 4.08E-03 | 8.84E-02 | 1.13E-05 | 3.96E+01 | 6.41E+03 | 7.22E+03 | 3.33E+02 | 5.36E+02 | 7.69E+03 | 1.33E-01 | 1.67E+03 | 1.68E-03 | 3.06E+03 | 6.77E+02 | |
| Ethylbenzene | 1.06E+02 | -9.49E+01 | 7.88E-03 | 6.85E-02 | 8.46E-06 | 4.46E+02 | 1.69E+02 | 8.50E+03 | 4.09E+02 | 6.17E+02 | 1.00E+04 | 2.37E-01 | 1.80E+02 | 5.56E-04 | 5.32E+03 | 1.18E+03 | |
| Tetrachloroethene | 1.66E+02 | -2.23E+01 | 1.77E-02 | 5.05E-02 | 9.46E-06 | 9.49E+01 | 2.06E+02 | 8.29E+03 | 3.94E+02 | 6.20E+02 | 9.46E+03 | 5.43E-01 | 9.30E+01 | 2.28E-03 | 2.63E+03 | 5.82E+02 | |
| 1,1,1-Trichloroethane | 1.33E+02 | -3.04E+01 | 1.72E-02 | 6.48E-02 | 9.60E-06 | 4.39E+01 | 1.29E+03 | 7.14E+03 | 3.47E+02 | 5.45E+02 | 7.79E+03 | 5.57E-01 | 4.50E+02 | 3.85E-03 | 2.02E+03 | 4.48E+02 | |
| Trichloroethene | 1.31E+02 | -8.47E+01 | 9.85E-03 | 6.87E-02 | 1.02E-05 | 6.07E+01 | 1.28E+03 | 7.51E+03 | 3.60E+02 | 5.71E+02 | 8.28E+03 | 3.14E-01 | 4.30E+02 | 2.39E-03 | 2.57E+03 | 5.68E+02 | |
| Vinyl Chloride | 6.25E+01 | -1.54E+02 | 2.78E-02 | 1.07E-01 | 1.20E-05 | 2.17E+01 | 8.80E+03 | 4.97E+03 | 2.60E+02 | 4.25E+02 | 4.61E+03 | 9.98E-01 | 3.45E+03 | 1.02E-02 | 1.24E+03 | 2.75E+02 | |

Model Input Parameters:

| | | | |
|----------------------|---------|--|--|
| Soil = | SIC | silty clay | Soil type (site-specific). |
| T _s = | 19.4 | °C | Average soil temperature (USEPA 2017) (site-specific). |
| T _s = | 292.55 | K | Temperature in Kelvin. |
| F _{oc} = | 0.002 | unitless | Fraction organic carbon (USEPA 2002b default). |
| ρ _b = | 1.38 | g/cm ³ | Soil dry bulk density for silty clay (USEPA 2017). |
| θ _T = | 0.481 | unitless | Total soil porosity for silty clay (USEPA 2017). |
| θ _{as} = | 0.265 | unitless | Air-filled soil porosity [= θ _T - θ _{ws}]. |
| θ _{ws} = | 0.216 | unitless | Water-filled soil porosity for silty clay (USEPA 2017). |
| Q/C _{vol} = | 68.18 | (g/m ² /sec)/(kg/m ³) | Volatilization flux per unit concentration under passive conditions (USEPA 2002b default). |
| Q/C _{sa} = | 14.31 | (g/m ² /sec)/(kg/m ³) | Volatilization flux per unit concentration under soil invasive conditions (USEPA 2002b default). |
| T _{res} = | 8.2E+08 | second | Exposure interval for a residential scenario (based on 26 years). |
| T _{cons} = | 3.2E+07 | second | Exposure interval under soil invasive conditions (site-specific). |
| CD = | 365 | days | Construction duration in days (site-specific). |
| t _c = | 8760 | hour | Construction time in hours (site-specific). |
| F _D = | 0.186 | unitless | Dispersion Correction Factor (site-specific). |

| | | | | | |
|-------------------------|--------------------------------------|-----------------------|------------------------------------|-------|-------------------------|
| °C | Degress Celsius. | g/mol | Gram per mole. | mg/kg | Milligram per kilogram. |
| atm·m ³ /mol | Atmosphere per cubic meter per mole. | g/m ² /sec | Gram per meter squared per second. | mg/L | Milligram per liter. |
| cal/mol | Calorie per mol. | K | Kelvin. | mL/g | Milliliter per gram. |
| cm ² /sec | Centimeter squared per second. | kg/m ³ | Kilogram per cubic meter. | | |
| g/cm ² | Gram per cubic centimeter. | m ³ /kg | Cubic meter per kilogram. | | |

[a] Constituent-specific parameters were obtained from the Chemical Specific Parameters Table from the Regional Screening Level Table (USEPA 2018a).

[b] Enthalpy of vaporization and Henry's Law Constant were adjusted for soil temperature based on USEPA recommended methods (USEPA 2001).

[c] C_{sat} and VF calculated using equations from USEPA 2002b. See Table .

C_{sat} was calculated for constituents that might potentially be liquid at soil temperature of 30°C (i.e. for constituents whose melting point is less than 30°C).

VF was only calculated for constituents that have a volatilization potential (i.e., molecular weight less than 200 g/mol and Henry's Law Constant greater than 1 x 10⁻⁵ atm·m³/mol).

Table 21
Non-Carcinogenic Toxicity Values for Oral and Dermal Exposure
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent | Oral RfD (mg/kg/day) [a] | | | | Adjustment Factor [b] | Dermal RfD (mg/kg/day) [b] | | Subchronic | | Chronic | |
|-----------------------------------|--------------------------|-------|----------|-------|-----------------------|----------------------------|---------|---------------------------------|---|---------------------------------|---|
| | Subchronic | [ref] | Chronic | [ref] | | Subchronic | Chronic | Target Site/ Critical Effect | Confidence Level/ Uncertainty Factor | Target Site/ Critical Effect | Confidence Level/ Uncertainty Factor |
| | | | | | | | | | | | |
| Volatile Organic Compounds | | | | | | | | | | | |
| Benzene | 1.00E-02 | P | 4.00E-03 | I | 1 | 1.0E-02 | 4.0E-03 | Blood | Medium / 100 | Blood | Medium / 300 |
| 1,1-Dichloroethane | 2.00E+00 | P | 2.00E-01 | P | 1 | 2.0E+00 | 2.0E-01 | Kidney | Low / 300 | Kidney | Low / 3000 |
| 1,1-Dichloroethene | 9.00E-03 | H | 5.00E-02 | I | 1 | 9.0E-03 | 5.0E-02 | Liver | NA / 1000 | Liver | Medium / 100 |
| cis-1,2-Dichloroethene | 2.00E-02 | P | 2.00E-03 | I | 1 | 2.0E-02 | 2.0E-03 | Kidney | Low / 300 | Kidney | low / 3000 |
| trans-1,2-Dichloroethene | 2.00E-01 | A | 2.00E-02 | I | 1 | 2.0E-01 | 2.0E-02 | Hepatic | NA / 100 | Red blood cells | low / 3000 |
| Ethylbenzene | 5.00E-02 | P | 1.00E-01 | I | 1 | 5.0E-02 | 1.0E-01 | Liver | Medium / 1000 | Hepatic, Urinary | Low / 1000 |
| Naphthalene | 6.00E-01 | A | 2.00E-02 | I | 1 | 6.0E-01 | 2.0E-02 | Neurological | NA / 90 | Body weight | Low / 3000 |
| Tetrachloroethene | 1.00E-01 | H | 6.00E-03 | I | 1 | 1.0E-01 | 6.0E-03 | Neurological | NA / 100 | Nervous System | medium / 1000 |
| 1,1,1-Trichloroethane | 7.00E+00 | I | 2.00E+00 | I | 1 | 7.0E+00 | 2.0E+00 | Whole body | Low-Medium / 1000 | Whole body | Low-Medium / 1000 |
| Trichloroethene | 5.00E-04 | A | 5.00E-04 | I | 1 | 5.0E-04 | 5.0E-04 | Developmental/Immunological | NA / 10 to 1000 | Heart/Thymus | High / 10 |
| 1,2,4-Trimethylbenzene | 4.00E-02 | I | 1.00E-02 | I | 1 | 4.0E-02 | 1.0E-02 | NA | NA / NA | Nervous system | Low / 300 |
| Vinyl Chloride | 3.00E-03 | c | 3.00E-03 | I | 1 | 3.0E-03 | 3.0E-03 | Liver | Medium / 30 | Liver | Medium / 30 |
| Total Inorganics | | | | | | | | | | | |
| Iron | 7.00E-01 | P | 7.00E-01 | P | 1 | 7.0E-01 | 7.0E-01 | GI Ttract | NA / 1.5 | GI Ttract | NA / 1.5 |

References [ref]:

- A Agency for Toxic Substances Disease Registry (ATSDR 2018).
- H United States Environmental Protection Agency (USEPA), Health Effects Summary Table (HEAST) (USEPA 2011b).
- I USEPA, Integrated Risk Information System (IRIS) (USEPA 2019a).
- P USEPA, Provisional Peer Reviewed Toxicity Values (PPRTV) (USEPA 2019b).
- S USEPA RSLs user guide (Section 5; USEPA 2018a).

- [a] Toxicity values were obtained following USEPA recommended hierarchy (USEPA 2003).
- [b] The oral-to-dermal adjustment factor (oral absorption efficiency) as used to calculate the dermal reference dose (RfD) values (USEPA 2004).
 $RfD (dermal) = RfD (oral) \times \text{Adjustment Factor (oral absorption efficiency)}$.
- [c] Value for non-diet.
- c The chronic value is used.
- GI Gastrointestinal.
- mg/kg/day Milligram per kilogram per day.
- NA Not available or applicable.
- RfD Reference dose.

Table 22
Non-Carcinogenic Toxicity Values for Inhalation Exposure
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent | Inhalation RfC (mg/m ³) [a] | | | | Subchronic | | Chronic | |
|-----------------------------------|---|-------|----------|-------|---------------------------------|---|---------------------------------|---|
| | Subchronic | [ref] | Chronic | [ref] | Target Site/ Critical Effect | Confidence Level/ Uncertainty Factor | Target Site/ Critical Effect | Confidence Level/ Uncertainty Factor |
| Volatile Organic Compounds | | | | | | | | |
| Benzene | 8.00E-02 | P | 3.00E-02 | I | Blood | Medium / 100 | Blood | Medium / 300 |
| 1,1-Dichloroethane | NA | | NA | | NA | NA / NA | NA | NA / NA |
| 1,1-Dichloroethene | 7.93E-02 | A | 2.00E-01 | I | Hepatic | NA / 100 | Liver | Medium / 30 |
| cis-1,2-Dichloroethene | NA | | NA | | NA | NA / NA | NA | NA / NA |
| trans-1,2-Dichloroethene | 7.93E-01 | A | NA | | Hepatic | NA / 1000 | Lung; Liver | Low / 3000 |
| Ethylbenzene | 9.00E+00 | P | 1.00E+00 | I | Ear | Medium / 100 | Developmental | Low / 300 |
| Naphthalene | 3.00E-03 | c | 3.00E-03 | I | Nervous, Respiratory | Medium / 3000 | Nervous, Respiratory | Medium / 3000 |
| Tetrachloroethene | 4.07E-02 | A | 4.00E-02 | I | Neurological | NA / 100 | Nervous System | medium / 1000 |
| 1,1,1-Trichloroethane | 5.00E+00 | I | 5.00E+00 | I | Liver | Medium / 100 | Liver | Medium / 100 |
| Trichloroethene | 2.15E-03 | A | 2.00E-03 | I | Developmental/Immunological | NA / 10 to 1000 | Thymus/Heart | High / 100 |
| 1,2,4-Trimethylbenzene | 2.00E-01 | I | 6.00E-02 | I | NA | NA / NA | Nervous system | Low to medium / 300 |
| Vinyl Chloride | 7.67E-02 | A | 1.00E-01 | I | Hepatic | NA / 30 | Liver | Medium / 30 |
| Total Inorganics | | | | | | | | |
| Iron | NA | | NA | | NA | NA / NA | NA | NA / NA |

References [ref]:

- A Agency for Toxic Substances Disease Registry (ATSDR 2018).
- I United States Environmental Protection Agency (USEPA), Integrated Risk Information System (IRIS) (USEPA 2019a).
- P USEPA, Provisional Peer Reviewed Toxicity Values (PPRTV) (USEPA 2019b).

[a] Toxicity values were obtained following USEPA recommended hierarchy (USEPA 2003).

c The chronic value is used if available.

mg/m³ Milligram per cubic meter.

NA Not available or not applicable.

RfC Reference concentration.

Table 23
Carcinogenic Toxicity Values for Oral and Dermal Exposure
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent | Oral CSF [a] (mg/kg/day) ⁻¹ [ref] | Adjustment Factor [b] | Dermal CSF [b] (mg/kg/day) ⁻¹ | Mutagen | Tumor Site | Weight of Evidence Classification [c] |
|-----------------------------------|---|--------------------------|---|---------|---------------|--|
| Volatile Organic Compounds | | | | | | |
| Benzene [d] | 5.50E-02 | I | 1 | 5.5E-02 | Blood | A |
| 1,1-Dichloroethane | 5.70E-03 | C | 1 | 5.7E-03 | NA | C |
| 1,1-Dichloroethene | NA | | 1 | NA | NA | C |
| cis-1,2-Dichloroethene | NA | | 1 | NA | NA | I |
| trans-1,2-Dichloroethene | NA | | 1 | NA | NA | I |
| Ethylbenzene [e] | 1.10E-02 | C | 1 | 1.1E-02 | NA | D |
| Naphthalene | NA | | 1 | NA | NA | C |
| Tetrachloroethene | 2.10E-03 | I | 1 | 2.1E-03 | Liver | L |
| 1,1,1-Trichloroethane | NA | | 1 | NA | NA | I |
| Trichloroethene [f] | 4.60E-02 | I | 1 | 4.6E-02 | M | Kidney, Liver |
| 1,2,4-Trimethylbenzene | NA | | 1 | NA | NA | I |
| Vinyl Chloride [g] | 7.20E-01 | I | 1 | 7.2E-01 | M | Liver |
| Total Inorganics | | | | | | |
| Iron | NA | | 1 | NA | NA | NA |

References [ref]:

- C California Environmental Protection Agency (CalEPA), Toxicity Criteria Database (CalEPA 2019).
- I United States Environmental Protection Agency (USEPA), Integrated Risk Information System (IRIS) (USEPA 2019a).
- [a] Toxicity values were obtained following USEPA recommended hierarchy (USEPA 2003).
- [b] The oral-to-dermal adjustment factor (oral absorption efficiency) as used to calculate the dermal CSF values (USEPA 2004).
 CSF (dermal) = CSF (oral) / Adjustment Factor (oral absorption efficiency)
- [c] The USEPA 1986 hierarchical cancer classification system and the more recent (USEPA 2005a) narrative system were used. The most up-to-date classification is presented for each constituent.
 1986 A: Human carcinogen (sufficient evidence of carcinogenicity in humans).
 C: Possible human carcinogen (limited evidence of carcinogenicity in animals and inadequate or lack of human data).
 D: Not classifiable as to human carcinogenicity (inadequate or no evidence).
 2005 H: Carcinogenic to humans.
 L: Likely to be carcinogenic to humans.
 I: Inadequate information to assess carcinogenic potential.
- [d] Maximum (most conservative) value of the range of 1.5E-02 to 5.5E-02 (mg/kg/day)⁻¹ presented in the IRIS database.
- [e] The IRIS summary for ethylbenzene states that ethylbenzene is not classifiable as to human carcinogenicity due to the lack of animal bioassays and human studies.
- [f] Values for adult (site worker and construction worker).
- [g] Values are for adult/child exposure. [Vinyl chloride is a carcinogen by mutagenic mode of action (MOA) but should be assessed using two different cancer tox values rather than by using the MOA method (USEPA 2005a).]
- Not applicable.
- CSF Cancer slope factor.
- (mg/kg/day)⁻¹ Inverse milligram per kilogram per day (risk per unit dose).
- NA Not available or not applicable.

Table 24
Carcinogenic Toxicity Values for Inhalation Exposure
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent | Inhalation | | Mutagen | Tumor Site | Weight of Evidence Classification [b] | |
|-----------------------------------|---------------------|----------|---------|------------|---------------------------------------|---|
| | Unit Risk (IUR) [a] | [ref] | | | | |
| Volatile Organic Compounds | | | | | | |
| Benzene | [c] | 7.80E-06 | I | Blood | A | |
| 1,1-Dichloroethane | | 1.60E-06 | C | NA | C | |
| 1,1-Dichloroethene | | NA | | NA | C | |
| cis-1,2-Dichloroethene | | NA | | NA | I | |
| trans-1,2-Dichloroethene | | NA | | NA | I | |
| Ethylbenzene | [d] | 2.50E-06 | C | NA | D | |
| Naphthalene | | 3.40E-05 | C | NA | C | |
| Tetrachloroethene | [e] | 2.60E-07 | I | Liver | L | |
| 1,1,1-Trichloroethane | | NA | | NA | I | |
| Trichloroethene | [f] | 4.10E-06 | I | M | Kidney, Liver | H |
| 1,2,4-Trimethylbenzene | | NA | | NA | I | |
| Vinyl Chloride | [g] | 4.40E-06 | I | M | Liver | A |
| Total Inorganics | | | | | | |
| Iron | | NA | | NA | NA | |

References [ref]:

- C California Environmental Protection Agency (CalEPA), Toxicity Criteria Database (CalEPA 2019).
I United States Environmental Protection Agency (USEPA), Integrated Risk Information System (IRIS; USEPA 2019a).

[a] Toxicity values were obtained following USEPA recommended hierarchy (USEPA 2003).

[b] The USEPA 1986 hierarchal cancer classification system and the more recent (USEPA 2005a) narrative system were used. The most up-to-date classification is presented for each constituent.

1986 A: Human carcinogen (sufficient evidence of carcinogenicity in humans).

C: Possible human carcinogen (limited evidence of carcinogenicity in animals and inadequate or lack of human data).

D: Not classifiable as to human carcinogenicity (inadequate or no evidence).

2005 H: Carcinogenic to humans.

L: Likely to be carcinogenic to humans.

I: Inadequate information to assess carcinogenic potential.

[c] Maximum (most conservative) value of the range of 1.5E-02 to 5.5E-02 (mg/kg/day)⁻¹ presented in the IRIS database.

[d] The IRIS summary for ethylbenzene states that ethylbenzene is not classifiable as to human carcinogenicity due to the lack of animal bioassays and human studies.

[e] The IRIS summary for naphthalene states that available data are inadequate to establish a causal association between exposure to naphthalene and cancer in humans.

[f] Values for adult (site worker and construction worker).

[g] Values are for adult/child exposure. [Vinyl chloride is a carcinogen by mutagenic mode of action (MOA) but should be assessed using two different cancer toxicity values rather than by using the MOA method (USEPA 2005a).]

– Not applicable.

($\mu\text{g}/\text{m}^3$)⁻¹ Inverse microgram per cubic meter.

NA Not available or not applicable.

Table 25
Dermal Absorption Parameters
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent | ABSd [a] | Permeability Constant Kp (cm/hour) [b] Value | Within EPD? | Non-Steady State Dermal Absorption Parameters [c] | | | | DA_2hr [d] (L/cm ² /event) | |
|-----------------------------------|----------|---|-------------|---|---------------|-----------|--------------|--|-----|
| | | | | FA (unitless) | τ (hour) | t* (hour) | B (unitless) | | |
| Volatile Organic Compounds | | | | | | | | | |
| Benzene | 0 | 1.49E-02 | Yes | 1 | 2.88E-01 | 6.91E-01 | 5.07E-02 | 3.74E-05 | [2] |
| 1,1-Dichloroethane | 0 | 6.75E-03 | Yes | 1 | 3.77E-01 | 9.04E-01 | 2.58E-02 | 1.84E-05 | [2] |
| 1,1-Dichloroethene | 0 | 1.17E-02 | Yes | 1 | 3.67E-01 | 8.81E-01 | 4.43E-02 | 3.14E-05 | [2] |
| cis-1,2-Dichloroethene | 0 | 1.10E-02 | Yes | 1 | 3.67E-01 | 8.81E-01 | 4.17E-02 | 2.95E-05 | [2] |
| Ethylbenzene | 0 | 4.93E-02 | Yes | 1 | 4.13E-01 | 9.92E-01 | 1.95E-01 | 1.31E-04 | [2] |
| Naphthalene | 0.13 | 4.66E-02 | Yes | 1 | 5.49E-01 | 1.32E+00 | 2.03E-01 | 1.39E-04 | [2] |
| Trichloroethene | 0 | 1.16E-02 | Yes | 1 | 5.72E-01 | 1.37E+00 | 5.11E-02 | 3.60E-05 | [2] |
| 1,2,4-Trimethylbenzene | 0 | 8.57E-02 | Yes | 1 | 4.95E-01 | 1.19E+00 | 3.61E-01 | 2.39E-04 | [2] |
| Vinyl Chloride | 0 | 8.38E-03 | Yes | 1 | 2.35E-01 | 5.65E-01 | 2.55E-02 | 2.04E-05 | [2] |
| Total Inorganics | | | | | | | | | |
| Iron | 0 | 1.00E-03 | Yes | 1 | 2.16E-01 | 5.19E-01 | 2.87E-03 | 2.00E-06 | [0] |

– For constituents falling outside of the EPD, dermal absorption from water is not expected to occur.

cm/hour Centimeter per hour.

EPD Effective predictive domain.

L/cm²/event Liter per centimeter squared per event.

[a] Dermal absorption efficiency (ABSd) for uptake of constituents from a soil matrix (unitless), from United States Environmental Protection Agency (USEF)

[b] Permeability coefficient for dermal contact with constituents in water (centimeters per hour), from USEPA 2018a.

[c] Absorption parameters for use in the non-steady state model for dermal contact with constituents in water, from USEPA 2018a.

τ = Lag time for dermal absorption through the skin.

t* = Time required to reach steady state.

B = Ratio of the permeability coefficient through the stratus corneum relative to the permeability coefficient across the viable epidermis.

FA = Fraction of absorbed water.

[d] Dermal absorption factor (DA) calculated according to equations presented in USEPA 2004 (using Equation [0], [1], or [2] as indicated in Table 17 based on exposure time (ET) = 2 hours.

Table 26
Risk and Hazard Calculations for a Current and Hypothetical Future Site Worker for Exposure to Surface Soil (0-2 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent [a] | EPCs [b] (mg/kg) | | ABSd [c] | RBF [d] | VF-sl [e] (m ³ /kg) | CANCER RISK | | | | Percent Total ELCR | NON-CANCER HAZARD | | | | Percent Total HI | |
|--|---------------------|-----|----------|---------|-----------------------------------|---------------------|------------|------------|--------------------|--------------------------|-----------------------|----------|------------|----------------------|------------------------|------|
| | | | | | | Route-Specific Risk | | | Calculated Risk | | Route-Specific Hazard | | | Calculated Hazard | | |
| | | | | | | Oral | Dermal | Inhalation | | | Oral | Dermal | Inhalation | | | |
| | | | | | | ELCRo | ELCRd | ELCRI | | | ELCR | HQo | HQd | | | HQi |
| Volatile Organic Compounds | | | | | | | | | | | | | | | | |
| cis-1,2-Dichloroethene | 1.49E-02 | UCL | 0 | 1 | 3.06E+03 | V | NA | NA | NA | – | | 6.4E-06 | – | NA | 6.4E-06 | <1% |
| Tetrachloroethene | 2.14E-03 | UCL | 0 | 1 | 2.63E+03 | V | 1.4E-12 | – | 1.7E-11 | 1.9E-11 | <1% | 3.1E-07 | – | 4.7E-06 | 5.0E-06 | <1% |
| Trichloroethene | 1.27E+02 | UCL | 0 | 1 | 2.57E+03 | V | 1.8E-06 | – | 1.6E-05 | 1.8E-05 | 100% | 2.2E-01 | – | 5.6E+00 | 5.9E+00 | 100% |
| Vinyl Chloride | 7.82E-03 | UCL | 0 | 1 | 1.24E+03 | V | 1.7E-09 | – | 2.3E-09 | 4.0E-09 | <1% | 2.2E-06 | – | 1.4E-05 | 1.7E-05 | <1% |
| Total Risk or Hazard with all COPCs | | | | | | | Total ELCR | | 2E-05 | 100% | | Total HI | | 6 | 100% | |

- [a] Only detected constituents of potential concern are presented.
- [b] The exposure point concentration (EPC) was the lower concentration of either the upper confidence level on the mean (UCL) or the maximum concentration, where the UCL was incalculable. The UCLs were calculated using United States Environmental Protection Agency (USEPA) ProUCL version 5.1.00 (USEPA 2016a). The UCL used is the one recommended by ProUCL, unless a greater than 95% UCL was recommended, in which case the 95% UCL was selected.
- [c] Dermal absorption efficiency (ABSd) for uptake of constituents from a soil matrix (unitless) (USEPA 2018a).
- [d] Relative bioavailability factor is constituent-specific; default of 100% (i.e., 1) unless otherwise indicated (unitless).
- [e] The volatilization factor for soil ([VF]) identified with [V]), derived in Table 20.

| | | | | | |
|-----------------|---------------------------------------|----------------|--------------------------------|-----|---|
| – | Not applicable. | HI | Hazard index (sum of the HQs). | µg | Microgram. |
| % | Percent. | HQ | Hazard quotient. | mg | Milligram. |
| cm ² | Square centimeter. | hr | Hour. | NA | Toxicity value not available or not applicable. |
| CSF | Cancer slope factor. | IUR | Inhalation unit risk. | RfC | Reference concentration. |
| ELCR | Excess lifetime cancer risk. | kg | Kilogram. | RfD | Reference dose. |
| EPCs | Exposure point concentration in soil. | m ³ | Cubic meter. | | |

Equations are presented in Table 15, and summarized below.
 Constituent-specific toxicity values (CSF, IUR, RfC, RfD) are presented in Table 21 through Table 24.

$$ELCR_o = (EPCs \times RBF \times FI \times IRs \times EF \times ED \times CSF_o) / (1,000,000 \text{ mg/kg} \times BW \times ATc)$$

$$ELCR_d = (EPCs \times SSAs \times SAR \times ABSd \times EF \times ED \times CSF_a) / (1,000,000 \text{ mg/kg} \times BW \times ATc)$$

$$ELCR_i = (EPCs \times ET \times CF \times EF \times ED \times IUR \times 1000 \text{ } \mu\text{g/mg}) / (VF \times ATc)$$

$$HQ_o = (EPCs \times RBF \times FI \times IRs \times EF \times ED) / (1,000,000 \text{ mg/kg} \times BW \times ATnc \times RfD_o)$$

$$HQ_d = (EPCs \times SSAs \times SAR \times ABSd \times EF \times ED) / (1,000,000 \text{ mg/kg} \times BW \times ATnc \times RfD_a)$$

$$HQ_i = (EPCs \times ET \times CF \times EF \times ED) / (VF \times ATnc \times RfC)$$

| Variable | Acronym | Value | Unit | Source |
|------------------------------------|---------|--------|-------------------------|--------------|
| Averaging time, cancer | ATc | 25,550 | days | See Table 14 |
| Averaging time, non-cancer | ATnc | 9,125 | days | See Table 14 |
| Body weight | BW | 80 | kg | See Table 14 |
| Exposure time | ET | 8 | hrs/day | See Table 14 |
| Exposure frequency | EF | 250 | days/year | See Table 14 |
| Exposure duration | ED | 25 | years | See Table 14 |
| Conversion factor (days/hr) | CF | 0.042 | days/hr | See Table 14 |
| Fraction ingested from site | FI | 1 | unitless | See Table 14 |
| Ingestion rate of soil | IRs | 100 | mg/day | See Table 14 |
| Soil-to-skin adherence rate | SAR | 0.12 | mg/cm ² /day | See Table 14 |
| Skin surface area for soil contact | SSAs | 3,527 | cm ² | See Table 14 |

Table 27
Risk and Hazard Calculations for a Hypothetical Site Worker for Exposure to Combined Surface and Subsurface Soil (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent [a] | EPCs [b] (mg/kg) | | ABSd [c] | RBF [d] | VF-sl [e] (m³/kg) | CANCER RISK | | | | Percent Total ELCR | NON-CANCER HAZARD | | | | Percent Total HI | |
|--|---------------------|-----|----------|---------|----------------------|---------------------|------------|------------|--------------------|--------------------------|-----------------------|---------|------------|----------------------|------------------------|------|
| | | | | | | Route-Specific Risk | | | Calculated Risk | | Route-Specific Hazard | | | Calculated Hazard | | |
| | | | | | | Oral | Dermal | Inhalation | | | Oral | Dermal | Inhalation | | | |
| | | | | | | ELCRo | ELCRd | ELCRi | | | ELCR | HQo | HQd | | | HQi |
| Volatile Organic Compounds | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 4.53E-01 | UCL | 0 | 1 | 2.64E+03 | V | 7.9E-10 | – | 2.2E-08 | 2.3E-08 | <1% | 1.9E-06 | – | NA | 1.9E-06 | <1% |
| 1,1-Dichloroethene | 3.42E+00 | UCL | 0 | 1 | 1.46E+03 | V | NA | NA | NA | – | – | 5.8E-05 | – | 2.7E-03 | 2.7E-03 | <1% |
| cis-1,2-Dichloroethene | 1.25E+01 | UCL | 0 | 1 | 3.06E+03 | V | NA | NA | NA | – | – | 5.4E-03 | – | NA | 5.4E-03 | <1% |
| Ethylbenzene | 1.10E-02 | UCL | 0 | 1 | 5.32E+03 | V | 3.7E-11 | – | 4.2E-10 | 4.6E-10 | <1% | 9.4E-08 | – | 4.7E-07 | 5.6E-07 | <1% |
| Tetrachloroethene | 4.47E-01 | UCL | 0 | 1 | 2.63E+03 | V | 2.9E-10 | – | 3.6E-09 | 3.9E-09 | <1% | 6.4E-05 | – | 9.7E-04 | 1.0E-03 | <1% |
| 1,1,1-Trichloroethane | 3.64E+01 | UCL | 0 | 1 | 2.02E+03 | V | NA | NA | NA | – | – | 1.6E-05 | – | 8.2E-04 | 8.4E-04 | <1% |
| Trichloroethene | 2.04E+02 | UCL | 0 | 1 | 2.57E+03 | V | 2.9E-06 | – | 2.7E-05 | 2.9E-05 | 100% | 3.5E-01 | – | 9.1E+00 | 9.4E+00 | 100% |
| Vinyl Chloride | 1.75E-02 | UCL | 0 | 1 | 1.24E+03 | V | 3.8E-09 | – | 5.1E-09 | 8.9E-09 | <1% | 5.0E-06 | – | 3.2E-05 | 3.7E-05 | <1% |
| Total Risk or Hazard with all COPCs | | | | | | | Total ELCR | | 3E-05 | 100% | Total HI | | 9 | 100% | | |

- [a] Only detected constituents of potential concern are presented.
- [b] The exposure point concentration (EPC) was the lower concentration of either the upper confidence level on the mean (UCL) or the maximum concentration, where the UCL was incalculable. The UCLs were calculated using United States Environmental Protection Agency (USEPA) ProUCL version 5.1.00 (USEPA 2016a). The UCL used is the one recommended by ProUCL, unless a greater than 95% UCL was recommended, in which case the 95% UCL was selected.
- [c] Dermal absorption efficiency (ABSd) for uptake of constituents from a soil matrix (unitless) (USEPA 2018a).
- [d] Relative bioavailability factor for arsenic in soil was set at 0.60 (i.e., 0.6) consistent with USEPA recommendations (USEPA 2018a).
- [e] The volatilization factor for soil ([VF] identified with [V]), derived in Table 20.

| | | | | | |
|-----------------|---------------------------------------|----------------|--------------------------------|-----|---|
| – | Not applicable. | HI | Hazard index (sum of the HQs). | µg | Microgram. |
| % | Percent. | HQ | Hazard quotient. | mg | Milligram. |
| cm ² | Square centimeter. | hr | Hour. | NA | Toxicity value not available or not applicable. |
| CSF | Cancer slope factor. | IUR | Inhalation unit risk. | RfC | Reference concentration. |
| ELCR | Excess lifetime cancer risk. | kg | Kilogram. | RfD | Reference dose. |
| EPCs | Exposure point concentration in soil. | m ³ | Cubic meter. | | |

Equations are presented in Table 15, and summarized below.
 Constituent-specific toxicity values (CSF, IUR, RfC, RfD) are presented in Table 21 through Table 24.

$$ELCRo = (EPCs \times RBF \times FI \times IRs \times EF \times ED \times CSFo) / (1,000,000 \text{ mg/kg} \times BW \times ATc)$$

$$ELCRd = (EPCs \times SSAs \times SAR \times ABSd \times EF \times ED \times CSFa) / (1,000,000 \text{ mg/kg} \times BW \times ATc)$$

$$ELCRi = (EPCs \times ET \times CF \times EF \times ED \times IUR \times 1000 \text{ } \mu\text{g/mg}) / (VF \times ATc)$$

$$HQo = (EPCs \times RBF \times FI \times IRs \times EF \times ED) / (1,000,000 \text{ mg/kg} \times BW \times ATnc \times RfDo)$$

$$HQd = (EPCs \times SSAs \times SAR \times ABSd \times EF \times ED) / (1,000,000 \text{ mg/kg} \times BW \times ATnc \times RfDa)$$

$$HQi = (EPCs \times ET \times CF \times EF \times ED) / (VF \times ATnc \times RfC)$$

| Variable | Acronym | Value | Unit | Source |
|------------------------------------|---------|--------|-------------------------|--------------|
| Averaging time, cancer | ATc | 25,550 | days | See Table 14 |
| Averaging time, non-cancer | ATnc | 9,125 | days | See Table 14 |
| Body weight | BW | 80 | kg | See Table 14 |
| Exposure time | ET | 8 | hrs/day | See Table 14 |
| Exposure frequency | EF | 250 | days/year | See Table 14 |
| Exposure duration | ED | 25 | years | See Table 14 |
| Conversion factor (days/hr) | CF | 0.042 | days/hr | See Table 14 |
| Fraction ingested from site | FI | 1 | unitless | See Table 14 |
| Ingestion rate of soil | IRs | 100 | mg/day | See Table 14 |
| Soil-to-skin adherence rate | SAR | 0.12 | mg/cm ² /day | See Table 14 |
| Skin surface area for soil contact | SSAs | 3,527 | cm ² | See Table 14 |

Table of Inputs and Outputs for Multiple Chemicals

Note: Parameters other than the chemical concentration must be entered in the MODEL sheet and must be the same for all chemicals. Warnings and errors are displayed in only on the MODEL sheet.

| | | | Benzene | Dichloroethane, 1,1- | Dichloroethylene, 1,1- | Naphthalene | Trichloroethylene | rimethylbenzene, 1,2,4 | Vinyl Chloride |
|---|------------------------------------|---------------|--------------------|----------------------|------------------------|--------------------|--------------------|-------------------------|--------------------|
| Source Characteristics: | | | Value | Value | Value | Value | Value | Value | Value |
| Source medium | Units | Symbol | Groundwater | Groundwater | Groundwater | Groundwater | Groundwater | Groundwater | Groundwater |
| Source medium | | Source | | | | | | | |
| Groundwater concentration | (ug/L) | Cmedium | 0.632 | 188 | 177 | 83.2 | 21500 | 2.02 | 593 |
| Depth below grade to water table | (m) | Ls | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 |
| Average groundwater temperature | (°C) | Ts | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 |
| Calc: Source vapor concentration | (ug/m3) | Cs | 113 | 34724 | 156897 | 1008 | 6718244 | 357 | 586406 |
| Calc: % of pure component saturated vapor concentration | (%) | %Sat | 0.000% | 0.003% | 0.005% | 0.172% | 1.378% | 0.003% | 0.006% |
| Chemical: | | | Value | Value | Value | Value | Value | Value | Value |
| Chemical Name | | Chem | Benzene | Dichloroethane, 1,1- | Dichloroethylene, 1,1- | Naphthalene | Trichloroethylene | Trimethylbenzene, 1,2,4 | Vinyl Chloride |
| CAS No. | | CAS | 71-43-2 | 75-34-3 | 75-35-4 | 91-20-3 | 79-01-6 | 95-63-6 | 75-01-4 |
| Toxicity Factors | | | | | | | | | |
| Unit risk factor | (ug/m ³) ⁻¹ | IUR | 7.80E-06 | 1.60E-06 | Not Available | 3.40E-05 | see note | Not Available | 4.40E-06 |
| Mutagenic compound | | Mut | No | No | No | No | Yes | No | VC |
| Reference concentration | (ug/m ³) | RfC | 3.00E-02 | Not Available | 2.00E-01 | 3.00E-03 | 2.00E-03 | 6.00E-02 | 1.00E-01 |
| Chemical Properties: | | | Value | Value | Value | Value | Value | Value | Value |
| Pure component water solubility | (mg/L) | S | 1.79E+03 | 5.04E+03 | 2.42E+03 | 3.10E+01 | 1.28E+03 | 5.70E+01 | 8.80E+03 |
| Henry's Law Constant @ 25°C | (atm-m ³ /mol) | Hc | 5.55E-03 | 5.62E-03 | 2.61E-02 | 4.40E-04 | 9.85E-03 | 6.16E-03 | 2.78E-02 |
| Calc: Henry's Law Constant @ 25°C | (dimensionless) | Hr | 2.27E-01 | 2.30E-01 | 1.07E+00 | 1.80E-02 | 4.03E-01 | 2.52E-01 | 1.14E+00 |
| Calc: Henry's Law Constant @ system temperature | (dimensionless) | Hs | 1.78E-01 | 1.85E-01 | 8.86E-01 | 1.21E-02 | 3.12E-01 | 1.77E-01 | 9.89E-01 |
| Diffusivity in air | (cm2/s) | Dair | 8.95E-02 | 8.36E-02 | 8.63E-02 | 6.05E-02 | 6.87E-02 | 6.07E-02 | 1.07E-01 |
| Diffusivity in water | (cm2/s) | Dwater | 1.03E-05 | 1.06E-05 | 1.10E-05 | 8.38E-06 | 1.02E-05 | 7.92E-06 | 1.20E-05 |
| Building Characteristics: | | | Value | Value | Value | Value | Value | Value | Value |
| Building setting | | Bldg_Setting | Commercial | Commercial | Commercial | Commercial | Commercial | Commercial | Commercial |
| Foundation type | | Found_Type | Slab-on-grade | Slab-on-grade | Slab-on-grade | Slab-on-grade | Slab-on-grade | Slab-on-grade | Slab-on-grade |
| Depth below grade to base of foundation | (m) | Lb | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| Foundation thickness | (m) | Lf | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| Fraction of foundation area with cracks | (-) | eta | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| Enclosed space floor area | (m2) | Ab | 1500.00 | 1500.00 | 1500.00 | 1500.00 | 1500.00 | 1500.00 | 1500.00 |
| Enclosed space mixing height | (m) | Hb | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| Indoor air exchange rate | (1/hr) | ach | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 |
| Qsoil/Qbuilding | (-) | Qsoil_Qb | 0.0030 | 0.0030 | 0.0030 | 0.0030 | 0.0030 | 0.0030 | 0.0030 |
| Calc: Building ventilation rate | (m3/hr) | Qb | 6750.00 | 6750.00 | 6750.00 | 6750.00 | 6750.00 | 6750.00 | 6750.00 |
| Calc: Average vapor flow rate into building | (m3/hr) | Qsoil | 20.25 | 20.25 | 20.25 | 20.25 | 20.25 | 20.25 | 20.25 |

Table of Inputs and Outputs for Multiple Chemicals

Note: Parameters other than the chemical concentration must be entered in the MODEL sheet and must be the same for all chemicals. Warnings and errors are displayed in only on the MODEL sheet.

| | | | Benzene | Dichloroethane, 1,1- | Dichloroethylene, 1,1- | Naphthalene | Trichloroethylene | rimethylbenzene, 1,2,4 | Vinyl Chloride |
|---|----------------------|---------------|--------------|----------------------|------------------------|--------------|-------------------|------------------------|----------------|
| Vadose zone characteristics: | Units | Symbol | Value | Value | Value | Value | Value | Value | Value |
| Stratum A (Top of soil profile): | | | | | | | | | |
| Stratum A SCS soil type | | SCS_A | Silty Clay | Silty Clay | Silty Clay | Silty Clay | Silty Clay | Silty Clay | Silty Clay |
| Stratum A thickness (from surface) | (m) | hSA | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 |
| Stratum A total porosity | (-) | nSA | 0.481 | 0.481 | 0.481 | 0.481 | 0.481 | 0.481 | 0.481 |
| Stratum A water-filled porosity | (-) | nwSA | 0.216 | 0.216 | 0.216 | 0.216 | 0.216 | 0.216 | 0.216 |
| Stratum A bulk density | (g/cm ³) | rhoSA | 1.380 | 1.380 | 1.380 | 1.380 | 1.380 | 1.380 | 1.380 |
| Stratum B (Soil layer below Stratum A): | | | | | | | | | |
| Stratum B SCS soil type | | SCS_B | Not Present | Not Present | Not Present | Not Present | Not Present | Not Present | Not Present |
| Stratum B thickness | (m) | hSB | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stratum B total porosity | (-) | nSB | | | | | | | |
| Stratum B water-filled porosity | (-) | nwSB | | | | | | | |
| Stratum B bulk density | (g/cm ³) | rhoSB | | | | | | | |
| Stratum C (Soil layer below Stratum B): | | | | | | | | | |
| Stratum C SCS soil type | | SCS_C | Not Present | Not Present | Not Present | Not Present | Not Present | Not Present | Not Present |
| Stratum C thickness | (m) | hSC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stratum C total porosity | (-) | nSC | | | | | | | |
| Stratum C water-filled porosity | (-) | nwSC | | | | | | | |
| Stratum C bulk density | (g/cm ³) | rhoSC | | | | | | | |
| Stratum directly above the water table | | | | | | | | | |
| Stratum A, B, or C | | src_soil | Stratum A | Stratum A | Stratum A | Stratum A | Stratum A | Stratum A | Stratum A |
| Height of capillary fringe | (m) | hcz | 1.923 | 1.923 | 1.923 | 1.923 | 1.923 | 1.923 | 1.923 |
| Capillary zone total porosity | (-) | ncz | 0.481 | 0.481 | 0.481 | 0.481 | 0.481 | 0.481 | 0.481 |
| Capillary zone water filled porosity | (-) | nwcz | 0.424 | 0.424 | 0.424 | 0.424 | 0.424 | 0.424 | 0.424 |
| Exposure Parameters: | Units | Symbol | Value | Value | Value | Value | Value | Value | Value |
| Target risk for carcinogens | (-) | Target_CR | 1.00E-06 | 1.00E-06 | 1.00E-06 | 1.00E-06 | 1.00E-06 | 1.00E-06 | 1.00E-06 |
| Target hazard quotient for non-carcinogens | (-) | Target_HQ | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Exposure Scenario | | Scenario | Commercial | Commercial | Commercial | Commercial | Commercial | Commercial | Commercial |
| Averaging time for carcinogens | (yrs) | ATc | 70 | 70 | 70 | 70 | 70 | 70 | 70 |
| Averaging time for non-carcinogens | (yrs) | ATnc | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Exposure duration | (yrs) | ED | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Exposure frequency | (days/yr) | EF | 250 | 250 | 250 | 250 | 250 | 250 | 250 |
| Exposure time | (hrs/24 hrs) | ET | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Mutagenic mode-of-action factor | (yrs) | MMOAF | 72 | 72 | 72 | 72 | 72 | 72 | 72 |

Table of Inputs and Outputs for Multiple Chemicals

Note: Parameters other than the chemical concentration must be entered in the MODEL sheet and must be the same for all chemicals. Warnings and errors are displayed in only on the MODEL sheet.

| | | | Benzene | Dichloroethane, 1,1- | Dichloroethylene, 1,1- | Naphthalene | Trichloroethylene | rimethylbenzene, 1,2,4 | Vinyl Chloride |
|---|--|---------|-------------------|----------------------|------------------------|-------------------|-------------------|------------------------|-------------------|
| Source to Indoor Air Attenuation Factor | | | Value | Value | Value | Value | Value | Value | Value |
| Groundwater to indoor air attenuation coefficient | (-) | alpha | 1.8E-06 | 1.7E-06 | 1.3E-06 | 7.8E-06 | 1.3E-06 | 1.3E-06 | 1.6E-06 |
| | | Range | 1.8E-06 - 1.8E-06 | 1.7E-06 - 1.7E-06 | 1.3E-06 - 1.3E-06 | 7.3E-06 - 7.9E-06 | 1.2E-06 - 1.3E-06 | 1.3E-06 - 1.3E-06 | 1.5E-06 - 1.6E-06 |
| Predicted Indoor Air Concentration | | | Value | Value | Value | Value | Value | Value | Value |
| Indoor air concentration due to vapor intrusion | (ug/m3) | Cia | 2.0E-04 | 6.0E-02 | 2.0E-01 | 7.9E-03 | 8.5E+00 | 4.6E-04 | 9.2E-01 |
| | | Range | 2.0E-04 - 2.0E-04 | 5.9E-02 - 6.0E-02 | 2.0E-01 - 2.0E-01 | 7.3E-03 - 7.9E-03 | 8.4E+00 - 8.5E+00 | 4.5E-04 - 4.6E- | 9.0E-01 - 9.2E- |
| | (ppbv) | Cia | 6.4E-05 | 1.5E-02 | 5.1E-02 | 1.5E-03 | 1.6E+00 | 9.3E-05 | 3.6E-01 |
| | | Range | 6.3E-05 - 6.4E-05 | 1.5E-02 - 1.5E-02 | 5.0E-02 - 5.1E-02 | 1.4E-03 - 1.5E-03 | 1.6E+00 - 1.6E+00 | 9.2E-05 - 9.3E-05 | 3.5E-01 - 3.6E-01 |
| Predicted Vapor Concentration Beneath the Foundation | | | Value | Value | Value | Value | Value | Value | Value |
| Subslab vapor concentration | (ug/m3) | Css | 6.8E-02 | 2.0E+01 | 6.7E+01 | 2.6E+00 | 2.8E+03 | 1.5E-01 | 3.1E+02 |
| | | Range | 4.1E-03 - 2.0E+00 | 1.2E+00 - 5.9E+02 | 4.0E+00 - 2.0E+03 | 1.6E-01 - 7.3E+01 | 1.7E+02 - 8.4E+04 | 9.2E-03 - 4.5E+00 | 1.8E+01 - 9.0E+03 |
| | (ppbv) | Css | 2.1E-02 | 4.9E+00 | 1.7E+01 | 5.0E-01 | 5.3E+02 | 3.1E-02 | 1.2E+02 |
| | | Range | 1.3E-03 - 6.3E-01 | 3.0E-01 - 1.5E+02 | 1.0E+00 - 5.0E+02 | 3.0E-02 - 1.4E+01 | 3.2E+01 - 1.6E+04 | 1.9E-03 - 9.2E-01 | 7.2E+00 - 3.5E+03 |
| Diffusive Transport Upward Through Vadose Zone | | | Value | Value | Value | Value | Value | Value | Value |
| Effective diffusion coefficient through Stratum A | (cm2/sec) | DeffA | 4.6E-03 | 4.3E-03 | 4.5E-03 | 3.2E-03 | 3.6E-03 | 3.1E-03 | 5.6E-03 |
| Effective diffusion coefficient through Stratum B | (cm2/sec) | DeffB | | | | | | | |
| Effective diffusion coefficient through Stratum C | (cm2/sec) | DeffC | | | | | | | |
| Effective diffusion coefficient through capillary zone | (cm2/sec) | DeffCZ | 4.3E-05 | 4.1E-05 | 3.0E-05 | 1.9E-04 | 3.0E-05 | 3.0E-05 | 3.7E-05 |
| Effective diffusion coefficient through unsaturated zone | (cm2/sec) | DeffT | 6.3E-05 | 6.0E-05 | 4.5E-05 | 2.7E-04 | 4.4E-05 | 4.5E-05 | 5.5E-05 |
| Critical Parameters | | | Value | Value | Value | Value | Value | Value | Value |
| a for diffusive transport from source to building with | (-) | A_Param | 1.8E-06 | 1.7E-06 | 1.3E-06 | 7.9E-06 | 1.3E-06 | 1.3E-06 | 1.6E-06 |
| Pe (Peclet Number) for transport through the foundation | (-) | B_Param | 1.6E+03 | 1.7E+03 | 1.6E+03 | 2.3E+03 | 2.1E+03 | 2.3E+03 | 1.3E+03 |
| a for convective transport from subslab to building | (-) | C_Param | 3.0E-03 | 3.0E-03 | 3.0E-03 | 3.0E-03 | 3.0E-03 | 3.0E-03 | 3.0E-03 |
| Interpretation | | | | | | | | | |
| #### | Advection is the dominant mechanism across the foundation. Diffusion through soil is the overall rate limiting process. | | | | | | | | |
| Critical Parameters | | | | | | | | | |
| #### | Hb, Ls, DeffT, ach | | | | | | | | |
| Non-Critical Parameters | | | | | | | | | |
| #### | Qsoil_Qb, Lf, DeffA, eta | | | | | | | | |

Table of Inputs and Outputs for Multiple Chemicals

Note: Parameters other than the chemical concentration must be entered in the MODEL sheet and must be the same for all chemicals. Warnings and errors are displayed in only on the MODEL sheet.

| | | | Benzene | Dichloroethane, 1,1- | Dichloroethylene, 1,1- | Naphthalene | Trichloroethylene | rimethylbenzene, 1,2,4 | Vinyl Chloride |
|--|----------------|---------------------|-------------------|-------------------------|------------------------|-------------------|-------------------|------------------------|-------------------|
| Risk Calculations | Units | Symbol | Value | Value | Value | Value | Value | Value | Value |
| Risk-Based Target Screening Levels | | | | | | | | | |
| Target risk for carcinogens | (-) | Target_CR | 1E-06 | 1E-06 | 1E-06 | 1E-06 | 1E-06 | 1E-06 | 1E-06 |
| Target hazard quotient for noncarcinogens | (-) | Target_HQ | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Target indoor air concentration | (ug/m3) | Target_IA | 1.57E+00 | 7.67E+00 | 8.76E+02 | 3.61E-01 | 2.05E+00 | 2.63E+02 | 2.10E-01 |
| | (ppbv) | Target_IA | 4.92E-01 | 1.89E+00 | 2.21E+02 | 6.88E-02 | 3.82E-01 | 5.35E+01 | 8.22E-02 |
| Target groundwater concentration | (ug/L) | Target_GW | 4.88E+03 | 2.41E+04 | 7.67E+05 | 3.80E+03 | 5.20E+03 | 1.16E+06 | 1.36E+02 |
| Incremental Risk Estimates | | | | | | | | | |
| Incremental cancer risk from vapor intrusion | (-) | Cancer_Risk | 1.29E-10 | 7.80E-09 | No IUR | 2.19E-08 | 1.10E-05 | No IUR | 3.29E-07 |
| | | Range | 1.3E-10 - 1.3E-10 | 7.7E-09 - 7.8E-09 | - | 2.0E-08 - 2.2E-08 | 1.1E-05 - 1.1E-05 | - | 3.2E-07 - 3.3E-07 |
| Hazard quotient from vapor intrusion | (-) | HQ | 1.54885E-06 | No RfC Available | 0.000230905 | 0.000601 | 0.968684871 | 1.74115E-06 | 0.002096338 |
| | | Range | 1.5E-06 - 1.5E-06 | C Available - No RfC Av | 2.3E-04 - 2.3E-04 | 5.6E-04 - 6.0E-04 | 9.6E-01 - 9.7E-01 | 1.7E-06 - 1.7E-06 | 2.1E-03 - 2.1E-03 |
| | | Total Risk | 1E-05 | | | | | | |
| | | Total Hazard | 1 | | | | | | |

Table 30

Risk and Hazard Calculations for a Hypothetical Future Construction Worker for Exposure to Combined Surface and Subsurface Soil (0-10 Feet)
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent [a] | EPCs [b] (mg/kg) | | ABSd [c] | RBF [d] | VF-sl _{cons} [e] (m ³ /kg) | CANCER RISK | | | | Percent Total ELCR | NON-CANCER HAZARD | | | | Percent Total HI | |
|-----------------------------------|---------------------|-----|----------|---------|---|---------------------|------------|------------|--------------------|--------------------------|-----------------------|------------|----|----------------------|------------------------|------|
| | | | | | | Route-Specific Risk | | | Calculated Risk | | Route-Specific Hazard | | | Calculated Hazard | | |
| | | | | | | Oral | Dermal | Inhalation | | Oral | Dermal | Inhalation | | | | |
| | | | | | | ELCRo | ELCRd | ELCRi | ELCR | HQo | HQd | HQi | HI | | | |
| Volatile Organic Compounds | | | | | | | | | | | | | | | | |
| 1,1-Dichloroethane | 4.53E-01 | UCL | 0 | 1 | 5.84E+02 | V | 4.2E-11 | – | 1.6E-09 | 1.7E-09 | <1% | 2.6E-07 | – | NA | 2.6E-07 | <1% |
| 1,1-Dichloroethene | 3.42E+00 | UCL | 0 | 1 | 3.24E+02 | V | NA | NA | NA | – | | 4.3E-04 | – | 1.2E-02 | 1.3E-02 | <1% |
| cis-1,2-Dichloroethene | 1.25E+01 | UCL | 0 | 1 | 6.77E+02 | V | NA | NA | NA | – | | 7.1E-04 | – | NA | 7.1E-04 | <1% |
| Ethylbenzene | 1.10E-02 | UCL | 0 | 1 | 1.18E+03 | V | 1.9E-12 | – | 3.0E-11 | 3.2E-11 | <1% | 2.5E-07 | – | 9.4E-08 | 3.4E-07 | <1% |
| Tetrachloroethene | 4.47E-01 | UCL | 0 | 1 | 5.82E+02 | V | 1.5E-11 | – | 2.6E-10 | 2.8E-10 | <1% | 5.0E-06 | – | 1.7E-03 | 1.7E-03 | <1% |
| 1,1,1-Trichloroethane | 3.64E+01 | UCL | 0 | 1 | 4.48E+02 | V | NA | NA | NA | – | | 5.9E-06 | – | 1.5E-03 | 1.5E-03 | <1% |
| Trichloroethene | 2.04E+02 | UCL | 0 | 1 | 5.68E+02 | V | 1.5E-07 | – | 1.9E-06 | 2.1E-06 | 100% | 4.6E-01 | – | 1.5E+01 | 1.6E+01 | 100% |
| Vinyl Chloride | 1.75E-02 | UCL | 0 | 1 | 2.75E+02 | V | 2.0E-10 | – | 3.6E-10 | 5.7E-10 | <1% | 6.6E-06 | – | 7.6E-05 | 8.2E-05 | <1% |
| Total Risk or Hazard | | | | | | | Total ELCR | | 2E-06 | 100% | Total HI | | 16 | 100% | | |

[a] Only detected constituents of potential concern are presented.

[b] The exposure point concentration (EPC) was the lower concentration of either the upper confidence level on the mean (UCL) or the maximum concentration, where the UCL was incalculable. The UCLs were calculated using United States Environmental Protection Agency (USEPA) ProUCL version 5.1.00 (USEPA 2016a). The UCL used is the one recommended by ProUCL, unless a greater than 95% UCL was recommended, in which case the 95% UCL was selected.

[c] Dermal absorption efficiency (ABSd) for uptake of constituents from a soil matrix (unitless) (USEPA 2018a).

[d] Relative bioavailability factor for arsenic in soil was set at 60% (i.e., 0.6) consistent with USEPA recommendations (USEPA 2018a).

[e] The volatilization factor for soil (VF) identified with [V], derived in Table 20.

| | | | | | |
|-----------------|---------------------------------------|----------------|--------------------------------|-----|---|
| – | Not applicable. | HI | Hazard index (sum of the HQs). | µg | Microgram. |
| % | Percent. | HQ | Hazard quotient. | mg | Milligram. |
| cm ² | Square centimeter. | hr | Hour. | NA | Toxicity value not available or not applicable. |
| CSF | Cancer slope factor. | IUR | Inhalation unit risk. | RfC | Reference concentration. |
| ELCR | Excess lifetime cancer risk. | kg | Kilogram. | RfD | Reference dose. |
| EPCs | Exposure point concentration in soil. | m ³ | Cubic meter. | | |

Equations are presented in Table 16, and summarized below.

Constituent-specific toxicity values (CSF, IUR, RfC, RfD) are presented in Table 21 through Table 24.

$$\text{ELCRo} = (\text{EPCs} \times \text{RBF} \times \text{FI} \times \text{IRs} \times \text{EF} \times \text{ED} \times \text{CSFo}) / (1,000,000 \text{ mg/kg} \times \text{BW} \times \text{ATc})$$

$$\text{ELCRd} = (\text{EPCs} \times \text{SSAs} \times \text{SAR} \times \text{ABSd} \times \text{EF} \times \text{ED} \times \text{CSFa}) / (1,000,000 \text{ mg/kg} \times \text{BW} \times \text{ATc})$$

$$\text{ELCRi} = (\text{EPCs} \times \text{ET} \times \text{CF} \times \text{EF} \times \text{ED} \times \text{IUR} \times 1000 \text{ µg/mg}) / (\text{VF} \times \text{ATc})$$

$$\text{HQo} = (\text{EPCs} \times \text{RBF} \times \text{FI} \times \text{IRs} \times \text{EF} \times \text{ED}) / (1,000,000 \text{ mg/kg} \times \text{BW} \times \text{ATnc} \times \text{RfDo})$$

$$\text{HQd} = (\text{EPCs} \times \text{SSAs} \times \text{SAR} \times \text{ABSd} \times \text{EF} \times \text{ED}) / (1,000,000 \text{ mg/kg} \times \text{BW} \times \text{ATnc} \times \text{RfDa})$$

$$\text{HQi} = (\text{EPCs} \times \text{ET} \times \text{CF} \times \text{EF} \times \text{ED}) / (\text{VF} \times \text{ATnc} \times \text{RfC})$$

| Variable | Acronym | Value | Unit | Source |
|------------------------------------|---------|--------|-------------------------|--------------|
| Averaging time, cancer | ATc | 25,550 | days | See Table 14 |
| Averaging time, non -cancer | ATnc | 365 | days | See Table 14 |
| Body weight | BW | 80 | kg | See Table 14 |
| Exposure time | ET | 8 | hrs/day | See Table 14 |
| Exposure frequency | EFsc | 5 | days/week | See Table 14 |
| Exposure duration | EDsc | 20 | weeks | See Table 14 |
| Conversion factor (days/hr) | CF | 0.042 | days/hr | See Table 14 |
| Fraction ingested from site | FI | 1 | unitless | See Table 14 |
| Ingestion rate of soil | IRs | 330 | mg/day | See Table 14 |
| Soil-to-skin adherence rate | SAR | 0.3 | mg/cm ² /day | See Table 14 |
| Skin surface area for soil contact | SSAs | 3,527 | cm ² | See Table 14 |

Table 31
Risk and Hazard Calculations for a Hypothetical Future Construction Worker for Exposure to Groundwater (Less than 15 ft bgs) in a Trench
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent [a] | EPCgw [b] (mg/L) | VFtrench [c] (L/m³) | CANCER RISK | | | | Percent Total ELCR | NON-CANCER HAZARD | | | | Percent Total HI | | |
|-----------------------------------|---------------------|------------------------|---------------------|--------|------------|--------------------|--------------------------|-----------------------|--------|------------|----------------------|------------------------|-----|------|
| | | | Route-Specific Risk | | | Calculated Risk | | Route-Specific Hazard | | | Calculated Hazard | | | |
| | | | Oral | Dermal | Inhalation | | | Oral | Dermal | Inhalation | | | | |
| | | | ELCRo | ELCRd | ELCRi | ELCR | | | | HQo | HQd | HQi | HI | |
| Volatile Organic Compounds | | | | | | | | | | | | | | |
| Benzene | 1.06E-03 | UCL | 3.55E-04 | NA | NA | 3.8E-12 | 3.8E-12 | <1% | NA | NA | 4.3E-07 | 4.3E-07 | <1% | |
| 1,1-Dichloroethane | 4.29E-01 | UCL | 3.44E-04 | NA | NA | 3.1E-10 | 3.1E-10 | <1% | NA | NA | NA | NA | – | |
| 1,1-Dichloroethene | 1.95E+00 | max | 1.70E-03 | NA | NA | NA | NA | – | NA | NA | 3.8E-03 | 3.8E-03 | <1% | |
| cis-1,2-Dichloroethene | 1.84E+01 | UCL | 2.61E-04 | NA | NA | NA | NA | – | NA | NA | NA | NA | – | |
| Ethylbenzene | 1.79E-03 | max | 3.61E-04 | NA | NA | 2.1E-12 | 2.1E-12 | <1% | NA | NA | 6.6E-09 | 6.6E-09 | <1% | |
| Naphthalene | 2.65E-01 | UCL | 1.63E-05 | NA | NA | 1.9E-10 | 1.9E-10 | <1% | NA | NA | 1.3E-04 | 1.3E-04 | <1% | |
| Trichloroethene | 5.37E+01 | UCL | 4.80E-04 | NA | NA | 1.4E-07 | 1.4E-07 | 91% | NA | NA | 1.1E+00 | 1.1E+00 | 99% | |
| 1,2,4-Trimethylbenzene | 2.88E-02 | max | 2.38E-04 | NA | NA | NA | NA | – | NA | NA | 3.1E-06 | 3.1E-06 | <1% | |
| Vinyl Chloride | 1.02E+00 | UCL | 2.38E-03 | NA | NA | 1.4E-08 | 1.4E-08 | 9% | NA | NA | 2.9E-03 | 2.9E-03 | <1% | |
| Total Inorganics | | | | | | | | | | | | | | |
| Iron | 5.10E+00 | max | – | NA | NA | – | NA | – | NA | NA | – | NA | – | |
| Total Risk or Hazard | | | | | | Total ELCR | | 2E-07 | 100% | Total HI | | | 1 | 100% |

[a] Only detected constituents of potential concern are presented.

[b] The exposure point concentration (EPC) was the lower concentration of either the upper confidence level on the mean (UCL) or the maximum concentration, where the UCL was incalculable. The UCLs were calculated using United States Environmental Protection Agency (USEPA) ProUCL version 5.1.00 (USEPA 2016a). The UCL used is the one recommended by ProUCL, unless a greater than 95% UCL was recommended, in which case the 95% UCL was selected. EPCs marked with "max" are based on the maximum detected concentration.

[c] The volatilization factor of exposed groundwater in a trench (VFtrench) is calculated in Table 19.

| | | | | | |
|-----------------|--|-----|--------------------------------|----------------|---|
| – | Not applicable. | HI | Hazard index (sum of the HQs). | m ³ | Cubic meter. |
| % | Percent. | HQ | Hazard quotient. | µg | Microgram. |
| cm ² | Square centimeter. | hr | Hour. | mg | Milligram. |
| ELCR | Excess lifetime cancer risk. | IUR | Inhalation unit risk. | NA | Toxicity value not available or not applicable. |
| EPCgw | Exposure point concentration in groundwater. | kg | Kilogram. | RfC | Reference concentration. |
| | | L | Liter. | | |

Equations are presented in Table 17, and summarized below.

Constituent-specific toxicity values (CSF, IUR, RfC, RfD) are presented in Table 21 through Table 24.

$$ELCRi = (EPCgw \times VFtrench \times ETinh \times CF \times EF \times ED \times IUR \times 1000 \mu g/mg) / (ATc)$$

$$HQi = (EPCgw \times VFtrench \times ETinh \times CF \times EF \times ED) / (ATnc \times RfC)$$

| Variable | Acronym | Value | Unit | Source |
|------------------------------|---------|--------|-----------|--------------|
| Averaging time, cancer | ATc | 25,550 | days | See Table 14 |
| Averaging time, non-cancer | ATnc | 365 | days | See Table 14 |
| Body weight | BW | 80 | kg | See Table 14 |
| Exposure time for inhalation | ET | 8 | hours/day | See Table 14 |
| Exposure frequency | EFsc | 5 | days/week | See Table 14 |
| Exposure duration | EDsc | 20 | weeks | See Table 14 |
| Conversion factor (days/hr) | CF | 0.042 | days/hr | See Table 14 |

Table 32
Risk and Hazard Calculations for a Hypothetical Future Resident for Exposure to Surface Soil (0-2 Feet)
Human Health Risk
AVX Corporation
Myrtle Beach, South Carolina

| Constituent [a] | EPCs [b] (mg/kg) | | ABSd [c] (unitless) | RBF [d] (unitless) | VF-sl [e] (m ³ /kg) | CANCER RISK | | | | Percent Total ELCR | NON-CANCER HAZARD | | | | Percent Total HI | |
|-----------------------------------|---------------------|-----|------------------------|-----------------------|-----------------------------------|---------------------|---------|------------|--------------------|--------------------------|-----------------------|---------|------------|----------------------|------------------------|------|
| | | | | | | Route-Specific Risk | | | Calculated Risk | | Route-Specific Hazard | | | Calculated Hazard | | |
| | | | | | | Oral | Dermal | Inhalation | | | Oral | Dermal | Inhalation | | | |
| | | | | | | ELCRo | ELCRd | ELCRi | | | ELCR | HQo | HQd | | | HQi |
| Volatile Organic Compounds | | | | | | | | | | | | | | | | |
| cis-1,2-Dichloroethene | 1.49E-02 | UCL | 0 | 1 | 3.06E+03 | V | NA | NA | NA | – | 100% | 9.5E-05 | – | NA | 9.5E-05 | <1% |
| Tetrachloroethene | 2.14E-03 | UCL | 0 | 1 | 2.63E+03 | V | 6.5E-12 | – | 7.5E-11 | 8.2E-11 | <1% | 4.6E-06 | – | 2.0E-05 | 2.4E-05 | <1% |
| Trichloroethene | 1.27E+02 | UCL | 0 | 1 | 2.57E+03 | V | 1.4E-05 | – | 1.0E-04 | 1.2E-04 | 100% | 3.2E+00 | – | 2.4E+01 | 2.7E+01 | 100% |
| Vinyl Chloride | 7.82E-03 | UCL | 0 | 1 | 1.24E+03 | V | 8.3E-08 | – | 3.8E-08 | 1.2E-07 | <1% | 3.3E-05 | – | 6.0E-05 | 9.4E-05 | <1% |
| | | | | | | – | | | | | | | | | | |
| Total Risk or Hazard | | | | | | Total ELCR | | | 1E-04 | 100% | Total HI | | | 27 | 100% | |

- [a] Only detected constituents of potential concern are presented.
- [b] The exposure point concentration (EPC) was the lower concentration of either the upper confidence level on the mean (UCL) or the maximum concentration, where the UCL was incalculable. The UCLs were calculated using United States Environmental Protection Agency (USEPA) ProUCL version 5.1.00 (USEPA 2016a). The UCL used is the one recommended by ProUCL, unless a greater than 95% UCL was recommended, in which case the 95% UCL was selected.
- [c] Dermal absorption efficiency (ABSd) for uptake of constituents from a soil matrix (unitless) (USEPA 2018a).
- [d] Relative bioavailability factor is constituent-specific; default of 100% (i.e., 1) unless otherwise indicated (unitless).
- [e] The volatilization factor for soil (VF) identified with [V]), derived in Table 20.
- [f] ELCRs for trichloroethene (TCE) were calculated using the TCE-specific equations presented in Table 11.
- [g] ELCRs for vinyl chloride (VC) were calculated using the VC-specific equations presented in Table 11.

| | | | | | |
|------|---------------------------------------|----|--------------------------------|--------------------|---|
| – | Not applicable. | HI | Hazard index (sum of the HQs). | m ³ /kg | Cubic meters per kilogram. |
| ELCR | Excess lifetime cancer risk. | HQ | Hazard quotient. | mg/kg | Milligrams per kilogram. |
| EPCs | Exposure point concentration in soil. | m | EPC based on maximum. | NA | Toxicity value not available or not applicable. |

Equations are presented in Table 11.
 Receptor-specific exposure parameters are presented in Table 14 while constituent specific absorption parameters are presented in Table 25.
 Constituent-specific toxicity values are presented in Table 21 through Table 24.

| Variable | Acronym | Value | Value | Unit | Source |
|--|---------|--------|---------|-------------------------|--------------|
| | | Child | Average | | |
| Averaging time, cancer | ATc | 25,550 | 25,550 | days | See Table 14 |
| Averaging time, non -cancer | ATnc | 2,190 | – | days | See Table 14 |
| Body weight | BW | 15 | – | kg | See Table 14 |
| Exposure time | ET | 24 | 24 | hrs/day | See Table 14 |
| Exposure frequency | EF | 350 | 350 | days/year | See Table 14 |
| Exposure duration | ED | 6 | 26 | years | See Table 14 |
| Conversion factor (days/hr) | CF | 0.042 | – | days/hr | See Table 14 |
| Fraction ingested from site | FI | 1 | – | unitless | See Table 14 |
| Ingestion rate of soil | IRs | 200 | – | mg/day | See Table 14 |
| Soil-to-skin adherence rate | SAR | 0.2 | – | mg/cm ² /day | See Table 14 |
| Skin surface area for soil contact | SSAs | 2,373 | – | cm ² | See Table 14 |
| Age-adjusted soil oral intake factor | IFso | – | 36,750 | mg-yr/kg/day | See Table 14 |
| Mutagenic age-adjusted soil oral intake factor | IFMso | – | 166,833 | mg-yr/kg/day | See Table 14 |
| Age-adjusted soil dermal intake factor | IFsd | – | 103,390 | mg-yr/kg/day | See Table 14 |
| Mutagenic age-adjusted soil dermal intake factor | IFMsd | – | 428,260 | mg-yr/kg/day | See Table 14 |
| Mutagenic age-adjusted soil inhalation intake factor | IFMsi | – | 72 | years | See Table 14 |
| Cancer adjustment factor for TCE, oral and dermal | CAFo | – | 0.804 | unitless | – |
| Mutagenic adjustment factor for TCE, oral and dermal | MAFo | – | 0.202 | unitless | – |
| Cancer adjustment factor for TCE, inhalation | CAFi | – | 0.756 | unitless | – |
| Mutagenic adjustment factor for TCE, inhalation | MAFi | – | 0.244 | unitless | – |

Table 33

Risk and Hazard Calculations for a Hypothetical Future Resident for Exposure to Combined Surface and Subsurface Soil (0-15 Feet)
 Human Health Risk Assessment
 AVX Corporation
 Myrtle Beach, South Carolina



| Constituent [a] | EPCs [b] (mg/kg) | ABSd [c] (unitless) | RBF [d] (unitless) | VF-sl [e] (m³/kg) | CANCER RISK | | | | Percent Total ELCR | NON-CANCER HAZARD | | | | Percent Total HI |
|-----------------------------------|---------------------|------------------------|-----------------------|----------------------|---------------------|--------|------------|--------------------|--------------------------|-----------------------|------------|---------|----------------------|------------------------|
| | | | | | Route-Specific Risk | | | Calculated Risk | | Route-Specific Hazard | | | Calculated Hazard | |
| | | | | | Oral | Dermal | Inhalation | | Oral | Dermal | Inhalation | HI | | |
| Volatile Organic Compounds | | | | | ELCRo | ELCRd | ELCRi | ELCR | | HQo | HQd | HQi | HI | |
| 1,1-Dichloroethane | 4.53E-01 UCL | 0 | 1 | 2.64E+03 V | 3.7E-09 | – | 9.8E-08 | 1.0E-07 | <1% | 2.9E-05 | – | NA | 2.9E-05 | <1% |
| 1,1-Dichloroethene | 3.42E+00 UCL | 0 | 1 | 1.46E+03 V | NA | NA | NA | – | | 8.7E-04 | – | 1.1E-02 | 1.2E-02 | <1% |
| cis-1,2-Dichloroethene | 1.25E+01 UCL | 0 | 1 | 3.06E+03 V | NA | NA | NA | – | | 8.0E-02 | – | NA | 8.0E-02 | <1% |
| Ethylbenzene | 1.10E-02 UCL | 0 | 1 | 5.32E+03 V | 1.7E-10 | – | 1.8E-09 | 2.0E-09 | <1% | 1.4E-06 | – | 2.0E-06 | 3.4E-06 | <1% |
| Tetrachloroethene | 4.47E-01 UCL | 0 | 1 | 2.63E+03 V | 1.3E-09 | – | 1.6E-08 | 1.7E-08 | <1% | 9.5E-04 | – | 4.1E-03 | 5.0E-03 | <1% |
| 1,1,1-Trichloroethane | 3.64E+01 UCL | 0 | 1 | 2.02E+03 V | NA | NA | NA | – | | 2.3E-04 | – | 3.5E-03 | 3.7E-03 | <1% |
| Trichloroethene | 2.04E+02 UCL | 0 | 1 | 2.57E+03 V | 2.3E-05 | – | 1.7E-04 | 1.9E-04 | 100% | 5.2E+00 | – | 3.8E+01 | 4.3E+01 | 100% |
| Vinyl Chloride | 1.75E-02 UCL | 0 | 1 | 1.24E+03 V | 1.9E-07 | – | 8.4E-08 | 2.7E-07 | <1% | 7.4E-05 | – | 1.4E-04 | 2.1E-04 | <1% |
| Total Risk or Hazard | | | | | Total ELCR | | | 2E-04 | 100% | | Total HI | | 43 | 100% |

- [a] Only detected constituents of potential concern are presented.
 - [b] The exposure point concentration (EPC) was the lower concentration of either the upper confidence level on the mean (UCL) or the maximum concentration, where the UCL was incalculable. The UCLs were calculated using United States Environmental Protection Agency (USEPA) ProUCL version 5.1.00 (USEPA 2016a). The UCL used is the one recommended by ProUCL, unless a greater than 95% UCL was recommended, in which case the 95% UCL was selected.
 - [c] Dermal absorption efficiency (ABSd) for uptake of constituents from a soil matrix (unitless) (USEPA 2018a).
 - [d] Relative bioavailability factor is constituent-specific; default of 100% (i.e., 1) unless otherwise indicated (unitless).
 - [e] The volatilization factor for soil ([VF] identified with [V]), derived in Table 20.
 - [f] ELCRs for trichloroethene (TCE) were calculated using the TCE-specific equations presented in Table 11.
 - [g] ELCRs for vinyl chloride (VC) were calculated using the VC-specific equations presented in Table 11.
- Not applicable.
- ELCR Excess lifetime cancer risk.
- EPCs Exposure point concentration in soil.
- HI Hazard index (sum of the HQs).
- HQ Hazard quotient.
- m EPC based on maximum.
- m³/kg Cubic meters per kilogram.
- mg/kg Milligrams per kilogram.
- NA Toxicity value not available or not applicable.

Equations are presented in Table 11.
 Receptor-specific exposure parameters are presented in Table 14 while constituent specific absorption parameters are presented in Table 25.
 Constituent-specific toxicity values are presented in Table 21 through Table 24.

| Variable | Acronym | Value | Value | Unit | Source |
|--|---------|--------|---------|--------------|--------------|
| | | Child | Average | | |
| Averaging time, cancer | ATc | 25,550 | 25,550 | days | See Table 14 |
| Averaging time, non -cancer | ATnc | 2,190 | – | days | See Table 14 |
| Body weight | BW | 15 | – | kg | See Table 14 |
| Exposure time | ET | 24 | 24 | hrs/day | See Table 14 |
| Exposure frequency | EF | 350 | 350 | days/year | See Table 14 |
| Exposure duration | ED | 6 | 26 | years | See Table 14 |
| Conversion factor (days/hr) | CF | 0.042 | – | days/hr | See Table 14 |
| Fraction ingested from site | FI | 1 | – | unitless | See Table 14 |
| Ingestion rate of soil | IRs | 200 | – | mg/day | See Table 14 |
| Soil-to-skin adherence rate | SAR | 0.2 | – | mg/cm²/day | See Table 14 |
| Skin surface area for soil contact | SSAs | 2,373 | – | cm² | See Table 14 |
| Age-adjusted soil oral intake factor | IFso | – | 36,750 | mg-yr/kg/day | See Table 14 |
| Mutagenic age-adjusted soil oral intake factor | IFMso | – | 166,833 | mg-yr/kg/day | See Table 14 |
| Age-adjusted soil dermal intake factor | IFsd | – | 103,390 | mg-yr/kg/day | See Table 14 |
| Mutagenic age-adjusted soil dermal intake factor | IFMsd | – | 428,260 | mg-yr/kg/day | See Table 14 |
| Mutagenic age-adjusted soil inhalation intake factor | IFMSi | – | 72 | years | See Table 14 |
| Cancer adjustment factor for TCE, oral and dermal | CAFo | – | 0.804 | unitless | |
| Mutagenic adjustment factor for TCE, oral and dermal | MAFo | – | 0.202 | unitless | |
| Cancer adjustment factor for TCE, inhalation | CAFi | – | 0.756 | unitless | |
| Mutagenic adjustment factor for TCE, inhalation | MAFi | – | 0.244 | unitless | |

Table 34
 Table of Inputs and Outputs for Multiple Chemicals
 Resident Exposure to Vapors from Groundwater Less than 25 Feet
 Human Health Risk Assessment
 AVX Corporation
 Myrtle Beach, South Carolina

Table of Inputs and Outputs for Multiple Chemicals

Note: Parameters other than the chemical concentration must be entered in the MODEL sheet and must be the same for all chemicals. Warnings and errors are displayed in only on the MODEL sheet.

| | | | Benzene | Dichloroethane, 1,1- | Dichloroethylene, 1,1- | Naphthalene | Trichloroethylene | rimethylbenzene, 1,2,4- | Vinyl Chloride |
|---|------------------------------------|----------|---------------|----------------------|------------------------|---------------|-------------------|--------------------------|----------------|
| Source Characteristics: | | | Value | Value | Value | Value | Value | Value | Value |
| Units | Symbol | | | | | | | | |
| Source medium | Source | | Groundwater | Groundwater | Groundwater | Groundwater | Groundwater | Groundwater | Groundwater |
| Groundwater concentration | (ug/L) | Cmedium | 0.632 | 188 | 177 | 83.2 | 21500 | 2.02 | 593 |
| Depth below grade to water table | (m) | Ls | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 |
| Average groundwater temperature | (°C) | Ts | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 |
| Calc: Source vapor concentration | (ug/m3) | Cs | 113 | 34724 | 156897 | 1008 | 6718244 | 357 | 586406 |
| Calc: % of pure component saturated vapor concentration | (%) | %Sat | 0.000% | 0.003% | 0.005% | 0.172% | 1.378% | 0.003% | 0.006% |
| Chemical: | | | Value | Value | Value | Value | Value | Value | Value |
| Units | Symbol | | | | | | | | |
| Chemical Name | Chem | | Benzene | Dichloroethane, 1,1- | Dichloroethylene, 1,1- | Naphthalene | Trichloroethylene | Trimethylbenzene, 1,2,4- | Vinyl Chloride |
| CAS No. | CAS | | 71-43-2 | 75-34-3 | 75-35-4 | 91-20-3 | 79-01-6 | 95-63-6 | 75-01-4 |
| Toxicity Factors | | | | | | | | | |
| Unit risk factor | (ug/m ³) ⁻¹ | IUR | 7.80E-06 | 1.60E-06 | Not Available | 3.40E-05 | see note | Not Available | 4.40E-06 |
| Mutagenic compound | | Mut | No | No | No | No | Yes | No | VC |
| Reference concentration | (ug/m ³) | RfC | 3.00E-02 | Not Available | 2.00E-01 | 3.00E-03 | 2.00E-03 | 6.00E-02 | 1.00E-01 |
| Chemical Properties: | | | Value | Value | Value | Value | Value | Value | Value |
| Units | Symbol | | | | | | | | |
| Pure component water solubility | (mg/L) | S | 1.79E+03 | 5.04E+03 | 2.42E+03 | 3.10E+01 | 1.28E+03 | 5.70E+01 | 8.80E+03 |
| Henry's Law Constant @ 25°C | (atm-m ³ /mol) | Hc | 5.55E-03 | 5.62E-03 | 2.61E-02 | 4.40E-04 | 9.85E-03 | 6.16E-03 | 2.78E-02 |
| Calc: Henry's Law Constant @ 25°C | (dimensionless) | Hr | 2.27E-01 | 2.30E-01 | 1.07E+00 | 1.80E-02 | 4.03E-01 | 2.52E-01 | 1.14E+00 |
| Calc: Henry's Law Constant @ system temperature | (dimensionless) | Hs | 1.78E-01 | 1.85E-01 | 8.86E-01 | 1.21E-02 | 3.12E-01 | 1.77E-01 | 9.89E-01 |
| Diffusivity in air | (cm ² /s) | Dair | 8.95E-02 | 8.36E-02 | 8.63E-02 | 6.05E-02 | 6.87E-02 | 6.07E-02 | 1.07E-01 |
| Diffusivity in water | (cm ² /s) | Dwater | 1.03E-05 | 1.06E-05 | 1.10E-05 | 8.38E-06 | 1.02E-05 | 7.92E-06 | 1.20E-05 |
| Building Characteristics: | | | Value | Value | Value | Value | Value | Value | Value |
| Units | Symbol | | | | | | | | |
| Building setting | Bldg_Setting | | Residential | Residential | Residential | Residential | Residential | Residential | Residential |
| Foundation type | Found_Type | | Slab-on-grade | Slab-on-grade | Slab-on-grade | Slab-on-grade | Slab-on-grade | Slab-on-grade | Slab-on-grade |
| Depth below grade to base of foundation | (m) | Lb | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Foundation thickness | (m) | Lf | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| Fraction of foundation area with cracks | (-) | eta | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| Enclosed space floor area | (m ²) | Ab | 150.00 | 150.00 | 150.00 | 150.00 | 150.00 | 150.00 | 150.00 |
| Enclosed space mixing height | (m) | Hb | 2.44 | 2.44 | 2.44 | 2.44 | 2.44 | 2.44 | 2.44 |
| Indoor air exchange rate | (1/hr) | ach | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 |
| Qsoil/Qbuilding | (-) | Qsoil_Qb | 0.0030 | 0.0030 | 0.0030 | 0.0030 | 0.0030 | 0.0030 | 0.0030 |
| Calc: Building ventilation rate | (m ³ /hr) | Qb | 164.70 | 164.70 | 164.70 | 164.70 | 164.70 | 164.70 | 164.70 |
| Calc: Average vapor flow rate into building | (m ³ /hr) | Qsoil | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 |

Table 34
 Table of Inputs and Outputs for Multiple Chemicals
 Resident Exposure to Vapors from Groundwater Less than 25 Feet
 Human Health Risk Assessment
 AVX Corporation
 Myrtle Beach, South Carolina

| Vadose zone characteristics: | | | Units | Symbol | Value | Value | Value | Value | Value | Value | Value |
|---|----------------------|-----------|--------------|---------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Stratum A (Top of soil profile): | | | | | | | | | | | |
| Stratum A SCS soil type | | SCS_A | | | Silty Clay | Silty Clay | Silty Clay | Silty Clay | Silty Clay | Silty Clay | Silty Clay |
| Stratum A thickness (from surface) | (m) | hSA | | | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 |
| Stratum A total porosity | (-) | nSA | | | 0.481 | 0.481 | 0.481 | 0.481 | 0.481 | 0.481 | 0.481 |
| Stratum A water-filled porosity | (-) | nwSA | | | 0.216 | 0.216 | 0.216 | 0.216 | 0.216 | 0.216 | 0.216 |
| Stratum A bulk density | (g/cm ³) | rhoSA | | | 1.380 | 1.380 | 1.380 | 1.380 | 1.380 | 1.380 | 1.380 |
| Stratum B (Soil layer below Stratum A): | | | | | | | | | | | |
| Stratum B SCS soil type | | SCS_B | | | Not Present | Not Present | Not Present | Not Present | Not Present | Not Present | Not Present |
| Stratum B thickness | (m) | hSB | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stratum B total porosity | (-) | nSB | | | | | | | | | |
| Stratum B water-filled porosity | (-) | nwSB | | | | | | | | | |
| Stratum B bulk density | (g/cm ³) | rhoSB | | | | | | | | | |
| Stratum C (Soil layer below Stratum B): | | | | | | | | | | | |
| Stratum C SCS soil type | | SCS_C | | | Not Present | Not Present | Not Present | Not Present | Not Present | Not Present | Not Present |
| Stratum C thickness | (m) | hSC | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Stratum C total porosity | (-) | nSC | | | | | | | | | |
| Stratum C water-filled porosity | (-) | nwSC | | | | | | | | | |
| Stratum C bulk density | (g/cm ³) | rhoSC | | | | | | | | | |
| Stratum directly above the water table | | | | | | | | | | | |
| Stratum A, B, or C | | src_soil | | | Stratum A | Stratum A | Stratum A | Stratum A | Stratum A | Stratum A | Stratum A |
| Height of capillary fringe | (m) | hcz | | | 1.923 | 1.923 | 1.923 | 1.923 | 1.923 | 1.923 | 1.923 |
| Capillary zone total porosity | (-) | ncz | | | 0.481 | 0.481 | 0.481 | 0.481 | 0.481 | 0.481 | 0.481 |
| Capillary zone water filled porosity | (-) | nwcz | | | 0.424 | 0.424 | 0.424 | 0.424 | 0.424 | 0.424 | 0.424 |
| Exposure Parameters: | | | Units | Symbol | Value | Value | Value | Value | Value | Value | Value |
| Target risk for carcinogens | (-) | Target_CR | | | 1.00E-06 | 1.00E-06 | 1.00E-06 | 1.00E-06 | 1.00E-06 | 1.00E-06 | 1.00E-06 |
| Target hazard quotient for non-carcinogens | (-) | Target_HQ | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Exposure Scenario | | Scenario | | | Residential | Residential | Residential | Residential | Residential | Residential | Residential |
| Averaging time for carcinogens | (yrs) | ATc | | | 70 | 70 | 70 | 70 | 70 | 70 | 70 |
| Averaging time for non-carcinogens | (yrs) | ATnc | | | 26 | 26 | 26 | 26 | 26 | 26 | 26 |
| Exposure duration | (yrs) | ED | | | 26 | 26 | 26 | 26 | 26 | 26 | 26 |
| Exposure frequency | (days/yr) | EF | | | 350 | 350 | 350 | 350 | 350 | 350 | 350 |
| Exposure time | (hrs/24 hrs) | ET | | | 24 | 24 | 24 | 24 | 24 | 24 | 24 |
| Mutagenic mode-of-action factor | (yrs) | MMOAF | | | 72 | 72 | 72 | 72 | 72 | 72 | 72 |
| Source to Indoor Air Attenuation Factor | | | Units | Symbol | Value | Value | Value | Value | Value | Value | Value |
| Groundwater to indoor air attenuation coefficient | (-) | alpha | | | 7.5E-06 | 7.1E-06 | 5.3E-06 | 3.2E-05 | 5.2E-06 | 5.3E-06 | 6.5E-06 |
| | | Range | | | 7.0E-06 - 7.5E-06 | 6.7E-06 - 7.1E-06 | 5.1E-06 - 5.3E-06 | 2.5E-05 - 3.2E-05 | 5.0E-06 - 5.2E-06 | 5.1E-06 - 5.3E-06 | 6.1E-06 - 6.5E-06 |
| Predicted Indoor Air Concentration | | | | | Value | Value | Value | Value | Value | Value | Value |
| Indoor air concentration due to vapor intrusion | (ug/m3) | Cia | | | 8.4E-04 | 2.5E-01 | 8.4E-01 | 3.2E-02 | 3.5E+01 | 1.9E-03 | 3.8E+00 |
| | | Range | | | 7.9E-04 - 8.4E-04 | 2.3E-01 - 2.5E-01 | 8.0E-01 - 8.4E-01 | 2.5E-02 - 3.3E-02 | 3.3E+01 - 3.5E+01 | 1.8E-03 - 1.9E-03 | 3.6E+00 - |
| | (ppbv) | Cia | | | 2.6E-04 | 6.1E-02 | 2.1E-01 | 6.2E-03 | 6.5E+00 | 3.9E-04 | 1.5E+00 |
| | | Range | | | 2.5E-04 - 2.6E-04 | 5.7E-02 - 6.1E-02 | 2.0E-01 - 2.1E-01 | 4.7E-03 - 6.2E-03 | 6.2E+00 - 6.5E+00 | 3.7E-04 - 3.9E-04 | 1.4E+00 - 1.5E+00 |

Table 34
 Table of Inputs and Outputs for Multiple Chemicals
 Resident Exposure to Vapors from Groundwater Less than 25 Feet
 Human Health Risk Assessment
 AVX Corporation
 Myrtle Beach, South Carolina

| Predicted Vapor Concentration Beneath the Foundation | | | Value | Value | Value | Value | Value | Value | Value |
|---|-----------|--------------|--|-------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Subslab vapor concentration | (ug/m3) | Css | 2.8E-01 | 8.2E+01 | 2.8E+02 | 1.1E+01 | 1.2E+04 | 6.3E-01 | 1.3E+03 |
| | | Range | 1.7E-02 - 7.9E+00 | 5.0E+00 - 2.3E+03 | 1.7E+01 - 8.0E+03 | 6.5E-01 - 2.5E+02 | 7.0E+02 - 3.3E+05 | 3.8E-02 - 1.8E+01 | 7.6E+01 - 3.6E+04 |
| | (ppbv) | Css | 8.8E-02 | 2.0E+01 | 7.0E+01 | 2.1E+00 | 2.2E+03 | 1.3E-01 | 5.0E+02 |
| | | Range | 5.3E-03 - 2.5E+00 | 1.2E+00 - 5.7E+02 | 4.2E+00 - 2.0E+03 | 1.2E-01 - 4.7E+01 | 1.3E+02 - 6.2E+04 | 7.7E-03 - 3.7E+00 | 3.0E+01 - 1.4E+04 |
| Diffusive Transport Upward Through Vadose Zone | | | Value | Value | Value | Value | Value | Value | Value |
| Effective diffusion coefficient through Stratum A | (cm2/sec) | DeffA | 4.6E-03 | 4.3E-03 | 4.5E-03 | 3.2E-03 | 3.6E-03 | 3.1E-03 | 5.6E-03 |
| Effective diffusion coefficient through Stratum B | (cm2/sec) | DeffB | | | | | | | |
| Effective diffusion coefficient through Stratum C | (cm2/sec) | DeffC | | | | | | | |
| Effective diffusion coefficient through capillary zone | (cm2/sec) | DeffCZ | 4.3E-05 | 4.1E-05 | 3.0E-05 | 1.9E-04 | 3.0E-05 | 3.0E-05 | 3.7E-05 |
| Effective diffusion coefficient through unsaturated zone | (cm2/sec) | DeffT | 6.5E-05 | 6.2E-05 | 4.7E-05 | 2.8E-04 | 4.6E-05 | 4.6E-05 | 5.7E-05 |
| Critical Parameters | | | Value | Value | Value | Value | Value | Value | Value |
| a for diffusive transport from source to building with | (-) | A_Param | 7.5E-06 | 7.1E-06 | 5.3E-06 | 3.2E-05 | 5.2E-06 | 5.3E-06 | 6.5E-06 |
| Pe (Peclet Number) for transport through the foundation | (-) | B_Param | 1.9E+02 | 2.0E+02 | 2.0E+02 | 2.8E+02 | 2.5E+02 | 2.8E+02 | 1.6E+02 |
| a for convective transport from subslab to building | (-) | C_Param | 3.0E-03 | 3.0E-03 | 3.0E-03 | 3.0E-03 | 3.0E-03 | 3.0E-03 | 3.0E-03 |
| Interpretation | | | | | | | | | |
| #### | | | Advection is the dominant mechanism across the foundation. Diffusion through soil is the overall rate limiting process. | | | | | | |
| Critical Parameters | | | | | | | | | |
| #### | | | Hb, Ls, DeffT, ach | | | | | | |
| Non-Critical Parameters | | | | | | | | | |
| #### | | | Qsoil_Qb, Lf, DeffA, eta | | | | | | |
| Risk Calculations | Units | Symbol | Value | Value | Value | Value | Value | Value | Value |
| Risk-Based Target Screening Levels | | | | | | | | | |
| Target risk for carcinogens | (-) | Target_CR | 1E-06 | 1E-06 | 1E-06 | 1E-06 | 1E-06 | 1E-06 | 1E-06 |
| Target hazard quotient for noncarcinogens | (-) | Target_HQ | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Target indoor air concentration | (ug/m3) | Target_IA | 3.60E-01 | 1.75E+00 | 2.09E+02 | 8.26E-02 | 4.78E-01 | 6.26E+01 | 1.68E-01 |
| | (ppbv) | Target_IA | 1.13E-01 | 4.34E-01 | 5.26E+01 | 1.58E-02 | 8.91E-02 | 1.27E+01 | 6.56E-02 |
| Target groundwater concentration | (ug/L) | Target_GW | 2.70E+02 | 1.33E+03 | 4.41E+04 | 2.12E+02 | 2.93E+02 | 6.67E+04 | 2.62E+01 |
| Incremental Risk Estimates | | | | | | | | | |
| Incremental cancer risk from vapor intrusion | (-) | Cancer_Risk | 2.34E-09 | 1.41E-07 | No IUR | 3.92E-07 | 7.34E-05 | No IUR | 2.27E-05 |
| | | Range | 2.2E-09 - 2.3E-09 | 1.3E-07 - 1.4E-07 | - | 3.0E-07 - 4.0E-07 | 7.0E-05 - 7.4E-05 | - | 2.1E-05 - 2.3E-05 |
| Hazard quotient from vapor intrusion | (-) | HQ | 2.69104E-05 | No RfC Available | 0.004014501 | 0.01035028 | 16.84056852 | 3.02673E-05 | 0.036436492 |
| | | Range | 2.5E-05 - 2.7E-05 | C Available - No RfC Av | 3.8E-03 - 4.0E-03 | 7.9E-03 - 1.0E-02 | 1.6E+01 - 1.7E+01 | 2.9E-05 - 3.0E-05 | 3.4E-02 - 3.7E-02 |
| | | Total Risk | 1E-04 | | | | | | |
| | | Total Hazard | 17 | | | | | | |

Table 35
Summary of Calculated Human Health Risks and Hazards
Human Health Risk Assessment
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina

| RECEPTOR Exposure Medium - Scenario | Calculation Table | Total Excess Lifetime Cancer Risk | Total Non-Cancer Hazard |
|---|-----------------------------|--|--|
| <u>Current or Hypothetical Future Site Worker</u> | | | |
| Direct Contact with Soil (0-2 Feet) | Table 26 | 2E-05 | 6 |
| Direct Contact with Soil (0-10 Feet) | Table 27 | 3E-05 | 9 |
| Inhalation of Vapors in Indoor Air | Table 28 | 1E-05 | 1 |
| Total for Surface Soil and Indoor Air | | 3E-05 | 7 |
| Total for Combined Surface and Subsurface Soil and Indoor Air | | 4E-05 | 10 |
| <u>Hypothetical Future Construction Worker</u> | | | |
| Direct Contact with Soil (0-2 Feet) | Table 29 | 1E-06 | 9.7 |
| Direct Contact with Soil (0-10 Feet) | Table 30 | 2E-06 | 16 |
| Direct Contact with Groundwater | Table 31 | 2E-07 | 1 |
| Total for Surface Soil and Groundwater | | 1E-06 | 11 |
| Total for Combined Surface and Subsurface Soil and Groundwater | | 2E-06 | 17 |
| <u>Hypothetical Future Resident</u> | | | |
| Direct Contact with Soil (0-2 Feet) | Table 32 | 1E-04 | 27 |
| Direct Contact with Soil (0-10 Feet) | Table 33 | 2E-04 | 43 |
| Inhalation of Vapors in Indoor Air | Table 34 | 1E-04 | 17 |
| Total for Surface Soil and Indoor Air | | 2E-04 | 44 |
| Total for Combined Surface and Subsurface Soil and Indoor Air | | 3E-04 | 60 |

Cancer risk estimates exceeding 1×10^{-4} and non-cancer hazard estimates exceeding 1 are in bold.

Table 36
Health-Based Concentration Goal Calculations for Exposure to Soil of a Resident
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent | EPCs [a] (mg/kg) | CANCER EFFECTS | | NON-CANCER EFFECTS | | Minimum HBG [b] (mg/kg) | |
|-----------------------------------|------------------------|----------------|--|--------------------|---|----------------------------------|--|
| | | ELCR | HBG _C (mg/kg) TCR = 1E-06 | HI | HBG _{NC} (mg/kg) THQ = 1 | | |
| Volatile Organic Compounds | | | | | | | |
| Trichloroethene | 2.04E+02 UCL | 1.89E-04 | 1.1E+00 | 4.33E+01 | 4.7E+00 | 1.1E+00 C | |

[a] Exposure point concentration in soil (EPCs), as shown on Table 33.

[b] Minimum of the HBG_C (identified by "C") and HBG_{NC} (identified by "N") for TCR = 10⁻⁶ and HBG_{NC} for THQ = 1.

ELCR Excess lifetime cancer risk.

HBG Heath-based concentration goal.

HI Hazard index (sum of the HQs).

mg/kg

TCR

THQ

Milligram per kilogram.

Target cancer risk.

Target hazard quotient for non-cancer effects.

Equations:

$$HBG_C = EPCs \times TCR / ELCR$$

$$HBG_{NC} = EPCs \times THQ / HI$$

Table 37
Health-Based Concentration Goal Calculations for Exposure to Soil of a Site Worker
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent | EPCs [a] (mg/kg) | | CANCER EFFECTS | | NON-CANCER EFFECTS | | Minimum HBG [b] (mg/kg) |
|-----------------------------------|------------------------|-----|----------------|--------------------------|--------------------|---------------------------|----------------------------------|
| | | | ELCR | HBG _C (mg/kg) | HI | HBG _{NC} (mg/kg) | |
| | | | | TCR = 1E-06 | | THQ = 1 | |
| Volatile Organic Compounds | | | | | | | |
| Trichloroethene | 2.04E+02 | UCL | 2.94E-05 | 6.9E+00 | 9.41E+00 | 2.2E+01 | 6.9E+00 C |

[a] Exposure point concentration in soil (EPCs), as shown on Table 27.

[b] Minimum of the HBG_C (identified by "C") and HBG_{NC} (identified by "N") for TCR = 10⁻⁶ and HBG_{NC} for THQ = 1.

| | | | |
|------|----------------------------------|-------|--|
| – | Not applicable. | mg/kg | Milligram per kilogram. |
| ELCR | Excess lifetime cancer risk. | TCR | Target cancer risk. |
| HBG | Health-based concentration goal. | THQ | Target hazard quotient for non-cancer effects. |
| HI | Hazard index (sum of the HQs). | | |

Equations:

$$HBG_C = EPCs \times TCR / ELCR$$

$$HBG_{NC} = EPCs \times THQ / HI$$

Table 38
Health-Based Concentration Goal Calculations for Exposure to Soil of a Construction Worker
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent | EPCs [a] (mg/kg) | | CANCER EFFECTS | | NON-CANCER EFFECTS | | Minimum HBG [b] (mg/kg) | |
|-----------------------------------|------------------------|-----|----------------|--------------------------|--------------------|---------------------------|----------------------------------|---|
| | | | ELCR | HBG _C (mg/kg) | HI | HBG _{NC} (mg/kg) | | |
| | | | | TCR = 1E-06 | | THQ = 1 | | |
| Volatile Organic Compounds | | | | | | | | |
| Trichloroethene | 2.04E+02 | UCL | 2.07E-06 | 9.8E+01 | 1.57E+01 | 1.3E+01 | 1.3E+01 | N |

[a] Exposure point concentration in soil (EPCs), as shown on Table 30.

[b] Minimum of the HBG_C (identified by "C") and HBG_{NC} (identified by "N") for TCR = 10⁻⁶ and HBG_{NC} for THQ = 1.

| | | | |
|------|----------------------------------|-------|--|
| – | Not applicable. | mg/kg | Milligram per kilogram. |
| ELCR | Excess lifetime cancer risk. | TCR | Target cancer risk. |
| HBG | Health-based concentration goal. | THQ | Target hazard quotient for non-cancer effects. |
| HI | Hazard index (sum of the HQs). | | |

Equations:

$$HBG_C = EPCs \times TCR / ELCR$$

$$HBG_{NC} = EPCs \times THQ / HI$$

Table 39
Health-Based Concentration Goal Calculations for Exposure to Groundwater of a Construction Worker
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent | EPCw [a] (mg/L) | CANCER EFFECTS | | NON-CANCER EFFECTS | | Minimum HBG [b] (mg/L) |
|-----------------------------------|-----------------------|----------------|---|--------------------|--|---------------------------------|
| | | ELCR | HBG _C (mg/L) TCR = 1E-06 | HI | HBG _{NC} (mg/L) THQ = 1 | |
| Volatile Organic Compounds | | | | | | |
| Trichloroethene | - | - | - | - | - | - |

[a] Exposure point concentration in groundwater (EPCw), as shown on Table 31.

[b] Minimum of the HBG_C (identified by "C") and HBG_{NC} (identified by "N") for TCR = 10⁻⁶ and HBG_{NC} for THQ = 1.

| | | | |
|------|----------------------------------|-----|--|
| ELCR | Excess lifetime cancer risk. | NA | Toxicity value not available. |
| HBG | Health-based concentration goal. | TCR | Target cancer risk. |
| HI | Hazard index (sum of the HQs). | THQ | Target hazard quotient for non-cancer effects. |
| mg/L | Milligram per liter. | | |

Equations:

$$HBG_C = EPCw \times TCR / ELCR$$

$$HBG_{NC} = EPCw \times THQ / HI$$

Table 40
Health-Based Concentration Goal Calculations for Exposure to Vapor Migration from Groundwater of a Resident
Human Health Risk Assessment
AVX Corporation
Myrtle Beach, South Carolina

| Constituent | EPCw [a] (mg/L) | | CANCER EFFECTS | | NON-CANCER EFFECTS | | Minimum HBG [b] (mg/L) | |
|-----------------------------------|-----------------------|-----|----------------|-------------------------|--------------------|--------------------------|---------------------------------|---|
| | | | ELCR | HBG _C (mg/L) | HI | HBG _{NC} (mg/L) | | |
| | | | | TCR = 1E-06 | | THQ = 1 | | |
| Volatile Organic Compounds | | | | | | | | |
| Trichloroethene | 2.15E+01 | UCL | 7.34E-05 | 2.9E-01 | 1.68E+01 | 1.3E+00 | 2.9E-01 | C |
| Vinyl Chloride | 5.93E-01 | UCL | 2.27E-05 | 2.6E-02 | – | – | 2.6E-02 | C |

[a] Exposure point concentration in groundwater (EPCw), as shown on Table 34.

[b] Minimum of the HBG_C (identified by "C") and HBG_{NC} (identified by "N") for TCR = 10⁻⁶ and HBG_{NC} for THQ = 1.

| | | | |
|------|----------------------------------|------|--|
| ELCR | Excess lifetime cancer risk. | mg/L | Milligram per liter. |
| HBG | Health-based concentration goal. | TCR | Target cancer risk. |
| HI | Hazard index (sum of the HQs). | THQ | Target hazard quotient for non-cancer effects. |

Equations:

$$HBG_C = EPCw \times TCR / ELCR$$

$$HBG_{NC} = EPCw \times THQ / HI$$

Table 41

Health-Based Concentration Goal Calculations for Exposure to Vapor Migration from Groundwater of a Site Worker
 Human Health Risk Assessment
 AVX Corporation
 Myrtle Beach, South Carolina

| Constituent | EPCw [a] (mg/L) | CANCER EFFECTS | | NON-CANCER EFFECTS | | Minimum HBG [b] (mg/L) | |
|-----------------------------------|-----------------------|----------------|---|--------------------|--|---------------------------------|--|
| | | ELCR | HBG _C (mg/L) TCR = 1E-06 | HI | HBG _{NC} (mg/L) THQ = 1 | | |
| Volatile Organic Compounds | | | | | | | |
| Trichloroethene | 2.15E+01 UCL | 1.1E-05 | 2.0E+00 | 9.7E-01 | 2.2E+01 | 2.0E+00 C | |

[a] Exposure point concentration in groundwater (EPCw), as shown on Table 28.

[b] Minimum of the HBG_C (identified by "C") and HBG_{NC} (identified by "N") for TCR = 10⁻⁶ and HBG_{NC} for THQ = 1.

ELCR Excess lifetime cancer risk.

HBG Heath-based concentration goal.

HI Hazard index (sum of the HQs).

mg/L

Milligram per liter.

TCR

Target cancer risk.

THQ

Target hazard quotient for non-cancer effects.

Equations:

$$HBG_C = EPCw \times TCR / ELCR$$

$$HBG_{NC} = EPCw \times THQ / HI$$

Table 42
Summary of Calculated Health-Based Goals
Human Health Risk Assessment
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina

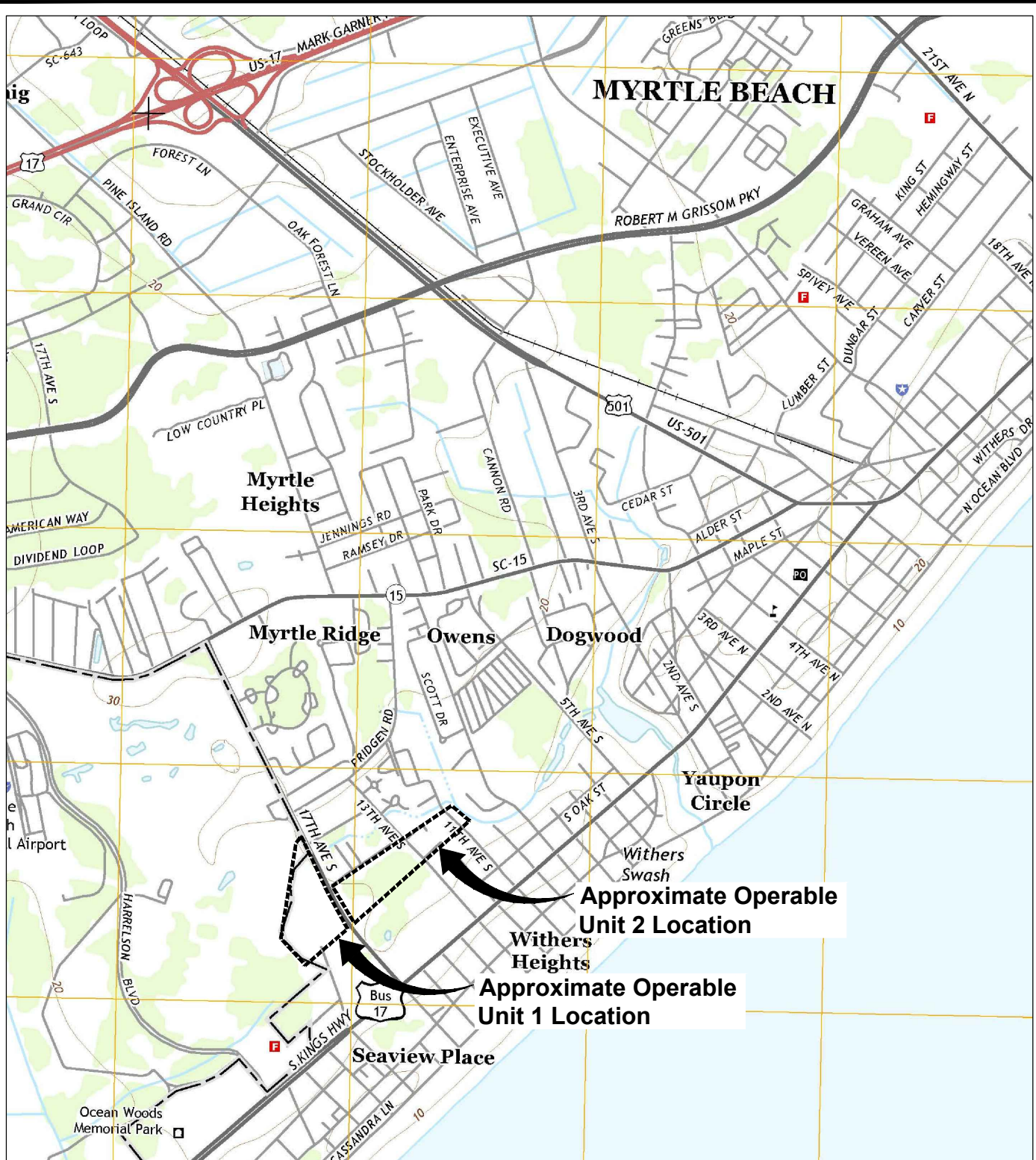
| Constituent | Soil HBG (mg/kg) | | | Groundwater HBG (mg/L) | | Vapor Intrusion from Groundwater HBG (mg/L) | | Recommended HBG Based on Implementation of Land Use Controls (mg/L) |
|-----------------------------------|------------------|-------------|---------------------|------------------------|---------------------|---|-------------|---|
| | Resident | Site Worker | Construction Worker | MCL | Construction Worker | Resident | Site Worker | |
| Volatile Organic Compounds | | | | | | | | |
| Trichloroethene | 1.1E+00 | 6.9E+00 | 1.3E+01 | 5.0E-03 | 4.9E+01 | 2.9E-01 | 2.0E+00 | 2.0E+00 |
| Vinyl Chloride | - | - | - | 2.0E-03 | - | 2.6E-02 | - | NA |

| | | | |
|-----|--|-------|-------------------------|
| - | Not calculated. | mg/kg | Milligram per kilogram. |
| HBG | Health-based concentration goal. | mg/L | Milligram per liter. |
| MCL | Maximum Contaminant Level (USEPA 2018a). | NA | Not available. |

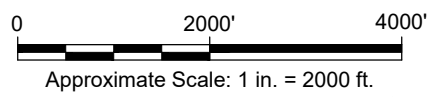
FIGURES



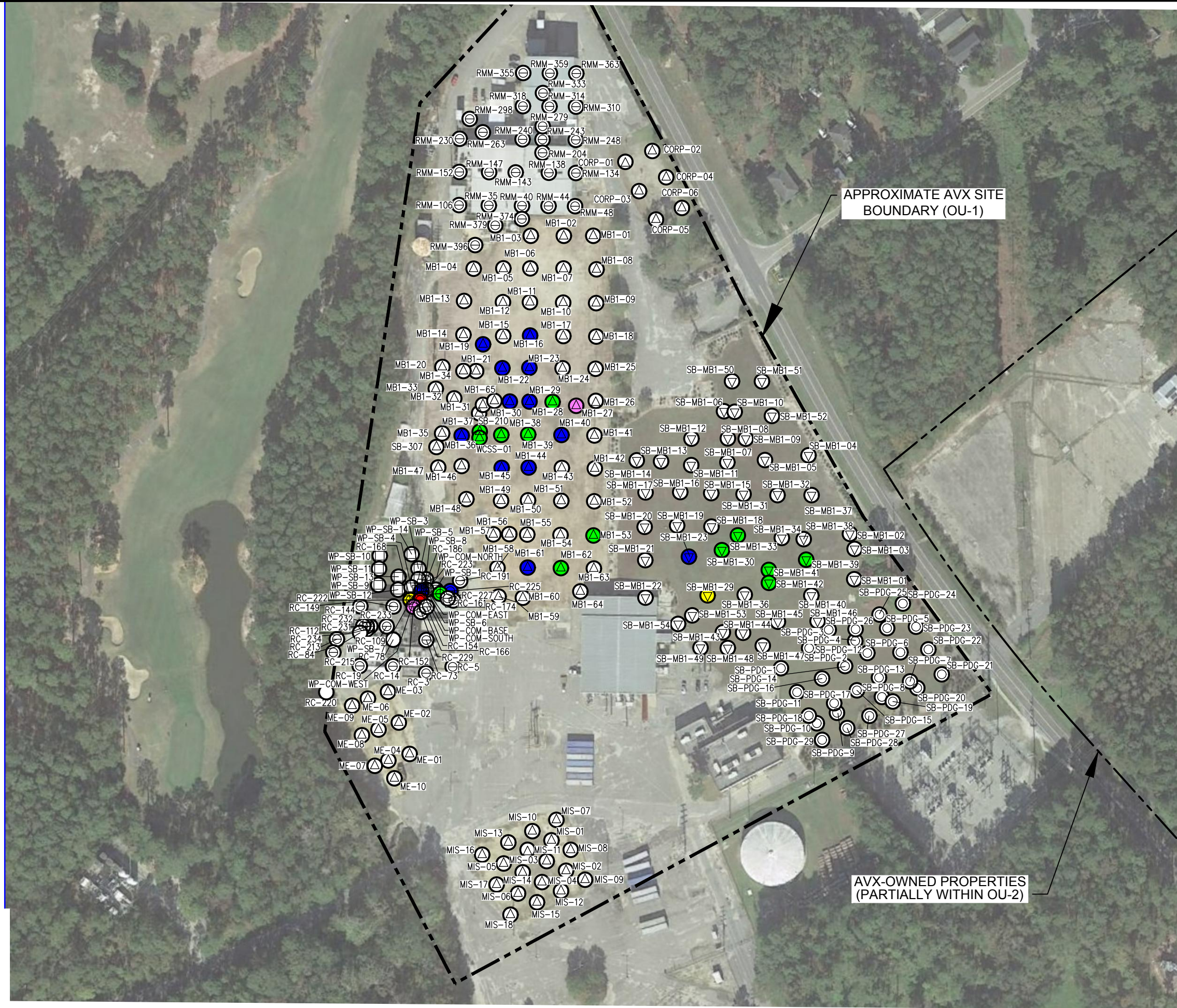
CITY:(Reed) DIV:GROUP:(Reed) DB:(Reed) LD:(Opt) PIC:(Opt) PM:(Reed) TM:(Opt) LYR:(Opt)ON="OFF"=REF+
 C:\users\schilling\OneDrive - ARCADIS\BIM 360 Docs\AVX CORP\Myrtle Beach\2018\60007393.000201-DWG\GMR2018-Fig 1A-SITE LOCATION.dwg LAYOUT: 1A. SAVED: 6/25/2018 9:01 AM. ACADVER: 21.05 (LMSTECH) PAGES: 1. PLOTTED: 6/25/2018 9:41 AM BY: SCHILLING, ADAM



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., MYRTLE BEACH, SOUTH CAROLINA, 2014.



| | |
|--|--|
| AVX CORPORATION MYRTLE BEACH FACILITY MYRTLE BEACH, SOUTH CAROLINA | |
| <h2 style="margin: 0;">SITE LOCATION</h2> | |
| <b style="font-size: 1.2em; vertical-align: middle;">ARCADIS | <i style="font-size: 0.8em; color: #0070C0;">Design & Consultancy for natural and built assets</i> |
| FIGURE <h1 style="margin: 0;">1-1</h1> | |



LEGEND:

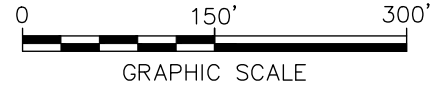
- 2018 WASTE PAD POST DEMOLITION SAMPLING LOCATION
- 2009/10 PDG BLDG PRE/POST DEMOLITION SAMPLING LOCATION
- 2012 MB1 PHASE 1 POST DEMOLITION SAMPLING LOCATION
- 2015 MB1 PHASE 2 POST DEMOLITION SAMPLING LOCATION
- 2018 RECLAIM AND RMM BLDG POST DEMOLITION SAMPLING LOCATION

TCE CONCENTRATIONS IN SURFACE SOIL (0-2 FT BGS)

- NON-DETECT OR <0.01 mg/kg
- >/=0.01 mg/kg AND <0.1 mg/kg
- >/=0.1 mg/kg AND <1.1 mg/kg
- >/=1.1 mg/kg AND <10 mg/kg
- >/=10 mg/kg AND <100 mg/kg
- >/=100 mg/kg

NOTES:

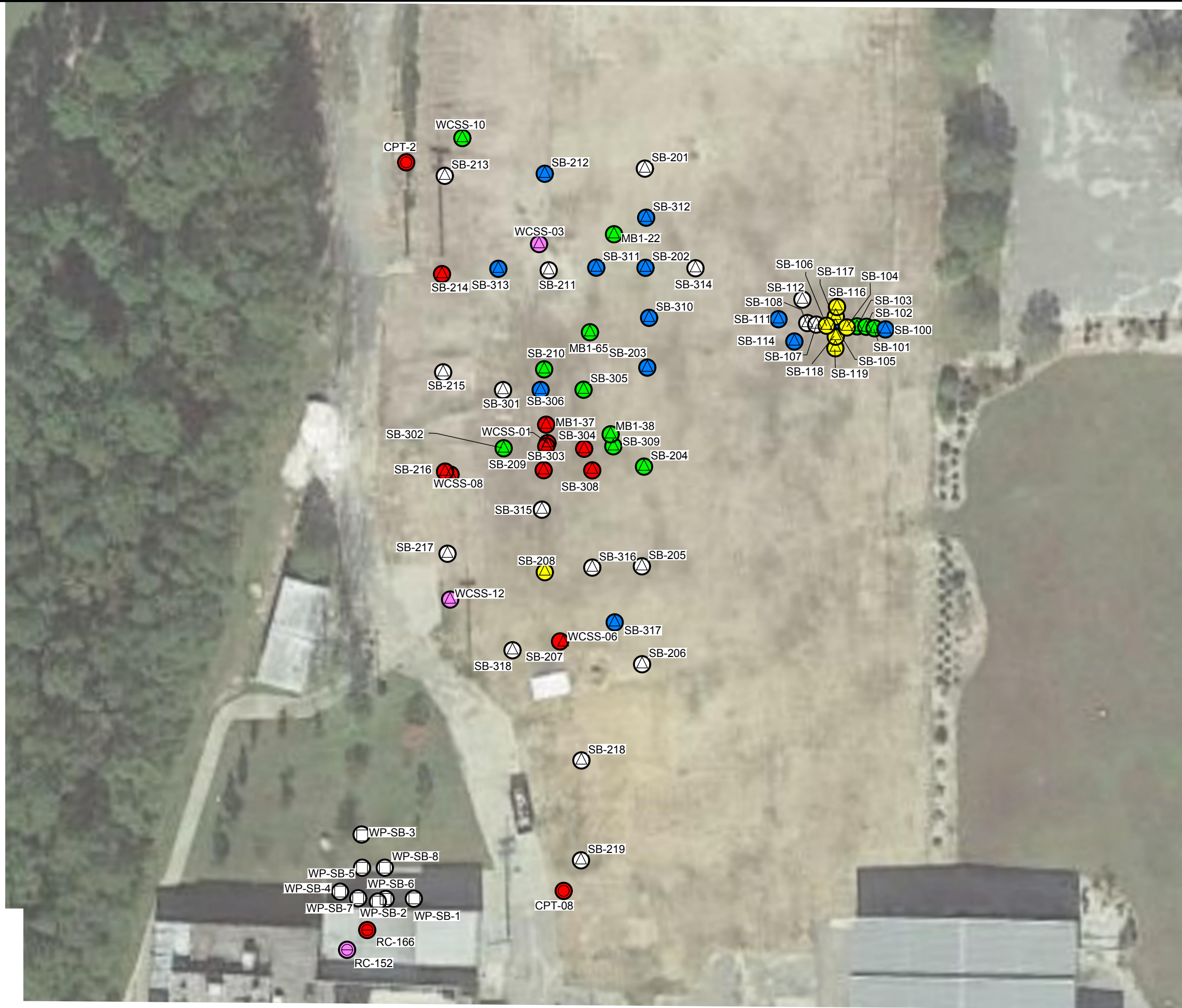
1. AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO, DATED NOVEMBER 15, 2017.
2. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.



AVX CORPORATION
 MYRTLE BEACH FACILITY
 MYRTLE BEACH, SOUTH CAROLINA

LOCATIONS OF SURFACE SOIL SAMPLES USED IN THE HHRA

CITY: Syracuse DIV/GROUP: EnvCAD, DB: A Schilling, P LUSTER, LD: A Schilling, PM/TM: M Harleth LXR: ON*OFF=REF (FRZ)
 C:\BIM\OneDrive - ARCADIS\BIM 360 Docs\AVX CORP\Myrtle Beach\2019\B0007393.000101.DWG\SUBSURFACE.LOC: INTERNAL.DWG LAYOUT: 3-2 SAVED: 3/5/2019 3:11 PM ACADVER: 23.05 (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 3/5/2019 3:22 PM BY: MCKEUGH, CAROL
 XREFS: IMAGES: PROJECTNAME: --- X-AERIAL-2017.jp2

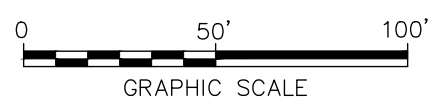


- LEGEND:**
- 2008 WASTE PAD POST DEMOLITION SAMPLING LOCATION
 - 2015 MB1 PHASE 2 POST DEMOLITION SAMPLING LOCATION
 - 2018 RECLAIM AND RMM BLDG POST DEMOLITION SAMPLING LOCATION
 - 2008 DATA GAP INVESTIGATION LOCATION

TCE CONCENTRATIONS IN SUBSURFACE SOIL (2-10FT BGS)

- NON-DETECT OR <0.01 mg/kg
- >/=0.01 mg/Kg AND <0.1 mg/Kg
- >/=0.1 mg/Kg AND <1.1 mg/Kg
- >/=1.1 mg/Kg AND <10.0 mg/Kg
- >/=10.0 mg/Kg AND <100.0 mg/Kg
- >/=100.0 mg/Kg

- NOTES:**
1. AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO, DATED NOVEMBER 15, 2017.
 1. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.



AVX CORPORATION
MYRTLE BEACH FACILITY
MYRTLE BEACH, SOUTH CAROLINA

**LOCATIONS OF SUBSURFACE SOIL
SAMPLES USED IN THE HHRA**

ARCADIS Design & Consultancy
for natural and
built assets

FIGURE
3-2

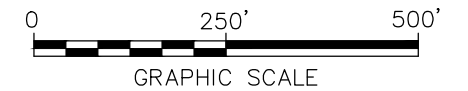


LEGEND:

- MONITORING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- ⊕ MONITORING WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- FORMER PUMPING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- ⊕ PRODUCTION WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- HYDRAULIC PROFILING TOOL SAMPLING LOCATION

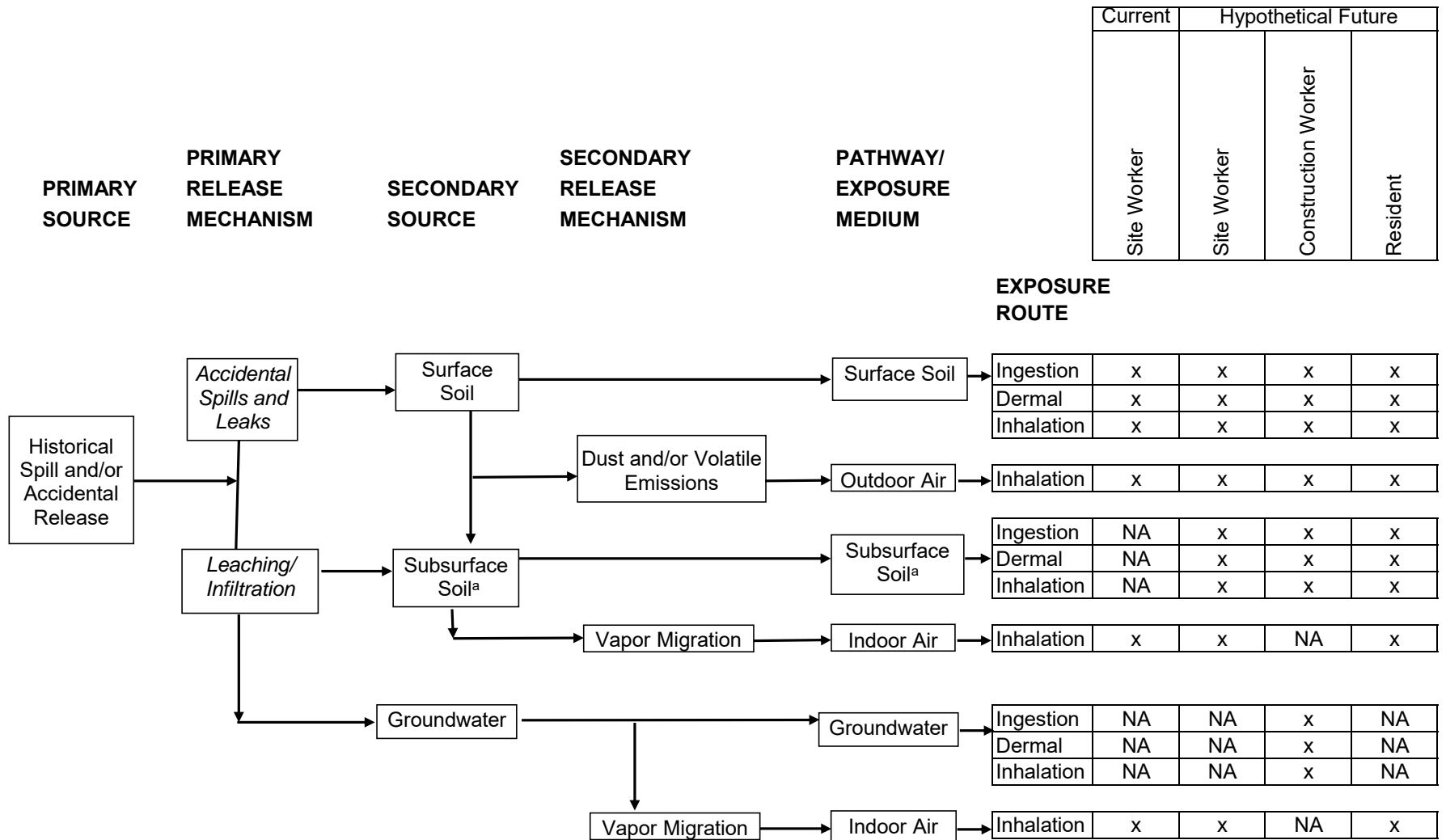
NOTES:

1. AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO, DATED NOVEMBER 15, 2017.
2. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.



AVX CORPORATION
 MYRTLE BEACH FACILITY
 MYRTLE BEACH, SOUTH CAROLINA

LOCATIONS OF GROUNDWATER SAMPLES USED IN THE HHRA



Notes:

x: Potentially complete exposure pathway.

NA: Incomplete exposure pathway.

a: Subsurface soil is considered to include soil from 0 to 10 feet below ground surface.

APPENDIX A

Vapor Intrusion Screening Levels



**Site-specific
 Resident Equation Inputs for Soil**

| Variable | Value |
|--|-----------|
| THQ (target hazard quotient) unitless | 0.1 |
| TR (target risk) unitless | 0.000001 |
| LT (lifetime) year | 70 |
| ET _{res} (exposure time) hour | 24 |
| ET _{res-c} (child exposure time) hour | 24 |
| ET _{res-a} (adult exposure time) hour | 24 |
| ET ₀₋₂ (mutagenic exposure time) hour | 24 |
| ET ₂₋₆ (mutagenic exposure time) hour | 24 |
| ET ₆₋₁₆ (mutagenic exposure time) hour | 24 |
| ET ₁₆₋₂₆ (mutagenic exposure time) hour | 24 |
| ED _{res} (exposure duration) year | 26 |
| ED _{res-c} (exposure duration - child) year | 6 |
| ED _{res-a} (exposure duration - adult) year | 20 |
| ED ₀₋₂ (mutagenic exposure duration) year | 2 |
| ED ₂₋₆ (mutagenic exposure duration) year | 4 |
| ED ₆₋₁₆ (mutagenic exposure duration) year | 10 |
| ED ₁₆₋₂₆ (mutagenic exposure duration) year | 10 |
| BW _{res-c} (body weight - child) kg | 15 |
| BW _{res-a} (body weight - adult) kg | 80 |
| BW ₀₋₂ (mutagenic body weight) kg | 15 |
| BW ₂₋₆ (mutagenic body weight) kg | 15 |
| BW ₆₋₁₆ (mutagenic body weight) kg | 80 |
| BW ₁₆₋₂₆ (mutagenic body weight) kg | 80 |
| SA _{res-c} (skin surface area - child) cm ² /day | 2373 |
| SA _{res-a} (skin surface area - adult) cm ² /day | 6032 |
| SA ₀₋₂ (mutagenic skin surface area) cm ² /day | 2373 |
| SA ₂₋₆ (mutagenic skin surface area) cm ² /day | 2373 |
| SA ₆₋₁₆ (mutagenic skin surface area) cm ² /day | 6032 |
| SA ₁₆₋₂₆ (mutagenic skin surface area) cm ² /day | 6032 |
| EF _{res} (exposure frequency) day/year | 350 |
| EF _{res-c} (exposure frequency - child) day/year | 350 |
| EF _{res-a} (exposure frequency - adult) day/year | 350 |
| EF ₀₋₂ (mutagenic exposure frequency) day/year | 350 |
| EF ₂₋₆ (mutagenic exposure frequency) day/year | 350 |
| EF ₆₋₁₆ (mutagenic exposure frequency) day/year | 350 |
| EF ₁₆₋₂₆ (mutagenic exposure frequency) day/year | 350 |
| IFS _{res-adj} (age-adjusted soil ingestion factor) mg/kg | 36750 |
| IFSM _{res-adj} (mutagenic age-adjusted soil ingestion factor) mg/kg | 166833.33 |
| IRS _{res-c} (soil intake rate - child) mg/day | 200 |
| IRS _{res-a} (soil intake rate - adult) mg/day | 100 |
| IRS ₀₋₂ (mutagenic soil intake rate) mg/day | 200 |
| IRS ₂₋₆ (mutagenic soil intake rate) mg/day | 200 |
| IRS ₆₋₁₆ (mutagenic soil intake rate) mg/day | 100 |
| IRS ₁₆₋₂₆ (mutagenic soil intake rate) mg/day | 100 |
| AF _{res-a} (skin adherence factor - adult) mg/cm ² | 0.07 |
| AF _{res-c} (skin adherence factor - child) mg/cm ² | 0.2 |
| AF ₀₋₂ (mutagenic skin adherence factor) mg/cm ² | 0.2 |
| AF ₂₋₆ (mutagenic skin adherence factor) mg/cm ² | 0.2 |
| AF ₆₋₁₆ (mutagenic skin adherence factor) mg/cm ² | 0.07 |

**Site-specific
 Resident Equation Inputs for Soil**

| Variable | Value |
|---|------------|
| AF ₁₆₋₂₆ (mutagenic skin adherence factor) mg/cm ² | 0.07 |
| DFS _{res-adj} (age-adjusted soil dermal factor) mg/kg | 103390 |
| DFSM _{res-adj} (mutagenic age-adjusted soil dermal factor) mg/kg | 428260 |
| City _{PEF} (Climate Zone) Selection | Default |
| A _s (acres) | 0.5 |
| Q/C _{wp} (inverse of the ratio of the geometric mean air concentration to the emission flu) | 93.77 |
| PEF (particulate emission factor) m ³ /kg | 1359344438 |
| A (PEF Dispersion Constant) | 16.2302 |
| B (PEF Dispersion Constant) | 18.7762 |
| C (PEF Dispersion Constant) | 216.108 |
| V (fraction of vegetative cover) unitless | 0.5 |
| U _m (mean annual wind speed) m/s | 4.69 |
| U _t (equivalent threshold value) | 11.32 |
| F(x) (function dependant on U _m /U _t) unitless | 0.194 |
| City _{VF} (Climate Zone) Selection | Default |
| A _s (acres) | 0.5 |
| Q/C _{vol} (inverse of the ratio of the geometric mean air concentration to the emission flu) | 68.18 |
| foc (fraction organic carbon in soil) g/g | 0.006 |
| p _b (dry soil bulk density) g/cm ³ | 1.5 |
| p _s (soil particle density) g/cm ³ | 2.65 |
| n (total soil porosity) L _{pore} /L _{soil} | 0.43396 |
| a (air-filled soil porosity) L _{air} /L _{soil} | 0.28396 |
| w (water-filled soil porosity) L _{water} /L _{soil} | 0.15 |
| T (exposure interval) s | 819936000 |
| A (VF Dispersion Constant) | 11.911 |
| B (VF Dispersion Constant) | 18.4385 |
| C (VF Dispersion Constant) | 209.7845 |
| City _{VF mass-loading} (Climate Zone) Selection | Default |
| VF _{ml} (volitization factor - mass-limit) m ³ /kg | . |
| Q/C _{vol} (inverse of the ratio of the geometric mean air concentration to the emission fl) | 68.18365 |
| A _s (acres) | 0.5 |
| T (exposure interval) yr | 26 |
| d _s (depth of source) m | . |
| p _b (dry soil bulk density) g/cm ³ | 1.5 |
| A (VF Dispersion Constant - Mass Limit) | 11.911 |
| B (VF Dispersion Constant - Mass Limit) | 18.4385 |
| C (VF Dispersion Constant - Mass Limit) | 209.7845 |

Output generated 16FEB2017:12:07:58

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] | |
|--|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-----|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|----------|----|
| Acephate | 30560-19-1 | No | No | - | - | - | - | 1.20E-03 | OP | - | - | 1 | 0.1 | 1 | - | 2.05E-11 | 8.18E+05 | 1.00E+01 | - | 1.36E+09 | 7.59E+00 | nc | |
| Acetaldehyde | 75-07-0 | No | Yes | - | - | 2.20E-06 | I | - | - | 9.00E-03 | IR | 1 | - | 1 | 8.72E+03 | 2.73E-03 | 1.00E+06 | 1.00E+00 | 1.07E+05 | 1.36E+09 | 8.18E+00 | nc | |
| Acetochlor | 34256-82-1 | No | No | - | - | - | - | 2.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 9.12E-07 | 2.23E+02 | 2.98E+02 | - | 1.36E+09 | 1.26E+02 | nc | |
| Acetone | 67-64-1 | No | Yes | - | - | - | - | 9.00E-01 | IR | 3.09E+01 | AT | 1 | - | 1 | 1.37E+04 | 1.43E-03 | 1.00E+06 | 2.36E+00 | 1.14E+05 | 1.36E+09 | 6.07E+03 | nc | |
| Acetone Cyanohydrin | 75-86-5 | No | No | - | - | - | - | - | - | 2.00E-03 | SC | 1 | 0.1 | 1 | - | 8.05E-08 | 1.00E+06 | 1.00E+00 | - | 1.36E+09 | 2.84E+05 | cm | |
| Acetonitrile | 75-05-8 | No | Yes | - | - | - | - | - | - | 6.00E-02 | IR | 1 | - | 1 | 1.30E+04 | 1.41E-03 | 1.00E+06 | 4.67E+00 | 1.28E+05 | 1.36E+09 | 8.11E+01 | nc | |
| Acetophenone | 98-86-2 | No | Yes | - | - | - | - | 1.00E-01 | IR | - | - | 1 | - | 1 | 5.97E+04 | 4.25E-04 | 6.13E+03 | 5.19E+01 | 2.52E+03 | 1.36E+09 | 7.82E+02 | nc | |
| Acetylaminofluorene, 2- | 53-96-3 | No | No | 3.80E+00 | C | 1.30E-03 | C | - | - | - | - | 1 | 0.1 | 1 | - | 7.85E-09 | 5.53E+00 | 2.21E+03 | - | 1.36E+09 | 1.43E-01 | ca | |
| Acifluorfen | 50594-66-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.47E-09 | 1.20E+02 | 3.88E+03 | - | 1.36E+09 | - | - | |
| Acridine | 260-94-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.62E-05 | 3.84E+01 | 1.64E+04 | - | 1.36E+09 | - | - | |
| Acrolein | 107-02-8 | No | Yes | - | - | - | - | 5.00E-04 | IR | 2.00E-05 | IR | 1 | - | 1 | 6.91E+03 | 4.99E-03 | 2.12E+05 | 1.00E+00 | 2.27E+04 | 1.36E+09 | 1.44E-02 | nc | |
| Acrylamide | 79-06-1 | Yes | No | 5.00E-01 | I | 1.00E-04 | I | 2.00E-03 | IR | 6.00E-03 | IR | 1 | 0.1 | 1 | - | 6.95E-08 | 3.90E+05 | 5.69E+00 | - | 1.36E+09 | 2.44E-01 | ca* | |
| Acrylic Acid | 79-10-7 | No | Yes | - | - | - | - | 5.00E-01 | IR | 1.00E-03 | IR | 1 | - | 1 | 9.53E+04 | 1.51E-05 | 1.00E+06 | 1.44E+00 | 1.09E+05 | 1.36E+09 | 9.91E+00 | nc | |
| Acrylonitrile | 107-13-1 | No | Yes | 5.40E-01 | I | 6.80E-05 | I | 4.00E-02 | AT | 2.00E-03 | IR | 1 | - | 1 | 7.69E+03 | 5.64E-03 | 7.45E+04 | 8.51E+00 | 1.13E+04 | 1.36E+09 | 2.55E-01 | ca** | |
| Adiponitrile | 111-69-3 | No | No | - | - | - | - | - | - | 6.00E-03 | PP | 1 | 0.1 | 1 | - | 4.95E-08 | 8.00E+04 | 2.02E+01 | - | 1.36E+09 | 8.51E+05 | cm | |
| Alachlor | 15972-60-8 | No | No | 5.60E-02 | C | - | - | 1.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 3.40E-07 | 2.40E+02 | 3.12E+02 | - | 1.36E+09 | 9.69E+00 | ca** | |
| Daminozide | 1596-84-5 | No | No | 1.80E-02 | C | 5.10E-06 | C | 1.50E-01 | IR | - | - | 1 | 0.1 | 1 | - | 1.73E-08 | 1.00E+05 | 1.00E+01 | - | 1.36E+09 | 3.01E+01 | ca* | |
| Aldicarb | 116-06-3 | No | No | - | - | - | - | 1.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 5.89E-08 | 6.03E+03 | 2.46E+01 | - | 1.36E+09 | 6.32E+00 | nc | |
| Aldicarb Sulfone | 1646-88-4 | No | No | - | - | - | - | 1.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 1.38E-07 | 1.00E+04 | 1.00E+01 | - | 1.36E+09 | 6.32E+00 | nc | |
| Aldicarb sulfoxide | 1646-87-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.96E-08 | 2.80E+04 | 1.00E+01 | - | 1.36E+09 | - | - | |
| Aldrin | 309-00-2 | No | Yes | 1.70E+01 | I | 4.90E-03 | I | 3.00E-05 | IR | - | - | 1 | - | 1 | 1.72E+06 | 1.80E-03 | 1.70E-02 | 8.20E+04 | - | 1.36E+09 | 3.93E-02 | ca** | |
| Aliphatic Chlorinated Hydrocarbons (each) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Aliphatic Chlorinated Hydrocarbons (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Alizarin Red Compounds | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Allyl Alcohol | 107-18-6 | No | Yes | - | - | - | - | 5.00E-03 | IR | 1.00E-04 | SC | 1 | - | 1 | 3.42E+04 | 2.04E-04 | 1.00E+06 | 1.90E+00 | 1.11E+05 | 1.36E+09 | 3.53E-01 | nc | |
| Allyl Chloride | 107-05-1 | No | Yes | 2.10E-02 | C | 6.00E-06 | C | - | - | 1.00E-03 | IR | 1 | - | 1 | 1.58E+03 | 4.50E-01 | 3.37E+03 | 3.96E+01 | 1.42E+03 | 1.36E+09 | 1.65E-01 | nc | |
| Aluminum | 7429-90-5 | No | No | - | - | - | - | 1.00E+00 | PP | 5.00E-03 | PP | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 7.74E+03 | nc |
| Aluminum Phosphide | 20859-73-8 | No | No | - | - | - | - | 4.00E-04 | IR | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 3.13E+00 | nc |
| Hydramethylnon | 67485-29-4 | No | No | - | - | - | - | 1.70E-02 | OP | - | - | 1 | 0.1 | 1 | - | 8.99E-05 | 6.00E-03 | 1.80E+08 | - | 1.36E+09 | 1.07E+02 | nc | |
| Ametryn | 834-12-8 | No | No | - | - | - | - | 9.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 9.93E-08 | 2.09E+02 | 4.28E+02 | - | 1.36E+09 | 5.69E+01 | nc | |
| Amino-4-chlorobenzotrifluoride, 3- | 121-50-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.67E+05 | 5.03E-04 | 1.12E+02 | 7.90E+02 | - | 1.36E+09 | - | - | |
| Aminoazobenzene, p- | 60-09-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.56E-09 | 3.20E+01 | 1.81E+03 | - | 1.36E+09 | - | - | |
| Aminobiphenyl, 4- | 92-67-1 | No | No | 2.10E+01 | C | 6.00E-03 | C | - | - | - | - | 1 | 0.1 | 1 | - | 5.97E-06 | 2.24E+02 | 2.47E+03 | - | 1.36E+09 | 2.58E-02 | ca | |
| Aminophenol, m- | 591-27-5 | No | No | - | - | - | - | 8.00E-02 | PP | - | - | 1 | 0.1 | 1 | - | 8.09E-09 | 2.70E+04 | 9.02E+01 | - | 1.36E+09 | 5.06E+02 | nc | |
| Aminophenol, o- | 95-55-6 | No | No | - | - | - | - | 4.00E-03 | SC | - | - | 1 | 0.1 | 1 | - | 8.09E-09 | 2.00E+04 | 9.20E+01 | - | 1.36E+09 | 2.53E+01 | nc | |
| Aminophenol, p- | 123-30-8 | No | No | - | - | - | - | 2.00E-02 | PP | - | - | 1 | 0.1 | 1 | - | 1.47E-08 | 1.60E+04 | 9.02E+01 | - | 1.36E+09 | 1.26E+02 | nc | |
| Aminopyridine, 4- | 504-24-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.15E-07 | 8.33E+04 | 3.46E+01 | - | 1.36E+09 | - | - | |
| Amitraz | 33089-61-1 | No | No | - | - | - | - | 2.50E-03 | IR | - | - | 1 | 0.1 | 1 | - | 4.04E-04 | 1.00E+00 | 2.57E+05 | - | 1.36E+09 | 1.58E+01 | nc | |
| Ammonium Sulfamate | 7773-06-0 | No | No | - | - | - | - | 2.00E-01 | IR | - | - | 1 | - | 1 | - | - | 1.34E+06 | - | - | - | 1.36E+09 | 1.56E+03 | nc |
| Amyl Alcohol, tert- | 75-85-4 | No | Yes | - | - | - | - | - | - | 3.00E-03 | SC | 1 | - | 1 | 2.62E+04 | 5.64E-04 | 1.10E+05 | 4.14E+00 | 1.37E+04 | 1.36E+09 | 8.20E+00 | nc | |
| Aniline | 62-53-3 | No | No | 5.70E-03 | I | 1.60E-06 | C | 7.00E-03 | PP | 1.00E-03 | IR | 1 | 0.1 | 1 | - | 8.26E-05 | 3.60E+04 | 7.02E+01 | - | 1.36E+09 | 4.42E+01 | nc | |
| Anilinobenzothiazole | 1843-21-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Anthraquinone, 9,10- | 84-65-1 | No | No | 4.00E-02 | P | - | - | 2.00E-03 | SC | - | - | 1 | 0.1 | 1 | - | 9.61E-07 | 1.35E+00 | 5.01E+03 | - | 1.36E+09 | 1.26E+01 | nc | |
| Antimony (metallic) | 7440-36-0 | No | No | - | - | - | - | 4.00E-04 | IR | - | - | 0.15 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 3.13E+00 | nc |
| Antimony Pentoxide | 1314-60-9 | No | No | - | - | - | - | 5.00E-04 | HE | - | - | 0.15 | - | 1 | - | - | 3.00E+03 | - | - | - | 1.36E+09 | 3.91E+00 | nc |
| Antimony Potassium Tartrate | 11071-15-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | 5.26E+04 | 1.34E+01 | - | 1.36E+09 | - | - | |
| Antimony Tetroxide | 1332-81-6 | No | No | - | - | - | - | 4.00E-04 | HE | - | - | 0.15 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 3.13E+00 | nc |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Resident Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| Antimony Trioxide | 1309-64-4 | No | No | - | - | - | - | - | - | 2.00E-04 | IR | 0.15 | - | 1 | - | - | - | - | - | 1.36E+09 | 2.84E+04 | nc |
| Antimony Trichloride | 10025-91-9 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 6.02E+06 | - | - | 1.36E+09 | - | - |
| Clofentezine | 74115-24-5 | No | No | - | - | - | - | 1.30E-02 | IR | - | - | 1 | 0.1 | 1 | - | 1.59E-08 | 1.00E+00 | 3.02E+04 | - | 1.36E+09 | 8.22E+01 | nc |
| Arsenic Salts | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.03 | 0.6 | - | - | - | - | - | 1.36E+09 | - | - |
| Arsenic, Inorganic | 7440-38-2 | No | No | 1.50E+00 | I | 4.30E-03 | I | 3.00E-04 | IR | 1.50E-05 | CA | 1 | 0.03 | 0.6 | - | - | - | - | - | 1.36E+09 | 6.77E-01 | ca** |
| Arsine | 7784-42-1 | No | No | - | - | - | - | 3.50E-06 | CA | 5.00E-05 | IR | 1 | - | 1 | - | - | 2.00E+05 | - | - | 1.36E+09 | 2.74E-02 | nc |
| Asulam | 3337-71-1 | No | No | - | - | - | - | 3.60E-02 | OP | - | - | 1 | 0.1 | 1 | - | 6.99E-11 | 5.00E+03 | 2.78E+01 | - | 1.36E+09 | 2.28E+02 | nc |
| Atrazine | 1912-24-9 | No | No | 2.30E-01 | C | - | - | 3.50E-02 | IR | - | - | 1 | 0.1 | 1 | - | 9.65E-08 | 3.47E+01 | 2.25E+02 | - | 1.36E+09 | 2.36E+00 | ca* |
| Auramine | 492-80-8 | No | No | 8.80E-01 | C | 2.50E-04 | C | - | - | - | - | 1 | 0.1 | 1 | - | 1.49E-07 | 5.35E+01 | 4.46E+03 | - | 1.36E+09 | 6.17E-01 | ca |
| Avermectin B1 | 65195-55-3 | No | No | - | - | - | - | 4.00E-04 | IR | - | - | 1 | 0.1 | 1 | - | 5.40E-26 | 3.50E-04 | 8.77E+05 | - | 1.36E+09 | 2.53E+00 | nc |
| Azobenzene | 103-33-3 | No | Yes | 1.10E-01 | I | 3.10E-05 | I | - | - | - | - | 1 | - | 1 | 5.23E+05 | 5.52E-04 | 6.40E+00 | 3.76E+03 | - | 1.36E+09 | 5.58E+00 | ca |
| Azodicarbonamide | 123-77-3 | No | No | - | - | - | - | 1.00E+00 | PP | 7.00E-06 | PP | 1 | 0.1 | 1 | - | 3.35E-11 | 3.50E+01 | 6.96E+01 | - | 1.36E+09 | 8.58E+02 | nc |
| Barium | 7440-39-3 | No | No | - | - | - | - | 2.00E-01 | IR | 5.00E-04 | HE | 0.07 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.53E+03 | nc |
| Barium Chromate | 10294-40-3 | Yes | No | 5.00E-01 | C | 1.50E-01 | C | 2.00E-02 | CA | 2.00E-04 | CA | 0.025 | - | 1 | - | - | 2.60E+00 | - | - | 1.36E+09 | 2.96E-01 | ca |
| Cyfluthrin | 68359-37-5 | No | No | - | - | - | - | 2.50E-02 | IR | - | - | 1 | 0.1 | 1 | - | 1.19E-06 | 3.00E-03 | 1.31E+05 | - | 1.36E+09 | 1.58E+02 | nc |
| Benfluralin | 1861-40-1 | No | Yes | - | - | - | - | 5.00E-03 | OP | - | - | 1 | - | 1 | 3.07E+05 | 1.19E-02 | 1.00E-01 | 1.64E+04 | - | 1.36E+09 | 3.91E+01 | nc |
| Benomyl | 17804-35-2 | No | No | - | - | - | - | 5.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 2.02E-10 | 3.80E+00 | 3.36E+02 | - | 1.36E+09 | 3.16E+02 | nc |
| Bentazon | 25057-89-0 | No | No | - | - | - | - | 3.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 8.91E-08 | 5.00E+02 | 1.00E+01 | - | 1.36E+09 | 1.90E+02 | nc |
| Benzaldehyde | 100-52-7 | No | Yes | 4.00E-03 | P | - | - | 1.00E-01 | IR | - | - | 1 | - | 1 | 2.25E+04 | 1.09E-03 | 6.95E+03 | 1.11E+01 | 1.16E+03 | 1.36E+09 | 1.74E+02 | ca** |
| Benzamide, N,N-diethyl-3-methyl (DEET) | 134-62-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | - | - | 8.50E-07 | 0.00E+00 | 1.13E+02 | - | 1.36E+09 | - | - |
| Benzene | 71-43-2 | No | Yes | 5.50E-02 | I | 7.80E-06 | I | 4.00E-03 | IR | 3.00E-02 | IR | 1 | - | 1 | 3.54E+03 | 2.27E-01 | 1.79E+03 | 1.46E+02 | 1.82E+03 | 1.36E+09 | 1.16E+00 | ca** |
| Benzene, Ethyldimethyl | 29224-55-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 9.12E+03 | 4.17E-01 | 1.77E+01 | 1.20E+03 | 1.30E+02 | 1.36E+09 | - | - |
| Benzene, Ethylmethyl | 25550-14-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.78E+04 | 2.05E-01 | 7.45E+01 | 7.16E+02 | 3.30E+02 | 1.36E+09 | - | - |
| Benzene, Methylpropenyl | 768-00-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.15E+04 | 2.78E-01 | 5.00E+01 | 1.33E+03 | 4.07E+02 | 1.36E+09 | - | - |
| Benzene, Methylpropyl | 28729-54-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Benzene, Trimethyl | 25551-13-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.23E+04 | 3.59E-01 | 4.82E+01 | 6.02E+02 | 1.82E+02 | 1.36E+09 | - | - |
| Benzenediamine-2-methyl sulfate, 1,4- | 6369-59-1 | No | No | 1.00E-01 | X | - | - | 3.00E-04 | SC | - | - | 1 | 0.1 | 1 | - | 8.86E-22 | 1.00E+06 | 3.84E+01 | - | 1.36E+09 | 1.90E+00 | nc |
| Benzenethiol | 108-98-5 | No | Yes | - | - | - | - | 1.00E-03 | PP | - | - | 1 | - | 1 | 1.94E+04 | 1.37E-02 | 8.35E+02 | 2.34E+02 | 1.26E+03 | 1.36E+09 | 7.82E+00 | nc |
| Benzidine | 92-87-5 | Yes | No | 2.30E+02 | I | 6.70E-02 | I | 3.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 2.11E-09 | 3.22E+02 | 1.19E+03 | - | 1.36E+09 | 5.30E-04 | ca |
| Benzofluoranthenes, total | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Benzofluorene, 2,3- | 243-17-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.60E-04 | 4.00E-03 | 9.70E+04 | - | 1.36E+09 | - | - |
| Benzoic Acid | 65-85-0 | No | No | - | - | - | - | 4.00E+00 | IR | - | - | 1 | 0.1 | 1 | - | 1.56E-06 | 3.40E+03 | 6.00E-01 | - | 1.36E+09 | 2.53E+04 | nc |
| Benzoic acid, 3,5-dichloro- | 51-36-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.43E-06 | 1.47E+02 | 4.26E+01 | - | 1.36E+09 | - | - |
| Benzoic acid, 4-hydroxy-, methyl ester | 99-76-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 9.12E-08 | 2.50E+03 | 8.63E+01 | - | 1.36E+09 | - | - |
| Benzothiazole | 95-16-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.53E-05 | 4.30E+03 | 8.47E+02 | - | 1.36E+09 | - | - |
| Benzotrichloride | 98-07-7 | No | Yes | 1.30E+01 | I | - | - | - | - | - | - | 1 | - | 1 | 6.76E+04 | 1.06E-02 | 5.30E+01 | 1.00E+03 | 3.24E+02 | 1.36E+09 | 5.35E-02 | ca |
| Benzyl Alcohol | 100-51-6 | No | No | - | - | - | - | 1.00E-01 | PP | - | - | 1 | 0.1 | 1 | - | 1.38E-05 | 4.29E+04 | 2.15E+01 | - | 1.36E+09 | 6.32E+02 | nc |
| Benzyl Chloride | 100-44-7 | No | Yes | 1.70E-01 | I | 4.90E-05 | C | 2.00E-03 | PP | 1.00E-03 | PP | 1 | - | 1 | 2.55E+04 | 1.68E-02 | 5.25E+02 | 4.46E+02 | 1.46E+03 | 1.36E+09 | 1.08E+00 | ca** |
| Beryllium and compounds | 7440-41-7 | No | No | - | - | 2.40E-03 | I | 2.00E-03 | IR | 2.00E-05 | IR | 0.007 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.56E+01 | nc |
| Dicrotophos | 141-66-2 | No | No | - | - | - | - | 7.00E-05 | OP | - | - | 1 | 0.1 | 1 | - | 2.06E-09 | 1.00E+06 | 1.66E+01 | - | 1.36E+09 | 4.42E-01 | nc |
| Bifenoxy | 42576-02-3 | No | No | - | - | - | - | 9.00E-03 | PP | - | - | 1 | 0.1 | 1 | - | 4.42E-06 | 3.98E-01 | 3.68E+03 | - | 1.36E+09 | 5.69E+01 | nc |
| Biphenrin | 82657-04-3 | No | No | - | - | - | - | 1.50E-02 | IR | - | - | 1 | 0.1 | 1 | - | 4.09E-05 | 1.00E-03 | 2.27E+06 | - | 1.36E+09 | 9.48E+01 | nc |
| Biphenyl, 1,1'- | 92-52-4 | No | Yes | 8.00E-03 | I | - | - | 5.00E-01 | IR | 4.00E-04 | SC | 1 | - | 1 | 1.14E+05 | 1.26E-02 | 7.48E+00 | 5.13E+03 | - | 1.36E+09 | 4.75E+00 | nc |
| Bis(2-chloroethoxy)methane | 111-91-1 | No | No | - | - | - | - | 3.00E-03 | PP | - | - | 1 | 0.1 | 1 | - | 1.57E-04 | 7.80E+03 | 1.44E+01 | - | 1.36E+09 | 1.90E+01 | nc |
| Bis(2-chloroethyl)ether | 111-44-4 | No | Yes | 1.10E+00 | I | 3.30E-04 | I | - | - | - | - | 1 | - | 1 | 4.25E+04 | 6.95E-04 | 1.72E+04 | 3.22E+01 | 5.05E+03 | 1.36E+09 | 2.30E-01 | ca |
| Bis(2-chloro-1-methylethyl) ether | 108-60-1 | No | Yes | - | - | - | - | 4.00E-02 | IR | - | - | 1 | - | 1 | 3.50E+04 | 3.03E-03 | 1.70E+03 | 8.29E+01 | 1.02E+03 | 1.36E+09 | 3.13E+02 | nc |
| Bis(chloromethyl)ether | 542-88-1 | No | Yes | 2.20E+02 | I | 6.20E-02 | I | - | - | - | - | 1 | - | 1 | 1.88E+03 | 1.78E-01 | 2.20E+04 | 9.70E+00 | 4.22E+03 | 1.36E+09 | 8.28E-05 | ca |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|-----------------------------------|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| Bisphenol A | 80-05-7 | No | No | - | - | - | - | 5.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 4.09E-10 | 1.20E+02 | 3.77E+04 | - | 1.36E+09 | 3.16E+02 | nc |
| Boron And Borates Only | 7440-42-8 | No | No | - | - | - | - | 2.00E-01 | IR | 2.00E-02 | HE | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.56E+03 | nc |
| Boron Trifluoride | 7637-07-2 | No | Yes | - | - | - | - | 4.00E-02 | CA | 1.30E-02 | CA | 1 | - | 1 | - | - | 3.32E+06 | - | - | 1.36E+09 | 3.13E+02 | nc |
| Boron Trichloride | 10294-34-5 | No | Yes | - | - | - | - | 2.00E+00 | PP | 2.00E-02 | PP | 1 | - | 1 | - | 7.48E-01 | - | - | - | 1.36E+09 | 1.56E+04 | nc |
| Bromacil | 314-40-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 5.27E-09 | 8.15E+02 | 6.66E+01 | - | 1.36E+09 | - | - |
| Bromate | 15541-45-4 | No | No | 7.00E-01 | I | - | - | 4.00E-03 | IR | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 9.93E-01 | ca* |
| Bromine | 7726-95-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 3.36E+04 | - | 2.55E+05 | 1.36E+09 | - | - |
| Bromo-2-chloroethane, 1- | 107-04-0 | No | Yes | 2.00E+00 | X | 6.00E-04 | X | - | - | - | - | 1 | - | 1 | 5.92E+03 | 3.72E-02 | 6.90E+03 | 3.96E+01 | 2.38E+03 | 1.36E+09 | 2.57E-02 | ca |
| Bromo-3-fluorobenzene, 1- | 1073-06-9 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.12E+04 | 1.02E-01 | 3.78E+02 | 3.75E+02 | 8.96E+02 | 1.36E+09 | - | - |
| Bromo-4-Ethylbenzene, 1- | 1585-07-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.54E+04 | 1.28E-01 | 2.33E+01 | 7.16E+02 | 1.03E+02 | 1.36E+09 | - | - |
| Bromoacetic acid | 79-08-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.67E-07 | 1.75E+06 | 1.44E+00 | - | 1.36E+09 | - | - |
| Bromoacetophenone, 3- | 2142-63-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.60E-04 | 3.44E+02 | 8.32E+01 | - | 1.36E+09 | - | - |
| Bromobenzene | 108-86-1 | No | Yes | - | - | - | - | 8.00E-03 | IR | 6.00E-02 | IR | 1 | - | 1 | 8.37E+03 | 1.01E-01 | 4.46E+02 | 2.34E+02 | 6.79E+02 | 1.36E+09 | 2.85E+01 | nc |
| Bromochloromethane | 74-97-5 | No | Yes | - | - | - | - | - | - | 4.00E-02 | SC | 1 | - | 1 | 3.58E+03 | 5.97E-02 | 1.67E+04 | 2.17E+01 | 4.04E+03 | 1.36E+09 | 1.49E+01 | nc |
| Bromodichloromethane | 75-27-4 | No | Yes | 6.20E-02 | I | 3.70E-05 | C | 2.00E-02 | IR | - | - | 1 | - | 1 | 3.97E+03 | 8.67E-02 | 3.03E+03 | 3.18E+01 | 9.32E+02 | 1.36E+09 | 2.93E-01 | ca |
| Bromodiphenyl Ether, p- | 101-55-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.86E+05 | 4.78E-03 | 1.45E+00 | 3.08E+03 | 2.69E+01 | 1.36E+09 | - | - |
| Bromofluorobenzene, p- | 460-00-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.14E+04 | 1.02E-01 | 1.36E+02 | 3.75E+02 | 3.23E+02 | 1.36E+09 | - | - |
| Bromoform | 75-25-2 | No | Yes | 7.90E-03 | I | 1.10E-06 | I | 2.00E-02 | IR | - | - | 1 | - | 1 | 9.70E+03 | 2.19E-02 | 3.10E+03 | 3.18E+01 | 9.15E+02 | 1.36E+09 | 1.93E+01 | ca** |
| Bromomethane | 74-83-9 | No | Yes | - | - | - | - | 1.40E-03 | IR | 5.00E-03 | IR | 1 | - | 1 | 1.40E+03 | 3.00E-01 | 1.52E+04 | 1.32E+01 | 3.59E+03 | 1.36E+09 | 6.83E-01 | nc |
| Bromophenol, p- | 106-41-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 6.17E-06 | 1.40E+04 | 3.00E+02 | - | 1.36E+09 | - | - |
| Bromophos | 2104-96-3 | No | Yes | - | - | - | - | 5.00E-03 | HE | - | - | 1 | - | 1 | 1.24E+05 | 8.38E-03 | 3.00E-01 | 2.02E+03 | - | 1.36E+09 | 3.91E+01 | nc |
| Bromopropane, 1- | 106-94-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.14E+03 | 2.99E-01 | 2.45E+03 | 3.96E+01 | 9.66E+02 | 1.36E+09 | - | - |
| Bromopyridine, 2- | 109-04-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.15E-04 | 2.08E+04 | 1.15E+02 | - | 1.36E+09 | - | - |
| Bromotrifluoromethane | 75-62-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.30E+04 | 1.52E-02 | 8.69E+02 | 4.39E+01 | 3.18E+02 | 1.36E+09 | - | - |
| Bromoxynil | 1689-84-5 | No | No | 1.03E-01 | O | - | - | 1.50E-02 | OP | - | - | 1 | 0.1 | 1 | - | 5.40E-09 | 1.30E+02 | 3.30E+02 | - | 1.36E+09 | 5.27E+00 | ca* |
| Bromoxynil Octanoate | 1689-99-2 | No | Yes | - | - | - | - | 1.50E-02 | OP | - | - | 1 | - | 1 | 4.74E+05 | 1.30E-03 | 8.00E-02 | 4.25E+03 | - | 1.36E+09 | 1.17E+02 | nc |
| Butadiene, 1,3- | 106-99-0 | No | Yes | 3.40E+00 | C | 3.00E-05 | I | - | - | 2.00E-03 | IR | 1 | - | 1 | 8.66E+02 | 3.01E+00 | 7.35E+02 | 3.96E+01 | 6.67E+02 | 1.36E+09 | 5.80E-02 | ca** |
| Butanediol, 2,3- | 513-85-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.18E-06 | 1.00E+06 | 1.00E+00 | - | 1.36E+09 | - | - |
| Butanol | 35296-72-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.12E+04 | 3.70E-04 | 1.25E+05 | 2.92E+00 | 1.47E+04 | 1.36E+09 | - | - |
| Butanol, N- | 71-36-3 | No | Yes | - | - | - | - | 1.00E-01 | IR | - | - | 1 | - | 1 | 3.00E+04 | 3.60E-04 | 6.32E+04 | 3.47E+00 | 7.64E+03 | 1.36E+09 | 7.82E+02 | nc |
| Butanone-2, 4-chloro-4,4-difluoro | 1515-16-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Butyl alcohol, sec- | 78-92-2 | No | Yes | - | - | - | - | 2.00E+00 | PP | 3.00E+01 | PP | 1 | - | 1 | 2.92E+04 | 3.70E-04 | 1.81E+05 | 2.92E+00 | 2.13E+04 | 1.36E+09 | 1.34E+04 | nc |
| Butyl Alcohol, t- | 75-65-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.87E+04 | 3.70E-04 | 1.00E+06 | 2.11E+00 | - | 1.36E+09 | - | - |
| Butyl Formate, tert- | 762-75-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.35E+03 | 2.82E-02 | 1.12E+04 | 7.91E+00 | 1.70E+03 | 1.36E+09 | - | - |
| Butylacetate | 123-86-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.56E+03 | 1.15E-02 | 8.40E+03 | 1.85E+01 | 1.79E+03 | 1.36E+09 | - | - |
| Butylate | 2008-41-5 | No | Yes | - | - | - | - | 5.00E-02 | IR | - | - | 1 | - | 1 | 8.63E+04 | 3.45E-03 | 4.50E+01 | 3.86E+02 | - | 1.36E+09 | 3.91E+02 | nc |
| Butylated hydroxyanisole | 25013-16-5 | No | No | 2.00E-04 | C | 5.70E-08 | C | - | - | - | - | 1 | 0.1 | 1 | - | 4.78E-05 | 2.13E+02 | 8.41E+02 | - | 1.36E+09 | 2.71E+03 | ca |
| Butylated hydroxytoluene | 128-37-0 | No | No | 3.60E-03 | P | - | - | 3.00E-01 | PP | - | - | 1 | 0.1 | 1 | - | 1.68E-04 | 6.00E-01 | 1.48E+04 | - | 1.36E+09 | 1.51E+02 | ca* |
| Butylbenzene, n- | 104-51-8 | No | Yes | - | - | - | - | 5.00E-02 | PP | - | - | 1 | - | 1 | 8.14E+03 | 6.50E-01 | 1.18E+01 | 1.48E+03 | 1.08E+02 | 1.36E+09 | 3.91E+02 | cs |
| Butylbenzene, sec- | 135-98-8 | No | Yes | - | - | - | - | 1.00E-01 | SC | - | - | 1 | - | 1 | 7.35E+03 | 7.20E-01 | 1.76E+01 | 1.33E+03 | 1.45E+02 | 1.36E+09 | 7.82E+02 | cs |
| Butylbenzene, tert- | 98-06-6 | No | Yes | - | - | - | - | 1.00E-01 | SC | - | - | 1 | - | 1 | 7.36E+03 | 5.40E-01 | 2.95E+01 | 1.00E+03 | 1.83E+02 | 1.36E+09 | 7.82E+02 | cs |
| Butylchloride, t- | 507-20-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.70E+03 | 5.23E-01 | 2.88E+03 | 4.39E+01 | 1.33E+03 | 1.36E+09 | - | - |
| Butyltin | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Cacodylic Acid | 75-60-5 | No | No | - | - | - | - | 2.00E-02 | AT | - | - | 1 | 0.1 | 1 | - | 7.36E-13 | 2.00E+06 | 4.39E+01 | - | 1.36E+09 | 1.26E+02 | nc |
| Cadmium (Diet) | 7440-43-9 | No | No | - | - | 1.80E-03 | I | 1.00E-03 | IR | 1.00E-05 | AT | 0.025 | 0.001 | 1 | - | - | - | - | - | 1.36E+09 | 7.11E+00 | nc |
| Calcium | 7440-70-2 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Calcium Chromate | 13765-19-0 | Yes | No | 5.00E-01 | C | 1.50E-01 | C | 2.00E-02 | CA | 2.00E-04 | CA | 0.025 | - | 1 | - | - | - | - | - | 1.36E+09 | 2.96E-01 | ca |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Resident Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] | |
|----------------------------------|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|----------|----|
| Caprolactam | 105-60-2 | No | No | - | - | - | - | 5.00E-01 | IR | 2.20E-03 | CA | 1 | 0.1 | 1 | - | 1.03E-06 | 7.72E+05 | 2.45E+01 | - | 1.36E+09 | 3.13E+03 | nc | |
| Captafol | 2425-06-1 | No | No | 1.50E-01 | C | 4.30E-05 | C | 2.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 2.01E-07 | 1.40E+00 | 7.83E+02 | - | 1.36E+09 | 3.62E+00 | ca** | |
| Captan | 133-06-2 | No | No | 2.30E-03 | C | 6.60E-07 | C | 1.30E-01 | IR | - | - | 1 | 0.1 | 1 | - | 2.86E-07 | 5.10E+00 | 2.52E+02 | - | 1.36E+09 | 2.36E+02 | ca** | |
| Carbaryl | 63-25-2 | No | No | - | - | - | - | 1.00E-01 | IR | - | - | 1 | 0.1 | 1 | - | 1.34E-07 | 1.10E+02 | 3.55E+02 | - | 1.36E+09 | 6.32E+02 | nc | |
| Carbazole | 86-74-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.74E-06 | 1.80E+00 | 9.16E+03 | - | 1.36E+09 | - | - | |
| Carbofuran | 1563-66-2 | No | No | - | - | - | - | 5.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 1.26E-07 | 3.20E+02 | 9.53E+01 | - | 1.36E+09 | 3.16E+01 | nc | |
| Carbon Disulfide | 75-15-0 | No | Yes | - | - | - | - | 1.00E-01 | IR | 7.00E-01 | IR | 1 | - | 1 | 1.17E+03 | 5.89E-01 | 2.16E+03 | 2.17E+01 | 7.38E+02 | 1.36E+09 | 7.68E+01 | nc | |
| Carbon Tetrachloride | 56-23-5 | No | Yes | 7.00E-02 | I | 6.00E-06 | I | 4.00E-03 | IR | 1.00E-01 | IR | 1 | - | 1 | 1.49E+03 | 1.13E+00 | 7.93E+02 | 4.39E+01 | 4.58E+02 | 1.36E+09 | 6.53E-01 | ca* | |
| Carbonyl Sulfide | 463-58-1 | No | Yes | - | - | - | - | - | - | 1.00E-01 | PP | 1 | - | 1 | 6.46E+02 | 2.49E+01 | 1.22E+03 | 1.00E+00 | 5.89E+03 | 1.36E+09 | 6.74E+00 | nc | |
| Carbosulfan | 55285-14-8 | No | No | - | - | - | - | 1.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 2.09E-05 | 3.00E-01 | 1.20E+04 | - | 1.36E+09 | 6.32E+01 | nc | |
| Carboxin | 5234-68-4 | No | No | - | - | - | - | 1.00E-01 | IR | - | - | 1 | 0.1 | 1 | - | 1.31E-08 | 1.47E+02 | 1.69E+02 | - | 1.36E+09 | 6.32E+02 | nc | |
| Catechol | 120-80-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.91E-08 | 4.61E+05 | 2.45E+02 | - | 1.36E+09 | - | - | |
| Ceric oxide | 1306-38-3 | No | No | - | - | - | - | - | - | 9.00E-04 | IR | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 1.28E+05 | cm |
| Cerium, Stable | 7440-45-1 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Chloral | 75-87-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.55E+05 | 1.19E-07 | 3.00E+04 | 2.14E+00 | 3.38E+03 | 1.36E+09 | - | - | |
| Chloral Hydrate | 302-17-0 | No | Yes | - | - | - | - | 1.00E-01 | IR | - | - | 1 | - | 1 | 1.45E+05 | 2.33E-07 | 7.93E+05 | 1.00E+00 | - | 1.36E+09 | 7.82E+02 | nc | |
| Chloramben | 133-90-4 | No | No | - | - | - | - | 1.50E-02 | IR | - | - | 1 | 0.1 | 1 | - | 1.58E-09 | 7.00E+02 | 2.14E+01 | - | 1.36E+09 | 9.48E+01 | nc | |
| Chloramine | 127-65-1 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Chloranil | 118-75-2 | No | No | 4.03E-01 | H | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.34E-08 | 2.50E+02 | 3.08E+02 | - | 1.36E+09 | 1.35E+00 | ca | |
| Chlorate (ClO3) as | 14866-68-3 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Chlordane | 12789-03-6 | No | Yes | 3.50E-01 | I | 1.00E-04 | I | 5.00E-04 | IR | 7.00E-04 | IR | 1 | 0.04 | 1 | 1.53E+06 | 1.99E-03 | 5.60E-02 | 6.75E+04 | - | 1.36E+09 | 1.71E+00 | ca** | |
| Chlordane (alpha) | 5103-71-9 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.49E+06 | 1.99E-03 | 5.60E-02 | 6.75E+04 | - | 1.36E+09 | - | - | |
| Chlordane (gamma) | 5103-74-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.49E+06 | 1.99E-03 | 5.60E-02 | 6.75E+04 | - | 1.36E+09 | - | - | |
| Chlordecone (Kepone) | 143-50-0 | No | No | 1.00E+01 | I | 4.60E-03 | C | 3.00E-04 | IR | - | - | 1 | 0.1 | 1 | - | 2.20E-06 | 2.70E+00 | 1.75E+04 | - | 1.36E+09 | 5.43E-02 | ca* | |
| Chlorfenvinphos | 470-90-6 | No | No | - | - | - | - | 7.00E-04 | AT | - | - | 1 | 0.1 | 1 | - | 1.18E-06 | 1.24E+02 | 1.26E+03 | - | 1.36E+09 | 4.42E+00 | nc | |
| Chloride | 16887-00-6 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Chlorimuron, Ethyl- | 90982-32-4 | No | No | - | - | - | - | 9.00E-02 | OP | - | - | 1 | 0.1 | 1 | - | 7.44E-14 | 1.20E+03 | 7.18E+01 | - | 1.36E+09 | 5.69E+02 | nc | |
| Chlorinated Hydrocarbons (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Chlorine | 7782-50-5 | No | Yes | - | - | - | - | 1.00E-01 | IR | 1.45E-04 | AT | 1 | - | 1 | 1.22E+03 | 4.78E-01 | 6.30E+03 | - | 2.78E+03 | 1.36E+09 | 1.85E-02 | nc | |
| Chlorine Dioxide | 10049-04-4 | No | Yes | - | - | - | - | 3.00E-02 | IR | 2.00E-04 | IR | 1 | - | 1 | - | 1.64E+00 | - | - | - | - | 1.36E+09 | 2.33E+02 | nc |
| Chlorite | 14998-27-7 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Chlorite (Sodium Salt) | 7758-19-2 | No | No | - | - | - | - | 3.00E-02 | IR | - | - | 1 | - | 1 | - | - | 6.40E+05 | - | - | - | 1.36E+09 | 2.35E+02 | nc |
| Chloro-2-methylphenol, 4- | 1570-64-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.62E-05 | 4.00E+03 | 4.92E+02 | - | 1.36E+09 | - | - | |
| Chloro-4-methylphenol | 35421-08-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Chloro-1,1-difluoroethane, 1- | 75-68-3 | No | Yes | - | - | - | - | - | - | 5.00E+01 | IR | 1 | - | 1 | 1.03E+03 | 2.40E+00 | 1.40E+03 | 4.39E+01 | 1.15E+03 | 1.36E+09 | 5.36E+03 | cs | |
| Chloro-1,3-butadiene, 2- | 126-99-8 | No | Yes | - | - | 3.00E-04 | I | 2.00E-02 | HE | 2.00E-02 | IR | 1 | - | 1 | 1.08E+03 | 2.29E+00 | 8.75E+02 | 6.07E+01 | 7.86E+02 | 1.36E+09 | 1.01E-02 | ca | |
| Chloro-2-methylaniline HCl, 4- | 3165-93-3 | No | No | 4.60E-01 | H | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 6.38E-05 | 9.54E+02 | 3.52E+02 | - | 1.36E+09 | 1.18E+00 | ca | |
| Chloro-2-methylaniline, 4- | 95-69-2 | No | No | 1.00E-01 | P | 7.70E-05 | C | 3.00E-03 | SC | - | - | 1 | 0.1 | 1 | - | 8.14E-05 | 9.54E+02 | 1.85E+02 | - | 1.36E+09 | 5.43E+00 | ca** | |
| Chloro-6-fluorophenol, 2- | 2040-90-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Chloroacetaldehyde, 2- | 107-20-0 | No | Yes | 2.70E-01 | X | - | - | - | - | - | - | 1 | - | 1 | 1.62E+04 | 9.77E-04 | 1.11E+05 | 1.00E+00 | 1.18E+04 | 1.36E+09 | 2.57E+00 | ca | |
| Chloroacetamide | 79-07-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.61E-07 | 9.00E+04 | 5.69E+00 | - | 1.36E+09 | - | - | |
| Chloroacetic Acid | 79-11-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.79E-07 | 8.58E+05 | 1.44E+00 | - | 1.36E+09 | - | - | |
| Chloroacetophenone, 2- | 532-27-4 | No | No | - | - | - | - | - | - | 3.00E-05 | IR | 1 | 0.1 | 1 | - | 1.41E-04 | 1.10E+03 | 9.89E+01 | - | 1.36E+09 | 4.25E+03 | nc | |
| Chloroaniline | 27134-26-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.20E-04 | 8.16E+03 | 1.15E+02 | - | 1.36E+09 | - | - | |
| Chloroaniline, 3- | 108-42-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.09E-05 | 5.40E+03 | 1.13E+02 | - | 1.36E+09 | - | - | |
| Chloroaniline, p- | 106-47-8 | No | No | 2.00E-01 | P | - | - | 4.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 4.74E-05 | 3.90E+03 | 1.13E+02 | - | 1.36E+09 | 2.71E+00 | ca** | |
| Chlorobenzene | 108-90-7 | No | Yes | - | - | - | - | 2.00E-02 | IR | 5.00E-02 | PP | 1 | - | 1 | 6.45E+03 | 1.27E-01 | 4.98E+02 | 2.34E+02 | 7.61E+02 | 1.36E+09 | 2.77E+01 | nc | |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-----|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| Chlorobenzene sulfonic acid, p- | 98-66-8 | No | No | - | - | - | - | 1.00E-01 | SC | - | - | 1 | 0.1 | 1 | - | 7.60E-08 | 3.06E+05 | 1.61E+01 | - | 1.36E+09 | 6.32E+02 | nc |
| Chlorobenzenes (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Chlorobenzilate | 510-15-6 | No | No | 1.10E-01 | C | 3.10E-05 | C | 2.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 2.96E-06 | 1.30E+01 | 1.54E+03 | - | 1.36E+09 | 4.93E+00 | ca* |
| Chlorobenzoic Acid, 2- | 118-91-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | - | - | 2.66E-06 | 2.09E+03 | 2.71E+01 | - | 1.36E+09 | - | - |
| Chlorobenzoic Acid, p- | 74-11-3 | No | No | - | - | - | - | 3.00E-02 | SC | - | - | 1 | 0.1 | 1 | - | 3.28E-06 | 7.20E+01 | 2.66E+01 | - | 1.36E+09 | 1.90E+02 | nc |
| Chlorobenzotrifluoride, 3-nitro-4- | 121-17-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.55E+05 | 5.60E-03 | 3.56E+01 | 2.55E+03 | 5.47E+02 | 1.36E+09 | - | - |
| Chlorobenzotrifluoride, 4- | 98-56-6 | No | Yes | - | - | - | - | 3.00E-03 | PP | 3.00E-01 | PP | 1 | - | 1 | 6.76E+03 | 1.42E+00 | 2.90E+01 | 1.61E+03 | 2.90E+02 | 1.36E+09 | 2.11E+01 | nc |
| Chlorobiphenyl, p- | 2051-62-9 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.29E+05 | 2.34E-02 | 1.34E+00 | 8.23E+03 | - | 1.36E+09 | - | - |
| Chlorobutane, 1- | 109-69-3 | No | Yes | - | - | - | - | 4.00E-02 | PP | - | - | 1 | - | 1 | 1.76E+03 | 6.83E-01 | 1.10E+03 | 7.22E+01 | 7.28E+02 | 1.36E+09 | 3.13E+02 | nc |
| Chlorobutane, 2- | 78-86-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.46E+03 | 9.85E-01 | 1.00E+03 | 6.07E+01 | 6.51E+02 | 1.36E+09 | - | - |
| Chlorocyclopentadiene | 41851-50-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.88E+03 | 9.16E-01 | 9.70E+02 | 1.28E+02 | 1.01E+03 | 1.36E+09 | - | - |
| Chlorodibromoethane | 73506-94-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Chlorodifluoromethane | 75-45-6 | No | Yes | - | - | - | - | - | - | 5.00E+01 | IR | 1 | - | 1 | 9.38E+02 | 1.66E+00 | 2.77E+03 | 3.18E+01 | 1.68E+03 | 1.36E+09 | 4.89E+03 | cs |
| Chloroethanol, 2- | 107-07-3 | No | Yes | - | - | - | - | 2.00E-02 | PP | - | - | 1 | - | 1 | 7.81E+04 | 3.11E-05 | 1.00E+06 | 1.90E+00 | 1.11E+05 | 1.36E+09 | 1.56E+02 | nc |
| Chloroethylvinyl ether, 2- | 110-75-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.60E+03 | 3.58E-01 | 4.29E+02 | 1.77E+01 | 1.17E+02 | 1.36E+09 | - | - |
| Chloroform | 67-66-3 | No | Yes | 3.10E-02 | C | 2.30E-05 | I | 1.00E-02 | IR | 9.77E-02 | AT | 1 | - | 1 | 2.63E+03 | 1.50E-01 | 7.95E+02 | 3.18E+01 | 2.54E+03 | 1.36E+09 | 3.16E-01 | ca* |
| Chloromethane | 74-87-3 | No | Yes | - | - | - | - | - | - | 9.00E-02 | IR | 1 | - | 1 | 1.18E+03 | 3.61E-01 | 5.32E+03 | 1.32E+01 | 1.32E+03 | 1.36E+09 | 1.10E+01 | nc |
| Chloromethyl Methyl Ether | 107-30-2 | No | Yes | 2.40E+00 | C | 6.90E-04 | C | - | - | - | - | 1 | - | 1 | 5.33E+03 | 1.24E-02 | 6.94E+04 | 5.32E+00 | 9.32E+03 | 1.36E+09 | 2.02E-02 | ca |
| Chloronaphthalene, alpha- | 90-13-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 7.59E+04 | 1.45E-02 | 1.74E+01 | 2.53E+03 | 2.66E+02 | 1.36E+09 | - | - |
| Chloronitrobenzene, o- | 88-73-3 | No | No | 3.00E-01 | P | - | - | 3.00E-03 | PP | 1.00E-05 | SC | 1 | 0.1 | 1 | - | 3.80E-04 | 4.41E+02 | 3.71E+02 | - | 1.36E+09 | 1.81E+00 | ca* |
| Chloronitrobenzene, p- | 100-00-5 | No | No | 6.00E-02 | P | - | - | 7.00E-04 | PP | 2.00E-03 | PP | 1 | 0.1 | 1 | - | 2.00E-04 | 2.25E+02 | 3.63E+02 | - | 1.36E+09 | 4.42E+00 | nc |
| Chlorooctadecane, 1- | 3386-33-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | - | 2.48E+04 | 4.13E+01 | 0.00E+00 | 3.22E+05 | - | 1.36E+09 | - | - |
| Chlorophenol, 2- | 95-57-8 | No | Yes | - | - | - | - | 5.00E-03 | IR | - | - | 1 | - | 1 | 1.39E+05 | 4.58E-04 | 1.13E+04 | 3.88E+02 | 2.74E+04 | 1.36E+09 | 3.91E+01 | nc |
| Chlorophenol, 3- | 108-43-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.41E-05 | 2.60E+04 | 3.00E+02 | - | 1.36E+09 | - | - |
| Chlorophenol, 4- | 106-48-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.56E-05 | 2.40E+04 | 3.00E+02 | - | 1.36E+09 | - | - |
| Chlorophenols (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Chlorophenyl phenyl ether, 4- | 7005-72-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.15E+05 | 3.68E-03 | 3.30E+00 | 3.08E+03 | - | 1.36E+09 | - | - |
| Chlorophenyl Methyl Sulfide, p- | 123-09-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 6.91E+04 | 4.74E-03 | 1.19E+02 | 7.16E+02 | 5.23E+02 | 1.36E+09 | - | - |
| Chlorophenyl Methyl Sulfoxide | 934-73-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.00E-07 | 7.07E+03 | 7.33E+01 | - | 1.36E+09 | - | - |
| Chloropicrin | 76-06-2 | No | Yes | - | - | - | - | 4.00E-04 | CA | - | - | 1 | - | 1 | 4.68E+03 | 8.38E-02 | 1.62E+03 | 4.42E+01 | 6.17E+02 | 1.36E+09 | 1.95E-01 | nc |
| Chloropropane, 2- | 75-29-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.30E+03 | 7.15E-01 | 3.10E+03 | 3.18E+01 | 1.32E+03 | 1.36E+09 | - | - |
| Chlorothalonil | 1897-45-6 | No | No | 3.10E-03 | C | 8.90E-07 | C | 1.50E-02 | IR | - | - | 1 | 0.1 | 1 | - | 8.18E-05 | 8.10E-01 | 1.04E+03 | - | 1.36E+09 | 9.48E+01 | nc |
| Chlorotoluene, o- | 95-49-8 | No | Yes | - | - | - | - | 2.00E-02 | IR | - | - | 1 | - | 1 | 8.12E+03 | 1.46E-01 | 3.74E+02 | 3.83E+02 | 9.07E+02 | 1.36E+09 | 1.56E+02 | nc |
| Chlorotoluene, p- | 106-43-4 | No | Yes | - | - | - | - | 2.00E-02 | SC | - | - | 1 | - | 1 | 7.29E+03 | 1.79E-01 | 1.06E+02 | 3.75E+02 | 2.53E+02 | 1.36E+09 | 1.56E+02 | nc |
| Chlorozotocin | 54749-90-5 | No | No | 2.40E+02 | C | 6.90E-02 | C | - | - | - | - | 1 | 0.1 | 1 | - | 1.50E-20 | 1.83E+03 | 1.00E+01 | - | 1.36E+09 | 2.26E-03 | ca |
| Chlorpropham | 101-21-3 | No | No | - | - | - | - | 5.00E-02 | OP | - | - | 1 | 0.1 | 1 | - | 2.33E-05 | 8.90E+01 | 3.51E+02 | - | 1.36E+09 | 3.16E+02 | nc |
| Chlorpyrifos | 2921-88-2 | No | No | - | - | - | - | 1.00E-03 | AT | - | - | 1 | 0.1 | 1 | - | 1.20E-04 | 1.12E+00 | 7.28E+03 | - | 1.36E+09 | 6.32E+00 | nc |
| Chlorpyrifos Methyl | 5598-13-0 | No | No | - | - | - | - | 1.00E-02 | HE | - | - | 1 | 0.1 | 1 | - | 1.53E-04 | 4.76E+00 | 2.19E+03 | - | 1.36E+09 | 6.32E+01 | nc |
| Chlorsulfuron | 64902-72-3 | No | No | - | - | - | - | 2.00E-02 | OP | - | - | 1 | 0.1 | 1 | - | 1.40E-14 | 3.10E+04 | 3.22E+02 | - | 1.36E+09 | 1.26E+02 | nc |
| Chlorthiophos | 60238-56-4 | No | No | - | - | - | - | 8.00E-04 | HE | - | - | 1 | 0.1 | 1 | - | 4.91E-05 | 3.00E-01 | 1.28E+04 | - | 1.36E+09 | 5.06E+00 | nc |
| Chromium(III), Insoluble Salts | 16065-83-1 | No | No | - | - | - | - | 1.50E+00 | IR | - | - | 0.013 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.17E+04 | nc |
| Chromium(VI) | 18540-29-9 | Yes | No | 5.00E-01 | J | 8.40E-02 | S | 3.00E-03 | IR | 1.00E-04 | IR | 0.025 | - | 1 | - | - | 1.69E+06 | - | - | 1.36E+09 | 3.01E-01 | ca* |
| Chromium, Total | 7440-47-3 | No | No | - | - | - | - | - | - | - | - | 0.013 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Cobalt | 7440-48-4 | No | No | - | - | 9.00E-03 | P | 3.00E-04 | PP | 6.00E-06 | PP | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 2.34E+00 | nc |
| Complex Mixtures of Aliphatic and Aromatic Hydrocarbons | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Copper | 7440-50-8 | No | No | - | - | - | - | 4.00E-02 | HE | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.13E+02 | nc |

**Site-specific
 Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| Creosote | 8001-58-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | | |
| Cresol, m- | 108-39-4 | No | No | - | - | - | - | 5.00E-02 | IR | 6.00E-01 | CA | 1 | 0.1 | 1 | - | 3.50E-05 | 2.27E+04 | 3.00E+02 | - | 1.36E+09 | 3.16E+02 | nc |
| Cresol, o- | 95-48-7 | No | No | - | - | - | - | 5.00E-02 | IR | 6.00E-01 | CA | 1 | 0.1 | 1 | - | 4.91E-05 | 2.59E+04 | 3.07E+02 | - | 1.36E+09 | 3.16E+02 | nc |
| Cresol, p- | 106-44-5 | No | No | - | - | - | - | 1.00E-01 | AT | 6.00E-01 | CA | 1 | 0.1 | 1 | - | 4.09E-05 | 2.15E+04 | 3.00E+02 | - | 1.36E+09 | 6.32E+02 | nc |
| Cresol, p-chloro-m- | 59-50-7 | No | No | - | - | - | - | 1.00E-01 | AT | - | - | 1 | 0.1 | 1 | - | 1.00E-04 | 3.83E+03 | 4.92E+02 | - | 1.36E+09 | 6.32E+02 | nc |
| Cresols | 1319-77-3 | No | No | - | - | - | - | 1.00E-01 | AT | 6.00E-01 | CA | 1 | 0.1 | 1 | - | 2.53E-05 | 9.07E+03 | 3.07E+02 | - | 1.36E+09 | 6.32E+02 | nc |
| Crotonaldehyde | 4170-30-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.89E+04 | 7.93E-04 | 1.81E+05 | 1.79E+00 | 2.01E+04 | 1.36E+09 | | |
| Crotonaldehyde, trans- | 123-73-9 | No | Yes | 1.90E+00 | H | - | - | 1.00E-03 | PP | - | - | 1 | - | 1 | 1.89E+04 | 7.93E-04 | 1.50E+05 | 1.79E+00 | 1.66E+04 | 1.36E+09 | 3.66E-01 | ca* |
| Cumene | 98-82-8 | No | Yes | - | - | - | - | 1.00E-01 | IR | 4.00E-01 | IR | 1 | - | 1 | 6.21E+03 | 4.70E-01 | 6.13E+01 | 6.98E+02 | 2.68E+02 | 1.36E+09 | 1.95E+02 | nc |
| Cupferron | 135-20-6 | No | No | 2.20E-01 | C | 6.30E-05 | C | - | - | - | - | 1 | 0.1 | 1 | - | 1.48E-07 | 6.08E+05 | 7.62E+02 | - | 1.36E+09 | 2.47E+00 | ca |
| Cyanazine | 21725-46-2 | No | No | 8.40E-01 | H | - | - | 2.00E-03 | HE | - | - | 1 | 0.1 | 1 | - | 1.05E-10 | 1.70E+02 | 1.34E+02 | - | 1.36E+09 | 6.46E-01 | ca* |
| Cyclohexane | 110-82-7 | No | Yes | - | - | - | - | - | - | 6.00E+00 | IR | 1 | - | 1 | 1.04E+03 | 6.13E+00 | 5.50E+01 | 1.46E+02 | 1.17E+02 | 1.36E+09 | 6.52E+02 | cs |
| Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro- | 87-84-3 | No | No | 2.00E-02 | X | - | - | 2.00E-02 | SC | - | - | 1 | 0.1 | 1 | - | 3.92E-05 | 5.50E-02 | 2.81E+03 | - | 1.36E+09 | 2.71E+01 | ca** |
| Cyclohexanone | 108-94-1 | No | Yes | - | - | - | - | 5.00E+00 | IR | 7.00E-01 | PP | 1 | - | 1 | 4.17E+04 | 3.68E-04 | 2.50E+04 | 1.74E+01 | 5.11E+03 | 1.36E+09 | 2.82E+03 | nc |
| Cyclohexene | 110-83-8 | No | Yes | - | - | - | - | 5.00E-03 | PP | 1.00E+00 | SC | 1 | - | 1 | 1.46E+03 | 1.86E+00 | 2.13E+02 | 1.46E+02 | 2.83E+02 | 1.36E+09 | 3.11E+01 | nc |
| Cyclohexylamine | 108-91-8 | No | Yes | - | - | - | - | 2.00E-01 | IR | - | - | 1 | - | 1 | 7.46E+04 | 1.70E-04 | 1.00E+06 | 3.22E+01 | 2.93E+05 | 1.36E+09 | 1.56E+03 | nc |
| Cyclopentadiene | 542-92-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.49E+03 | 8.59E-01 | 1.80E+03 | 8.00E+01 | 1.34E+03 | 1.36E+09 | | |
| Cyhalothrin | 68085-85-8 | No | No | - | - | - | - | 1.00E-03 | OP | - | - | 1 | 0.1 | 1 | - | 6.05E-05 | 5.00E-03 | 3.41E+05 | - | 1.36E+09 | 6.32E+00 | nc |
| Cypermethrin | 52315-07-8 | No | No | - | - | - | - | 6.00E-02 | OP | - | - | 1 | 0.1 | 1 | - | 1.72E-05 | 4.00E-03 | 7.98E+04 | - | 1.36E+09 | 3.79E+02 | nc |
| Cyromazine | 66215-27-8 | No | No | - | - | - | - | 1.50E-02 | OP | - | - | 1 | 0.1 | 1 | - | 2.31E-12 | 1.30E+04 | 2.87E+01 | - | 1.36E+09 | 9.48E+01 | nc |
| Barium Cyanide | 542-62-1 | No | No | - | - | - | - | - | - | - | - | 0.07 | - | 1 | - | - | 1.71E+04 | - | - | 1.36E+09 | | |
| Calcium Cyanide | 592-01-8 | No | No | - | - | - | - | 1.00E-03 | IR | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 7.82E+00 | nc |
| Copper Cyanide | 544-92-3 | No | No | - | - | - | - | 5.00E-03 | IR | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.91E+01 | nc |
| Cyanide (CN-) | 57-12-5 | No | Yes | - | - | - | - | 6.00E-04 | IR | 8.00E-04 | SU | 1 | - | 1 | 5.33E+04 | 4.15E-03 | 9.54E+04 | - | 9.54E+05 | 1.36E+09 | 2.28E+00 | nc |
| Cyanide (total complex) | NA | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Cyanogen | 460-19-5 | No | Yes | - | - | - | - | 1.00E-03 | IR | - | - | 1 | - | 1 | - | 2.21E-01 | 8.00E+03 | - | - | 1.36E+09 | 7.82E+00 | nc |
| Cyanogen Bromide | 506-68-3 | No | Yes | - | - | - | - | 9.00E-02 | IR | - | - | 1 | - | 1 | - | 1.00E+00 | - | - | - | 1.36E+09 | 7.04E+02 | nc |
| Cyanogen Chloride | 506-77-4 | No | Yes | - | - | - | - | 5.00E-02 | IR | - | - | 1 | - | 1 | - | 7.87E-02 | 6.00E+04 | - | - | 1.36E+09 | 3.91E+02 | nc |
| Hydrogen Cyanide | 74-90-8 | No | Yes | - | - | - | - | 6.00E-04 | IR | 8.00E-04 | IR | 1 | - | 1 | 5.22E+04 | 5.44E-03 | 1.00E+06 | - | 1.00E+07 | 1.36E+09 | 2.26E+00 | nc |
| Chlorthal-dimethyl | 1861-32-1 | No | No | - | - | - | - | 1.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 8.91E-05 | 5.00E-01 | 5.11E+02 | - | 1.36E+09 | 6.32E+01 | nc |
| Dalapon | 75-99-0 | No | No | - | - | - | - | 3.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 2.31E-06 | 5.02E+05 | 3.23E+00 | - | 1.36E+09 | 1.90E+02 | nc |
| DDD | 72-54-8 | No | No | 2.40E-01 | I | 6.90E-05 | C | - | - | - | - | 1 | 0.1 | 1 | - | 2.70E-04 | 9.00E-02 | 1.18E+05 | - | 1.36E+09 | 2.26E+00 | ca |
| DDD, o,p'- | 53-19-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.34E-04 | 1.00E-01 | 1.20E+05 | - | 1.36E+09 | | |
| DDT/DDE/DDD (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | | |
| DDE, p,p'- | 72-55-9 | No | Yes | 3.40E-01 | I | 9.70E-05 | C | - | - | - | - | 1 | - | 1 | 2.10E+06 | 1.70E-03 | 4.00E-02 | 1.18E+05 | - | 1.36E+09 | 1.98E+00 | ca |
| DDT | 50-29-3 | No | No | 3.40E-01 | I | 9.70E-05 | I | 5.00E-04 | IR | - | - | 1 | 0.03 | 1 | - | 3.40E-04 | 5.50E-03 | 1.69E+05 | - | 1.36E+09 | 1.89E+00 | ca** |
| DDT, o,p'- | 789-02-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.03E-04 | 8.50E-02 | 1.72E+05 | - | 1.36E+09 | | |
| Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209) | 1163-19-5 | No | No | 7.00E-04 | I | - | - | 7.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 4.87E-07 | 1.00E-04 | 2.76E+05 | - | 1.36E+09 | 4.42E+01 | nc |
| Decane | 124-18-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.13E+03 | 2.11E+02 | 5.20E-02 | 1.45E+03 | 2.53E+00 | 1.36E+09 | | |
| Decanol, n- | 112-30-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 6.32E+04 | 1.31E-03 | 3.70E+01 | 1.27E+02 | 3.19E+01 | 1.36E+09 | | |
| Deltamethrin | 52918-63-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.04E-04 | 2.00E-03 | 7.98E+04 | - | 1.36E+09 | | |
| Demeton | 8065-48-3 | No | No | - | - | - | - | 4.00E-05 | IR | - | - | 1 | 0.1 | 1 | - | 1.56E-04 | 6.66E+02 | - | - | 1.36E+09 | 2.53E-01 | nc |
| Di(2-ethylhexyl)adipate | 103-23-1 | No | No | 1.20E-03 | I | - | - | 6.00E-01 | IR | - | - | 1 | 0.1 | 1 | - | 1.77E-05 | 7.80E-01 | 3.60E+04 | - | 1.36E+09 | 4.52E+02 | ca** |
| Diallate | 2303-16-4 | No | No | 6.10E-02 | H | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.55E-04 | 1.40E+01 | 6.44E+02 | - | 1.36E+09 | 8.89E+00 | ca |
| Diazinon | 333-41-5 | No | No | - | - | - | - | 7.00E-04 | AT | - | - | 1 | 0.1 | 1 | - | 4.62E-06 | 4.00E+01 | 3.03E+03 | - | 1.36E+09 | 4.42E+00 | nc |
| Dibenzothiophene | 132-65-0 | No | Yes | - | - | - | - | 1.00E-02 | SC | - | - | 1 | - | 1 | 5.24E+05 | 1.38E-03 | 1.47E+00 | 9.16E+03 | - | 1.36E+09 | 7.82E+01 | nc |

**Site-specific
 Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] | |
|---|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-----|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|----------|----|
| Dibromo-3-chloropropane, 1,2- | 96-12-8 | Yes | Yes | 8.00E-01 | P | 6.00E-03 | P | 2.00E-04 | PP | 2.00E-04 | IR | 1 | - | 1 | 3.20E+04 | 6.01E-03 | 1.23E+03 | 1.16E+02 | 9.79E+02 | 1.36E+09 | 5.26E-03 | ca* | |
| Dibromoacetic acid | 631-64-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.81E-07 | 2.11E+06 | 2.25E+00 | - | 1.36E+09 | - | - | |
| Dibromobenzene, 1,3- | 108-36-1 | No | Yes | - | - | - | - | 4.00E-04 | SC | - | - | 1 | - | 1 | 1.93E+04 | 5.07E-02 | 6.75E+01 | 3.75E+02 | 1.59E+02 | 1.36E+09 | 3.13E+00 | nc | |
| Dibromobenzene, 1,4- | 106-37-6 | No | Yes | - | - | - | - | 1.00E-02 | IR | - | - | 1 | - | 1 | 2.20E+04 | 3.65E-02 | 2.00E+01 | 3.75E+02 | - | 1.36E+09 | 7.82E+01 | nc | |
| Dibromochloromethane | 124-48-1 | No | Yes | 8.40E-02 | I | - | - | 2.00E-02 | IR | - | - | 1 | - | 1 | 7.95E+03 | 3.20E-02 | 2.70E+03 | 3.18E+01 | 8.02E+02 | 1.36E+09 | 8.28E+00 | ca* | |
| Dibromodichloromethane | 594-18-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.32E+04 | 4.95E-03 | 4.79E+02 | 4.39E+01 | - | 1.36E+09 | - | - | |
| Dibromodiphenyl Ether, p,p'- | 2050-47-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 6.05E+05 | 7.65E-04 | 1.80E-01 | 4.94E+03 | - | 1.36E+09 | - | - | |
| Dibromoethane, 1,2- | 106-93-4 | No | Yes | 2.00E+00 | I | 6.00E-04 | I | 9.00E-03 | IR | 9.00E-03 | IR | 1 | - | 1 | 8.64E+03 | 2.66E-02 | 3.91E+03 | 3.96E+01 | 1.34E+03 | 1.36E+09 | 3.62E-02 | ca | |
| Dibromomethane (Methylene Bromide) | 74-95-3 | No | Yes | - | - | - | - | - | - | 4.00E-03 | SC | 1 | - | 1 | 5.64E+03 | 3.36E-02 | 1.19E+04 | 2.17E+01 | 2.82E+03 | 1.36E+09 | 2.35E+00 | nc | |
| Bis(Octanoyloxy)Di-N-Butyl Stannane | 4731-77-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 6.15E+04 | 6.83E-01 | 1.01E-03 | 5.06E+04 | - | 1.36E+09 | - | - | |
| Bis(oleoyloxy)dibutyl tin | 13323-62-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.91E+06 | 1.53E+02 | 1.43E-13 | 8.27E+09 | - | 1.36E+09 | - | - | |
| Di-n-butyltin bis(2-ethylhexanoate) | 2781-10-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 9.37E+04 | 9.08E-01 | 4.81E-03 | 8.16E+04 | - | 1.36E+09 | - | - | |
| Di-n-butyltin bis(methyl maleate) | 15546-11-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.42E-08 | 6.05E+00 | 3.01E+01 | - | 1.36E+09 | - | - | |
| Di-n-butyltin bis(n-butyl maleate) | 15546-16-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 7.81E-08 | 5.26E-03 | 1.10E+03 | - | 1.36E+09 | - | - | |
| Di-n-butyltin dilaurate | 77-58-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.19E+05 | 6.58E+00 | 3.00E+00 | 6.16E+06 | - | 1.36E+09 | - | - | |
| Di-n-butyltin distearate | 5847-55-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.69E+06 | 1.97E+02 | 5.75E-14 | 8.27E+09 | - | 1.36E+09 | - | - | |
| Dibutoxy di-n-butyltin | 3349-36-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 5.99E+04 | 3.02E+00 | 4.45E+00 | 2.62E+05 | - | 1.36E+09 | - | - | |
| Dibutylbis((1-oxoisooctyl)oxy)stannane | 85702-74-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Dibutylbis(octadeca-9(Z),12(Z),15(Z)-trienoyloxy)stannane | 95873-60-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.46E+06 | 9.16E+01 | 7.88E-07 | 8.27E+09 | - | 1.36E+09 | - | - | |
| Dibutylbis(octadeca-9(Z),12(Z)-dienoyloxy)stannane | 85391-79-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Dibutylbis(palmitoyloxy)stannane | 13323-63-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.72E+05 | 6.38E+01 | 7.44E-07 | 7.50E+08 | - | 1.36E+09 | - | - | |
| Dibutyltin Compounds | NA | No | No | - | - | - | - | 3.00E-04 | PP | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | 1.90E+00 | nc |
| Dibutyltin diacetate | 1067-33-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.27E+04 | 2.28E-02 | 6.00E+00 | 3.44E+01 | 1.87E+00 | 1.36E+09 | - | - | |
| Dibutyltin oxide | 818-08-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 6.73E-01 | 1.28E+03 | - | 1.36E+09 | - | - | |
| Dibutyltin dichloride | 683-18-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.10E+04 | 1.25E-01 | 9.20E+01 | 1.86E+03 | - | 1.36E+09 | - | - | |
| Dicamba | 1918-00-9 | No | No | - | - | - | - | 3.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 8.91E-08 | 8.31E+03 | 2.90E+01 | - | 1.36E+09 | 1.90E+02 | nc | |
| Dichloro-2-butene, cis-1,4- | 1476-11-5 | No | Yes | - | - | 4.20E-03 | P | - | - | - | - | 1 | - | 1 | 1.11E+04 | 2.71E-02 | 5.80E+02 | 1.32E+02 | 5.19E+02 | 1.36E+09 | 7.43E-03 | ca | |
| Dichloro-2-butene, trans-1,4- | 110-57-6 | No | Yes | - | - | 4.20E-03 | P | - | - | - | - | 1 | - | 1 | 1.11E+04 | 2.71E-02 | 8.50E+02 | 1.32E+02 | 7.60E+02 | 1.36E+09 | 7.44E-03 | ca | |
| Dichloro-2-butene, 1,4- | 764-41-0 | No | Yes | - | - | 4.20E-03 | P | - | - | - | - | 1 | - | 1 | 3.21E+03 | 3.48E-01 | 5.80E+02 | 1.32E+02 | 5.54E+02 | 1.36E+09 | 2.15E-03 | ca | |
| Dichloroacetic Acid | 79-43-6 | No | No | 5.00E-02 | I | - | - | 4.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 3.43E-07 | 1.00E+06 | 2.25E+00 | - | 1.36E+09 | 1.09E+01 | ca** | |
| Dichloroaniline, 2,4- | 554-00-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 6.46E-05 | 6.20E+02 | 1.85E+02 | - | 1.36E+09 | - | - | |
| Dichloroaniline, 3,4- | 95-76-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.01E+05 | 5.97E-04 | 9.20E+01 | 1.85E+02 | - | 1.36E+09 | - | - | |
| Dichlorobenzene | 25321-22-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.02E+04 | 7.85E-02 | 8.00E+01 | 3.83E+02 | 1.93E+02 | 1.36E+09 | - | - | |
| Dichlorobenzene, 1,2- | 95-50-1 | No | Yes | - | - | - | - | 9.00E-02 | IR | 2.00E-01 | HE | 1 | - | 1 | 1.17E+04 | 7.85E-02 | 1.56E+02 | 3.83E+02 | 3.76E+02 | 1.36E+09 | 1.81E+02 | nc | |
| Dichlorobenzene, 1,3- | 541-73-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 9.93E+03 | 1.08E-01 | 1.25E+02 | 3.75E+02 | 2.97E+02 | 1.36E+09 | - | - | |
| Dichlorobenzene, 1,4- | 106-46-7 | No | Yes | 5.40E-03 | C | 1.10E-05 | C | 7.00E-02 | AT | 8.00E-01 | IR | 1 | - | 1 | 1.04E+04 | 9.85E-02 | 8.13E+01 | 3.75E+02 | - | 1.36E+09 | 2.61E+00 | ca | |
| Dichlorobenzidine, 3,3'- | 91-94-1 | No | No | 4.50E-01 | I | 3.40E-04 | C | - | - | - | - | 1 | 0.1 | 1 | - | 1.16E-09 | 3.10E+00 | 3.19E+03 | - | 1.36E+09 | 1.21E+00 | ca | |
| Dichlorobenzoic acid, -3,5 | 51-36-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.43E-06 | 1.47E+02 | 4.26E+01 | - | 1.36E+09 | - | - | |
| Dichlorobenzophenone, 4,4'- | 90-98-2 | No | No | - | - | - | - | 9.00E-03 | SC | - | - | 1 | 0.1 | 1 | - | 4.37E-05 | 8.29E-01 | 2.93E+03 | - | 1.36E+09 | 5.69E+01 | nc | |
| Dichlorobenzotrifluoride, 3,4- | 328-84-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.15E+04 | 1.05E+00 | 1.88E+01 | 2.63E+03 | 3.02E+02 | 1.36E+09 | - | - | |
| Dichlorodifluoromethane | 75-71-8 | No | Yes | - | - | - | - | 2.00E-01 | IR | 1.00E-01 | SC | 1 | - | 1 | 8.41E+02 | 1.40E+01 | 2.80E+02 | 4.39E+01 | 8.45E+02 | 1.36E+09 | 8.72E+00 | nc | |
| Dichlorodiisopropyl ether, 2,2'- | 39638-32-9 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.32E+04 | 1.36E-02 | 6.23E+02 | 4.58E+01 | 2.35E+02 | 1.36E+09 | - | - | |
| Dichloroethane, 1,1- | 75-34-3 | No | Yes | 5.70E-03 | C | 1.60E-06 | C | 2.00E-01 | PP | - | - | 1 | - | 1 | 2.08E+03 | 2.30E-01 | 5.04E+03 | 3.18E+01 | 1.69E+03 | 1.36E+09 | 3.55E+00 | ca | |
| Dichloroethane, 1,2- | 107-06-2 | No | Yes | 9.10E-02 | I | 2.60E-05 | I | 6.00E-03 | SC | 7.00E-03 | PP | 1 | - | 1 | 4.57E+03 | 4.82E-02 | 8.60E+03 | 3.96E+01 | 2.98E+03 | 1.36E+09 | 4.64E-01 | ca** | |
| Dichloroethylene, 1,1- | 75-35-4 | No | Yes | - | - | - | - | 5.00E-02 | IR | 2.00E-01 | IR | 1 | - | 1 | 1.16E+03 | 1.07E+00 | 2.42E+03 | 3.18E+01 | 1.19E+03 | 1.36E+09 | 2.27E+01 | nc | |

**Site-specific
Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| Dichloroethylene, 1,2-cis- | 156-59-2 | No | Yes | - | - | - | - | 2.00E-03 | IR | - | - | 1 | - | 1 | 2.50E+03 | 1.67E-01 | 6.41E+03 | 3.96E+01 | 2.37E+03 | 1.36E+09 | 1.56E+01 | nc |
| Dichloroethylene, 1,2-trans- | 156-60-5 | No | Yes | - | - | - | - | 2.00E-02 | IR | - | - | 1 | - | 1 | 1.75E+03 | 3.83E-01 | 4.52E+03 | 3.96E+01 | 1.85E+03 | 1.36E+09 | 1.56E+02 | nc |
| Dichlorophenol, 2,6- | 87-65-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.09E-04 | 1.90E+03 | 5.02E+02 | - | 1.36E+09 | | |
| Dichlorophenol, 3,4- | 95-77-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.26E-05 | 9.26E+03 | 4.92E+02 | - | 1.36E+09 | | |
| Dichlorophenol, 2,3- | 576-24-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.26E-05 | 3.60E+03 | 5.02E+02 | - | 1.36E+09 | | |
| Dichlorophenol, 2,4- | 120-83-2 | No | No | - | - | - | - | 3.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 1.75E-04 | 5.55E+03 | 1.47E+02 | - | 1.36E+09 | 1.90E+01 | nc |
| Dichlorophenol, 2,5- | 583-78-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.26E-05 | 2.00E+03 | 4.92E+02 | - | 1.36E+09 | | |
| Dichlorophenols (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | | |
| Dichlorophenoxy Acetic Acid, 2,4- | 94-75-7 | No | No | - | - | - | - | 1.00E-02 | IR | - | - | 1 | 0.05 | 1 | - | 1.45E-06 | 6.77E+02 | 2.96E+01 | - | 1.36E+09 | 6.99E+01 | nc |
| Butanoic acid, 4-(2,4-dichlorophenoxy)- | 94-82-6 | No | No | - | - | - | - | 3.00E-02 | OP | - | - | 1 | 0.1 | 1 | - | 9.36E-08 | 4.60E+01 | 3.70E+02 | - | 1.36E+09 | 1.90E+02 | nc |
| Dichloropropane, 1,2- | 78-87-5 | No | Yes | 3.70E-02 | P | 3.70E-05 | P | 4.00E-02 | PP | 4.00E-03 | IR | 1 | - | 1 | 3.79E+03 | 1.15E-01 | 2.80E+03 | 6.07E+01 | 1.36E+03 | 1.36E+09 | 2.83E-01 | ca** |
| Dichloropropane, 1,3- | 142-28-9 | No | Yes | - | - | - | - | 2.00E-02 | PP | - | - | 1 | - | 1 | 6.76E+03 | 3.99E-02 | 2.75E+03 | 7.22E+01 | 1.49E+03 | 1.36E+09 | 1.56E+02 | nc |
| Dichloropropane, 2,2- | 594-20-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.60E+03 | 6.58E-01 | 3.91E+02 | 4.39E+01 | 1.91E+02 | 1.36E+09 | | |
| Dichloropropanol, 2,3- | 616-23-9 | No | No | - | - | - | - | 3.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 1.47E-07 | 6.42E+04 | 5.57E+00 | - | 1.36E+09 | 1.90E+01 | nc |
| Dichloropropene, 1,3- | 542-75-6 | No | Yes | 1.00E-01 | I | 4.00E-06 | I | 3.00E-02 | IR | 2.00E-02 | IR | 1 | - | 1 | 3.55E+03 | 1.45E-01 | 2.80E+03 | 7.22E+01 | 1.57E+03 | 1.36E+09 | 1.84E+00 | ca** |
| Dichloropropene, 2,3- | 78-88-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.09E+03 | 1.70E-01 | 2.15E+03 | 6.07E+01 | 1.07E+03 | 1.36E+09 | | |
| Dichloropropene, cis-1,3- | 10061-01-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.04E+03 | 1.11E-01 | 2.18E+03 | 7.22E+01 | 1.21E+03 | 1.36E+09 | | |
| Dichloropropene, trans-1,3- | 10061-02-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 7.04E+03 | 3.56E-02 | 2.80E+03 | 7.22E+01 | 1.51E+03 | 1.36E+09 | | |
| Dichloropropene, 1,1- | 563-58-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | - | 1.18E+03 | 2.04E+00 | 7.49E+02 | 6.07E+01 | - | 1.36E+09 | | |
| Dichlorvos | 62-73-7 | No | No | 2.90E-01 | I | 8.30E-05 | C | 5.00E-04 | IR | 5.00E-04 | IR | 1 | 0.1 | 1 | - | 2.35E-05 | 8.00E+03 | 5.40E+01 | - | 1.36E+09 | 1.87E+00 | ca** |
| Dicyclohexylamine | 101-83-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 6.26E+04 | 2.25E-03 | 1.07E+02 | 1.73E+02 | 1.22E+02 | 1.36E+09 | | |
| Dicyclopentadiene | 77-73-6 | No | Yes | - | - | - | - | 8.00E-02 | PP | 3.00E-04 | SC | 1 | - | 1 | 4.11E+03 | 2.56E+00 | 2.65E+01 | 1.51E+03 | 2.56E+02 | 1.36E+09 | 1.29E-01 | nc |
| Dieldrin | 60-57-1 | No | No | 1.60E+01 | I | 4.60E-03 | I | 5.00E-05 | IR | - | - | 1 | 0.1 | 1 | - | 4.09E-04 | 1.95E-01 | 2.01E+04 | - | 1.36E+09 | 3.39E-02 | ca** |
| Diepoxybutane | 1464-53-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.46E+05 | 1.45E-06 | 1.00E+06 | 2.53E+00 | 1.15E+05 | 1.36E+09 | | |
| Diethanolamine | 111-42-2 | No | No | - | - | - | - | 2.00E-03 | PP | 2.00E-04 | PP | 1 | 0.1 | 1 | - | 1.58E-09 | 1.00E+06 | 1.00E+00 | - | 1.36E+09 | 1.26E+01 | nc |
| Diethyl sulfate | 64-67-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.51E-04 | 7.00E+03 | 2.82E+01 | - | 1.36E+09 | | |
| Diethyl-p-nitrophenylphosphate | 311-45-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.46E-09 | 3.64E+03 | 1.31E+02 | - | 1.36E+09 | | |
| Diethylene-glycol | 111-46-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.22E-08 | 1.00E+06 | 1.00E+00 | - | 1.36E+09 | | |
| Diethylene Glycol Dinitrate (DEGDN) | 693-21-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.59E-05 | 3.90E+03 | 3.22E+01 | - | 1.36E+09 | | |
| Diethylene Glycol Monobutyl Ether | 112-34-5 | No | No | - | - | - | - | 3.00E-02 | PP | 1.00E-04 | PP | 1 | 0.1 | 1 | - | 2.94E-07 | 1.00E+06 | 1.00E+01 | - | 1.36E+09 | 1.87E+02 | nc |
| Diethylene Glycol Monoethyl Ether | 111-90-0 | No | No | - | - | - | - | 6.00E-02 | PP | 3.00E-04 | PP | 1 | 0.1 | 1 | - | 9.12E-07 | 1.00E+06 | 1.00E+00 | - | 1.36E+09 | 3.76E+02 | nc |
| Diethylformamide | 617-84-5 | No | Yes | - | - | - | - | 1.00E-03 | PP | - | - | 1 | - | 1 | 1.39E+05 | 5.31E-06 | 1.00E+06 | 2.06E+00 | 1.12E+05 | 1.36E+09 | 7.82E+00 | nc |
| Diethylphosphorodithioate | 298-06-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.30E+04 | 1.52E-02 | 6.40E-02 | 3.88E+01 | 2.15E-02 | 1.36E+09 | | |
| Diethylstilbestrol | 56-53-1 | No | No | 3.50E+02 | C | 1.00E-01 | C | - | - | - | - | 1 | 0.1 | 1 | - | 2.37E-10 | 1.20E+01 | 2.74E+05 | - | 1.36E+09 | 1.55E-03 | ca |
| Difenzoquat | 43222-48-6 | No | No | - | - | - | - | 8.30E-02 | OP | - | - | 1 | 0.1 | 1 | - | - | 8.17E+05 | 7.84E+04 | - | 1.36E+09 | 5.25E+02 | nc |
| Diflubenzuron | 35367-38-5 | No | No | - | - | - | - | 2.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 1.88E-07 | 8.00E-02 | 4.63E+02 | - | 1.36E+09 | 1.26E+02 | nc |
| Difluoroethane, 1,1- | 75-37-6 | No | Yes | - | - | - | - | - | - | 4.00E+01 | IR | 1 | - | 1 | 1.15E+03 | 8.30E-01 | 3.20E+03 | 3.18E+01 | 1.43E+03 | 1.36E+09 | 4.79E+03 | cs |
| Difluoropropane, 2,2- | 420-45-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 7.58E+02 | 2.10E+01 | 1.59E+02 | 4.39E+01 | 6.91E+02 | 1.36E+09 | | |
| Dihydrosafrole | 94-58-6 | No | Yes | 4.40E-02 | C | 1.30E-05 | C | - | - | - | - | 1 | - | 1 | 1.23E+05 | 4.99E-04 | 5.69E+01 | 2.07E+02 | - | 1.36E+09 | 9.91E+00 | ca |
| Diisopropyl Ether | 108-20-3 | No | Yes | - | - | - | - | - | - | 7.00E-01 | PP | 1 | - | 1 | 3.06E+03 | 1.05E-01 | 8.80E+03 | 2.28E+01 | 2.26E+03 | 1.36E+09 | 2.23E+02 | nc |
| Diisopropyl Methylphosphonate | 1445-75-6 | No | Yes | - | - | - | - | 8.00E-02 | IR | - | - | 1 | - | 1 | 3.81E+04 | 1.79E-03 | 1.50E+03 | 4.22E+01 | 5.30E+02 | 1.36E+09 | 6.26E+02 | cs |
| Dimethipin | 55290-64-7 | No | No | - | - | - | - | 2.18E-02 | OP | - | - | 1 | 0.1 | 1 | - | 9.40E-10 | 4.60E+03 | 1.00E+01 | - | 1.36E+09 | 1.38E+02 | nc |
| Dimethoate | 60-51-5 | No | No | - | - | - | - | 2.20E-03 | OP | - | - | 1 | 0.1 | 1 | - | 9.93E-09 | 2.33E+04 | 1.28E+01 | - | 1.36E+09 | 1.39E+01 | nc |
| Dimethoxybenzidine, 3,3'- | 119-90-4 | No | No | 1.60E+00 | P | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.92E-09 | 6.00E+01 | 5.09E+02 | - | 1.36E+09 | 3.39E-01 | ca |
| Dimethyl methylphosphonate | 756-79-6 | No | No | 1.70E-03 | P | - | - | 6.00E-02 | PP | - | - | 1 | 0.1 | 1 | - | 5.56E-06 | 1.00E+06 | 5.41E+00 | - | 1.36E+09 | 3.19E+02 | ca** |
| Dimethyl Sulfate | 77-78-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.64E-04 | 2.80E+04 | 8.49E+00 | - | 1.36E+09 | | |
| Dimethyl Sulfide | 75-18-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.97E+03 | 6.58E-02 | 2.20E+04 | 2.17E+01 | 5.35E+03 | 1.36E+09 | | |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| Dimethylamino azobenzene [p-] | 60-11-7 | No | No | 4.60E+00 | C | 1.30E-03 | C | - | - | - | - | 1 | 0.1 | 1 | - | 1.64E-08 | 2.30E-01 | 2.03E+03 | - | 1.36E+09 | 1.18E-01 | ca |
| Dimethylaniline HCl, 2,4- | 21436-96-4 | No | No | 5.80E-01 | H | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 9.48E-05 | 3.65E+03 | 3.52E+02 | - | 1.36E+09 | 9.35E-01 | ca |
| Dimethylaniline, 2,4- | 95-68-1 | No | No | 2.00E-01 | P | - | - | 2.00E-03 | SC | - | - | 1 | 0.1 | 1 | - | 1.02E-04 | 6.07E+03 | 1.85E+02 | - | 1.36E+09 | 2.71E+00 | ca** |
| Dimethylaniline, N,N- | 121-69-7 | No | Yes | 2.70E-02 | P | - | - | 2.00E-03 | IR | - | - | 1 | - | 1 | 3.13E+04 | 2.32E-03 | 1.45E+03 | 7.87E+01 | 8.30E+02 | 1.36E+09 | 1.56E+01 | nc |
| Dimethylbenzidine, 3,3'- | 119-93-7 | No | No | 1.10E+01 | P | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.57E-09 | 1.30E+03 | 3.19E+03 | - | 1.36E+09 | 4.93E-02 | ca |
| Dimethylcyclohexylamine, n,n- | 98-94-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.80E+04 | 9.61E-04 | 1.05E+04 | 3.60E+01 | - | 1.36E+09 | - | - |
| Dimethylformamide | 68-12-2 | No | Yes | - | - | - | - | 1.00E-01 | PP | 3.00E-02 | IR | 1 | - | 1 | 1.28E+05 | 3.02E-06 | 1.00E+06 | 1.00E+00 | 1.06E+05 | 1.36E+09 | 2.64E+02 | nc |
| Dimethylhydrazine, 1,1- | 57-14-7 | No | Yes | - | - | - | - | 1.00E-04 | SC | 2.00E-06 | SC | 1 | - | 1 | 2.77E+04 | 5.27E-04 | 1.00E+06 | 1.20E+01 | 1.72E+05 | 1.36E+09 | 5.73E-03 | nc |
| Dimethylhydrazine, 1,2- | 540-73-8 | No | Yes | 5.50E+02 | C | 1.60E-01 | C | - | - | - | - | 1 | - | 1 | 1.68E+05 | 2.84E-06 | 1.00E+06 | 1.49E+01 | 1.89E+05 | 1.36E+09 | 8.84E-04 | ca |
| Dimethylphenethylamine | 122-09-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 5.85E-05 | 1.86E+04 | 1.08E+03 | - | 1.36E+09 | - | - |
| Dimethylphenol, 2,4- | 105-67-9 | No | No | - | - | - | - | 2.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 3.89E-05 | 7.87E+03 | 4.92E+02 | - | 1.36E+09 | 1.26E+02 | nc |
| Dimethylphenol, 2,6- | 576-26-1 | No | No | - | - | - | - | 6.00E-04 | IR | - | - | 1 | 0.1 | 1 | - | 2.72E-04 | 6.05E+03 | 5.02E+02 | - | 1.36E+09 | 3.79E+00 | nc |
| Dimethylphenol, 3,4- | 95-65-8 | No | No | - | - | - | - | 1.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 1.70E-05 | 4.76E+03 | 4.92E+02 | - | 1.36E+09 | 6.32E+00 | nc |
| Dimethylvinylchloride | 513-37-1 | No | Yes | 4.50E-02 | C | 1.30E-05 | C | - | - | - | - | 1 | - | 1 | 5.48E+03 | 4.84E-02 | 1.00E+03 | 6.07E+01 | 4.73E+02 | 1.36E+09 | 1.10E+00 | ca |
| Dinitro-o-cresol, 4,6- | 534-52-1 | No | No | - | - | - | - | 8.00E-05 | SC | - | - | 1 | 0.1 | 1 | - | 5.72E-05 | 1.98E+02 | 7.54E+02 | - | 1.36E+09 | 5.06E-01 | nc |
| Dinitro-o-cyclohexyl Phenol, 4,6- | 131-89-5 | No | No | - | - | - | - | 2.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 2.26E-06 | 1.50E+01 | 1.65E+04 | - | 1.36E+09 | 1.26E+01 | nc |
| Dinitroaniline, 3,5- | 618-87-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.21E-09 | 1.29E+03 | 1.69E+02 | - | 1.36E+09 | - | - |
| Dinitrobenzene, 1,2- | 528-29-0 | No | No | - | - | - | - | 1.00E-04 | PP | - | - | 1 | 0.1 | 1 | - | 2.18E-06 | 1.33E+02 | 3.59E+02 | - | 1.36E+09 | 6.32E-01 | nc |
| Dinitrobenzene, 1,3- | 99-65-0 | No | No | - | - | - | - | 1.00E-04 | IR | - | - | 1 | 0.1 | 1 | - | 2.00E-06 | 5.33E+02 | 3.52E+02 | - | 1.36E+09 | 6.32E-01 | nc |
| Dinitrobenzene, 1,4- | 100-25-4 | No | No | - | - | - | - | 1.00E-04 | PP | - | - | 1 | 0.1 | 1 | - | 3.43E-06 | 6.90E+01 | 3.52E+02 | - | 1.36E+09 | 6.32E-01 | nc |
| Dinitrophenol, 2,4- | 51-28-5 | No | No | - | - | - | - | 2.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 3.52E-06 | 2.79E+03 | 4.61E+02 | - | 1.36E+09 | 1.26E+01 | nc |
| Dinitrophenols | 25550-58-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.13E-06 | 5.60E+00 | 4.70E+02 | - | 1.36E+09 | - | - |
| Dinitrosopentamethylenetetramine, N,N- | 101-25-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.02E-04 | 5.70E-03 | 5.80E+01 | - | 1.36E+09 | - | - |
| Dinitrotoluene Mixture, 2,4/2,6- | NA | No | No | 6.80E-01 | I | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.62E-05 | 2.70E+02 | 5.87E+02 | - | 1.36E+09 | 7.98E-01 | ca |
| Dinitrotoluene, 2,4- | 121-14-2 | No | No | 3.10E-01 | C | 8.90E-05 | C | 2.00E-03 | IR | - | - | 1 | 0.102 | 1 | - | 2.21E-06 | 2.00E+02 | 5.76E+02 | - | 1.36E+09 | 1.74E+00 | ca** |
| Dinitrotoluene, 2,6- | 606-20-2 | No | No | 1.50E+00 | P | - | - | 3.00E-04 | SC | - | - | 1 | 0.099 | 1 | - | 3.05E-05 | 1.82E+02 | 5.87E+02 | - | 1.36E+09 | 3.63E-01 | ca** |
| Dinitrotoluene, 2-Amino-4,6- | 35572-78-2 | No | No | - | - | - | - | 2.00E-03 | SU | - | - | 1 | 0.006 | 1 | - | 1.34E-09 | 1.22E+03 | 2.83E+02 | - | 1.36E+09 | 1.54E+01 | nc |
| Dinitrotoluene, 4-Amino-2,6- | 19406-51-0 | No | No | - | - | - | - | 2.00E-03 | SU | - | - | 1 | 0.009 | 1 | - | 1.34E-09 | 1.22E+03 | 2.83E+02 | - | 1.36E+09 | 1.53E+01 | nc |
| Dinitrotoluene, 2,3- | 602-01-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | - | - | 3.79E-06 | 2.70E+02 | 5.87E+02 | - | 1.36E+09 | - | - |
| Dinitrotoluene, 2,5- | 619-15-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | - | - | 3.79E-06 | 2.20E+02 | 5.76E+02 | - | 1.36E+09 | - | - |
| Dinitrotoluene, 3,4- | 610-39-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | - | - | 3.79E-06 | 1.79E+02 | 5.76E+02 | - | 1.36E+09 | - | - |
| Dinitrotoluene, 3,5- | 618-85-9 | No | No | - | - | - | - | - | - | - | - | - | - | - | - | 3.79E-06 | 1.45E+02 | 5.64E+02 | - | 1.36E+09 | - | - |
| Dinitrotoluene, Technical grade | 25321-14-6 | No | No | 4.50E-01 | X | - | - | 9.00E-04 | SC | - | - | 1 | 0.1 | 1 | - | 3.79E-06 | 2.70E+02 | 5.87E+02 | - | 1.36E+09 | 1.21E+00 | ca** |
| Dinoseb | 88-85-7 | No | No | - | - | - | - | 1.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 1.86E-05 | 5.20E+01 | 4.29E+03 | - | 1.36E+09 | 6.32E+00 | nc |
| Dioxane, 1,4- | 123-91-1 | No | Yes | 1.00E-01 | I | 5.00E-06 | I | 3.00E-02 | IR | 3.00E-02 | IR | 1 | - | 1 | 3.96E+04 | 1.96E-04 | 1.00E+06 | 2.63E+00 | 1.16E+05 | 1.36E+09 | 5.30E+00 | ca* |
| Diphenamid | 957-51-7 | No | No | - | - | - | - | 3.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 1.48E-09 | 2.60E+02 | 4.80E+03 | - | 1.36E+09 | 1.90E+02 | nc |
| Diphenyl Sulfone | 127-63-9 | No | No | - | - | - | - | 8.00E-04 | SC | - | - | 1 | 0.1 | 1 | - | 1.02E-05 | 3.14E+02 | 1.11E+03 | - | 1.36E+09 | 5.06E+00 | nc |
| Diphenylamine | 122-39-4 | No | No | - | - | - | - | 1.00E-01 | OP | - | - | 1 | 0.1 | 1 | - | 1.10E-04 | 5.30E+01 | 8.26E+02 | - | 1.36E+09 | 6.32E+02 | nc |
| Diphenylhydrazine, 1,2- | 122-66-7 | No | No | 8.00E-01 | I | 2.20E-04 | I | - | - | - | - | 1 | 0.1 | 1 | - | 1.95E-05 | 2.21E+02 | 1.51E+03 | - | 1.36E+09 | 6.78E-01 | ca |
| Diquat | 85-00-7 | No | No | - | - | - | - | 2.20E-03 | IR | - | - | 1 | 0.1 | 1 | - | 5.81E-12 | 7.08E+05 | 9.27E+03 | - | 1.36E+09 | 1.39E+01 | nc |
| Direct Black 38 | 1937-37-7 | No | No | 7.10E+00 | C | 1.40E-01 | C | - | - | - | - | 1 | 0.1 | 1 | - | 3.36E-38 | 3.00E+03 | 2.42E+08 | - | 1.36E+09 | 7.62E-02 | ca |
| Direct Blue 6 | 2602-46-2 | No | No | 7.40E+00 | C | 1.40E-01 | C | - | - | - | - | 1 | 0.1 | 1 | - | 3.72E-42 | 1.37E-04 | 7.91E+08 | - | 1.36E+09 | 7.31E-02 | ca |
| Direct Brown 95 | 16071-86-6 | No | No | 6.70E+00 | C | 1.40E-01 | C | - | - | - | - | 1 | 0.1 | 1 | - | - | 1.00E+06 | 6.99E+06 | - | 1.36E+09 | 8.07E-02 | ca |
| Direct Sky Blue | 2610-05-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.50E-42 | 4.00E+04 | 2.88E+08 | - | 1.36E+09 | - | - |
| Disulfoton | 298-04-4 | No | No | - | - | - | - | 4.00E-05 | IR | - | - | 1 | 0.1 | 1 | - | 8.83E-05 | 1.63E+01 | 8.38E+02 | - | 1.36E+09 | 2.53E-01 | nc |
| Dithiane, 1,4- | 505-29-3 | No | Yes | - | - | - | - | 1.00E-02 | IR | - | - | 1 | - | 1 | 4.54E+04 | 1.72E-03 | 3.00E+03 | 1.46E+02 | - | 1.36E+09 | 7.82E+01 | nc |
| Diundecyl Phthalate | 3648-20-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | - | 1.47E+07 | 2.29E-03 | 1.11E+00 | 5.16E+06 | - | 1.36E+09 | - | - |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| Diuron | 330-54-1 | No | No | - | - | - | - | 2.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 2.06E-08 | 4.20E+01 | 1.09E+02 | - | 1.36E+09 | 1.26E+01 | nc |
| Dodine | 2439-10-3 | No | No | - | - | - | - | 2.00E-02 | OP | - | - | 1 | 0.1 | 1 | - | 3.68E-09 | 6.30E+02 | 2.48E+03 | - | 1.36E+09 | 1.26E+02 | nc |
| Hexachlorodibenzo-p-dioxin | 34465-46-8 | No | No | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 0.03 | 1 | - | 2.33E-04 | 4.00E-06 | 6.95E+05 | - | 1.36E+09 | 4.93E-05 | ca** |
| Hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8- | 39227-28-6 | No | No | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 0.03 | 1 | - | 1.61E-04 | 4.40E-06 | 6.95E+05 | - | 1.36E+09 | 4.93E-05 | ca** |
| Hexachlorodibenzo-p-dioxin, Mixture | NA | No | No | 6.20E+03 | I | 1.30E+00 | I | - | - | - | - | 1 | 0.03 | 1 | - | 2.33E-04 | 4.00E-06 | 6.95E+05 | - | 1.36E+09 | 1.03E-04 | ca |
| HpCDD, 2,3,7,8- | 37871-00-4 | No | Yes | 1.30E+03 | W | 3.80E-01 | W | 7.00E-08 | WH | 4.00E-06 | WH | 1 | 0.03 | 1 | 2.43E+06 | 7.15E-03 | 1.41E-06 | 1.16E+06 | - | 1.36E+09 | 4.80E-04 | ca** |
| HxCDD, 1,2,3,6,7,8- | 57653-85-7 | No | No | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 0.03 | 1 | - | 7.93E-05 | 2.65E-05 | 6.95E+05 | - | 1.36E+09 | 4.93E-05 | ca** |
| HxCDD, 1,2,3,7,8,9- | 19408-74-3 | No | No | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 0.03 | 1 | - | 7.93E-05 | 2.65E-05 | 6.95E+05 | - | 1.36E+09 | 4.93E-05 | ca** |
| Endosulfan | 115-29-7 | No | Yes | - | - | - | - | 6.00E-03 | IR | - | - | 1 | - | 1 | 4.10E+05 | 2.66E-03 | 3.25E-01 | 6.76E+03 | - | 1.36E+09 | 4.69E+01 | nc |
| Endosulfan I | 959-98-8 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 2.90E-04 | 5.10E-01 | 6.76E+03 | - | 1.36E+09 | - | - |
| Endosulfan II | 33213-65-9 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 1.60E-05 | 4.50E-01 | 6.76E+03 | - | 1.36E+09 | - | - |
| Endosulfan Sulfate | 1031-07-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.33E-05 | 4.80E-01 | 9.85E+03 | - | 1.36E+09 | - | - |
| Endothall | 145-73-3 | No | No | - | - | - | - | 2.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 1.57E-14 | 1.00E+05 | 1.94E+01 | - | 1.36E+09 | 1.26E+02 | nc |
| Endrin | 72-20-8 | No | No | - | - | - | - | 3.00E-04 | IR | - | - | 1 | 0.1 | 1 | - | 2.60E-04 | 2.50E-01 | 2.01E+04 | - | 1.36E+09 | 1.90E+00 | nc |
| Endrin ketone | 53494-70-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 8.26E-07 | 2.22E-01 | 9.72E+03 | - | 1.36E+09 | - | - |
| Endrin aldehyde | 7421-93-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.71E-04 | 2.40E-02 | 3.27E+03 | - | 1.36E+09 | - | - |
| Epichlorohydrin | 106-89-8 | No | Yes | 9.90E-03 | I | 1.20E-06 | I | 6.00E-03 | PP | 1.00E-03 | IR | 1 | - | 1 | 1.89E+04 | 1.24E-03 | 6.59E+04 | 9.91E+00 | 1.05E+04 | 1.36E+09 | 1.89E+00 | nc |
| Epoxybutane, 1,2- | 106-88-7 | No | Yes | - | - | - | - | - | - | 2.00E-02 | IR | 1 | - | 1 | 7.66E+03 | 7.36E-03 | 9.50E+04 | 9.91E+00 | 1.53E+04 | 1.36E+09 | 1.60E+01 | nc |
| EPTC | 759-94-4 | No | Yes | - | - | - | - | 5.00E-02 | OP | - | - | 1 | - | 1 | 1.17E+05 | 6.50E-04 | 3.75E+02 | 1.64E+02 | - | 1.36E+09 | 3.91E+02 | nc |
| Ethanol | 64-17-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.14E+04 | 2.04E-04 | 1.00E+06 | 1.05E+00 | 1.06E+05 | 1.36E+09 | - | - |
| Ethanol, 2-(2-methoxyethoxy)- | 111-77-3 | No | No | - | - | - | - | 4.00E-02 | PP | - | - | 1 | 0.1 | 1 | - | 6.75E-10 | 1.00E+06 | 1.00E+00 | - | 1.36E+09 | 2.53E+02 | nc |
| Ethephon | 16672-87-0 | No | No | - | - | - | - | 5.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 2.33E-10 | 1.00E+06 | 5.03E+00 | - | 1.36E+09 | 3.16E+01 | nc |
| Ethion | 563-12-2 | No | No | - | - | - | - | 5.00E-04 | IR | - | - | 1 | 0.1 | 1 | - | 1.55E-05 | 2.00E+00 | 8.82E+02 | - | 1.36E+09 | 3.16E+00 | nc |
| Ethoxy Propanol | 52125-53-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.46E+05 | 3.02E-06 | 3.66E+05 | 1.36E+00 | 3.96E+04 | 1.36E+09 | - | - |
| Ethoxyethanol Acetate, 2- | 111-15-9 | No | Yes | - | - | - | - | 1.00E-01 | PP | 6.00E-02 | PP | 1 | - | 1 | 6.15E+04 | 1.31E-04 | 1.87E+05 | 4.54E+00 | 2.38E+04 | 1.36E+09 | 2.58E+02 | nc |
| Ethoxyethanol, 2- | 110-80-5 | No | Yes | - | - | - | - | 9.00E-02 | PP | 2.00E-01 | IR | 1 | - | 1 | 9.84E+04 | 1.92E-05 | 1.00E+06 | 1.00E+00 | 1.06E+05 | 1.36E+09 | 5.24E+02 | nc |
| Ethyl methane sulfonate | 62-50-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.06E-05 | 1.35E+05 | 7.89E+00 | - | 1.36E+09 | - | - |
| Ethyl Acetate | 141-78-6 | No | Yes | - | - | - | - | 9.00E-01 | IR | 7.00E-02 | PP | 1 | - | 1 | 8.62E+03 | 5.48E-03 | 8.00E+04 | 5.58E+00 | 1.08E+04 | 1.36E+09 | 6.24E+01 | nc |
| Ethyl Acrylate | 140-88-5 | No | Yes | - | - | - | - | 5.00E-03 | PP | 8.00E-03 | PP | 1 | - | 1 | 6.34E+03 | 1.39E-02 | 1.50E+04 | 1.07E+01 | 2.50E+03 | 1.36E+09 | 4.66E+00 | nc |
| Ethyl Chloride | 75-00-3 | No | Yes | - | - | - | - | - | - | 1.00E+01 | IR | 1 | - | 1 | 1.29E+03 | 4.54E-01 | 6.71E+03 | 2.17E+01 | 2.12E+03 | 1.36E+09 | 1.35E+03 | nc |
| Ethyl Ether | 60-29-7 | No | Yes | - | - | - | - | 2.00E-01 | IR | - | - | 1 | - | 1 | 3.12E+03 | 5.03E-02 | 6.04E+04 | 9.70E+00 | 1.01E+04 | 1.36E+09 | 1.56E+03 | nc |
| Ethyl Methacrylate | 97-63-2 | No | Yes | - | - | - | - | - | - | 3.00E-01 | PP | 1 | - | 1 | 5.77E+03 | 2.34E-02 | 5.40E+03 | 1.67E+01 | 1.10E+03 | 1.36E+09 | 1.81E+02 | nc |
| Ethyl-p-nitrophenyl Phosphonate | 2104-64-5 | No | No | - | - | - | - | 1.00E-05 | IR | - | - | 1 | 0.1 | 1 | - | 1.82E-05 | 3.11E+00 | 1.55E+04 | - | 1.36E+09 | 6.32E-02 | nc |
| Ethylbenzene | 100-41-4 | No | Yes | 1.10E-02 | C | 2.50E-06 | C | 1.00E-01 | IR | 1.00E+00 | IR | 1 | - | 1 | 5.67E+03 | 3.22E-01 | 1.69E+02 | 4.46E+02 | 4.80E+02 | 1.36E+09 | 5.78E+00 | ca* |
| Ethylene Cyanohydrin | 109-78-4 | No | No | - | - | - | - | 7.00E-02 | PP | - | - | 1 | 0.1 | 1 | - | 3.07E-07 | 1.00E+06 | 1.00E+00 | - | 1.36E+09 | 4.42E+02 | nc |
| Ethylene Diamine | 107-15-3 | No | Yes | - | - | - | - | 9.00E-02 | PP | - | - | 1 | - | 1 | 1.80E+05 | 7.07E-08 | 1.00E+06 | 1.49E+01 | 1.89E+05 | 1.36E+09 | 7.04E+02 | nc |
| Ethylene Glycol | 107-21-1 | No | No | - | - | - | - | 2.00E+00 | IR | 4.00E-01 | CA | 1 | 0.1 | 1 | - | 2.45E-06 | 1.00E+06 | 1.00E+00 | - | 1.36E+09 | 1.26E+04 | nc |
| Ethylene Glycol Monobutyl Ether | 111-76-2 | No | No | - | - | - | - | 1.00E-01 | IR | 1.60E+00 | IR | 1 | 0.1 | 1 | - | 6.54E-05 | 1.00E+06 | 2.82E+00 | - | 1.36E+09 | 6.32E+02 | nc |
| Ethylene Oxide | 75-21-8 | Yes | Yes | 3.10E-01 | C | 3.00E-03 | I | - | - | 3.00E-02 | CA | 1 | - | 1 | 6.09E+03 | 6.05E-03 | 1.00E+06 | 3.24E+00 | 1.21E+05 | 1.36E+09 | 2.05E-03 | ca |
| Ethylene Thiourea | 96-45-7 | No | No | 4.50E-02 | C | 1.30E-05 | C | 8.00E-05 | IR | - | - | 1 | 0.1 | 1 | - | 5.56E-10 | 2.00E+04 | 1.30E+01 | - | 1.36E+09 | 5.06E-01 | nc |
| Ethyleneimine | 151-56-4 | No | Yes | 6.50E+01 | C | 1.90E-02 | C | - | - | - | - | 1 | - | 1 | 2.39E+04 | 4.95E-04 | 1.00E+06 | 9.04E+00 | 1.54E+05 | 1.36E+09 | 2.66E-03 | ca |
| Ethylphenol, 4- | 123-07-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.16E-05 | 4.90E+03 | 5.73E+02 | - | 1.36E+09 | - | - |
| Ethylphthalyl Ethyl Glycolate | 84-72-0 | No | No | - | - | - | - | 3.00E+00 | IR | - | - | 1 | 0.1 | 1 | - | 2.71E-07 | 2.17E+02 | 1.02E+03 | - | 1.36E+09 | 1.90E+04 | nc |
| Famphur | 52-85-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 6.58E-07 | 1.09E+02 | 1.89E+02 | - | 1.36E+09 | - | - |
| Fenamiphos | 22224-92-6 | No | No | - | - | - | - | 2.50E-04 | IR | - | - | 1 | 0.1 | 1 | - | 4.95E-08 | 3.29E+02 | 3.98E+02 | - | 1.36E+09 | 1.58E+00 | nc |
| Fenpropathrin | 39515-41-8 | No | No | - | - | - | - | 2.50E-02 | IR | - | - | 1 | 0.1 | 1 | - | 3.12E-04 | 3.30E-01 | 2.25E+04 | - | 1.36E+09 | 1.58E+02 | nc |
| Fluometuron | 2164-17-2 | No | No | - | - | - | - | 1.30E-02 | IR | - | - | 1 | 0.1 | 1 | - | 1.07E-07 | 1.10E+02 | 2.85E+02 | - | 1.36E+09 | 8.22E+01 | nc |

**Site-specific
 Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| Fluoride | 16984-48-8 | No | No | - | - | - | - | 4.00E-02 | CA | 1.30E-02 | CA | 1 | - | 1 | - | - | 1.69E+00 | - | - | 1.36E+09 | 3.13E+02 | nc |
| Fluorine (Soluble Fluoride) | 7782-41-4 | No | No | - | - | - | - | 6.00E-02 | IR | 1.30E-02 | CA | 1 | - | 1 | - | - | 1.69E+00 | - | - | 1.36E+09 | 4.69E+02 | nc |
| Fluorobenzene | 462-06-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.71E+03 | 2.56E-01 | 1.54E+03 | 2.34E+02 | 2.39E+03 | 1.36E+09 | | |
| Fluorobiphenyl, 2- | 321-60-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.24E+05 | 1.97E-02 | 1.39E+01 | 8.40E+03 | - | 1.36E+09 | | |
| Fluorophenol, 2- | 367-12-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.12E+05 | 1.32E-04 | 1.41E+04 | 3.07E+02 | 2.73E+04 | 1.36E+09 | | |
| Fluridone | 59756-60-4 | No | No | - | - | - | - | 8.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 3.31E-07 | 1.20E+01 | 5.68E+04 | - | 1.36E+09 | 5.06E+02 | nc |
| Flurprimidol | 56425-91-3 | No | No | - | - | - | - | 1.50E-02 | OP | - | - | 1 | 0.1 | 1 | - | 5.36E-08 | 1.14E+02 | 2.19E+03 | - | 1.36E+09 | 9.48E+01 | nc |
| Flutolanil | 66332-96-5 | No | No | - | - | - | - | 5.00E-01 | OP | - | - | 1 | 0.1 | 1 | - | 1.30E-07 | 6.53E+00 | 2.56E+03 | - | 1.36E+09 | 3.16E+03 | nc |
| Fluvalinate | 69409-94-5 | No | No | - | - | - | - | 1.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 5.93E-07 | 5.00E-03 | 7.30E+05 | - | 1.36E+09 | 6.32E+01 | nc |
| Folpet | 133-07-3 | No | No | - | - | - | - | 9.00E-02 | OP | - | - | 1 | 0.1 | 1 | - | 3.13E-06 | 8.00E-01 | 1.77E+01 | - | 1.36E+09 | 5.69E+02 | nc |
| Fomesafen | 72178-02-0 | No | No | - | - | - | - | 2.50E-03 | OP | - | - | 1 | 0.1 | 1 | - | 3.08E-11 | 5.00E+01 | 1.55E+03 | - | 1.36E+09 | 1.58E+01 | nc |
| Fonofos | 944-22-9 | No | No | - | - | - | - | 2.00E-03 | IR | - | - | 1 | 0.1 | 1 | - | 2.85E-04 | 1.57E+01 | 8.56E+02 | - | 1.36E+09 | 1.26E+01 | nc |
| Formaldehyde | 50-00-0 | No | Yes | - | - | 1.30E-05 | I | 2.00E-01 | IR | 9.83E-03 | AT | 1 | - | 1 | 7.77E+04 | 1.38E-05 | 4.00E+05 | 1.00E+00 | 4.24E+04 | 1.36E+09 | 1.68E+01 | ca** |
| Formic Acid | 64-18-6 | No | Yes | - | - | - | - | 9.00E-01 | PP | 3.00E-04 | SC | 1 | - | 1 | 9.30E+04 | 6.83E-06 | 1.00E+06 | 1.00E+00 | 1.06E+05 | 1.36E+09 | 2.91E+00 | nc |
| Fosetyl-AL | 39148-24-8 | No | No | - | - | - | - | 2.50E+00 | OP | - | - | 1 | 0.1 | 1 | - | 1.29E-12 | 1.11E+05 | 6.49E+03 | - | 1.36E+09 | 1.58E+04 | nc |
| Fuel Oil Number 2 | 68476-30-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | | |
| Furazolidone | 67-45-8 | No | No | 3.80E+00 | H | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.33E-09 | 4.00E+01 | 8.58E+02 | - | 1.36E+09 | 1.43E-01 | ca |
| Furfural | 98-01-1 | No | Yes | - | - | - | - | 3.00E-03 | IR | 5.00E-02 | HE | 1 | - | 1 | 4.86E+04 | 1.54E-04 | 7.41E+04 | 6.08E+00 | 1.01E+04 | 1.36E+09 | 2.15E+01 | nc |
| Furium | 531-82-8 | No | No | 1.50E+00 | C | 4.30E-04 | C | - | - | - | - | 1 | 0.1 | 1 | - | 5.44E-14 | 4.21E+03 | 5.78E+02 | - | 1.36E+09 | 3.62E-01 | ca |
| Furmecycloz | 60568-05-0 | No | No | 3.00E-02 | I | 8.60E-06 | C | - | - | - | - | 1 | 0.1 | 1 | - | 2.82E-07 | 3.00E-01 | 4.29E+02 | - | 1.36E+09 | 1.81E+01 | ca |
| Dibenzofuran | 132-64-9 | No | Yes | - | - | - | - | 1.00E-03 | SC | - | - | 1 | 0.03 | 1 | 1.56E+05 | 8.71E-03 | 3.10E+00 | 9.16E+03 | - | 1.36E+09 | 7.30E+00 | nc |
| Furan | 110-00-9 | No | Yes | - | - | - | - | 1.00E-03 | IR | - | - | 1 | 0.03 | 1 | 2.62E+03 | 2.21E-01 | 1.00E+04 | 8.00E+01 | 6.22E+03 | 1.36E+09 | 7.30E+00 | nc |
| Heptachlorodibenzofuran, 1,2,3,4,6,7,8- | 67562-39-4 | No | Yes | 1.30E+03 | W | 3.80E-01 | W | 7.00E-08 | WH | 4.00E-06 | WH | 1 | 0.03 | 1 | 6.27E+06 | 5.76E-04 | 1.35E-06 | 6.50E+05 | - | 1.36E+09 | 4.88E-04 | ca** |
| Hexachlorodibenzofuran, 1,2,3,4,7,8- | 70648-26-9 | No | Yes | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 0.03 | 1 | 2.89E+06 | 1.59E-03 | 2.98E-06 | 3.89E+05 | - | 1.36E+09 | 4.82E-05 | ca** |
| HpCDF, 1,2,3,4,7,8,9- | 55673-89-7 | No | Yes | 1.30E+03 | W | 3.80E-01 | W | 7.00E-08 | WH | 4.00E-06 | WH | 1 | 0.03 | 1 | 6.27E+06 | 5.76E-04 | 1.35E-06 | 6.50E+05 | - | 1.36E+09 | 4.88E-04 | ca** |
| HpCDF, 2,3,7,8- | 38998-75-3 | No | Yes | 1.30E+03 | W | 3.80E-01 | W | 7.00E-08 | WH | 4.00E-06 | WH | 1 | 0.03 | 1 | 6.27E+06 | 5.76E-04 | 1.35E-06 | 6.50E+05 | - | 1.36E+09 | 4.88E-04 | ca** |
| HxCDF, 1,2,3,6,7,8- | 57117-44-9 | No | Yes | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 0.03 | 1 | 2.89E+06 | 1.59E-03 | 3.49E-04 | 3.89E+05 | - | 1.36E+09 | 4.82E-05 | ca** |
| HxCDF, 1,2,3,7,8,9- | 72918-21-9 | No | No | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 0.03 | 1 | - | 3.47E-04 | 1.56E-03 | 3.89E+05 | - | 1.36E+09 | 4.93E-05 | ca** |
| HxCDF, 2,3,4,6,7,8- | 60851-34-5 | No | No | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 0.03 | 1 | - | 2.78E-04 | 5.89E-05 | 3.89E+05 | - | 1.36E+09 | 4.93E-05 | ca** |
| HxCDF, 2,3,7,8- | 55684-94-1 | No | No | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 0.03 | 1 | - | 3.47E-04 | 1.56E-03 | 3.97E+05 | - | 1.36E+09 | 4.93E-05 | ca** |
| Gadolinium | 7440-54-2 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Gallium | 7440-55-3 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Germanium | 7440-56-4 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Glufosinate, Ammonium | 77182-82-2 | No | No | - | - | - | - | 6.00E-03 | OP | - | - | 1 | 0.1 | 1 | - | 1.81E-12 | 1.37E+06 | 1.00E+01 | - | 1.36E+09 | 3.79E+01 | nc |
| Glutaraldehyde | 111-30-8 | No | No | - | - | - | - | - | - | 8.00E-05 | CA | 1 | 0.1 | 1 | - | 1.35E-06 | 2.24E+05 | 1.00E+00 | - | 1.36E+09 | 1.13E+04 | nc |
| Glycerol | 56-81-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 7.07E-07 | 1.00E+06 | 1.00E+00 | - | 1.36E+09 | | |
| Glycidyl | 765-34-4 | No | Yes | - | - | - | - | 4.00E-04 | IR | 1.00E-03 | HE | 1 | - | 1 | 8.43E+04 | 2.09E-05 | 1.00E+06 | 1.00E+00 | 1.06E+05 | 1.36E+09 | 2.31E+00 | nc |
| Glyphosate | 1071-83-6 | No | No | - | - | - | - | 1.00E-01 | IR | - | - | 1 | 0.1 | 1 | - | 8.59E-11 | 1.05E+04 | 2.10E+03 | - | 1.36E+09 | 6.32E+02 | nc |
| Guanidine Chloride | 50-01-1 | No | No | - | - | - | - | 2.00E-02 | PP | - | - | 1 | 0.1 | 1 | - | 8.87E-17 | 1.00E+06 | - | - | 1.36E+09 | 1.26E+02 | nc |
| Guanidine | 113-00-8 | No | Yes | - | - | - | - | 1.00E-02 | SC | - | - | 1 | - | 1 | 1.45E+05 | 9.57E-10 | 1.84E+03 | 1.20E+01 | - | 1.36E+09 | 7.82E+01 | nc |
| Guanidine Nitrate | 506-93-4 | No | No | - | - | - | - | 3.00E-02 | SC | - | - | 1 | 0.1 | 1 | - | 3.66E-17 | 1.00E+06 | 2.28E+01 | - | 1.36E+09 | 1.90E+02 | nc |
| Azinphos-methyl | 86-50-0 | No | No | - | - | - | - | 3.00E-03 | AT | 1.00E-02 | AT | 1 | 0.1 | 1 | - | 9.77E-07 | 2.09E+01 | 5.19E+01 | - | 1.36E+09 | 1.90E+01 | nc |
| Haloacetic acids | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | | |
| Haloxypop, Methyl | 69806-40-2 | No | No | - | - | - | - | 5.00E-05 | IR | - | - | 1 | 0.1 | 1 | - | 1.30E-05 | 9.30E+00 | 5.45E+03 | - | 1.36E+09 | 3.16E-01 | nc |
| HCDD, 1,2,3,4,6,7,8,- | 35822-46-9 | No | Yes | 1.30E+03 | C | 3.80E-01 | C | 1.00E-06 | CA | 4.00E-06 | CA | 1 | 0.03 | 1 | 2.43E+06 | 7.15E-03 | 2.40E-06 | 1.16E+06 | - | 1.36E+09 | 4.80E-04 | ca* |
| Heptachlor | 76-44-8 | No | Yes | 4.50E+00 | I | 1.30E-03 | I | 5.00E-04 | IR | - | - | 1 | - | 1 | 4.79E+05 | 1.20E-02 | 1.80E-01 | 4.13E+04 | - | 1.36E+09 | 1.34E-01 | ca* |
| Heptachlor Epoxide | 1024-57-3 | No | Yes | 9.10E+00 | I | 2.60E-03 | I | 1.30E-05 | IR | - | - | 1 | - | 1 | 8.43E+05 | 8.59E-04 | 2.00E-01 | 1.01E+04 | - | 1.36E+09 | 7.05E-02 | ca** |

**Site-specific
 Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| Heptanal, n- | 111-71-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 7.80E+03 | 1.10E-02 | 1.25E+03 | 1.09E+01 | 2.09E+02 | 1.36E+09 | | |
| Heptane, N- | 142-82-5 | No | Yes | - | - | - | - | 3.00E-04 | SC | 4.00E-01 | PP | 1 | - | 1 | 8.95E+02 | 8.18E+01 | 3.40E+00 | 2.40E+02 | 5.79E+01 | 1.36E+09 | 2.21E+00 | nc |
| Heptanol, n- | 111-70-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.43E+04 | 7.69E-04 | 1.67E+03 | 2.10E+01 | 3.78E+02 | 1.36E+09 | | |
| Hexabromobenzene | 87-82-1 | No | Yes | - | - | - | - | 2.00E-03 | IR | - | - | 1 | - | 1 | 3.80E+05 | 1.15E-03 | 1.60E-04 | 2.81E+03 | - | 1.36E+09 | 1.56E+01 | nc |
| Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153) | 68631-49-2 | No | No | - | - | - | - | 2.00E-04 | IR | - | - | 1 | 0.1 | 1 | - | - | 9.00E-04 | - | - | 1.36E+09 | 1.26E+00 | nc |
| Hexachlorobenzene | 118-74-1 | No | Yes | 1.60E+00 | I | 4.60E-04 | I | 8.00E-04 | IR | - | - | 1 | - | 1 | 6.80E+04 | 6.95E-02 | 6.20E-03 | 6.20E+03 | - | 1.36E+09 | 2.12E-01 | ca* |
| Hexachlorobutadiene | 87-68-3 | No | Yes | 7.80E-02 | I | 2.20E-05 | I | 1.00E-03 | PP | - | - | 1 | - | 1 | 1.08E+04 | 4.21E-01 | 3.20E+00 | 8.45E+02 | 1.68E+01 | 1.36E+09 | 1.19E+00 | ca** |
| Hexachlorocyclohexane, Alpha- | 319-84-6 | No | No | 6.30E+00 | I | 1.80E-03 | I | 8.00E-03 | AT | - | - | 1 | 0.1 | 1 | - | 2.74E-04 | 2.00E+00 | 2.81E+03 | - | 1.36E+09 | 8.61E-02 | ca |
| Hexachlorocyclohexane, Beta- | 319-85-7 | No | No | 1.80E+00 | I | 5.30E-04 | I | - | - | - | - | 1 | 0.1 | 1 | - | 1.80E-05 | 2.40E-01 | 2.81E+03 | - | 1.36E+09 | 3.01E-01 | ca |
| Hexachlorocyclohexane, Delta- | 319-86-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.10E-04 | 3.14E+01 | 2.81E+03 | - | 1.36E+09 | | |
| Hexachlorocyclohexane, Epsilon- | 6108-10-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.10E-04 | 8.00E+00 | 2.81E+03 | - | 1.36E+09 | | |
| Hexachlorocyclohexane, Gamma- (Lindane) | 58-89-9 | No | No | 1.10E+00 | C | 3.10E-04 | C | 3.00E-04 | IR | - | - | 1 | 0.04 | 1 | - | 2.10E-04 | 7.30E+00 | 2.81E+03 | - | 1.36E+09 | 5.68E-01 | ca** |
| Hexachlorocyclohexane, Technical | 608-73-1 | No | No | 1.80E+00 | I | 5.10E-04 | I | - | - | - | - | 1 | 0.1 | 1 | - | 2.10E-04 | 8.00E+00 | 2.81E+03 | - | 1.36E+09 | 3.01E-01 | ca |
| Hexachlorocyclopentadiene | 77-47-4 | No | Yes | - | - | - | - | 6.00E-03 | IR | 2.00E-04 | IR | 1 | - | 1 | 8.51E+03 | 1.10E+00 | 1.80E+00 | 1.40E+03 | 1.57E+01 | 1.36E+09 | 1.77E-01 | nc |
| Hexachloroethane | 67-72-1 | No | Yes | 4.00E-02 | I | 1.10E-05 | C | 7.00E-04 | IR | 3.00E-02 | IR | 1 | - | 1 | 8.01E+03 | 1.59E-01 | 5.00E+01 | 1.97E+02 | - | 1.36E+09 | 1.83E+00 | ca** |
| Hexachlorophene | 70-30-4 | No | No | - | - | - | - | 3.00E-04 | IR | - | - | 1 | 0.1 | 1 | - | 2.24E-11 | 1.40E+02 | 6.69E+05 | - | 1.36E+09 | 1.90E+00 | nc |
| Hexachloropropene | 1888-71-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.07E+04 | 1.92E-01 | 1.70E+01 | 4.06E+02 | 4.38E+01 | 1.36E+09 | | |
| Hexadecanoic Acid | 57-10-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 5.56E+05 | 8.18E-04 | 4.00E-02 | 3.52E+03 | - | 1.36E+09 | | |
| Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) | 121-82-4 | No | No | 1.10E-01 | I | - | - | 3.00E-03 | IR | - | - | 1 | 0.015 | 1 | - | 8.22E-10 | 5.97E+01 | 8.91E+01 | - | 1.36E+09 | 6.06E+00 | ca** |
| Hexamethylene Diisocyanate, 1,6- | 822-06-0 | No | Yes | - | - | - | - | - | - | 1.00E-05 | IR | 1 | - | 1 | 3.00E+05 | 1.96E-03 | 1.17E+02 | 4.82E+03 | 3.39E+03 | 1.36E+09 | 3.13E-01 | nc |
| Hexamethylphosphoramide | 680-31-9 | No | No | - | - | - | - | 4.00E-04 | PP | - | - | 1 | 0.1 | 1 | - | 8.18E-07 | 1.00E+06 | 1.00E+01 | - | 1.36E+09 | 2.53E+00 | nc |
| Hexane, N- | 110-54-3 | No | Yes | - | - | - | - | - | - | 7.00E-01 | IR | 1 | - | 1 | 8.29E+02 | 7.36E+01 | 9.50E+00 | 1.32E+02 | 1.41E+02 | 1.36E+09 | 6.05E+01 | nc |
| Hexanedioic Acid | 124-04-9 | No | No | - | - | - | - | 2.00E+00 | PP | - | - | 1 | 0.1 | 1 | - | 1.93E-10 | 3.08E+04 | 2.43E+01 | - | 1.36E+09 | 1.26E+04 | nc |
| Hexanol, n- | 111-27-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.93E+04 | 6.99E-04 | 5.90E+03 | 1.15E+01 | 9.99E+02 | 1.36E+09 | | |
| Hexanone, 2- | 591-78-6 | No | Yes | - | - | - | - | 5.00E-03 | IR | 3.00E-02 | IR | 1 | - | 1 | 1.33E+04 | 3.81E-03 | 1.72E+04 | 1.50E+01 | 3.28E+03 | 1.36E+09 | 2.02E+01 | nc |
| Hexazinone | 51235-04-2 | No | No | - | - | - | - | 3.30E-02 | IR | - | - | 1 | 0.1 | 1 | - | 9.24E-11 | 3.30E+04 | 1.29E+02 | - | 1.36E+09 | 2.09E+02 | nc |
| Hydrazine | 302-01-2 | No | Yes | 3.00E+00 | I | 4.90E-03 | I | - | - | 3.00E-05 | PP | 1 | - | 1 | - | 2.50E-05 | 1.00E+06 | - | - | 1.36E+09 | 2.32E-01 | ca |
| Hydrazine Sulfate | 10034-93-2 | No | No | 3.00E+00 | I | 4.90E-03 | I | - | - | - | - | 1 | - | 1 | - | - | 3.06E+04 | - | - | 1.36E+09 | 2.32E-01 | ca |
| Hydrogen Chloride | 7647-01-0 | No | Yes | - | - | - | - | - | - | 2.00E-02 | IR | 1 | - | 1 | - | 8.34E+07 | 6.73E+05 | - | - | 1.36E+09 | 2.84E+06 | cm |
| Hydrogen Fluoride | 7664-39-3 | No | Yes | - | - | - | - | 4.00E-02 | CA | 1.40E-02 | CA | 1 | - | 1 | - | 4.25E-03 | 1.00E+06 | - | - | 1.36E+09 | 3.13E+02 | nc |
| Hydrogen Selenide | 7783-07-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Hydrogen Sulfate | 12143-45-2 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Hydrogen Sulfide | 7783-06-4 | No | Yes | - | - | - | - | - | - | 2.00E-03 | IR | 1 | - | 1 | - | 3.50E-01 | 3.74E+03 | - | - | 1.36E+09 | 2.84E+05 | cm |
| Hydroquinone | 123-31-9 | No | No | 6.00E-02 | P | - | - | 4.00E-02 | PP | - | - | 1 | 0.1 | 1 | - | 1.93E-09 | 7.20E+04 | 2.41E+02 | - | 1.36E+09 | 9.04E+00 | ca* |
| Imazalil | 35554-44-0 | No | No | 6.11E-02 | O | - | - | 2.50E-03 | OP | - | - | 1 | 0.1 | 1 | - | 1.06E-07 | 1.80E+02 | 8.50E+03 | - | 1.36E+09 | 8.88E+00 | ca** |
| Imazaquin | 81335-37-7 | No | No | - | - | - | - | 2.50E-01 | IR | - | - | 1 | 0.1 | 1 | - | 2.83E-16 | 9.00E+01 | 2.39E+03 | - | 1.36E+09 | 1.58E+03 | nc |
| Indium | 7440-74-6 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Iodide | 20461-54-5 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Iodine | 7553-56-2 | No | No | - | - | - | - | 1.00E-02 | AT | - | - | 1 | - | 1 | - | - | 3.30E+02 | - | - | 1.36E+09 | 7.82E+01 | nc |
| Iodomethane | 74-88-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.85E+03 | 2.15E-01 | 1.38E+04 | 1.32E+01 | 3.04E+03 | 1.36E+09 | | |
| Iodopropynyl Butylcarbamate (IPBC) | 55406-53-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.91E-06 | 1.56E+02 | 2.85E+02 | - | 1.36E+09 | | |
| Iprodione | 36734-19-7 | No | No | - | - | - | - | 4.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 1.28E-07 | 1.39E+01 | 5.25E+01 | - | 1.36E+09 | 2.53E+02 | nc |
| Iron | 7439-89-6 | No | No | - | - | - | - | 7.00E-01 | PP | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.48E+03 | nc |
| Iron Sulfide | 11126-12-8 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Isobutyl Alcohol | 78-83-1 | No | Yes | - | - | - | - | 3.00E-01 | IR | - | - | 1 | - | 1 | 2.81E+04 | 4.00E-04 | 8.50E+04 | 2.92E+00 | 1.00E+04 | 1.36E+09 | 2.35E+03 | nc |
| Isodrin | 465-73-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.68E+06 | 1.80E-03 | 1.70E-02 | 8.20E+04 | - | 1.36E+09 | | |

**Site-specific
 Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|----------------------------------|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-----|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| Isophorone | 78-59-1 | No | No | 9.50E-04 | I | - | - | 2.00E-01 | IR | 2.00E+00 | CA | 1 | 0.1 | 1 | - | 2.71E-04 | 1.20E+04 | 6.52E+01 | - | 1.36E+09 | 5.71E+02 | ca** |
| Isopropalin | 33820-53-0 | No | Yes | - | - | - | - | 1.50E-02 | IR | - | - | 1 | - | 1 | 4.20E+05 | 4.54E-03 | 1.10E-01 | 1.14E+04 | - | 1.36E+09 | 1.17E+02 | nc |
| Isopropanol | 67-63-0 | No | Yes | - | - | - | - | 2.00E+00 | PP | 2.00E-01 | PP | 1 | - | 1 | 2.77E+04 | 3.31E-04 | 1.00E+06 | 1.53E+00 | 1.09E+05 | 1.36E+09 | 5.57E+02 | nc |
| Isopropyl Methyl Phosphonic Acid | 1832-54-8 | No | No | - | - | - | - | 1.00E-01 | IR | - | - | 1 | 0.1 | 1 | - | 2.81E-07 | 5.04E+04 | 7.71E+00 | - | 1.36E+09 | 6.32E+02 | nc |
| Isopropyltoluene, p- | 99-87-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.53E+03 | 4.50E-01 | 2.34E+01 | 1.12E+03 | 1.62E+02 | 1.36E+09 | | |
| Isosafrole | 120-58-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.48E+03 | 1.47E+00 | 1.44E+02 | 2.07E+02 | 2.34E+02 | 1.36E+09 | | |
| Isoxaben | 82558-50-7 | No | No | - | - | - | - | 5.00E-02 | IR | - | - | 1 | 0.1 | 1 | - | 5.19E-08 | 1.42E+00 | 1.26E+03 | - | 1.36E+09 | 3.16E+02 | nc |
| JP-4 | 50815-00-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 4.09E+02 | 5.70E+01 | - | - | 1.36E+09 | | |
| JP-5 | NA | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 2.41E-03 | 5.00E+00 | 1.25E+00 | 5.40E-01 | 1.36E+09 | | |
| JP-7 | NA | No | Yes | - | - | - | - | - | - | 3.00E-01 | U | 1 | - | 1 | - | 4.09E-01 | 1.04E+01 | - | - | 1.36E+09 | 4.25E+07 | cm |
| JP-8 | NA | No | Yes | - | - | - | - | - | - | - | - | - | - | - | - | 2.41E-03 | 1.24E+01 | 1.25E+00 | 1.34E+00 | 1.36E+09 | | |
| Kerosene | 8008-20-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 4.09E-01 | 1.04E+01 | - | - | 1.36E+09 | | |
| Lactofen | 77501-63-4 | No | No | - | - | - | - | 8.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.93E-05 | 1.00E-01 | 2.30E+04 | - | 1.36E+09 | 5.06E+01 | nc |
| Lactonitrile | 78-97-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.01E-04 | 4.66E+05 | 1.00E+00 | - | 1.36E+09 | | |
| Lanthanum | 7439-91-0 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Lead Alkyls | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | | |
| Lead Chromate | 7758-97-6 | Yes | No | 5.00E-01 | U | 1.50E-01 | U | 2.00E-02 | U | 2.00E-04 | U | 0.025 | - | 1 | - | - | 1.70E-01 | - | - | 1.36E+09 | 2.96E-01 | ca |
| Lead Phosphate | 7446-27-7 | No | No | 8.50E-03 | U | 1.20E-05 | U | - | - | - | - | 1 | - | 1 | - | - | 0.00E+00 | - | - | 1.36E+09 | 8.18E+01 | ca |
| Lead acetate | 301-04-2 | No | No | 8.50E-03 | U | 1.20E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | - | 1.60E+03 | 1.00E+00 | - | 1.36E+09 | 6.38E+01 | ca |
| Lead and Compounds | 7439-92-1 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Lead subacetate | 1335-32-6 | No | No | 8.50E-03 | U | 1.20E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | - | 6.25E+04 | 1.04E+01 | - | 1.36E+09 | 6.38E+01 | ca |
| Lewisite | 541-25-3 | No | Yes | - | - | - | - | 5.00E-06 | U | - | - | 1 | - | 1 | 2.56E+04 | 8.91E-03 | 5.00E+02 | 1.11E+02 | 3.84E+02 | 1.36E+09 | 3.91E-02 | nc |
| Linuron | 330-55-2 | No | No | - | - | - | - | 7.70E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.56E-07 | 7.50E+01 | 3.40E+02 | - | 1.36E+09 | 4.87E+01 | nc |
| Lithium | 7439-93-2 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.56E+01 | nc |
| Lithium Perchlorate | 7791-03-9 | No | No | - | - | - | - | 7.00E-04 | U | - | - | 1 | - | 1 | - | - | 5.87E+05 | - | - | 1.36E+09 | 5.48E+00 | nc |
| Lutetium | 7439-94-3 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| MCPA | 94-74-6 | No | No | - | - | - | - | 5.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 5.44E-08 | 6.30E+02 | 2.96E+01 | - | 1.36E+09 | 3.16E+00 | nc |
| MCPB | 94-81-5 | No | No | - | - | - | - | 4.40E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.11E-07 | 4.80E+01 | 9.84E+01 | - | 1.36E+09 | 2.78E+01 | nc |
| MCPP | 93-65-2 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 7.44E-07 | 6.20E+02 | 4.85E+01 | - | 1.36E+09 | 6.32E+00 | nc |
| Magnesium | 7439-95-4 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Malathion | 121-75-5 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.00E-07 | 1.43E+02 | 3.13E+01 | - | 1.36E+09 | 1.26E+02 | nc |
| Maleic Anhydride | 108-31-6 | No | No | - | - | - | - | 1.00E-01 | U | 7.00E-04 | U | 1 | 0.1 | 1 | - | 1.61E-04 | 1.63E+05 | 1.00E+00 | - | 1.36E+09 | 6.28E+02 | nc |
| Maleic Hydrazide | 123-33-1 | No | No | - | - | - | - | 5.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 1.08E-09 | 4.51E+03 | 3.30E+00 | - | 1.36E+09 | 3.16E+03 | nc |
| Malononitrile | 109-77-3 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 5.36E-06 | 1.33E+05 | 3.33E+00 | - | 1.36E+09 | 6.32E-01 | nc |
| Mancozeb | 8018-01-7 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 6.21E-10 | 6.20E+00 | 6.08E+02 | - | 1.36E+09 | 1.90E+02 | nc |
| Maneb | 12427-38-2 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.99E-07 | 6.00E+00 | 6.08E+02 | - | 1.36E+09 | 3.16E+01 | nc |
| Manganese (Non-diet) | 7439-96-5 | No | No | - | - | - | - | 2.40E-02 | U | 5.00E-05 | U | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.83E+02 | nc |
| Mechlorethamine | 51-75-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.19E-04 | 1.20E+04 | 8.85E+01 | - | 1.36E+09 | | |
| Mepfosfolan | 950-10-7 | No | No | - | - | - | - | 9.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 4.87E-09 | 5.70E+01 | 6.36E+02 | - | 1.36E+09 | 5.69E-01 | nc |
| Mepiquat Chloride | 24307-26-4 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.76E-10 | 5.00E+05 | 6.62E+01 | - | 1.36E+09 | 1.90E+02 | nc |
| Mercaptobenzothiazole, 2- | 149-30-4 | No | No | 1.10E-02 | U | - | - | 4.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.48E-06 | 1.20E+02 | 1.36E+03 | - | 1.36E+09 | 2.53E+01 | nc |
| Mercuric Chloride | 7487-94-7 | No | No | - | - | - | - | 3.00E-04 | U | 3.00E-04 | U | 0.07 | - | 1 | - | - | 6.90E+04 | - | - | 1.36E+09 | 2.35E+00 | nc |
| Mercury (elemental) | 7439-97-6 | No | Yes | - | - | - | - | - | - | 3.00E-04 | U | 1 | - | 1 | 3.47E+04 | 3.52E-01 | 6.00E-02 | - | 3.13E+00 | 1.36E+09 | 1.09E+00 | nc |
| Merphos | 150-50-5 | No | Yes | - | - | - | - | 3.00E-05 | U | - | - | 1 | - | 1 | 1.94E+06 | 9.28E-04 | 3.50E-03 | 4.90E+04 | - | 1.36E+09 | 2.35E-01 | nc |
| Merphos Oxide | 78-48-8 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.20E-05 | 2.30E+00 | 2.35E+03 | - | 1.36E+09 | 6.32E-01 | nc |
| Metalaxyl | 57837-19-1 | No | No | - | - | - | - | 6.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.21E-07 | 8.40E+03 | 3.86E+01 | - | 1.36E+09 | 3.79E+02 | nc |
| Methacrylonitrile | 126-98-7 | No | Yes | - | - | - | - | 1.00E-04 | U | 3.00E-02 | U | 1 | - | 1 | 6.80E+03 | 1.01E-02 | 2.54E+04 | 1.31E+01 | 4.59E+03 | 1.36E+09 | 7.54E-01 | nc |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| Methamidophos | 10265-92-6 | No | No | - | - | - | - | 5.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 3.55E-08 | 1.00E+06 | 5.41E+00 | - | 1.36E+09 | 3.16E-01 | nc |
| Methanol | 67-56-1 | No | Yes | - | - | - | - | 2.00E+00 | U | 2.00E+01 | U | 1 | - | 1 | 2.91E+04 | 1.86E-04 | 1.00E+06 | 1.00E+00 | 1.06E+05 | 1.36E+09 | 1.24E+04 | nc |
| Methapyrilene | 91-80-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.32E-10 | 6.01E+02 | 1.86E+03 | - | 1.36E+09 | - | - |
| Methidathion | 950-37-8 | No | No | - | - | - | - | 1.50E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.93E-07 | 1.87E+02 | 2.12E+01 | - | 1.36E+09 | 9.48E+00 | nc |
| Methomyl | 16752-77-5 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 8.05E-10 | 5.80E+04 | 1.00E+01 | - | 1.36E+09 | 1.58E+02 | nc |
| Methoxy-5-nitroaniline, 2- | 99-59-2 | No | No | 4.90E-02 | U | 1.40E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | 5.11E-07 | 1.15E+02 | 7.13E+01 | - | 1.36E+09 | 1.11E+01 | ca |
| Methoxychlor | 72-43-5 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 8.30E-06 | 1.00E-01 | 2.69E+04 | - | 1.36E+09 | 3.16E+01 | nc |
| Methoxyethanol Acetate, 2- | 110-49-6 | No | Yes | - | - | - | - | 8.00E-03 | U | 1.00E-03 | U | 1 | - | 1 | 1.24E+05 | 1.27E-05 | 1.00E+06 | 2.49E+00 | 1.15E+05 | 1.36E+09 | 1.07E+01 | nc |
| Methoxyethanol, 2- | 109-86-4 | No | Yes | - | - | - | - | 5.00E-03 | U | 2.00E-02 | U | 1 | - | 1 | 1.01E+05 | 1.35E-05 | 1.00E+06 | 1.00E+00 | 1.06E+05 | 1.36E+09 | 3.30E+01 | nc |
| Methyl Acetate | 79-20-9 | No | Yes | - | - | - | - | 1.00E+00 | U | - | - | 1 | - | 1 | 8.12E+03 | 4.70E-03 | 2.43E+05 | 3.06E+00 | 2.90E+04 | 1.36E+09 | 7.82E+03 | nc |
| Methyl Acrylate | 96-33-3 | No | Yes | - | - | - | - | 2.00E-02 | U | - | - | 1 | - | 1 | 6.97E+03 | 8.14E-03 | 4.94E+04 | 5.84E+00 | 6.75E+03 | 1.36E+09 | 1.45E+01 | nc |
| Methyl Ethyl Ketone (2-Butanone) | 78-93-3 | No | Yes | - | - | - | - | 6.00E-01 | U | 5.00E+00 | U | 1 | - | 1 | 1.22E+04 | 2.33E-03 | 2.23E+05 | 4.51E+00 | 2.84E+04 | 1.36E+09 | 2.70E+03 | nc |
| Methyl Hydrazine | 60-34-4 | No | Yes | - | - | 1.00E-03 | U | 1.00E-03 | U | 2.00E-05 | U | 1 | - | 1 | 5.04E+04 | 1.24E-04 | 1.00E+06 | 1.33E+01 | 1.80E+05 | 1.36E+09 | 1.04E-01 | nc |
| Methyl Isobutyl Ketone (4-methyl-2-pentanone) | 108-10-1 | No | Yes | - | - | - | - | 3.00E+00 | U | - | - | 1 | - | 1 | 1.06E+04 | 5.64E-03 | 1.90E+04 | 1.26E+01 | 3.36E+03 | 1.36E+09 | 3.31E+03 | nc |
| Methyl Isocyanate | 624-83-9 | No | Yes | - | - | - | - | 1.00E-03 | U | - | - | 1 | - | 1 | 4.40E+03 | 3.79E-02 | 2.92E+04 | 3.96E+01 | 1.01E+04 | 1.36E+09 | 4.59E-01 | nc |
| Methyl Mercaptan | 74-93-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.78E+03 | 1.28E-01 | 1.54E+04 | 1.32E+01 | 3.13E+03 | 1.36E+09 | - | - |
| Methyl Mercury | 22967-92-6 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 7.82E-01 | nc |
| Methyl Methacrylate | 80-62-6 | No | Yes | - | - | - | - | 1.40E+00 | U | 7.00E-01 | U | 1 | - | 1 | 6.34E+03 | 1.30E-02 | 1.50E+04 | 9.14E+00 | 2.36E+03 | 1.36E+09 | 4.44E+02 | nc |
| Methyl Parathion | 298-00-0 | No | No | - | - | - | - | 2.50E-04 | U | - | - | 1 | 0.1 | 1 | - | 4.09E-06 | 3.77E+01 | 7.29E+02 | - | 1.36E+09 | 1.58E+00 | nc |
| Methyl Phosphonic Acid | 993-13-5 | No | No | - | - | - | - | 6.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 4.99E-10 | 2.00E+04 | 1.41E+00 | - | 1.36E+09 | 3.79E+02 | nc |
| Methyl Styrene (Mixed Isomers) | 25013-15-4 | No | Yes | - | - | - | - | 6.00E-03 | U | 4.00E-02 | U | 1 | - | 1 | 2.43E+04 | 1.07E-01 | 8.90E+01 | 7.16E+02 | 3.93E+02 | 1.36E+09 | 3.21E+01 | nc |
| Methyl dicyclohexylamine, n- | 7560-83-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.74E+04 | 4.95E-03 | 3.19E+02 | 1.77E+02 | - | 1.36E+09 | - | - |
| Methyl methanesulfonate | 66-27-3 | No | No | 9.90E-02 | U | 2.80E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.65E-04 | 2.00E+05 | 4.33E+00 | - | 1.36E+09 | 5.48E+00 | ca |
| Methyl tert-Butyl Ether (MTBE) | 1634-04-4 | No | Yes | 1.80E-03 | U | 2.60E-07 | U | - | - | 3.00E+00 | U | 1 | - | 1 | 4.90E+03 | 2.40E-02 | 5.10E+04 | 1.16E+01 | 8.88E+03 | 1.36E+09 | 4.66E+01 | ca* |
| Methyl-1,4-benzenediamine dihydrochloride, 2- | 615-45-2 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 2.61E-16 | 1.00E+06 | 2.02E+02 | - | 1.36E+09 | 1.90E+00 | nc |
| Methyl-2-Pentanol, 4- | 108-11-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.72E+04 | 1.82E-03 | 1.64E+04 | 8.16E+00 | 2.45E+03 | 1.36E+09 | - | - |
| Methyl-5-Nitroaniline, 2- | 99-55-8 | No | No | 9.00E-03 | U | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.39E-07 | 1.00E+04 | 1.79E+02 | - | 1.36E+09 | 6.03E+01 | ca** |
| Methyl-N-nitro-N-nitrosoguanidine, N- | 70-25-7 | No | No | 8.30E+00 | U | 2.40E-03 | U | - | - | - | - | 1 | 0.1 | 1 | - | 4.99E-11 | 2.67E+05 | 7.20E+01 | - | 1.36E+09 | 6.54E-02 | ca |
| Methylaniline Hydrochloride, 2- | 636-21-5 | No | No | 1.30E-01 | U | 3.70E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | 8.59E-05 | 8.29E+03 | 1.15E+02 | - | 1.36E+09 | 4.17E+00 | ca |
| Methylarsonic acid | 124-58-3 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | - | 2.56E+05 | 4.39E+01 | - | 1.36E+09 | 6.32E+01 | nc |
| Methylaziridine, 2- | 75-55-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.20E+04 | 4.09E-04 | 1.00E+06 | 1.45E+01 | 1.87E+05 | 1.36E+09 | - | - |
| Methylbenzene, 1,4-diamine monohydrochloride, 2- | 74612-12-7 | No | No | - | - | - | - | 2.00E-04 | U | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | 1.26E+00 | nc |
| Methylbenzene-1,4-diamine sulfate, 2- | 615-50-9 | No | No | 1.00E-01 | U | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | 1.90E+00 | nc |
| Methylcholanthrene, 3- | 56-49-5 | Yes | No | 2.20E+01 | U | 6.30E-03 | U | - | - | - | - | 1 | 0.1 | 1 | - | 2.14E-04 | 2.90E-03 | 9.62E+05 | - | 1.36E+09 | 5.54E-03 | ca |
| Methylcyclohexane | 108-87-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 9.90E+02 | 1.76E+01 | 1.40E+01 | 2.34E+02 | 6.77E+01 | 1.36E+09 | - | - |
| Methylcyclohexylamine, n- | 100-60-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.18E+04 | 1.23E-03 | 1.75E+04 | 3.76E+01 | 5.70E+03 | 1.36E+09 | - | - |
| Methylcyclopentane | 96-37-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.86E+02 | 1.48E+01 | 4.20E+01 | 1.28E+02 | 1.54E+02 | 1.36E+09 | - | - |
| Methylene Chloride | 75-09-2 | Yes | Yes | 2.00E-03 | U | 1.00E-08 | U | 6.00E-03 | U | 6.00E-01 | U | 1 | - | 1 | 2.19E+03 | 1.33E-01 | 1.30E+04 | 2.17E+01 | 3.32E+03 | 1.36E+09 | 3.50E+01 | nc |
| Methylene-bis(2-chloroaniline), 4,4'- | 101-14-4 | Yes | No | 1.00E-01 | U | 4.30E-04 | U | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.66E-09 | 1.39E+01 | 5.70E+03 | - | 1.36E+09 | 1.22E+00 | ca* |
| Methylene-bis(N,N-dimethyl) Aniline, 4,4'- | 101-61-1 | No | No | 4.60E-02 | U | 1.30E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | 4.37E-08 | 4.14E+00 | 2.67E+03 | - | 1.36E+09 | 1.18E+01 | ca |
| Methylenebisbenzenamine, 4,4'- | 101-77-9 | No | No | 1.60E+00 | U | 4.60E-04 | U | - | - | 2.00E-02 | U | 1 | 0.1 | 1 | - | 2.17E-09 | 1.00E+03 | 2.13E+03 | - | 1.36E+09 | 3.39E-01 | ca |
| Methylenediphenyl Diisocyanate | 101-68-8 | No | No | - | - | - | - | - | - | 6.00E-04 | U | 1 | 0.1 | 1 | - | 3.66E-05 | 8.29E-01 | 2.85E+05 | - | 1.36E+09 | 8.51E+04 | nc |
| Methylisothiocyanate | 556-61-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.48E+04 | 1.83E-03 | 7.60E+03 | 1.07E+01 | - | 1.36E+09 | - | - |
| Methylnaphthalene | 1321-94-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 5.86E+04 | 2.10E-02 | 2.50E+01 | 2.53E+03 | - | 1.36E+09 | - | - |
| Methylnaphthalene, 1- | 90-12-0 | No | Yes | 2.90E-02 | U | - | - | 7.00E-02 | U | - | - | 1 | 0.13 | 1 | 5.86E+04 | 2.10E-02 | 2.58E+01 | 2.53E+03 | 3.94E+02 | 1.36E+09 | 1.76E+01 | ca* |

**Site-specific
Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| Methylnaphthalene, 2- | 91-57-6 | No | Yes | - | - | - | - | 4.00E-03 | U | - | - | 1 | 0.13 | 1 | 5.80E+04 | 2.12E-02 | 2.46E+01 | 2.48E+03 | - | 1.36E+09 | 2.39E+01 | nc |
| Methylstyrene, Alpha- | 98-83-9 | No | Yes | - | - | - | - | 7.00E-02 | U | - | - | 1 | - | 1 | 1.28E+04 | 1.04E-01 | 1.16E+02 | 6.98E+02 | 5.00E+02 | 1.36E+09 | 5.48E+02 | cs |
| Methyltriethyl Lead | 1762-28-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.63E+03 | 2.54E+01 | 1.92E+00 | 3.31E+02 | 1.32E+01 | 1.36E+09 | - | - |
| Metolachlor | 51218-45-2 | No | No | - | - | - | - | 1.50E-01 | U | - | - | 1 | 0.1 | 1 | - | 3.68E-07 | 5.30E+02 | 4.89E+02 | - | 1.36E+09 | 9.48E+02 | nc |
| Metribuzin | 21087-64-9 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 4.78E-09 | 1.05E+03 | 5.31E+01 | - | 1.36E+09 | 1.58E+02 | nc |
| Metsulfuron-methyl | 74223-64-6 | No | No | - | - | - | - | 2.50E-01 | U | - | - | 1 | 0.1 | 1 | - | 5.40E-15 | 9.50E+03 | 9.25E+01 | - | 1.36E+09 | 1.58E+03 | nc |
| Mineral oils | 8012-95-1 | No | Yes | - | - | - | - | 3.00E+00 | U | - | - | 1 | - | 1 | 1.38E+03 | 3.34E+02 | 3.70E-03 | 4.82E+03 | 3.41E-01 | 1.36E+09 | 2.35E+04 | cs |
| Mirex | 2385-85-5 | No | Yes | 1.80E+01 | U | 5.10E-03 | U | 2.00E-04 | U | - | - | 1 | - | 1 | 8.57E+05 | 3.32E-02 | 8.50E-02 | 3.57E+05 | - | 1.36E+09 | 3.57E-02 | ca* |
| Molinate | 2212-67-1 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.68E-04 | 9.70E+02 | 1.82E+02 | - | 1.36E+09 | 1.26E+01 | nc |
| Molybdenum | 7439-98-7 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.91E+01 | nc |
| Monoaluminum phosphate | 13530-50-2 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Monoammonium phosphate | 7722-76-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Monobutyltin Compounds | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Monocalcium phosphate | 7758-23-8 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Monochloramine | 10599-90-3 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 7.82E+02 | nc |
| Monochlorobutanes | 25154-42-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Monochlorophenols (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Monocyclic aromatic hydrocarbons (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Monomagnesium phosphate | 7757-86-0 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Monomethylaniline | 100-61-8 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 3.63E-04 | 5.62E+03 | 8.21E+01 | - | 1.36E+09 | 1.26E+01 | nc |
| Monopotassium phosphate | 7778-77-0 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Monosodium phosphate | 7558-80-7 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | 4.87E+05 | - | - | 1.36E+09 | 3.80E+05 | cm |
| Myclobutanil | 88671-89-0 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.75E-07 | 1.42E+02 | 6.08E+03 | - | 1.36E+09 | 1.58E+02 | nc |
| N,N'-Diphenyl-1,4-benzenediamine | 74-31-7 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 8.38E-09 | 7.35E+00 | 5.19E+04 | - | 1.36E+09 | 1.90E+00 | nc |
| N-Methyl dithiocarbamate | 137-42-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | 7.22E+05 | 5.87E+01 | - | 1.36E+09 | - | - |
| Naled | 300-76-5 | No | Yes | - | - | - | - | 2.00E-03 | U | - | - | 1 | - | 1 | 5.70E+04 | 2.66E-03 | 1.50E+00 | 1.27E+02 | - | 1.36E+09 | 1.56E+01 | nc |
| Naphtha, High Flash Aromatic (HFAN) | 64742-95-6 | No | Yes | - | - | - | - | 3.00E-02 | U | 1.00E-01 | U | 1 | - | 1 | - | 1.80E-02 | 3.10E+01 | - | - | 1.36E+09 | 2.35E+02 | nc |
| Naphthalene | 91-20-3 | No | Yes | - | - | 3.40E-05 | U | 2.00E-02 | U | 3.00E-03 | U | 1 | 0.13 | 1 | 4.63E+04 | 1.80E-02 | 3.10E+01 | 1.54E+03 | - | 1.36E+09 | 3.82E+00 | ca** |
| Naphthol, 2- | 135-19-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.12E-06 | 7.55E+02 | 1.98E+03 | - | 1.36E+09 | - | - |
| Naphthoquinone, 1,4- | 130-15-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 8.05E-08 | 6.68E+02 | 4.54E+02 | - | 1.36E+09 | - | - |
| Naphthylamine, 1- | 134-32-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.54E-06 | 1.70E+03 | 2.53E+03 | - | 1.36E+09 | - | - |
| Naphthylamine, 2- | 91-59-8 | No | No | 1.80E+00 | U | 0.00E+00 | U | - | - | - | - | 1 | 0.1 | 1 | - | 3.31E-06 | 1.89E+02 | 2.48E+03 | - | 1.36E+09 | 3.01E-01 | ca |
| Napropamide | 15299-99-7 | No | No | - | - | - | - | 1.20E-01 | U | - | - | 1 | 0.1 | 1 | - | 3.44E-08 | 7.30E+01 | 3.22E+03 | - | 1.36E+09 | 7.59E+02 | nc |
| Neodymium Chloride (Stable, Nonradioactive) | 10024-93-8 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 1.00E+06 | - | - | 1.36E+09 | - | - |
| Niagara Blue 4B | 2429-74-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.50E-42 | 5.89E-03 | 2.82E+08 | - | 1.36E+09 | - | - |
| Nickel Acetate | 373-02-4 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 1 | 0.1 | 1 | - | - | 1.66E+05 | 1.00E+00 | - | 1.36E+09 | 6.72E+01 | nc |
| Nickel Carbonate | 3333-67-3 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 1 | 0.1 | 1 | - | - | 9.30E+01 | - | - | 1.36E+09 | 6.72E+01 | nc |
| Nickel Carbonyl | 13463-39-3 | No | Yes | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 1 | - | 1 | - | 2.04E+01 | 1.80E+02 | - | - | 1.36E+09 | 8.25E+01 | nc |
| Nickel Hydroxide | 12054-48-7 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 8.25E+01 | nc |
| Nickel Oxide | 1313-99-1 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 2.00E-05 | U | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 8.35E+01 | nc |
| Nickel Refinery Dust | NA | No | No | - | - | 2.40E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 8.25E+01 | nc |
| Nickel Soluble Salts | 7440-02-0 | No | No | - | - | 2.60E-04 | U | 2.00E-02 | U | 9.00E-05 | U | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.55E+02 | nc |
| Nickel Subsulfide | 12035-72-2 | No | No | 1.70E+00 | U | 4.80E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 4.09E-01 | ca |
| Nickelocene | 1271-28-9 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | 6.72E+01 | nc |
| Nicotinonitrile | 100-54-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.12E-05 | 1.35E+05 | 4.72E+01 | - | 1.36E+09 | - | - |
| Niobium | 7440-03-1 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Nitrate | 14797-55-8 | No | No | - | - | - | - | 1.60E+00 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.25E+04 | nc |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] | | |
|------------------------------|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|----------|----------|------|
| Nitrate + Nitrite (as N) | NA | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | | | |
| Nitric Acid | 7697-37-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | - | 1.36E+09 | | |
| Nitric Oxide | 10102-43-9 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | - | 1.36E+09 | | |
| Nitrite | 14797-65-0 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | - | 1 | - | - | 9.49E+04 | - | - | - | - | 1.36E+09 | 7.82E+02 | nc |
| Nitroaniline, 2- | 88-74-4 | No | No | - | - | - | - | 1.00E-02 | U | 5.00E-05 | U | 1 | 0.1 | 1 | - | 2.41E-06 | 1.47E+03 | 1.11E+02 | - | - | - | 1.36E+09 | 6.27E+01 | nc |
| Nitroaniline, 3- | 99-09-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.23E-07 | 1.20E+03 | 1.09E+02 | - | - | - | 1.36E+09 | | |
| Nitroaniline, 4- | 100-01-6 | No | No | 2.00E-02 | U | - | - | 4.00E-03 | U | 6.00E-03 | U | 1 | 0.1 | 1 | - | 5.15E-08 | 7.28E+02 | 1.09E+02 | - | - | - | 1.36E+09 | 2.53E+01 | nc |
| Nitrobenzene | 98-95-3 | No | Yes | - | - | 4.00E-05 | U | 2.00E-03 | U | 9.00E-03 | U | 1 | - | 1 | 7.31E+04 | 9.81E-04 | 2.09E+03 | 2.26E+02 | 3.04E+03 | - | 1.36E+09 | 5.13E+00 | ca** | |
| Nitrobiphenyl, 4- | 92-93-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.45E-04 | 1.23E+00 | 7.97E+03 | - | - | - | 1.36E+09 | | |
| Nitrocellulose | 9004-70-0 | No | No | - | - | - | - | 3.00E+03 | U | - | - | 1 | 0.1 | 1 | - | 1.35E-21 | 1.00E+06 | 1.00E+01 | - | - | - | 1.36E+09 | 1.90E+07 | cm |
| Nitrodiphenylamine, 2- | 119-75-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.71E-06 | 2.77E+01 | 1.31E+03 | - | - | - | 1.36E+09 | | |
| Nitrofurantoin | 67-20-9 | No | No | - | - | - | - | 7.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 5.44E-11 | 7.95E+01 | 1.17E+02 | - | - | - | 1.36E+09 | 4.42E+02 | nc |
| Nitrofurazone | 59-87-0 | No | No | 1.30E+00 | U | 3.70E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.27E-11 | 2.10E+02 | 3.50E+02 | - | - | - | 1.36E+09 | 4.17E-01 | ca |
| Nitrogen Dioxide | 10102-44-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | - | 1.36E+09 | | |
| Nitroglycerin | 55-63-0 | No | No | 1.70E-02 | U | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 3.54E-06 | 1.38E+03 | 1.16E+02 | - | - | - | 1.36E+09 | 6.32E-01 | nc |
| Nitroguanidine | 556-88-7 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 1.82E-14 | 4.40E+03 | 2.07E+01 | - | - | - | 1.36E+09 | 6.32E+02 | nc |
| Nitromethane | 75-52-5 | No | Yes | - | - | 8.80E-06 | U | - | - | 5.00E-03 | U | 1 | - | 1 | 1.69E+04 | 1.17E-03 | 1.11E+05 | 1.03E+01 | 1.80E+04 | - | 1.36E+09 | 5.41E+00 | ca** | |
| Nitrophenol, 2- | 88-75-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.20E+05 | 5.23E-04 | 2.50E+03 | 2.97E+02 | - | - | - | 1.36E+09 | | |
| Nitrophenol, 2-amino-4- | 99-57-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 9.12E-11 | 9.25E+02 | 1.43E+02 | - | - | - | 1.36E+09 | | |
| Nitrophenol, 3- | 554-84-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 8.18E-08 | 1.35E+04 | 2.91E+02 | - | - | - | 1.36E+09 | | |
| Nitrophenol, 4- | 100-02-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.70E-08 | 1.16E+04 | 2.91E+02 | - | - | - | 1.36E+09 | | |
| Nitrophenol, 4-amino-2- | 119-34-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 9.12E-11 | 1.10E+04 | 1.43E+02 | - | - | - | 1.36E+09 | | |
| Nitropropane, 2- | 79-46-9 | No | Yes | - | - | 2.70E-03 | U | - | - | 2.00E-02 | U | 1 | - | 1 | 1.31E+04 | 4.87E-03 | 1.70E+04 | 3.08E+01 | 4.86E+03 | - | 1.36E+09 | 1.37E-02 | ca | |
| Nitropyrene, 4- | 57835-92-4 | No | No | 1.20E+00 | U | 1.10E-04 | U | - | - | - | - | 1 | 0.13 | 1 | - | 1.00E-06 | 6.79E-02 | 8.61E+04 | - | - | - | 1.36E+09 | 4.24E-01 | ca |
| Nitroquinoline-1-oxide, 4- | 56-57-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.11E-12 | 2.34E+03 | 4.01E+03 | - | - | - | 1.36E+09 | | |
| Nitroso-N-ethylurea, N- | 759-73-9 | Yes | No | 2.70E+01 | U | 7.70E-03 | U | - | - | - | - | 1 | 0.1 | 1 | - | 5.40E-09 | 1.30E+04 | 2.10E+01 | - | - | - | 1.36E+09 | 4.51E-03 | ca |
| Nitroso-N-methylurea, N- | 684-93-5 | Yes | No | 1.20E+02 | U | 3.40E-02 | U | - | - | - | - | 1 | 0.1 | 1 | - | 4.05E-09 | 1.44E+04 | 1.10E+01 | - | - | - | 1.36E+09 | 1.02E-03 | ca |
| Nitroso-di-N-butylamine, N- | 924-16-3 | No | Yes | 5.40E+00 | U | 1.60E-03 | U | - | - | - | - | 1 | - | 1 | 2.43E+05 | 5.40E-04 | 1.27E+03 | 9.15E+02 | - | - | - | 1.36E+09 | 9.89E-02 | ca |
| Nitroso-di-N-propylamine, N- | 621-64-7 | No | No | 7.00E+00 | U | 2.00E-03 | U | - | - | - | - | 1 | 0.1 | 1 | - | 2.20E-04 | 1.30E+04 | 2.75E+02 | - | - | - | 1.36E+09 | 7.75E-02 | ca |
| Nitrosodiethanolamine, N- | 1116-54-7 | No | No | 2.80E+00 | U | 8.00E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.98E-10 | 1.00E+06 | 1.00E+00 | - | - | - | 1.36E+09 | 1.94E-01 | ca |
| Nitrosodiethylamine, N- | 55-18-5 | Yes | No | 1.50E+02 | U | 4.30E-02 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.48E-04 | 1.06E+05 | 8.29E+01 | - | - | - | 1.36E+09 | 8.12E-04 | ca |
| Nitrosodimethylamine, N- | 62-75-9 | Yes | Yes | 5.10E+01 | U | 1.40E-02 | U | 8.00E-06 | U | 4.00E-05 | U | 1 | - | 1 | 8.23E+04 | 7.44E-05 | 1.00E+06 | 2.28E+01 | 2.37E+05 | - | 1.36E+09 | 2.00E-03 | ca* | |
| Nitrosodiphenylamine, N- | 86-30-6 | No | No | 4.90E-03 | U | 2.60E-06 | U | - | - | - | - | 1 | 0.1 | 1 | - | 4.95E-05 | 3.50E+01 | 2.63E+03 | - | - | - | 1.36E+09 | 1.11E+02 | ca |
| Nitrosomethylethylamine, N- | 10595-95-6 | No | Yes | 2.20E+01 | U | 6.30E-03 | U | - | - | - | - | 1 | - | 1 | 1.21E+05 | 5.89E-05 | 3.00E+05 | 4.35E+01 | 1.08E+05 | - | 1.36E+09 | 1.99E-02 | ca | |
| Nitrosomethylvinylamine, N- | 4549-40-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.09E+04 | 1.47E-04 | 3.00E+04 | 4.35E+01 | 1.08E+04 | - | 1.36E+09 | | | |
| Nitrosomorpholine [N-] | 59-89-2 | No | No | 6.70E+00 | U | 1.90E-03 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.00E-06 | 1.00E+06 | 2.25E+01 | - | - | - | 1.36E+09 | 8.10E-02 | ca |
| Nitrosopiperidine [N-] | 100-75-4 | No | No | 9.40E+00 | U | 2.70E-03 | U | - | - | - | - | 1 | 0.1 | 1 | - | 3.45E-05 | 7.65E+04 | 1.68E+02 | - | - | - | 1.36E+09 | 5.77E-02 | ca |
| Nitrosopyrrolidine, N- | 930-55-2 | No | No | 2.10E+00 | U | 6.10E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 2.00E-06 | 1.00E+06 | 9.19E+01 | - | - | - | 1.36E+09 | 2.58E-01 | ca |
| Nitrotoluene, 4-Amino-2- | 119-32-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.39E-07 | 1.40E+03 | 1.79E+02 | - | - | - | 1.36E+09 | | |
| Nitrotoluene, m- | 99-08-1 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 3.80E-04 | 5.00E+02 | 3.63E+02 | - | - | - | 1.36E+09 | 6.32E-01 | nc |
| Nitrotoluene, o- | 88-72-2 | No | Yes | 2.20E-01 | U | - | - | 9.00E-04 | U | - | - | 1 | - | 1 | 1.37E+05 | 5.11E-04 | 6.50E+02 | 3.71E+02 | 1.51E+03 | - | 1.36E+09 | 3.16E+00 | ca** | |
| Nitrotoluene, p- | 99-99-0 | No | No | 1.60E-02 | U | - | - | 4.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.30E-04 | 4.42E+02 | 3.63E+02 | - | - | - | 1.36E+09 | 2.53E+01 | nc |
| Nonachlor, trans- | 39765-80-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.71E+06 | 1.01E-03 | 1.04E-02 | 1.13E+05 | - | - | - | 1.36E+09 | | |
| Nonane, n- | 111-84-2 | No | Yes | - | - | - | - | 3.00E-04 | U | 2.00E-02 | U | 1 | - | 1 | 1.04E+03 | 1.39E+02 | 2.20E-01 | 7.96E+02 | 6.86E+00 | - | 1.36E+09 | 1.13E+00 | nc | |
| Nonanol, n- | 143-08-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.65E+04 | 1.26E-03 | 1.40E+02 | 6.98E+01 | 7.27E+01 | - | 1.36E+09 | | | |
| Norflurazon | 27314-13-2 | No | No | - | - | - | - | 1.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.40E-08 | 3.37E+01 | 3.12E+03 | - | - | - | 1.36E+09 | 9.48E+01 | nc |
| OCDD | 3268-87-9 | No | No | 3.90E+01 | U | 1.14E-02 | U | 2.33E-06 | U | 1.33E-04 | U | 1 | 0.03 | 1 | - | 2.76E-04 | 2.29E-07 | 1.94E+06 | - | - | - | 1.36E+09 | 1.64E-02 | ca** |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| OCDF | 39001-02-0 | No | No | 3.90E+01 | U | 1.14E-02 | U | 2.33E-06 | U | 1.33E-04 | U | 1 | 0.03 | 1 | - | 7.73E-05 | 4.09E-07 | 1.09E+06 | - | 1.36E+09 | 1.64E-02 | ca** |
| Octabromodiphenyl Ether | 32536-52-0 | No | No | - | - | - | - | 3.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 3.06E-06 | 1.11E-08 | 9.90E+04 | - | 1.36E+09 | 1.90E+01 | nc |
| Octachlorostyrene | 29082-74-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 6.09E+05 | 9.40E-03 | 1.74E-03 | 5.51E+04 | - | 1.36E+09 | | |
| Octadecanoic Acid | 57-11-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.95E-05 | 5.97E-01 | 1.17E+04 | - | 1.36E+09 | | |
| Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) | 2691-41-0 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.006 | 1 | - | 3.54E-08 | 5.00E+00 | 5.32E+02 | - | 1.36E+09 | 3.86E+02 | nc |
| Octahydrotrimethylmethylethylphenanthrenol | 511-15-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.40E-05 | 1.15E-01 | 3.95E+05 | - | 1.36E+09 | | |
| Octamethylpyrophosphoramidate | 152-16-9 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.54E-08 | 1.00E+06 | 2.01E+01 | - | 1.36E+09 | 1.26E+01 | nc |
| Octanol, n- | 111-87-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.88E+04 | 1.00E-03 | 5.40E+02 | 3.83E+01 | 1.78E+02 | 1.36E+09 | | |
| Octanone, 2- | 111-13-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.54E+04 | 7.69E-03 | 8.99E+02 | 4.98E+01 | 3.60E+02 | 1.36E+09 | | |
| Octanone, 3- | 106-68-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.88E+04 | 5.31E-03 | 2.60E+03 | 5.21E+01 | 1.08E+03 | 1.36E+09 | | |
| Octyl Phthalate, di-N- | 117-84-0 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.05E-04 | 2.20E-02 | 1.41E+05 | - | 1.36E+09 | 6.32E+01 | nc |
| Oleic acid | 112-80-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 6.92E+05 | 1.83E-03 | 1.15E-02 | 1.17E+04 | 8.08E-01 | 1.36E+09 | | |
| Oleum | 8014-95-7 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Oryzalin | 19044-88-3 | No | No | 7.79E-03 | U | - | - | 1.40E-01 | U | - | - | 1 | 0.1 | 1 | - | 7.81E-08 | 2.50E+00 | 8.25E+02 | - | 1.36E+09 | 6.97E+01 | ca* |
| Oxadiazon | 19666-30-9 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.97E-06 | 7.00E-01 | 5.00E+03 | - | 1.36E+09 | 3.16E+01 | nc |
| Oxamyl | 23135-22-0 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 9.69E-09 | 2.80E+05 | 1.00E+01 | - | 1.36E+09 | 1.58E+02 | nc |
| Oxychlorane | 27304-13-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.52E-06 | 2.30E-02 | 1.55E+04 | - | 1.36E+09 | | |
| Oxyfluorfen | 42874-03-3 | No | No | 7.32E-02 | U | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.35E-05 | 1.16E-01 | 3.99E+04 | - | 1.36E+09 | 7.41E+00 | ca* |
| Ozone | 10028-15-6 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 4.94E+03 | - | - | 1.36E+09 | | |
| Paclbutrazol | 76738-62-0 | No | No | - | - | - | - | 1.30E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.39E-09 | 2.60E+01 | 9.23E+02 | - | 1.36E+09 | 8.22E+01 | nc |
| Paraquat Dichloride | 1910-42-5 | No | No | - | - | - | - | 4.50E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.32E-11 | 6.20E+05 | 6.78E+03 | - | 1.36E+09 | 2.84E+01 | nc |
| Parathion | 56-38-2 | No | No | - | - | - | - | 6.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.22E-05 | 1.10E+01 | 2.42E+03 | - | 1.36E+09 | 3.79E+01 | nc |
| PeCDD, 2,3,7,8- | 36088-22-9 | No | No | 1.30E+05 | U | 3.80E+01 | U | 7.00E-10 | U | 4.00E-08 | U | 1 | 0.03 | 1 | - | 8.99E-05 | 1.20E-04 | 4.33E+05 | - | 1.36E+09 | 4.93E-06 | ca** |
| PeCDF, 1,2,3,7,8- | 57117-41-6 | No | No | 3.90E+03 | U | 1.14E+00 | U | 2.33E-08 | U | 1.33E-06 | U | 1 | 0.03 | 1 | - | 2.05E-04 | 2.35E-04 | 2.33E+05 | - | 1.36E+09 | 1.64E-04 | ca** |
| PeCDF, 2,3,4,7,8- | 57117-31-4 | No | No | 3.90E+04 | U | 1.14E+01 | U | 2.33E-09 | U | 1.33E-07 | U | 1 | 0.03 | 1 | - | 2.05E-04 | 2.35E-04 | 2.33E+05 | - | 1.36E+09 | 1.64E-05 | ca** |
| Pebulate | 1114-71-2 | No | Yes | - | - | - | - | 5.00E-02 | U | - | - | 1 | - | 1 | 4.49E+04 | 9.69E-03 | 1.00E+02 | 2.99E+02 | - | 1.36E+09 | 3.91E+02 | nc |
| Pendimethalin | 40487-42-1 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.50E-05 | 3.30E-01 | 5.62E+03 | - | 1.36E+09 | 1.90E+02 | nc |
| Pentabromodiphenyl Ether | 32534-81-9 | No | Yes | - | - | - | - | 2.00E-03 | U | - | - | 1 | - | 1 | 5.14E+05 | 4.42E-03 | 2.40E-03 | 2.17E+04 | 3.13E-01 | 1.36E+09 | 1.56E+01 | cs |
| Pentabromodiphenyl ether, 2,2',4,4',5'- (BDE-99) | 60348-60-9 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 4.82E-05 | 7.86E-05 | 2.17E+04 | - | 1.36E+09 | 6.32E-01 | nc |
| Pentachloroaniline | 527-20-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.74E-05 | 2.98E-02 | 1.24E+04 | - | 1.36E+09 | | |
| Pentachlorobenzene | 608-93-5 | No | Yes | - | - | - | - | 8.00E-04 | U | - | - | 1 | - | 1 | 8.13E+04 | 2.87E-02 | 8.31E-01 | 3.71E+03 | - | 1.36E+09 | 6.26E+00 | nc |
| Pentachlorobiphenyl, 2',3,4,4',5'- (PCB 123) | 65510-44-3 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 0.14 | 1 | 7.35E+05 | 7.77E-03 | 1.60E-02 | 1.31E+05 | - | 1.36E+09 | 1.19E-01 | ca** |
| Pentachlorobiphenyl, 2,3',4,4',5'- (PCB 118) | 31508-00-6 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 0.14 | 1 | 5.89E+05 | 1.18E-02 | 1.34E-02 | 1.28E+05 | - | 1.36E+09 | 1.18E-01 | ca** |
| Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105) | 32598-14-4 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 0.14 | 1 | 6.01E+05 | 1.16E-02 | 3.40E-03 | 1.31E+05 | - | 1.36E+09 | 1.18E-01 | ca** |
| Pentachlorobiphenyl, 2,3,4,4',5'- (PCB 114) | 74472-37-0 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 0.14 | 1 | 1.05E+06 | 3.78E-03 | 1.60E-02 | 1.31E+05 | - | 1.36E+09 | 1.22E-01 | ca** |
| Pentachlorobiphenyl, 3,3',4,4',5'- (PCB 126) | 57465-28-8 | No | Yes | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 0.14 | 1 | 7.26E+05 | 7.77E-03 | 7.33E-03 | 1.28E+05 | - | 1.36E+09 | 3.58E-05 | ca** |
| Pentachlorocyclopentadiene | 25329-35-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.42E+04 | 2.45E-01 | 1.01E+01 | 9.41E+02 | - | 1.36E+09 | | |
| Pentachlorodibenzo-p-dioxin, 1,2,3,7,8- | 40321-76-4 | No | No | 1.30E+05 | U | 3.80E+01 | U | 7.00E-10 | U | 4.00E-08 | U | 1 | 0.03 | 1 | - | 1.07E-04 | 1.53E-04 | 4.16E+05 | - | 1.36E+09 | 4.93E-06 | ca** |
| Pentachloroethane | 76-01-7 | No | Yes | 9.00E-02 | U | - | - | - | - | - | - | 1 | - | 1 | 9.64E+03 | 7.93E-02 | 4.90E+02 | 1.36E+02 | 4.56E+02 | 1.36E+09 | 7.72E+00 | ca |
| Pentachloronitrobenzene | 82-68-8 | No | Yes | 2.60E-01 | U | - | - | 3.00E-03 | U | - | - | 1 | - | 1 | 4.31E+05 | 1.81E-03 | 4.40E-01 | 6.00E+03 | - | 1.36E+09 | 2.67E+00 | ca** |
| Pentachlorophenol | 87-86-5 | No | No | 4.00E-01 | U | 5.10E-06 | U | 5.00E-03 | U | - | - | 1 | 0.25 | 1 | - | 1.00E-06 | 1.40E+01 | 5.92E+02 | - | 1.36E+09 | 1.02E+00 | ca* |
| Pentaerythritol tetranitrate (PETN) | 78-11-5 | No | No | 4.00E-03 | U | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 5.40E-08 | 4.30E+01 | 6.48E+02 | - | 1.36E+09 | 1.26E+01 | nc |
| Pentamethyl dipropylentriamine | 3855-32-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.00E-09 | 1.00E+06 | 1.21E+02 | - | 1.36E+09 | | |
| Pentane, n- | 109-66-0 | No | Yes | - | - | - | - | - | - | 1.00E+00 | U | 1 | - | 1 | 7.79E+02 | 5.11E+01 | 3.80E+01 | 7.22E+01 | 3.88E+02 | 1.36E+09 | 8.13E+01 | nc |
| Pentyl Alcohol, N- | 71-41-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.84E+04 | 5.31E-04 | 2.20E+04 | 6.33E+00 | 3.04E+03 | 1.36E+09 | | |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| Perchlorate and Perchlorate Salts | 14797-73-0 | No | No | - | - | - | - | 7.00E-04 | U | - | - | 1 | - | 1 | - | - | 2.45E+05 | - | - | 1.36E+09 | 5.48E+00 | nc |
| Perfluorobutane Sulfonate (PFBS) | 375-73-5 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | - | 5.66E+04 | 6.17E+01 | - | 1.36E+09 | 1.26E+02 | nc |
| Perfluorooctane Sulfonate (PFOS) | 1763-23-1 | No | No | - | - | - | - | 2.00E-05 | U | - | - | 1 | 0.1 | 1 | - | - | 6.80E+02 | 3.72E+02 | - | 1.36E+09 | 1.26E-01 | nc |
| Perfluorooctanoic acid (PFOA) | 335-67-1 | No | No | 7.00E-02 | U | - | - | 2.00E-05 | U | - | - | 1 | 0.1 | 1 | - | - | 9.50E+03 | 1.15E+02 | - | 1.36E+09 | 1.26E-01 | nc |
| Permethrin | 52645-53-1 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 7.65E-05 | 6.00E-03 | 1.19E+05 | - | 1.36E+09 | 3.16E+02 | nc |
| Perylene | 198-55-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.13 | 1 | - | 1.49E-04 | 4.00E-04 | 5.99E+05 | - | 1.36E+09 | - | - |
| Pesticides (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Pesticides, organochlorinated (each) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Pesticides, organochlorinated (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Phenacetin | 62-44-2 | No | No | 2.20E-03 | U | 6.30E-07 | U | - | - | - | - | 1 | 0.1 | 1 | - | 8.71E-09 | 7.66E+02 | 4.10E+01 | - | 1.36E+09 | 2.47E+02 | ca |
| Phenanthrene | 85-01-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | 0.13 | 1 | 6.43E+05 | 1.73E-03 | 1.15E+00 | 1.67E+04 | - | 1.36E+09 | - | - |
| Phenmedipham | 13684-63-4 | No | No | - | - | - | - | 2.40E-01 | U | - | - | 1 | 0.1 | 1 | - | 3.44E-11 | 4.70E+00 | 2.59E+03 | - | 1.36E+09 | 1.52E+03 | nc |
| Phenol | 108-95-2 | No | No | - | - | - | - | 3.00E-01 | U | 2.00E-01 | U | 1 | 0.1 | 1 | - | 1.36E-05 | 8.28E+04 | 1.87E+02 | - | 1.36E+09 | 1.90E+03 | nc |
| Phenol, 2-(1-methylethoxy)-, methylcarbamate | 114-26-1 | No | No | - | - | - | - | 4.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 5.85E-08 | 1.86E+03 | 6.00E+01 | - | 1.36E+09 | 2.53E+01 | nc |
| Phenothiazine | 92-84-2 | No | No | - | - | - | - | 5.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.14E-06 | 1.59E+00 | 1.48E+03 | - | 1.36E+09 | 3.16E+00 | nc |
| Phenyl Isothiocyanate | 103-72-0 | No | Yes | - | - | - | - | 2.00E-04 | U | - | - | 1 | - | 1 | 7.08E+03 | 1.21E-01 | 8.99E+01 | 2.19E+02 | 1.29E+02 | 1.36E+09 | 1.56E+00 | nc |
| Phenylenediamine, m- | 108-45-2 | No | No | - | - | - | - | 6.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 5.11E-08 | 2.38E+05 | 3.38E+01 | - | 1.36E+09 | 3.79E+01 | nc |
| Phenylenediamine, o- | 95-54-5 | No | No | 1.20E-01 | U | - | - | 4.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.94E-07 | 4.04E+04 | 3.45E+01 | - | 1.36E+09 | 4.52E+00 | ca** |
| Phenylenediamine, p- | 106-50-3 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.75E-08 | 3.70E+04 | 3.38E+01 | - | 1.36E+09 | 6.32E+00 | nc |
| Phenylmercuric Acetate | 62-38-4 | No | No | - | - | - | - | 8.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 2.31E-08 | 4.37E+03 | 5.64E+01 | - | 1.36E+09 | 5.06E-01 | nc |
| Phenylphenol, 2- | 90-43-7 | No | No | 1.94E-03 | U | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.29E-05 | 7.00E+02 | 6.72E+03 | - | 1.36E+09 | 2.80E+02 | ca |
| Phorate | 298-02-2 | No | No | - | - | - | - | 2.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.79E-04 | 5.00E+01 | 4.60E+02 | - | 1.36E+09 | 1.26E+00 | nc |
| Phosgene | 75-44-5 | No | Yes | - | - | - | - | - | - | 3.00E-04 | U | 1 | - | 1 | 9.81E+02 | 6.83E-01 | 6.83E+03 | 1.00E+00 | 1.61E+03 | 1.36E+09 | 3.07E-02 | nc |
| Phosmet | 732-11-6 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.43E-07 | 2.44E+01 | 1.00E+01 | - | 1.36E+09 | 1.26E+02 | nc |
| Phosphine | 7803-51-2 | No | Yes | - | - | - | - | 3.00E-04 | U | 3.00E-04 | U | 1 | - | 1 | - | 9.98E-01 | 2.60E+05 | - | - | 1.36E+09 | 2.35E+00 | nc |
| Phosphoric Acid | 7664-38-2 | No | No | - | - | - | - | 4.86E+01 | U | 1.00E-02 | U | 1 | - | 1 | - | - | 5.48E+06 | - | - | 1.36E+09 | 3.00E+05 | cm |
| Phosphorus (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Phosphorus pentoxide | 1314-56-3 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Phosphorus, White | 7723-14-0 | No | Yes | - | - | - | - | 2.00E-05 | U | - | - | 1 | - | 1 | 6.92E+03 | 8.60E-02 | 3.00E+00 | 1.12E+03 | - | 1.36E+09 | 1.56E-01 | nc |
| Phthalates (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Phthalic Acid, P- | 100-21-0 | No | No | - | - | - | - | 1.00E+00 | U | - | - | 1 | 0.1 | 1 | - | 1.59E-11 | 1.50E+01 | 7.92E+01 | - | 1.36E+09 | 6.32E+03 | nc |
| Phthalic Acid, m- | 121-91-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.59E-11 | 1.30E+02 | 7.92E+01 | - | 1.36E+09 | - | - |
| Phthalic Acid, o- | 88-99-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 8.18E-10 | 6.97E+03 | 8.09E+01 | - | 1.36E+09 | - | - |
| Phthalic Anhydride | 85-44-9 | No | No | - | - | - | - | 2.00E+00 | U | 2.00E-02 | U | 1 | 0.1 | 1 | - | 6.66E-07 | 6.20E+03 | 1.00E+01 | - | 1.36E+09 | 1.26E+04 | nc |
| Picloram | 1918-02-1 | No | No | - | - | - | - | 7.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.18E-12 | 4.30E+02 | 3.88E+01 | - | 1.36E+09 | 4.42E+02 | nc |
| Picoline, 2- | 109-06-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 7.64E+04 | 4.07E-04 | 1.00E+06 | 1.15E+02 | 7.90E+05 | 1.36E+09 | - | - |
| Picramic Acid (2-Amino-4,6-dinitrophenol) | 96-91-3 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 3.99E-10 | 1.40E+03 | 2.27E+02 | - | 1.36E+09 | 6.32E-01 | nc |
| Picric Acid (2,4,6-Trinitrophenol) | 88-89-1 | No | No | - | - | - | - | 9.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 6.95E-10 | 1.27E+04 | 2.25E+03 | - | 1.36E+09 | 5.69E+00 | nc |
| Piperidine | 110-89-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.11E+04 | 1.82E-04 | 1.00E+06 | 5.47E+01 | 4.28E+05 | 1.36E+09 | - | - |
| Pirimiphos, Methyl | 29232-93-7 | No | No | - | - | - | - | 6.67E-05 | U | - | - | 1 | 0.1 | 1 | - | 2.87E-05 | 8.60E+00 | 3.75E+02 | - | 1.36E+09 | 4.22E-01 | nc |
| Polybrominated Biphenyls | 59536-65-1 | No | No | 3.00E+01 | U | 8.60E-03 | U | 7.00E-06 | U | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | 1.81E-02 | ca** |
| Polychlorinated Biphenyls (high risk) | 1336-36-3 | No | Yes | 2.00E+00 | U | 5.71E-04 | U | - | - | - | - | 1 | 0.14 | 1 | 5.32E+05 | 1.70E-02 | 7.00E-01 | 7.81E+04 | - | 1.36E+09 | 2.28E-01 | ca |
| Polycyclic aromatic hydrocarbons (PAH), Total | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.13 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Polycyclic aromatic hydrocarbons (PAH), Total (high molecular weight) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.13 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Polycyclic aromatic hydrocarbons (PAH), Total (low molecular weight) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.13 | 1 | - | - | - | - | - | 1.36E+09 | - | - |

Site-specific
Resident Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] | | |
|--|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|----------|-----|--|
| Polycyclic chlorinated hydrocarbons (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | | | |
| Polymeric Methylene Diphenyl Diisocyanate (PMDI) | 9016-87-9 | No | No | - | - | - | - | - | - | 6.00E-04 | U | 1 | 0.1 | 1 | - | 5.40E-10 | 1.76E-06 | 1.00E+10 | - | - | 1.36E+09 | 8.51E+04 | nc | |
| Polyphosphoric acid | 8017-16-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm | |
| Potassium | 7440-09-7 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | - | 1.36E+09 | | |
| Potassium Cyanide | 151-50-8 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | - | 1 | - | - | 7.20E+05 | - | - | - | 1.36E+09 | 1.56E+01 | nc | |
| Potassium Perchlorate | 7778-74-7 | No | No | - | - | - | - | 7.00E-04 | U | - | - | 1 | - | 1 | - | - | 1.50E+04 | - | - | - | 1.36E+09 | 5.48E+00 | nc | |
| Potassium Perfluorobutane Sulfonate | 29420-49-3 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.59E-11 | 4.62E+04 | - | - | - | 1.36E+09 | 1.26E+02 | nc | |
| Potassium Perfluorooctane Sulfonate | 2795-39-3 | No | No | - | - | - | - | 2.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 8.18E-05 | 6.80E+02 | - | - | - | 1.36E+09 | 1.26E-01 | nc | |
| Potassium Silver Cyanide | 506-61-6 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 0.04 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 3.91E+01 | nc | |
| Potassium tripolyphosphate | 13845-36-8 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm | |
| Praseodymium | 7440-10-0 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | - | 1.36E+09 | | |
| Praseodymium Chloride (Stable, Nonradioactive) | 10361-79-2 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 9.61E+05 | - | - | - | 1.36E+09 | | | |
| Prochloraz | 67747-09-5 | No | No | 1.50E-01 | U | - | - | 9.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 6.70E-07 | 3.40E+01 | 2.43E+03 | - | - | 1.36E+09 | 3.62E+00 | ca* | |
| Profluralin | 26399-36-0 | No | Yes | - | - | - | - | 6.00E-03 | U | - | - | 1 | - | 1 | 4.19E+05 | 1.19E-02 | 1.00E-01 | 3.05E+04 | - | - | 1.36E+09 | 4.69E+01 | nc | |
| Promethium | 7440-12-2 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | | | |
| Prometon | 1610-18-0 | No | No | - | - | - | - | 1.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.72E-08 | 7.50E+02 | 1.37E+02 | - | - | 1.36E+09 | 9.48E+01 | nc | |
| Prometryn | 7287-19-6 | No | No | - | - | - | - | 4.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 4.87E-07 | 3.30E+01 | 6.56E+02 | - | - | 1.36E+09 | 2.53E+02 | nc | |
| Propachlor | 1918-16-7 | No | No | - | - | - | - | 1.30E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.47E-05 | 5.80E+02 | 2.05E+02 | - | - | 1.36E+09 | 8.22E+01 | nc | |
| Propanil | 709-98-8 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 6.99E-08 | 1.52E+02 | 1.76E+02 | - | - | 1.36E+09 | 3.16E+01 | nc | |
| Propanoic acid, 2-(2,4-dichlorophenoxy)- | 120-36-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.55E-09 | 3.50E+02 | 4.85E+01 | - | - | 1.36E+09 | | | |
| Propargite | 2312-35-8 | No | No | 3.27E-02 | U | - | - | 4.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.62E-05 | 2.15E-01 | 3.67E+04 | - | - | 1.36E+09 | 1.66E+01 | ca* | |
| Propargyl Alcohol | 107-19-7 | No | Yes | - | - | - | - | 2.00E-03 | U | - | - | 1 | - | 1 | 6.28E+04 | 4.70E-05 | 1.00E+06 | 1.90E+00 | 1.11E+05 | 1.36E+09 | 1.56E+01 | nc | | |
| Propazine | 139-40-2 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.88E-07 | 8.60E+00 | 3.44E+02 | - | - | 1.36E+09 | 1.26E+02 | nc | |
| Propham | 122-42-9 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 7.52E-06 | 1.79E+02 | 2.19E+02 | - | - | 1.36E+09 | 1.26E+02 | nc | |
| Propiconazole | 60207-90-1 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 7.03E-08 | 1.10E+02 | 1.56E+03 | - | - | 1.36E+09 | 6.32E+02 | nc | |
| Propionaldehyde | 123-38-6 | No | Yes | - | - | - | - | - | - | 8.00E-03 | U | 1 | - | 1 | 8.96E+03 | 3.00E-03 | 3.06E+05 | 1.00E+00 | 3.26E+04 | 1.36E+09 | 7.47E+00 | nc | | |
| Propionitrile | 107-12-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.50E+04 | 1.51E-03 | 1.03E+05 | 8.51E+00 | 1.56E+04 | 1.36E+09 | | | | |
| Propionitrile, 3-(NN-dimethylamino) | 1738-25-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.89E+05 | 8.22E-07 | 1.00E+06 | 9.97E+00 | 1.60E+05 | 1.36E+09 | | | | |
| Propyl Alcohol, n- | 71-23-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.91E+04 | 3.03E-04 | 1.00E+06 | 1.90E+00 | 1.11E+05 | 1.36E+09 | | | | |
| Propyl benzene | 103-65-1 | No | Yes | - | - | - | - | 1.00E-01 | U | 1.00E+00 | U | 1 | - | 1 | 6.99E+03 | 4.29E-01 | 5.22E+01 | 8.13E+02 | 2.64E+02 | 1.36E+09 | 3.77E+02 | cs | | |
| Propylene | 115-07-1 | No | Yes | - | - | - | - | - | - | 3.00E+00 | U | 1 | - | 1 | 7.03E+02 | 8.01E+00 | 2.00E+02 | 2.17E+01 | 3.49E+02 | 1.36E+09 | 2.20E+02 | nc | | |
| Propylene Glycol | 57-55-6 | No | No | - | - | - | - | 2.00E+01 | U | - | - | 1 | 0.1 | 1 | - | 5.27E-07 | 1.00E+06 | 1.00E+00 | - | - | 1.36E+09 | 1.26E+05 | cm | |
| Propylene Glycol Dinitrate | 6423-43-4 | No | No | - | - | - | - | - | - | 2.72E-04 | U | 1 | 0.1 | 1 | - | 3.85E-05 | 3.26E+03 | 6.07E+01 | - | - | 1.36E+09 | 3.86E+04 | nc | |
| Propylene Glycol Monoethyl Ether | 1569-02-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.46E+05 | 3.02E-06 | 3.66E+05 | 1.30E+00 | 3.95E+04 | 1.36E+09 | | | | |
| Propylene Glycol Monomethyl Ether | 107-98-2 | No | Yes | - | - | - | - | 7.00E-01 | U | 2.00E+00 | U | 1 | - | 1 | 7.83E+04 | 3.76E-05 | 1.00E+06 | 1.00E+00 | 1.06E+05 | 1.36E+09 | 4.10E+03 | nc | | |
| Propylene Oxide | 75-56-9 | No | Yes | 2.40E-01 | U | 3.70E-06 | U | - | - | 3.00E-02 | U | 1 | - | 1 | 1.03E+04 | 2.85E-03 | 5.90E+05 | 5.19E+00 | 7.77E+04 | 1.36E+09 | 2.11E+00 | ca* | | |
| Propylamide | 23950-58-5 | No | No | - | - | - | - | 7.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.99E-07 | 1.50E+01 | 4.05E+02 | - | - | 1.36E+09 | 4.74E+02 | nc | |
| Prussian Blue (Ferric Ferrocyanide) | 14038-43-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | | | |
| Pyrazinyl phosphorothioate, O,O-diethyl O-2- | 297-97-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.52E-05 | 1.14E+03 | 3.95E+02 | - | - | 1.36E+09 | | | |
| Pyrene | 129-00-0 | No | Yes | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.13 | 1 | 2.38E+06 | 4.87E-04 | 1.35E-01 | 5.43E+04 | - | - | 1.36E+09 | 1.79E+02 | nc | |
| Pyridine | 110-86-1 | No | Yes | - | - | - | - | 1.00E-03 | U | - | - | 1 | - | 1 | 5.54E+04 | 4.50E-04 | 1.00E+06 | 7.17E+01 | 5.30E+05 | 1.36E+09 | 7.82E+00 | nc | | |
| Quinalphos | 13593-03-8 | No | No | - | - | - | - | 5.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.90E-06 | 2.20E+01 | 4.19E+03 | - | - | 1.36E+09 | 3.16E+00 | nc | |
| Quinoline | 91-22-5 | No | No | 3.00E+00 | U | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 6.83E-05 | 6.11E+03 | 1.54E+03 | - | - | 1.36E+09 | 1.81E-01 | ca | |
| Quizalofop-ethyl | 76578-14-8 | No | No | - | - | - | - | 9.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 4.33E-07 | 3.00E-01 | 7.74E+03 | - | - | 1.36E+09 | 5.69E+01 | nc | |
| Refractory Ceramic Fibers | NA | No | No | - | - | - | - | - | - | 3.00E-02 | U | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 4.25E+06 | cm | |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-----|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|---------|
| Resmethrin | 10453-86-8 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 5.44E-06 | 3.79E-02 | 3.11E+05 | - | 1.36E+09 | 1.90E+02 | nc |
| Resorcinol | 108-46-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.04E-09 | 7.17E+05 | 2.41E+02 | - | 1.36E+09 | - | - |
| Ronnel | 299-84-3 | No | Yes | - | - | - | - | 5.00E-02 | U | - | - | 1 | - | 1 | 4.64E+05 | 1.31E-03 | 1.00E+00 | 4.46E+03 | - | 1.36E+09 | 3.91E+02 | nc |
| Rotenone | 83-79-4 | No | No | - | - | - | - | 4.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 4.58E-12 | 2.00E-01 | 2.61E+05 | - | 1.36E+09 | 2.53E+01 | nc |
| Rubidium | 7440-17-7 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Rubidium Chloride | 7791-11-9 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 9.39E+07 | - | - | 1.36E+09 | - | - |
| Rubidium Hydroxide | 1310-82-3 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 1.73E+06 | - | - | 1.36E+09 | - | - |
| Rubidium Iodide | 7790-29-6 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 1.65E+06 | - | - | 1.36E+09 | - | - |
| Safrole | 94-59-7 | Yes | No | 2.20E-01 | U | 6.30E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | 3.71E-04 | 1.21E+02 | 2.07E+02 | - | 1.36E+09 | 5.54E-01 | ca |
| Samarium Chloride (Stable, Nonradioactive) | 10361-82-7 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 9.38E+05 | - | - | 1.36E+09 | - | - |
| Samarium Nitrate (Stable, Nonradioactive) | 10361-83-8 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 1.44E+06 | - | - | 1.36E+09 | - | - |
| Scandium | 7440-20-2 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Selenious Acid | 7783-00-8 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1 | - | 1 | - | - | 9.00E+05 | - | - | 1.36E+09 | 3.91E+01 | nc |
| Selenite | 14124-67-5 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Selenium | 7782-49-2 | No | No | - | - | - | - | 5.00E-03 | U | 2.00E-02 | U | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.91E+01 | nc |
| Selenium Sulfide | 7446-34-6 | No | No | - | - | - | - | 5.00E-03 | U | 2.00E-02 | U | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.91E+01 | nc |
| Selenourea | 630-10-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 1.00E+06 | 1.20E+01 | 1.72E+05 | 1.36E+09 | - | - |
| Sethoxydim | 74051-80-2 | No | No | - | - | - | - | 1.40E-01 | U | - | - | 1 | 0.1 | 1 | - | 8.83E-10 | 2.50E+01 | 4.37E+03 | - | 1.36E+09 | 8.85E+02 | nc |
| Silica (crystalline, respirable) | 7631-86-9 | No | No | - | - | - | - | - | - | 3.00E-03 | U | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 4.25E+05 | cm |
| Silicon | 7440-21-3 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Silver | 7440-22-4 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.91E+01 | nc |
| Silver Cyanide | 506-64-9 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 0.04 | - | 1 | - | - | 2.30E+01 | - | - | 1.36E+09 | 7.82E+02 | nc |
| Simazine | 122-34-9 | No | No | 1.20E-01 | U | - | - | 5.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 3.85E-08 | 6.20E+00 | 1.47E+02 | - | 1.36E+09 | 4.52E+00 | ca** |
| Sodium | 7440-23-5 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Sodium Acifluorfen | 62476-59-9 | No | No | - | - | - | - | 1.30E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.47E-09 | 2.50E+05 | 3.88E+03 | - | 1.36E+09 | 8.22E+01 | nc |
| Sodium Azide | 26628-22-8 | No | No | - | - | - | - | 4.00E-03 | U | - | - | 1 | - | 1 | - | - | 4.08E+05 | - | - | 1.36E+09 | 3.13E+01 | nc |
| Sodium Cyanide | 143-33-9 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 1 | - | 1 | - | - | 5.82E+05 | - | - | 1.36E+09 | 7.82E+00 | nc |
| Sodium Dichromate | 10588-01-9 | Yes | No | 5.00E-01 | U | 1.50E-01 | U | 2.00E-02 | U | 2.00E-04 | U | 0.025 | - | 1 | - | - | 1.87E+06 | - | - | 1.36E+09 | 2.96E-01 | ca |
| Sodium Diethyldithiocarbamate | 148-18-5 | No | No | 2.70E-01 | U | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | - | 3.64E+05 | 2.05E+02 | - | 1.36E+09 | 2.01E+00 | ca* |
| Sodium Fluoride | 7681-49-4 | No | No | - | - | - | - | 5.00E-02 | U | 1.30E-02 | U | 1 | - | 1 | - | - | 4.22E+04 | - | - | 1.36E+09 | 3.91E+02 | nc |
| Sodium Fluoroacetate | 62-74-8 | No | No | - | - | - | - | 2.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 4.46E-05 | 1.11E+06 | 1.44E+00 | - | 1.36E+09 | 1.26E-01 | nc |
| Sodium Hydroxide | 1310-73-2 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 4.20E+05 | - | - | 1.36E+09 | - | - |
| Sodium Metavanadate | 13718-26-8 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 1 | - | 1 | - | - | 2.10E+05 | - | - | 1.36E+09 | 7.82E+00 | nc |
| Sodium Perchlorate | 7601-89-0 | No | No | - | - | - | - | 7.00E-04 | U | - | - | 1 | - | 1 | - | - | 2.10E+06 | - | - | 1.36E+09 | 5.48E+00 | nc |
| Sodium Tungstate | 13472-45-2 | No | No | - | - | - | - | 8.00E-04 | U | - | - | 1 | - | 1 | - | - | 7.42E+05 | - | - | 1.36E+09 | 6.26E+00 | nc |
| Sodium Tungstate Dihydrate | 10213-10-2 | No | No | - | - | - | - | 8.00E-04 | U | - | - | 1 | - | 1 | - | - | 7.42E+05 | - | - | 1.36E+09 | 6.26E+00 | nc |
| Sodium acid pyrophosphate | 7758-16-9 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Sodium aluminum phosphate (acidic) | 7785-88-8 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Sodium aluminum phosphate (anhydrous) | 10279-59-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Sodium aluminum phosphate (tetrahydrate) | 10305-76-7 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Sodium hexametaphosphate | 10124-56-8 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Sodium polyphosphate | 68915-31-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Sodium trimetaphosphate | 7785-84-4 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Sodium tripolyphosphate | 7758-29-4 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Stearyl Acetate | 822-23-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.74E+04 | 8.87E-01 | 5.57E-04 | 8.27E+04 | - | 1.36E+09 | - | - |
| Stirofos (Tetrachlorovinphos) | 961-11-5 | No | No | 2.40E-02 | U | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 7.52E-08 | 1.10E+01 | 1.38E+03 | - | 1.36E+09 | 2.26E+01 | ca** |
| Strontium Chromate | 7789-06-2 | Yes | No | 5.00E-01 | U | 1.50E-01 | U | 2.00E-02 | U | 2.00E-04 | U | 0.025 | - | 1 | - | - | 1.06E+03 | - | - | 1.36E+09 | 2.96E-01 | ca |

Site-specific Resident Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] | |
|--|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|----------|------|
| Strontium, Stable | 7440-24-6 | No | No | - | - | - | - | 6.00E-01 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 4.69E+03 | nc |
| Strychnine | 57-24-9 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 3.09E-12 | 1.60E+02 | 5.40E+03 | - | - | 1.36E+09 | 1.90E+00 | nc |
| Styrene | 100-42-5 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E+00 | U | 1 | - | 1 | 9.36E+03 | 1.12E-01 | 3.10E+02 | 4.46E+02 | 8.67E+02 | 1.36E+09 | 6.01E+02 | nc | |
| Styrene-Acrylonitrile (SAN) Trimer | NA | No | No | - | - | - | - | 3.00E-03 | U | - | - | 1 | 0.1 | 1 | - | - | 8.49E+01 | - | - | - | 1.36E+09 | 1.90E+01 | nc |
| Sulfate | 14808-79-8 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 1.00E+06 | - | - | - | 1.36E+09 | - | - |
| Sulfide | 18496-25-8 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Sulfite | 14265-45-3 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Sulfolane | 126-33-0 | No | No | - | - | - | - | 1.00E-03 | U | 2.00E-03 | U | 1 | 0.1 | 1 | - | 1.98E-04 | 1.00E+06 | 9.08E+00 | - | - | 1.36E+09 | 6.32E+00 | nc |
| Sulfonylbis(4-chlorobenzene), 1,1'- | 80-07-9 | No | No | - | - | - | - | 8.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 5.60E-06 | 2.39E+00 | 2.86E+03 | - | - | 1.36E+09 | 5.06E+00 | nc |
| Sulfur | 7704-34-9 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Sulfur Dioxide | 7446-09-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.31E-02 | 1.07E+05 | - | - | - | 1.36E+09 | - | - |
| Sulfur Mustard | 505-60-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.78E+04 | 1.00E-03 | 6.84E+02 | 2.40E+02 | 1.05E+03 | 1.36E+09 | - | - | |
| Sulfur Trioxide | 7446-11-9 | No | Yes | - | - | - | - | - | - | 1.00E-03 | U | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 1.42E+05 | cm |
| Sulfuric Acid | 7664-93-9 | No | No | - | - | - | - | - | - | 1.00E-03 | U | 1 | - | 1 | - | - | 1.00E+06 | - | - | - | 1.36E+09 | 1.42E+05 | cm |
| Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester | 140-57-8 | No | No | 2.50E-02 | U | 7.10E-06 | U | 5.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 7.77E-06 | 5.90E-01 | 5.55E+03 | - | - | 1.36E+09 | 2.17E+01 | ca* |
| TCDD, 2,3,7,8- | 1746-01-6 | No | Yes | 1.30E+05 | U | 3.80E+01 | U | 7.00E-10 | U | 4.00E-08 | U | 1 | 0.03 | 1 | 1.96E+06 | 2.04E-03 | 2.00E-04 | 2.49E+05 | - | - | 1.36E+09 | 4.77E-06 | ca** |
| TCDF, 2,3,7,8- | 51207-31-9 | No | Yes | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 0.03 | 1 | 2.49E+06 | 6.83E-04 | 6.92E-04 | 1.40E+05 | - | - | 1.36E+09 | 4.80E-05 | ca** |
| TCMTB | 21564-17-0 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.65E-10 | 1.25E+02 | 3.37E+03 | - | - | 1.36E+09 | 1.90E+02 | nc |
| Tebuthiuron | 34014-18-1 | No | No | - | - | - | - | 7.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 4.91E-09 | 2.50E+03 | 4.24E+01 | - | - | 1.36E+09 | 4.42E+02 | nc |
| Technetium | 7440-26-8 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Tellurium | 13494-80-9 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 0.00E+00 | - | - | - | 1.36E+09 | - | - |
| Temphos | 3383-96-8 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 8.01E-08 | 2.70E-01 | 9.51E+04 | - | - | 1.36E+09 | 1.26E+02 | nc |
| Terbacil | 5902-51-2 | No | No | - | - | - | - | 1.30E-02 | U | - | - | 1 | 0.1 | 1 | - | 4.91E-09 | 7.10E+02 | 5.01E+01 | - | - | 1.36E+09 | 8.22E+01 | nc |
| Terbufos | 13071-79-9 | No | Yes | - | - | - | - | 2.50E-05 | U | - | - | 1 | - | 1 | 2.64E+05 | 9.81E-04 | 5.07E+00 | 9.99E+02 | 3.09E+01 | 1.36E+09 | 1.96E-01 | nc | |
| Terbutryn | 886-50-0 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 8.79E-07 | 2.50E+01 | 6.07E+02 | - | - | 1.36E+09 | 6.32E+00 | nc |
| Test Chemical | NA | No | No | - | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Tetrabromodiphenyl ether, 2,2',4,4'- (BDE-47) | 5436-43-1 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.21E-04 | 1.46E-03 | 1.32E+04 | - | - | 1.36E+09 | 6.32E-01 | nc |
| Tetrabutyl Lead | 1920-90-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.65E+03 | 3.25E+02 | 1.44E-02 | 7.88E+04 | - | - | 1.36E+09 | - | - |
| Tetrachloroaniline, 2,3,5,6- | 3481-20-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.35E-05 | 9.49E+00 | 7.42E+03 | - | - | 1.36E+09 | - | - |
| Tetrachlorobenzene, 1,2,3,4- | 634-66-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 5.99E+04 | 3.11E-02 | 5.92E+00 | 2.27E+03 | - | - | 1.36E+09 | - | - |
| Tetrachlorobenzene, 1,2,4,5- | 95-94-3 | No | Yes | - | - | - | - | 3.00E-04 | U | - | - | 1 | - | 1 | 5.07E+04 | 4.09E-02 | 5.95E-01 | 2.22E+03 | - | - | 1.36E+09 | 2.35E+00 | nc |
| Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77) | 32598-13-3 | No | No | 1.30E+01 | U | 3.80E-03 | U | 7.00E-06 | U | 4.00E-04 | U | 1 | 0.14 | 1 | - | 3.84E-04 | 5.69E-04 | 7.81E+04 | - | - | 1.36E+09 | 3.84E-02 | ca** |
| Tetrachlorobiphenyl, 3,4,4',5'- (PCB 81) | 70362-50-4 | No | Yes | 3.90E+01 | U | 1.14E-02 | U | 2.33E-06 | U | 1.33E-04 | U | 1 | 0.14 | 1 | 5.09E+05 | 9.12E-03 | 3.22E-02 | 7.81E+04 | - | - | 1.36E+09 | 1.16E-02 | ca** |
| Tetrachloroethane, 1,1,1,2- | 630-20-6 | No | Yes | 2.60E-02 | U | 7.40E-06 | U | 3.00E-02 | U | - | - | 1 | - | 1 | 5.68E+03 | 1.02E-01 | 1.07E+03 | 8.60E+01 | 6.80E+02 | 1.36E+09 | 1.99E+00 | ca | |
| Tetrachloroethane, 1,1,2,2- | 79-34-5 | No | Yes | 2.00E-01 | U | 5.80E-05 | U | 2.00E-02 | U | - | - | 1 | - | 1 | 1.51E+04 | 1.50E-02 | 2.83E+03 | 9.49E+01 | 1.90E+03 | 1.36E+09 | 6.04E-01 | ca | |
| Tetrachloroethylene | 127-18-4 | No | Yes | 2.10E-03 | U | 2.60E-07 | U | 6.00E-03 | U | 4.00E-02 | U | 1 | - | 1 | 2.35E+03 | 7.24E-01 | 2.06E+02 | 9.49E+01 | 1.66E+02 | 1.36E+09 | 8.10E+00 | nc | |
| Tetrachlorophenol, 2,3,4,5- | 4901-51-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 6.91E-06 | 2.87E+01 | 4.74E+03 | - | - | 1.36E+09 | - | - |
| Tetrachlorophenol, 2,3,4,6- | 58-90-2 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.61E-04 | 2.30E+01 | 2.80E+02 | - | - | 1.36E+09 | 1.90E+02 | nc |
| Tetrachlorophenols (total) | 25167-83-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.61E-04 | 2.30E+01 | 2.97E+03 | - | - | 1.36E+09 | - | - |
| Tetrachloroterephthalate, 2,3,5,6- | 2136-79-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.69E-11 | 1.75E+02 | 1.31E+03 | - | - | 1.36E+09 | - | - |
| Tetrachlorotoluene, p- alpha, alpha, alpha- | 5216-25-1 | No | Yes | 2.00E+01 | U | - | - | - | - | - | - | 1 | - | 1 | 1.06E+05 | 7.89E-03 | 4.04E+00 | 1.61E+03 | - | - | 1.36E+09 | 3.48E-02 | ca |
| Tetraethyl Dithiopyrophosphate | 3689-24-5 | No | No | - | - | - | - | 5.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.82E-04 | 3.00E+01 | 2.66E+02 | - | - | 1.36E+09 | 3.16E+00 | nc |
| Tetraethyl Lead | 78-00-2 | No | Yes | - | - | - | - | 1.00E-07 | U | - | - | 1 | - | 1 | 1.91E+03 | 2.32E+01 | 2.90E-01 | 6.48E+02 | 2.43E+00 | 1.36E+09 | 7.82E-04 | nc | |
| Tetrafluoroethane, 1,1,1,2- | 811-97-2 | No | Yes | - | - | - | - | - | - | 8.00E+01 | U | 1 | - | 1 | 1.22E+03 | 2.04E+00 | 2.04E+03 | 8.60E+01 | 2.04E+03 | 1.36E+09 | 1.02E+04 | cs | |
| Tetrahydrofuran | 109-99-9 | No | Yes | - | - | - | - | 9.00E-01 | U | 2.00E+00 | U | 1 | 0.03 | 1 | 1.20E+04 | 2.88E-03 | 1.00E+06 | 1.08E+01 | 1.65E+05 | 1.36E+09 | 1.81E+03 | nc | |
| Tetrahydrothiophene | 110-01-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.24E+03 | 2.50E-02 | 3.73E+03 | 8.00E+01 | 2.18E+03 | 1.36E+09 | - | - | |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] | |
|---|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|---------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|----------|------|
| Tetramethyl Lead | 75-74-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.31E+03 | 2.49E+01 | 1.50E+01 | 4.39E+01 | - | 1.36E+09 | - | - | |
| Tetramethylcyclohexane | 30501-43-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Tetrapotassium phosphate | 7320-34-5 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Tetrapropyl Lead | 3440-75-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.65E+03 | 1.05E+02 | 5.82E-03 | 7.15E+03 | - | 1.36E+09 | - | - | |
| Tetrasodium pyrophosphate | 7722-88-5 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | 8.14E+04 | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Tetryl (Trinitrophenylmethyl nitramine) | 479-45-8 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.00065 | 1 | - | 1.11E-07 | 7.40E+01 | 4.61E+03 | - | 1.36E+09 | - | 1.56E+01 | nc |
| Thallic Oxide | 1314-32-5 | No | No | - | - | - | - | 2.00E-05 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 1.56E-01 | nc |
| Thallium (I) Nitrate | 10102-45-1 | No | No | - | - | - | - | 1.00E-05 | U | - | - | 1 | - | 1 | - | - | 9.55E+04 | - | - | - | 1.36E+09 | 7.82E-02 | nc |
| Thallium (Soluble Salts) | 7440-28-0 | No | No | - | - | - | - | 1.00E-05 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 7.82E-02 | nc |
| Thallium Acetate | 563-68-8 | No | Yes | - | - | - | - | 1.00E-05 | U | - | - | 1 | - | 1 | - | - | 2.80E+04 | 1.51E+00 | - | - | 1.36E+09 | 7.82E-02 | nc |
| Thallium Carbonate | 6533-73-9 | No | Yes | - | - | - | - | 2.00E-05 | U | - | - | 1 | - | 1 | - | - | 5.20E+04 | 2.88E+00 | - | - | 1.36E+09 | 1.56E-01 | nc |
| Thallium Chloride | 7791-12-0 | No | No | - | - | - | - | 1.00E-05 | U | - | - | 1 | - | 1 | - | - | 2.90E+03 | - | - | - | 1.36E+09 | 7.82E-02 | nc |
| Thallium Selenite | 12039-52-0 | No | No | - | - | - | - | 1.00E-05 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 7.82E-02 | nc |
| Thallium Sulfate | 7446-18-6 | No | No | - | - | - | - | 2.00E-05 | U | - | - | 1 | - | 1 | - | - | 5.47E+04 | - | - | - | 1.36E+09 | 1.56E-01 | nc |
| Thiophenylsulfonamide | 79277-27-3 | No | No | - | - | - | - | 4.30E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.67E-12 | 2.24E+03 | 5.08E+01 | - | 1.36E+09 | - | 2.72E+02 | nc |
| Thiobencarb | 28249-77-6 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.09E-05 | 2.80E+01 | 1.63E+03 | - | 1.36E+09 | - | 6.32E+01 | nc |
| Thiocyanates | NA | No | No | - | - | - | - | 2.00E-04 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 1.56E+00 | nc |
| Thiocyanic Acid | 463-56-9 | No | Yes | - | - | - | - | 2.00E-04 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 1.56E+00 | nc |
| Thiodiglycol | 111-48-8 | No | No | - | - | - | - | 7.00E-02 | U | - | - | 1 | 0.0075 | 1 | - | 7.56E-08 | 1.00E+06 | 1.00E+00 | - | 1.36E+09 | - | 5.38E+02 | nc |
| Thiofanox | 39196-18-4 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 3.84E-07 | 5.20E+03 | 7.24E+01 | - | 1.36E+09 | - | 1.90E+00 | nc |
| Thiophanate, Methyl | 23564-05-8 | No | No | 1.16E-02 | U | - | - | 2.67E-02 | U | - | - | 1 | 0.1 | 1 | - | 4.95E-08 | 2.66E+01 | 3.27E+02 | - | 1.36E+09 | - | 4.68E+01 | ca** |
| Thiophene | 110-02-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.18E+03 | 9.28E-02 | 3.01E+03 | 8.00E+01 | 1.80E+03 | 1.36E+09 | - | - | |
| Thiram | 137-26-8 | No | No | - | - | - | - | 1.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 7.44E-06 | 3.00E+01 | 6.11E+02 | - | 1.36E+09 | - | 9.48E+01 | nc |
| Thorium | 7440-29-1 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Thymol | 89-83-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.97E-05 | 9.00E+02 | 1.47E+03 | - | 1.36E+09 | - | - | |
| Tin | 7440-31-5 | No | No | - | - | - | - | 6.00E-01 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 4.69E+03 | nc |
| Titanium | 7440-32-6 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Titanium Tetrachloride | 7550-45-0 | No | Yes | - | - | - | - | - | - | 1.00E-04 | U | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 1.42E+04 | nc |
| Toluene | 108-88-3 | No | Yes | - | - | - | - | 8.00E-02 | U | 5.00E+00 | U | 1 | - | 1 | 4.29E+03 | 2.71E-01 | 5.26E+02 | 2.34E+02 | 8.18E+02 | 1.36E+09 | 4.89E+02 | nc | |
| Toluene-2,4-diisocyanate | 584-84-9 | No | Yes | - | - | 1.10E-05 | U | - | - | 8.00E-06 | U | 1 | - | 1 | 7.61E+05 | 4.54E-04 | 3.76E+01 | 7.42E+03 | - | 1.36E+09 | - | 6.35E-01 | nc |
| Toluene-2,5-diamine | 95-70-5 | No | No | 1.80E-01 | U | - | - | 2.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 3.04E-07 | 7.72E+04 | 5.54E+01 | - | 1.36E+09 | - | 1.26E+00 | nc |
| Toluene-2,6-diisocyanate | 91-08-7 | No | Yes | - | - | 1.10E-05 | U | - | - | 8.00E-06 | U | 1 | - | 1 | 6.32E+05 | 4.54E-04 | 3.76E+01 | 7.58E+03 | 1.71E+03 | 1.36E+09 | 5.27E-01 | nc | |
| Toluenediamine, 2,3- | 2687-25-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.04E-07 | 2.46E+04 | 5.65E+01 | - | 1.36E+09 | - | - | |
| Toluenediamine, 3,4- | 496-72-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.06E-07 | 2.69E+04 | 5.54E+01 | - | 1.36E+09 | - | - | |
| Toluidine, o- (Methylaniline, 2-) | 95-53-4 | No | No | 1.60E-02 | U | 5.10E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | 8.09E-05 | 1.66E+04 | 1.15E+02 | - | 1.36E+09 | - | 3.39E+01 | ca |
| Toluidine, p- | 106-49-0 | No | No | 3.00E-02 | U | - | - | 4.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 8.26E-05 | 6.50E+03 | 1.13E+02 | - | 1.36E+09 | - | 1.81E+01 | ca** |
| Total Petroleum Hydrocarbons (Aliphatic High) | NA | No | Yes | - | - | - | - | 3.00E+00 | U | - | - | 1 | - | 1 | 1.06E+03 | 3.34E+02 | 3.70E-03 | 4.82E+03 | 3.41E-01 | 1.36E+09 | 2.35E+04 | cs | |
| Total Petroleum Hydrocarbons (Aliphatic Low) | NA | No | Yes | - | - | - | - | - | - | 6.00E-01 | U | 1 | - | 1 | 8.29E+02 | 7.36E+01 | 9.50E+00 | 1.32E+02 | 1.41E+02 | 1.36E+09 | 5.19E+01 | nc | |
| Total Petroleum Hydrocarbons (Aliphatic Medium) | NA | No | Yes | - | - | - | - | 1.00E-02 | U | 1.00E-01 | U | 1 | - | 1 | 1.04E+03 | 1.39E+02 | 2.20E-01 | 7.96E+02 | 6.86E+00 | 1.36E+09 | 9.56E+00 | cs | |
| Total Petroleum Hydrocarbons (Aromatic High) | NA | No | No | - | - | - | - | 4.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.62E-04 | 2.60E-01 | 5.55E+04 | - | 1.36E+09 | - | 2.53E+02 | nc |
| Total Petroleum Hydrocarbons (Aromatic Low) | NA | No | Yes | - | - | - | - | 4.00E-03 | U | 3.00E-02 | U | 1 | - | 1 | 3.54E+03 | 2.27E-01 | 1.79E+03 | 1.46E+02 | 1.82E+03 | 1.36E+09 | 8.18E+00 | nc | |
| Total Petroleum Hydrocarbons (Aromatic Medium) | NA | No | Yes | - | - | - | - | 4.00E-03 | U | 3.00E-03 | U | 1 | - | 1 | 5.24E+04 | 1.96E-02 | 2.78E+01 | 2.01E+03 | - | 1.36E+09 | - | 1.08E+01 | nc |
| Toxaphene | 8001-35-2 | No | No | 1.10E+00 | U | 3.20E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 2.45E-04 | 5.50E-01 | 7.72E+04 | - | 1.36E+09 | - | 4.93E-01 | ca |
| Tralometrin | 66841-25-6 | No | No | - | - | - | - | 7.50E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.61E-08 | 8.00E-02 | 1.91E+05 | - | 1.36E+09 | - | 4.74E+01 | nc |
| Tri-n-butyltin | 688-73-3 | No | Yes | - | - | - | - | 3.00E-04 | U | - | - | 1 | - | 1 | 3.36E+03 | 6.21E+01 | 7.30E-03 | 8.09E+03 | - | 1.36E+09 | - | 2.35E+00 | nc |

Site-specific Resident Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] | |
|---|-------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-----|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|----------|----|
| Triacetin | 102-76-1 | No | No | - | - | - | - | 8.00E+01 | U | - | - | 1 | 0.1 | 1 | - | 5.03E-07 | 5.80E+04 | 4.07E+01 | - | 1.36E+09 | 5.06E+05 | cm | |
| Triadimefon | 43121-43-3 | No | No | - | - | - | - | 3.40E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.32E-09 | 7.15E+01 | 2.99E+02 | - | 1.36E+09 | 2.15E+02 | nc | |
| Triallate | 2303-17-5 | No | Yes | 7.17E-02 | U | - | - | 2.50E-02 | U | - | - | 1 | - | 1 | 3.62E+05 | 4.91E-04 | 4.00E+00 | 1.01E+03 | - | 1.36E+09 | 9.70E+00 | ca* | |
| Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate) | 15136-87-5 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Triasulfuron | 82097-50-5 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.32E-11 | 3.20E+01 | 4.27E+02 | - | 1.36E+09 | 6.32E+01 | nc | |
| Triaziquone | 68-76-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.78E-14 | 1.07E+05 | 1.07E+02 | - | 1.36E+09 | - | - | |
| Tribenuron-methyl | 101200-48-0 | No | No | - | - | - | - | 8.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 4.17E-12 | 5.00E+01 | 9.47E+01 | - | 1.36E+09 | 5.06E+01 | nc | |
| Tribromobenzene, 1,2,4- | 615-54-3 | No | Yes | - | - | - | - | 5.00E-03 | U | - | - | 1 | - | 1 | 4.84E+04 | 1.39E-02 | 4.90E+00 | 6.14E+02 | - | 1.36E+09 | 3.91E+01 | nc | |
| Tribromochloromethane | 594-15-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.10E+04 | 1.62E-03 | 2.35E+02 | 4.39E+01 | - | 1.36E+09 | - | - | |
| Tribromodiphenyl Ether | 49690-94-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 7.79E+05 | 8.30E-04 | 2.68E-01 | 8.25E+03 | - | 1.36E+09 | - | - | |
| Tribromophenol, 2,4,6- | 118-79-6 | No | No | - | - | - | - | 9.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.45E-06 | 7.00E+01 | 8.05E+02 | - | 1.36E+09 | 5.69E+01 | nc | |
| Tributyl Phosphate | 126-73-8 | No | No | 9.00E-03 | U | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 5.76E-05 | 2.80E+02 | 2.35E+03 | - | 1.36E+09 | 6.03E+01 | ca** | |
| Tributyltin | 56573-85-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.12E+03 | 5.27E+01 | 1.70E+01 | 1.21E+04 | - | 1.36E+09 | - | - | |
| Tributyltin Compounds | NA | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | 1.90E+00 | nc |
| Tributyltin Oxide | 56-35-9 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.23E-05 | 1.95E+01 | 2.59E+07 | - | 1.36E+09 | 1.90E+00 | nc | |
| Tributyltin chloride | 1461-22-9 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.67E+04 | 3.12E+00 | 1.70E+01 | 1.21E+04 | 1.25E+03 | 1.36E+09 | - | - | |
| Tributyltin fluoride | 1983-10-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.74E+03 | 3.39E+01 | 6.00E+00 | 1.21E+04 | - | 1.36E+09 | - | - | |
| Tributyltin linoleate | 24124-25-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.21E+05 | 1.71E+02 | 1.98E-07 | 2.55E+07 | - | 1.36E+09 | - | - | |
| Tributyltin methacrylate | 2155-70-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.02E+04 | 1.96E+00 | 1.27E+00 | 4.92E+03 | - | 1.36E+09 | - | - | |
| Tributyltin naphthenate | 85409-17-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Tricaine Methanesulfonate | 886-86-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 6.66E-07 | 1.00E+05 | 5.90E+01 | - | 1.36E+09 | - | - | |
| Tricalcium phosphate | 7758-87-4 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Trichloro-1,2,2-trifluoroethane, 1,1,2- | 76-13-1 | No | Yes | - | - | - | - | 3.00E+01 | U | 5.00E+00 | U | 1 | - | 1 | 1.29E+03 | 2.15E+01 | 1.70E+02 | 1.97E+02 | 9.10E+02 | 1.36E+09 | 6.68E+02 | nc | |
| Trichloro-2'-hydroxydiphenylether | 3380-34-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.04E-07 | 1.00E+01 | 2.34E+04 | - | 1.36E+09 | - | - | |
| Trichloroacetic Acid | 76-03-9 | No | No | 7.00E-02 | U | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 5.52E-07 | 5.46E+04 | 3.23E+00 | - | 1.36E+09 | 7.75E+00 | ca* | |
| Trichloroaniline HCl, 2,4,6- | 33663-50-2 | No | No | 2.90E-02 | U | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.94E-12 | 2.10E+01 | 1.27E+03 | - | 1.36E+09 | 1.87E+01 | ca | |
| Trichloroaniline, 2,4,5- | 636-30-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.17E-05 | 5.16E+01 | 6.67E+02 | - | 1.36E+09 | - | - | |
| Trichloroaniline, 2,4,6- | 634-93-5 | No | No | 7.00E-03 | U | - | - | 3.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 5.48E-05 | 4.00E+01 | 4.44E+03 | - | 1.36E+09 | 1.90E-01 | nc | |
| Trichlorobenzene | 12002-48-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.46E+04 | 7.73E-02 | 3.00E+01 | 1.33E+03 | - | 1.36E+09 | - | - | |
| Trichlorobenzene, 1,2,3- | 87-61-6 | No | Yes | - | - | - | - | 8.00E-04 | U | - | - | 1 | - | 1 | 3.22E+04 | 5.11E-02 | 1.80E+01 | 1.38E+03 | - | 1.36E+09 | 6.26E+00 | nc | |
| Trichlorobenzene, 1,2,4- | 120-82-1 | No | Yes | 2.90E-02 | U | - | - | 1.00E-02 | U | 2.00E-03 | U | 1 | - | 1 | 2.99E+04 | 5.81E-02 | 4.90E+01 | 1.36E+03 | 4.05E+02 | 1.36E+09 | 5.78E+00 | nc | |
| Trichloroethane, 1,1,1- | 71-55-6 | No | Yes | - | - | - | - | 2.00E+00 | U | 5.00E+00 | U | 1 | - | 1 | 1.65E+03 | 7.03E-01 | 1.29E+03 | 4.39E+01 | 6.40E+02 | 1.36E+09 | 8.15E+02 | cs | |
| Trichloroethane, 1,1,2- | 79-00-5 | No | Yes | 5.70E-02 | U | 1.60E-05 | U | 4.00E-03 | U | 2.00E-04 | U | 1 | - | 1 | 7.22E+03 | 3.37E-02 | 4.59E+03 | 6.07E+01 | 2.16E+03 | 1.36E+09 | 1.50E-01 | nc | |
| Trichloroethylene | 79-01-6 | Yes | Yes | 4.60E-02 | U | 4.10E-06 | U | 5.00E-04 | U | 2.00E-03 | U | 1 | - | 1 | 2.21E+03 | 4.03E-01 | 1.28E+03 | 6.07E+01 | 6.92E+02 | 1.36E+09 | 4.12E-01 | nc | |
| Trichlorofluoromethane | 75-69-4 | No | Yes | - | - | - | - | 3.00E-01 | U | - | - | 1 | - | 1 | 1.04E+03 | 3.97E+00 | 1.10E+03 | 4.39E+01 | 1.23E+03 | 1.36E+09 | 2.35E+03 | cs | |
| Trichlorophenol, 2,4,5- | 95-95-4 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 6.62E-05 | 1.20E+03 | 1.60E+03 | - | 1.36E+09 | 6.32E+02 | nc | |
| Trichlorophenol, 2,4,6- | 88-06-2 | No | No | 1.10E-02 | U | 3.10E-06 | U | 1.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.06E-04 | 8.00E+02 | 3.81E+02 | - | 1.36E+09 | 6.32E+00 | nc | |
| Trichlorophenoxyacetic Acid, 2,4,5- | 93-76-5 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.55E-07 | 2.78E+02 | 1.07E+02 | - | 1.36E+09 | 6.32E+01 | nc | |
| Trichlorophenoxypropionic acid, -2,4,5 | 93-72-1 | No | No | - | - | - | - | 8.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 3.70E-07 | 7.10E+01 | 1.75E+02 | - | 1.36E+09 | 5.06E+01 | nc | |
| Trichloropropane, 1,1,2- | 598-77-6 | No | Yes | - | - | - | - | 5.00E-03 | U | - | - | 1 | - | 1 | 1.50E+04 | 1.30E-02 | 1.90E+03 | 9.49E+01 | 1.28E+03 | 1.36E+09 | 3.91E+01 | nc | |
| Trichloropropane, 1,2,3- | 96-18-4 | Yes | Yes | 3.00E+01 | U | - | - | 4.00E-03 | U | 3.00E-04 | U | 1 | - | 1 | 1.57E+04 | 1.40E-02 | 1.75E+03 | 1.16E+02 | 1.40E+03 | 1.36E+09 | 5.10E-03 | ca* | |
| Trichloropropene, 1,2,3- | 96-19-5 | No | Yes | - | - | - | - | 3.00E-03 | U | 3.00E-04 | U | 1 | - | 1 | 2.34E+03 | 7.20E-01 | 3.34E+02 | 1.16E+02 | 3.11E+02 | 1.36E+09 | 7.29E-02 | nc | |
| Trichlorotoluene, 2,3,6- | 2077-46-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.23E+04 | 6.13E-02 | 6.97E+00 | 2.27E+03 | - | 1.36E+09 | - | - | |
| Trichlorotoluene, alpha 2,6- | 2014-83-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 7.03E+04 | 1.17E-02 | 1.30E+01 | 1.20E+03 | - | 1.36E+09 | - | - | |
| Trichlorophenols (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Tricresyl Phosphate (TCP) | 1330-78-5 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.30E-05 | 3.60E-01 | 4.71E+04 | - | 1.36E+09 | 1.26E+02 | nc | |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina

**Site-specific
Resident Screening Levels (RSL) for Soil**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ² /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] | |
|--|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-------|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|----------|----|
| Tridiphane | 58138-08-2 | No | No | - | - | - | - | 3.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.68E-05 | 1.14E+00 | 3.45E+03 | - | 1.36E+09 | 1.90E+01 | nc | |
| Tridymite | 15468-32-3 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | | |
| Triethyl Lead | 5224-23-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.30E+03 | 1.40E+01 | 1.39E+03 | 2.21E+02 | 5.67E+03 | 1.36E+09 | | | |
| Triethyl phosphorothioate [O,O,O-] | 126-68-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.81E+04 | 1.10E-02 | 2.50E+02 | 1.38E+02 | 2.33E+02 | 1.36E+09 | | | |
| Triethylamine | 121-44-8 | No | Yes | - | - | - | - | - | - | 7.00E-03 | U | 1 | - | 1 | 1.58E+04 | 6.09E-03 | 6.86E+04 | 5.08E+01 | 2.78E+04 | 1.36E+09 | 1.15E+01 | nc | |
| Triethylene Glycol | 112-27-6 | No | No | - | - | - | - | 2.00E+00 | U | - | - | 1 | 0.1 | 1 | - | 1.29E-09 | 1.00E+06 | 1.00E+01 | - | 1.36E+09 | 1.26E+04 | nc | |
| Trifluoroethane, 1,1,1- | 420-46-2 | No | Yes | - | - | - | - | - | - | 2.00E+01 | U | 1 | - | 1 | 7.12E+02 | 3.15E+01 | 7.61E+02 | 4.39E+01 | 4.81E+03 | 1.36E+09 | 1.48E+03 | nc | |
| Trifluralin | 1582-09-8 | No | Yes | 7.70E-03 | U | - | - | 7.50E-03 | U | - | - | 1 | - | 1 | 5.12E+05 | 4.21E-03 | 1.84E-01 | 1.64E+04 | - | 1.36E+09 | 5.87E+01 | nc | |
| Trimagnesium phosphate | 7757-87-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Trimethyl Lead | 7442-13-9 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.12E+03 | 5.97E+00 | 2.17E+02 | 3.18E+01 | 3.08E+02 | 1.36E+09 | | | |
| Trimethyl Phosphate | 512-56-1 | No | No | 2.00E-02 | U | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.94E-07 | 5.00E+05 | 1.06E+01 | - | 1.36E+09 | 2.71E+01 | ca** | |
| Trimethyl-4-Propenyl-naphthalene, 1,2,3- | 26137-53-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 5.05E+05 | 9.55E-03 | 9.43E-02 | 3.94E+04 | - | 1.36E+09 | | | |
| Trimethylbenzene, 1,2,3- | 526-73-8 | No | Yes | - | - | - | - | 1.00E-02 | U | 6.00E-02 | U | 1 | - | 1 | 9.44E+03 | 1.78E-01 | 7.52E+01 | 6.27E+02 | 2.93E+02 | 1.36E+09 | 3.37E+01 | nc | |
| Trimethylbenzene, 1,2,4- | 95-63-6 | No | Yes | - | - | - | - | 1.00E-02 | U | 6.00E-02 | U | 1 | - | 1 | 7.91E+03 | 2.52E-01 | 5.70E+01 | 6.14E+02 | 2.18E+02 | 1.36E+09 | 3.03E+01 | nc | |
| Trimethylbenzene, 1,3,5- | 108-67-8 | No | Yes | - | - | - | - | 1.00E-02 | U | 6.00E-02 | U | 1 | - | 1 | 6.61E+03 | 3.59E-01 | 4.82E+01 | 6.02E+02 | 1.82E+02 | 1.36E+09 | 2.70E+01 | nc | |
| Trimethylethyl Lead | 1762-26-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.44E+03 | 1.44E+01 | 7.65E+00 | 8.60E+01 | 2.56E+01 | 1.36E+09 | | | |
| Trimethylpentane, 2,2,4- | 540-84-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 9.37E+02 | 1.24E+02 | 2.44E+00 | 2.40E+02 | 6.10E+01 | 1.36E+09 | | | |
| Trimethylpentene, 2,4,4- | 25167-70-8 | No | Yes | - | - | - | - | 1.00E-02 | U | - | - | 1 | - | 1 | 1.00E+03 | 3.05E+01 | 4.04E+00 | 2.40E+02 | 2.95E+01 | 1.36E+09 | 7.82E+01 | cs | |
| Trinitrobenzene, 1,3,5- | 99-35-4 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.019 | 1 | - | 2.66E-07 | 2.78E+02 | 1.68E+03 | - | 1.36E+09 | 2.25E+02 | nc | |
| Trinitrotoluene, 2,4,6- | 118-96-7 | No | No | 3.00E-02 | U | - | - | 5.00E-04 | U | - | - | 1 | 0.032 | 1 | - | 8.50E-07 | 1.15E+02 | 2.81E+03 | - | 1.36E+09 | 3.63E+00 | nc | |
| Triphenylphosphine Oxide | 791-28-6 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.15E-08 | 6.28E+01 | 1.95E+03 | - | 1.36E+09 | 1.26E+02 | nc | |
| Triphenyltin | 668-34-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.02E+06 | 3.21E-03 | 1.37E-01 | 3.36E+05 | - | 1.36E+09 | | | |
| Tripotassium phosphate | 7778-53-2 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Tripropyl Lead | 6618-03-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.67E+03 | 3.27E+01 | 2.15E-01 | 1.34E+03 | 3.08E+00 | 1.36E+09 | | | |
| Tris(1,3-Dichloro-2-propyl) Phosphate | 13674-87-8 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.07E-07 | 7.00E+00 | 1.11E+04 | - | 1.36E+09 | 1.26E+02 | nc | |
| Tris(1-chloro-2-propyl)phosphate | 13674-84-5 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.44E-06 | 1.20E+03 | 1.60E+03 | - | 1.36E+09 | 6.32E+01 | nc | |
| Tris(2,3-dibromopropyl)phosphate | 126-72-7 | No | Yes | 2.30E+00 | U | 6.60E-04 | U | - | - | - | - | 1 | - | 1 | 9.03E+05 | 8.91E-04 | 8.00E+00 | 9.71E+03 | 4.67E+02 | 1.36E+09 | 2.80E-01 | ca | |
| Tris(2-chloroethyl)phosphate | 115-96-8 | No | No | 2.00E-02 | U | - | - | 7.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.35E-04 | 7.00E+03 | 3.88E+02 | - | 1.36E+09 | 2.71E+01 | ca** | |
| Tris(2-ethylhexyl)phosphate | 78-42-2 | No | No | 3.20E-03 | U | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 3.21E-06 | 6.00E-01 | 2.47E+06 | - | 1.36E+09 | 1.70E+02 | ca** | |
| Trisbutoxyethyl Phosphate | 78-51-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.91E-10 | 1.10E+03 | 1.27E+03 | - | 1.36E+09 | | | |
| Trisodium phosphate | 7601-54-9 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 3.80E+05 | cm |
| Trithion | 786-19-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 8.79E-06 | 6.30E-01 | 8.31E+03 | - | 1.36E+09 | | | |
| Tungsten | 7440-33-7 | No | No | - | - | - | - | 8.00E-04 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 6.26E+00 | nc |
| Uranium (Soluble Salts) | NA | No | No | - | - | - | - | 2.00E-04 | U | 4.00E-05 | U | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 1.56E+00 | nc |
| Urea | 57-13-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.38E-05 | 5.45E+05 | 3.15E+00 | - | 1.36E+09 | | | |
| Urethane | 51-79-6 | Yes | No | 1.00E+00 | U | 2.90E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 2.63E-06 | 4.80E+05 | 1.21E+01 | - | 1.36E+09 | 1.22E-01 | ca | |
| Vanadium Pentoxide | 1314-62-1 | No | No | - | - | 8.30E-03 | U | 9.00E-03 | U | 7.00E-06 | U | 0.026 | - | 1 | - | - | 7.00E+02 | - | - | - | 1.36E+09 | 6.57E+01 | nc |
| Vanadium Sulfate | 36907-42-3 | No | No | - | - | - | - | - | - | - | - | 0.026 | - | 1 | - | - | - | - | - | - | 1.36E+09 | | |
| Vanadium and Compounds | 7440-62-2 | No | No | - | - | - | - | 5.04E-03 | U | 1.00E-04 | U | 0.026 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 3.93E+01 | nc |
| Vanadyl Sulfate | 27774-13-6 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | | |
| Vernolate | 1929-77-7 | No | Yes | - | - | - | - | 1.00E-03 | U | - | - | 1 | - | 1 | 1.23E+05 | 1.26E-03 | 9.00E+01 | 2.99E+02 | - | 1.36E+09 | 7.82E+00 | nc | |
| Vinclozolin | 50471-44-8 | No | No | - | - | - | - | 1.20E-03 | U | - | - | 1 | 0.1 | 1 | - | 7.11E-07 | 2.60E+00 | 2.84E+02 | - | 1.36E+09 | 7.59E+00 | nc | |
| Vinyl Acetate | 108-05-4 | No | Yes | - | - | - | - | 1.00E+00 | U | 2.00E-01 | U | 1 | - | 1 | 4.40E+03 | 2.09E-02 | 2.00E+04 | 5.58E+00 | 2.75E+03 | 1.36E+09 | 9.06E+01 | nc | |
| Vinyl Bromide | 593-60-2 | No | Yes | - | - | 3.20E-05 | U | - | - | 3.00E-03 | U | 1 | - | 1 | 1.37E+03 | 5.03E-01 | 7.60E+03 | 2.17E+01 | 2.47E+03 | 1.36E+09 | 1.20E-01 | ca** | |
| Vinyl Chloride | 75-01-4 | Yes | Yes | 7.20E-01 | U | 4.40E-06 | U | 3.00E-03 | U | 1.00E-01 | U | 1 | - | 1 | 9.55E+02 | 1.14E+00 | 8.80E+03 | 2.17E+01 | 3.92E+03 | 1.36E+09 | 5.92E-02 | ca | |
| Warfarin | 81-81-2 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.13E-07 | 1.70E+01 | 4.26E+02 | - | 1.36E+09 | 1.90E+00 | nc | |
| Xylene, P- | 106-42-3 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 1 | - | 1 | 5.58E+03 | 2.82E-01 | 1.62E+02 | 3.75E+02 | 3.89E+02 | 1.36E+09 | 5.62E+01 | nc | |

Site-specific
 Resident Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC ? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | S (mg/L) | K _{oc} (cm ³ /g) | Soil Saturation Concentration (mg/kg) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] | |
|--------------------|------------|----------|-------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-----|-----|--|---------------------------------|----------|--------------------------------------|---------------------------------------|--|-------------------------|----------|----|
| Xylene, m- | 108-38-3 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 1 | - | 1 | 5.46E+03 | 2.94E-01 | 1.61E+02 | 3.75E+02 | 3.87E+02 | 1.36E+09 | 5.50E+01 | nc | |
| Xylene, o- | 95-47-6 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 1 | - | 1 | 6.45E+03 | 2.12E-01 | 1.78E+02 | 3.83E+02 | 4.34E+02 | 1.36E+09 | 6.45E+01 | nc | |
| Xylenes | 1330-20-7 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 1 | - | 1 | 5.74E+03 | 2.71E-01 | 1.06E+02 | 3.83E+02 | 2.60E+02 | 1.36E+09 | 5.76E+01 | nc | |
| Ytterbium | 7440-64-4 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | | |
| Yttrium | 7440-65-5 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | | |
| Zinc Cyanide | 557-21-1 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 1 | - | 1 | - | - | 4.70E+00 | - | - | - | 1.36E+09 | 3.91E+02 | nc |
| Zinc Phosphide | 1314-84-7 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 2.35E+00 | nc |
| Zinc and Compounds | 7440-66-6 | No | No | - | - | - | - | 3.00E-01 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 2.35E+03 | nc |
| Zineb | 12122-67-7 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.11E-07 | 1.00E+01 | 1.35E+03 | - | - | 1.36E+09 | 3.16E+02 | nc |
| Zirconium | 7440-67-7 | No | No | - | - | - | - | 8.00E-05 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 6.26E-01 | nc |

**Site-specific
 Composite Worker Equation Inputs for Soil**

| Variable | Value |
|--|------------|
| TR (target cancer risk) unitless | 0.000001 |
| THQ (target hazard quotient) unitless | 0.1 |
| AT _w (averaging time) | 365 |
| EF _w (exposure frequency) d/yr | 250 |
| ED _w (exposure duration) yr | 25 |
| ET _w (exposure time) hr | 8 |
| LT (lifetime) yr | 70 |
| BW _w (body weight) | 80 |
| IR _w (soil ingestion rate) mg/day | 100 |
| SA _w (surface area) cm ² /day | 3527 |
| AF _w (skin adherence factor) mg/cm ² | 0.12 |
| City _{PEF} (Climate Zone) Selection | Default |
| A _s (acres) | 0.5 |
| Q/C _{wp} (inverse of the ratio of the geometric mean air concentration to the emission flu | 93.77 |
| PEF (particulate emission factor) m ³ /kg | 1359344438 |
| A (PEF Dispersion Constant) | 16.2302 |
| B (PEF Dispersion Constant) | 18.7762 |
| C (PEF Dispersion Constant) | 216.108 |
| V (fraction of vegetative cover) unitless | 0.5 |
| U _m (mean annual wind speed) m/s | 4.69 |
| U _t (equivalent threshold value) | 11.32 |
| F(x) (function dependant on U _m /U _t) unitless | 0.194 |
| City _{VF} (Climate Zone) Selection | Default |
| A _s (acres) | 0.5 |
| Q/C _{vol} (inverse of the ratio of the geometric mean air concentration to the emission flu | 68.18 |
| foc (fraction organic carbon in soil) g/g | 0.006 |
| p _b (dry soil bulk density) g/cm ³ | 1.5 |
| p _s (soil particle density) g/cm ³ | 2.65 |
| n (total soil porosity) L _{pore} /L _{soil} | 0.43396 |
| a (air-filled soil porosity) L _{air} /L _{soil} | 0.28396 |
| w (water-filled soil porosity) L _{water} /L _{soil} | 0.15 |
| T (exposure interval) s | 819936000 |
| A (VF Dispersion Constant) | 11.911 |
| B (VF Dispersion Constant) | 18.4385 |
| C (VF Dispersion Constant) | 209.7845 |
| City _{VF mass-loading} (Climate Zone) Selection | Default |
| VF _{ml} (volitization factor - mass-limit) m ³ /kg | |
| Q/C _{vol} (inverse of the ratio of the geometric mean air concentration to the emission fl | 68.18 |
| A _s (acres) | 0.5 |
| T (exposure interval) yr | 26 |
| d _s (depth of source) m | |
| p _b (dry soil bulk density) g/cm ³ | 1.5 |
| A (VF Dispersion Constant - Mass Limit) | 11.911 |
| B (VF Dispersion Constant - Mass Limit) | 18.4385 |
| C (VF Dispersion Constant - Mass Limit) | 209.7845 |

Site-specific Composite Worker Screening Levels (RSL) for Soil
 Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Acenaphthene | 83-32-9 | No | Yes | - | | - | | 6.00E-02 | U | - | | 1 | 0.13 | 1 | 1.41E+05 | 7.52E-03 | - | 3.90E+00 | 5.03E+03 | 1.36E+09 | 4.52E+03 | nc |
| Acenaphthylene | 208-96-8 | No | Yes | - | | - | | - | | - | | 1 | 0.13 | 1 | 1.89E+05 | 4.66E-03 | - | 1.61E+01 | 5.03E+03 | 1.36E+09 | | |
| Acephate | 30560-19-1 | No | No | - | | - | | 1.20E-03 | U | - | | 1 | 0.1 | 1 | - | 2.05E-11 | - | 8.18E+05 | 1.00E+01 | 1.36E+09 | 9.85E+01 | nc |
| Acetaldehyde | 75-07-0 | No | Yes | - | | 2.20E-06 | U | - | | 9.00E-03 | U | 1 | - | 1 | 8.70E+03 | 2.73E-03 | 1.07E+05 | 1.00E+06 | 1.00E+00 | 1.36E+09 | 3.43E+01 | nc |
| Acetochlor | 34256-82-1 | No | No | - | | - | | 2.00E-02 | U | - | | 1 | 0.1 | 1 | - | 9.12E-07 | - | 2.23E+02 | 2.98E+02 | 1.36E+09 | 1.64E+03 | nc |
| Acetone | 67-64-1 | No | Yes | - | | - | | 9.00E-01 | U | 3.09E+01 | U | 1 | - | 1 | 1.37E+04 | 1.43E-03 | 1.14E+05 | 1.00E+06 | 2.36E+00 | 1.36E+09 | 6.70E+04 | nc |
| Acetone Cyanohydrin | 75-86-5 | No | No | - | | - | | - | | 2.00E-03 | U | 1 | 0.1 | 1 | - | 8.05E-08 | - | 1.00E+06 | 1.00E+00 | 1.36E+09 | 1.19E+06 | cm |
| Acetonitrile | 75-05-8 | No | Yes | - | | - | | - | | 6.00E-02 | U | 1 | - | 1 | 1.30E+04 | 1.41E-03 | 1.28E+05 | 1.00E+06 | 4.67E+00 | 1.36E+09 | 3.41E+02 | nc |
| Acetophenone | 98-86-2 | No | Yes | - | | - | | 1.00E-01 | U | - | | 1 | - | 1 | 5.98E+04 | 4.25E-04 | 2.52E+03 | 6.13E+03 | 5.19E+01 | 1.36E+09 | 1.17E+04 | cs |
| Acetylaminofluorene, 2- | 53-96-3 | No | No | 3.80E+00 | U | 1.30E-03 | U | - | | - | | 1 | 0.1 | 1 | - | 7.85E-09 | - | 5.53E+00 | 2.21E+03 | 1.36E+09 | 6.05E-01 | ca |
| Acifluorfen | 50594-66-6 | No | No | - | | - | | - | | - | | 1 | 0.1 | 1 | - | 2.47E-09 | - | 1.20E+02 | 3.88E+03 | 1.36E+09 | | |
| Acridine | 260-94-6 | No | No | - | | - | | - | | - | | 1 | 0.1 | 1 | - | 1.62E-05 | - | 3.84E+01 | 1.64E+04 | 1.36E+09 | | |
| Acrolein | 107-02-8 | No | Yes | - | | - | | 5.00E-04 | U | 2.00E-05 | U | 1 | - | 1 | 6.90E+03 | 4.99E-03 | 2.27E+04 | 2.12E+05 | 1.00E+00 | 1.36E+09 | 6.04E-02 | nc |
| Acrylamide | 79-06-1 | Yes | No | 5.00E-01 | U | 1.00E-04 | U | 2.00E-03 | U | 6.00E-03 | U | 1 | 0.1 | 1 | - | 6.95E-08 | - | 3.90E+05 | 5.69E+00 | 1.36E+09 | 4.60E+00 | ca* |
| Acrylic Acid | 79-10-7 | No | Yes | - | | - | | 5.00E-01 | U | 1.00E-03 | U | 1 | - | 1 | 9.53E+04 | 1.51E-05 | 1.09E+05 | 1.00E+06 | 1.44E+00 | 1.36E+09 | 4.17E+01 | nc |
| Acrylonitrile | 107-13-1 | No | Yes | 5.40E-01 | U | 6.80E-05 | U | 4.00E-02 | U | 2.00E-03 | U | 1 | - | 1 | 7.68E+03 | 5.64E-03 | 1.13E+04 | 7.45E+04 | 8.51E+00 | 1.36E+09 | 1.13E+00 | ca** |
| Adiponitrile | 111-69-3 | No | No | - | | - | | - | | 6.00E-03 | U | 1 | 0.1 | 1 | - | 4.95E-08 | - | 8.00E+04 | 2.02E+01 | 1.36E+09 | 3.57E+06 | cm |
| Alachlor | 15972-60-8 | No | No | 5.60E-02 | U | - | | 1.00E-02 | U | - | | 1 | 0.1 | 1 | - | 3.40E-07 | - | 2.40E+02 | 3.12E+02 | 1.36E+09 | 4.10E+01 | ca* |
| Aldicarb | 116-06-3 | No | No | - | | - | | 1.00E-03 | U | - | | 1 | 0.1 | 1 | - | 5.89E-08 | - | 6.03E+03 | 2.46E+01 | 1.36E+09 | 8.21E+01 | nc |
| Aldicarb Sulfone | 1646-88-4 | No | No | - | | - | | 1.00E-03 | U | - | | 1 | 0.1 | 1 | - | 1.38E-07 | - | 1.00E+04 | 1.00E+01 | 1.36E+09 | 8.21E+01 | nc |
| Aldicarb sulfoxide | 1646-87-3 | No | No | - | | - | | - | | - | | 1 | 0.1 | 1 | - | 3.96E-08 | - | 2.80E+04 | 1.00E+01 | 1.36E+09 | | |
| Aldrin | 309-00-2 | No | Yes | 1.70E+01 | U | 4.90E-03 | U | 3.00E-05 | U | - | | 1 | - | 1 | 1.72E+06 | 1.80E-03 | - | 1.70E-02 | 8.20E+04 | 1.36E+09 | 1.84E-01 | ca* |
| Aliphatic Chlorinated Hydrocarbons (each) | NA | No | No | - | | - | | - | | - | | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | | |
| Aliphatic Chlorinated Hydrocarbons (total) | NA | No | No | - | | - | | - | | - | | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | | |
| Alizarin Red Compounds | NA | No | No | - | | - | | - | | - | | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | | |
| Allyl Alcohol | 107-18-6 | No | Yes | - | | - | | 5.00E-03 | U | 1.00E-04 | U | 1 | - | 1 | 3.41E+04 | 2.04E-04 | 1.11E+05 | 1.00E+06 | 1.90E+00 | 1.36E+09 | 1.49E+00 | nc |
| Allyl Chloride | 107-05-1 | No | Yes | 2.10E-02 | U | 6.00E-06 | U | - | | 1.00E-03 | U | 1 | - | 1 | 1.58E+03 | 4.50E-01 | 1.42E+03 | 3.37E+03 | 3.96E+01 | 1.36E+09 | 6.93E-01 | nc |
| Aluminum | 7429-90-5 | No | No | - | | - | | 1.00E+00 | U | 5.00E-03 | U | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.12E+05 | cm |
| Aluminum Phosphide | 20859-73-8 | No | No | - | | - | | 4.00E-04 | U | - | | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 4.67E+01 | nc |

Site-specific
Composite Worker Screening Levels (RSL) for Soil
 Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|------------------------------------|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Aluminum metaphosphate | 13776-88-0 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Ametryn | 834-12-8 | No | No | - | - | - | - | 9.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 9.93E-08 | - | 2.09E+02 | 4.28E+02 | 1.36E+09 | 7.39E+02 | nc |
| Amino-4-chlorobenzotrifluoride, 3- | 121-50-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.67E+05 | 5.03E-04 | - | 1.12E+02 | 7.90E+02 | 1.36E+09 | - | - |
| Aminoazobenzene, p- | 60-09-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.56E-09 | - | 3.20E+01 | 1.81E+03 | 1.36E+09 | - | - |
| Aminobiphenyl, 4- | 92-67-1 | No | No | 2.10E+01 | U | 6.00E-03 | U | - | - | - | - | 1 | 0.1 | 1 | - | 5.97E-06 | - | 2.24E+02 | 2.47E+03 | 1.36E+09 | 1.09E-01 | ca |
| Aminophenol, m- | 591-27-5 | No | No | - | - | - | - | 8.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 8.09E-09 | - | 2.70E+04 | 9.02E+01 | 1.36E+09 | 6.57E+03 | nc |
| Aminophenol, o- | 95-55-6 | No | No | - | - | - | - | 4.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 8.09E-09 | - | 2.00E+04 | 9.20E+01 | 1.36E+09 | 3.28E+02 | nc |
| Aminophenol, p- | 123-30-8 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.47E-08 | - | 1.60E+04 | 9.02E+01 | 1.36E+09 | 1.64E+03 | nc |
| Aminopyridine, 4- | 504-24-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.15E-07 | - | 8.33E+04 | 3.46E+01 | 1.36E+09 | - | - |
| Amitraz | 33089-61-1 | No | No | - | - | - | - | 2.50E-03 | U | - | - | 1 | 0.1 | 1 | - | 4.04E-04 | - | 1.00E+00 | 2.57E+05 | 1.36E+09 | 2.05E+02 | nc |
| Ammonium Perchlorate | 7790-98-9 | No | No | - | - | - | - | 7.00E-04 | U | - | - | 1 | - | 1 | - | - | - | 2.45E+05 | - | 1.36E+09 | 8.18E+01 | nc |
| Ammonium Sulfamate | 7773-06-0 | No | No | - | - | - | - | 2.00E-01 | U | - | - | 1 | - | 1 | - | - | - | 1.34E+06 | - | 1.36E+09 | 2.34E+04 | nc |
| Ammonium polyphosphate | 68333-79-9 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Amyl Alcohol, tert- | 75-85-4 | No | Yes | - | - | - | - | - | - | 3.00E-03 | U | 1 | - | 1 | 2.62E+04 | 5.64E-04 | 1.37E+04 | 1.10E+05 | 4.14E+00 | 1.36E+09 | 3.45E+01 | nc |
| Aniline | 62-53-3 | No | No | 5.70E-03 | U | 1.60E-06 | U | 7.00E-03 | U | 1.00E-03 | U | 1 | 0.1 | 1 | - | 8.26E-05 | - | 3.60E+04 | 7.02E+01 | 1.36E+09 | 4.03E+02 | ca** |
| Anilinothiazole | 1843-21-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Anthracene | 120-12-7 | No | Yes | - | - | - | - | 3.00E-01 | U | - | - | 1 | 0.13 | 1 | 5.24E+05 | 2.27E-03 | - | 4.34E-02 | 1.64E+04 | 1.36E+09 | 2.26E+04 | nc |
| Anthraquinone, 9,10- | 84-65-1 | No | No | 4.00E-02 | U | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 9.61E-07 | - | 1.35E+00 | 5.01E+03 | 1.36E+09 | 5.74E+01 | ca** |
| Antimony (metallic) | 7440-36-0 | No | No | - | - | - | - | 4.00E-04 | U | - | - | 0.15 | - | 1 | - | - | - | - | - | 1.36E+09 | 4.67E+01 | nc |
| Antimony Pentoxide | 1314-60-9 | No | No | - | - | - | - | 5.00E-04 | U | - | - | 0.15 | - | 1 | - | - | - | 3.00E+03 | - | 1.36E+09 | 5.84E+01 | nc |
| Antimony Potassium Tartrate | 11071-15-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | 5.26E+04 | 1.34E+01 | 1.36E+09 | - | - |
| Antimony Tetroxide | 1332-81-6 | No | No | - | - | - | - | 4.00E-04 | U | - | - | 0.15 | - | 1 | - | - | - | - | - | 1.36E+09 | 4.67E+01 | nc |
| Antimony Trichloride | 10025-91-9 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | 6.02E+06 | - | 1.36E+09 | - | - |
| Antimony Trioxide | 1309-64-4 | No | No | - | - | - | - | - | - | 2.00E-04 | U | 0.15 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.19E+05 | cm |
| Aroclor 1016 | 12674-11-2 | No | Yes | 7.00E-02 | U | 2.00E-05 | U | 7.00E-05 | U | - | - | 1 | 0.14 | 1 | 7.13E+05 | 8.18E-03 | - | 4.20E-01 | 4.77E+04 | 1.36E+09 | 5.13E+00 | nc |
| Aroclor 1221 | 11104-28-2 | No | Yes | 2.00E+00 | U | 5.71E-04 | U | - | - | - | - | 1 | 0.14 | 1 | 2.04E+05 | 9.32E-03 | - | 1.50E+01 | 8.40E+03 | 1.36E+09 | 8.32E-01 | ca |
| Aroclor 1232 | 11141-16-5 | No | Yes | 2.00E+00 | U | 5.71E-04 | U | - | - | - | - | 1 | 0.14 | 1 | 1.12E+05 | 3.01E-02 | - | 1.45E+00 | 8.40E+03 | 1.36E+09 | 7.19E-01 | ca |
| Aroclor 1242 | 53469-21-9 | No | Yes | 2.00E+00 | U | 5.71E-04 | U | - | - | - | - | 1 | 0.14 | 1 | 5.91E+05 | 1.40E-02 | - | 2.77E-01 | 7.81E+04 | 1.36E+09 | 9.50E-01 | ca |
| Aroclor 1248 | 12672-29-6 | No | Yes | 2.00E+00 | U | 5.71E-04 | U | - | - | - | - | 1 | 0.14 | 1 | 6.24E+05 | 1.80E-02 | - | 1.00E-01 | 7.65E+04 | 1.36E+09 | 9.54E-01 | ca |
| Aroclor 1254 | 11097-69-1 | No | Yes | 2.00E+00 | U | 5.71E-04 | U | 2.00E-05 | U | - | - | 1 | 0.14 | 1 | 8.44E+05 | 1.16E-02 | - | 4.30E-02 | 1.31E+05 | 1.36E+09 | 9.72E-01 | ca** |
| Aroclor 1260 | 11096-82-5 | No | Yes | 2.00E+00 | U | 5.71E-04 | U | - | - | - | - | 1 | 0.14 | 1 | 1.32E+06 | 1.37E-02 | - | 1.44E-02 | 3.50E+05 | 1.36E+09 | 9.91E-01 | ca |
| Aroclor 5460 | 11126-42-4 | No | Yes | - | - | - | - | 6.00E-04 | U | - | - | 1 | 0.14 | 1 | 9.56E+05 | 5.11E-03 | - | 5.32E-02 | 8.13E+04 | 1.36E+09 | 4.40E+01 | nc |
| Arsenic Salts | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.03 | 0.6 | - | - | - | - | - | 1.36E+09 | - | - |
| Arsenic, Inorganic | 7440-38-2 | No | No | 1.50E+00 | U | 4.30E-03 | U | 3.00E-04 | U | 1.50E-05 | U | 1 | 0.03 | 0.6 | - | - | - | - | - | 1.36E+09 | 3.00E+00 | ca* |
| Arsine | 7784-42-1 | No | No | - | - | - | - | 3.50E-06 | U | 5.00E-05 | U | 1 | - | 1 | - | - | - | 2.00E+05 | - | 1.36E+09 | 4.09E-01 | nc |
| Asulam | 3337-71-1 | No | No | - | - | - | - | 3.60E-02 | U | - | - | 1 | 0.1 | 1 | - | 6.99E-11 | - | 5.00E+03 | 2.78E+01 | 1.36E+09 | 2.95E+03 | nc |
| Atrazine | 1912-24-9 | No | No | 2.30E-01 | U | - | - | 3.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 9.65E-08 | - | 3.47E+01 | 2.25E+02 | 1.36E+09 | 9.99E+00 | ca |
| Auramine | 492-80-8 | No | No | 8.80E-01 | U | 2.50E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.49E-07 | - | 5.35E+01 | 4.46E+03 | 1.36E+09 | 2.61E+00 | ca |
| Avermectin B1 | 65195-55-3 | No | No | - | - | - | - | 4.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 5.40E-26 | - | 3.50E-04 | 8.77E+05 | 1.36E+09 | 3.28E+01 | nc |
| Azinphos-methyl | 86-50-0 | No | No | - | - | - | - | 3.00E-03 | U | 1.00E-02 | U | 1 | 0.1 | 1 | - | 9.77E-07 | - | 2.09E+01 | 5.19E+01 | 1.36E+09 | 2.46E+02 | nc |
| Azobenzene | 103-33-3 | No | Yes | 1.10E-01 | U | 3.10E-05 | U | - | - | - | - | 1 | - | 1 | 5.23E+05 | 5.52E-04 | - | 6.40E+00 | 3.76E+03 | 1.36E+09 | 2.60E+01 | ca |
| Azodicarbonamide | 123-77-3 | No | No | - | - | - | - | 1.00E+00 | U | 7.00E-06 | U | 1 | 0.1 | 1 | - | 3.35E-11 | - | 3.50E+01 | 6.96E+01 | 1.36E+09 | 3.97E+03 | nc |
| Barium | 7440-39-3 | No | No | - | - | - | - | 2.00E-01 | U | 5.00E-04 | U | 0.07 | - | 1 | - | - | - | - | - | 1.36E+09 | 2.17E+04 | nc |

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| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Barium Chromate | 10294-40-3 | Yes | No | 5.00E-01 | U | 1.50E-01 | U | 2.00E-02 | U | 2.00E-04 | U | 0.025 | - | 1 | - | - | 2.60E+00 | - | 1.36E+09 | 6.18E+00 | ca | |
| Barium Cyanide | 542-62-1 | No | No | - | - | - | - | - | - | - | - | 0.07 | - | 1 | - | - | 1.71E+04 | - | 1.36E+09 | - | - | |
| Benfluralin | 1861-40-1 | No | Yes | - | - | - | - | 5.00E-03 | U | - | - | 1 | - | 1 | 3.07E+05 | 1.19E-02 | 1.00E-01 | 1.64E+04 | 1.36E+09 | 5.84E+02 | nc | |
| Benomyl | 17804-35-2 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.02E-10 | - | 3.80E+00 | 3.36E+02 | 1.36E+09 | 4.10E+03 | nc |
| Bensulfuron-methyl | 83055-99-6 | No | No | - | - | - | - | 2.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 1.55E-13 | - | 1.20E+02 | 2.78E+01 | 1.36E+09 | 1.64E+04 | nc |
| Bentazon | 25057-89-0 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 8.91E-08 | - | 5.00E+02 | 1.00E+01 | 1.36E+09 | 2.46E+03 | nc |
| Benz[a]anthracene | 56-55-3 | Yes | Yes | 1.00E-01 | U | 6.00E-05 | U | - | - | - | - | 1 | 0.13 | 1 | 4.41E+06 | 4.91E-04 | 9.40E-03 | 1.77E+05 | 1.36E+09 | 2.06E+01 | ca | |
| Benzaldehyde | 100-52-7 | No | Yes | 4.00E-03 | U | - | - | 1.00E-01 | U | - | - | 1 | - | 1 | 2.25E+04 | 1.09E-03 | 1.16E+03 | 6.95E+03 | 1.11E+01 | 1.36E+09 | 8.18E+02 | ca* |
| Benzamide, N,N-diethyl-3-methyl (DEET) | 134-62-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | - | - | 8.50E-07 | - | 0.00E+00 | 1.13E+02 | 1.36E+09 | - | - |
| Benzene | 71-43-2 | No | Yes | 5.50E-02 | U | 7.80E-06 | U | 4.00E-03 | U | 3.00E-02 | U | 1 | - | 1 | 3.54E+03 | 2.27E-01 | 1.82E+03 | 1.79E+03 | 1.46E+02 | 1.36E+09 | 5.09E+00 | ca** |
| Benzene, Ethyldimethyl | 29224-55-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 9.13E+03 | 4.17E-01 | 1.31E+02 | 1.77E+01 | 1.20E+03 | 1.36E+09 | - | - |
| Benzene, Ethylmethyl | 25550-14-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.78E+04 | 2.05E-01 | 3.30E+02 | 7.45E+01 | 7.16E+02 | 1.36E+09 | - | - |
| Benzene, Methylpropenyl | 768-00-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.15E+04 | 2.78E-01 | 4.07E+02 | 5.00E+01 | 1.33E+03 | 1.36E+09 | - | - |
| Benzene, Methylpropyl | 28729-54-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Benzene, Trimethyl | 25551-13-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.23E+04 | 3.59E-01 | 1.82E+02 | 4.82E+01 | 6.02E+02 | 1.36E+09 | - | - |
| Benzenediamine-2-methyl sulfate, 1,4- | 6369-59-1 | No | No | 1.00E-01 | U | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 8.86E-22 | - | 1.00E+06 | 3.84E+01 | 1.36E+09 | 2.30E+01 | ca** |
| Benzenethiol | 108-98-5 | No | Yes | - | - | - | - | 1.00E-03 | U | - | - | 1 | - | 1 | 1.94E+04 | 1.37E-02 | 1.26E+03 | 8.35E+02 | 2.34E+02 | 1.36E+09 | 1.17E+02 | nc |
| Benzidine | 92-87-5 | Yes | No | 2.30E+02 | U | 6.70E-02 | U | 3.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.11E-09 | - | 3.22E+02 | 1.19E+03 | 1.36E+09 | 9.99E-03 | ca |
| Benzo(j)fluoranthene | 205-82-3 | No | No | 1.20E+00 | U | 1.10E-04 | U | - | - | - | - | 1 | 0.13 | 1 | - | 8.30E-06 | - | 2.50E-03 | 5.99E+05 | 1.36E+09 | 1.76E+00 | ca |
| Benzo(a)pyrene | 50-32-8 | Yes | No | 1.00E+00 | U | 6.00E-04 | U | 3.00E-04 | U | 2.00E-06 | U | 1 | 0.13 | 1 | - | 1.87E-05 | - | 1.62E-03 | 5.87E+05 | 1.36E+09 | 2.11E+00 | ca* |
| Benzo(b)fluoranthene | 205-99-2 | Yes | No | 1.00E-01 | U | 6.00E-05 | U | - | - | - | - | 1 | 0.13 | 1 | - | 2.69E-05 | - | 1.50E-03 | 5.99E+05 | 1.36E+09 | 2.11E+01 | ca |
| Benzo(g,h,i)perylene | 191-24-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.13 | 1 | - | 1.35E-05 | - | 2.60E-04 | 1.95E+06 | 1.36E+09 | - | - |
| Benzo(k)fluoranthene | 207-08-9 | Yes | No | 1.00E-02 | U | 6.00E-06 | U | - | - | - | - | 1 | 0.13 | 1 | - | 2.39E-05 | - | 8.00E-04 | 5.87E+05 | 1.36E+09 | 2.11E+02 | ca |
| Benzo[fluoranthenes, total | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Benzo[fluorene, 2,3- | 243-17-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.60E-04 | - | 4.00E-03 | 9.70E+04 | 1.36E+09 | - | - |
| Benzoic Acid | 65-85-0 | No | No | - | - | - | - | 4.00E+00 | U | - | - | 1 | 0.1 | 1 | - | 1.56E-06 | - | 3.40E+03 | 6.00E-01 | 1.36E+09 | 3.28E+05 | cm |
| Benzoic acid, 3,5-dichloro- | 51-36-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.43E-06 | - | 1.47E+02 | 4.26E+01 | 1.36E+09 | - | - |
| Benzoic acid, 4-hydroxy-, methyl ester | 99-76-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 9.12E-08 | - | 2.50E+03 | 8.63E+01 | 1.36E+09 | - | - |
| Benzothiazole | 95-16-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.53E-05 | - | 4.30E+03 | 8.47E+02 | 1.36E+09 | - | - |
| Benzotrichloride | 98-07-7 | No | Yes | 1.30E+01 | U | - | - | - | - | - | - | 1 | - | 1 | 6.77E+04 | 1.06E-02 | 3.23E+02 | 5.30E+01 | 1.00E+03 | 1.36E+09 | 2.52E-01 | ca |
| Benzyl Alcohol | 100-51-6 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 1.38E-05 | - | 4.29E+04 | 2.15E+01 | 1.36E+09 | 8.21E+03 | nc |
| Benzyl Chloride | 100-44-7 | No | Yes | 1.70E-01 | U | 4.90E-05 | U | 2.00E-03 | U | 1.00E-03 | U | 1 | - | 1 | 2.55E+04 | 1.68E-02 | 1.46E+03 | 5.25E+02 | 4.46E+02 | 1.36E+09 | 4.79E+00 | ca** |
| Beryllium and compounds | 7440-41-7 | No | No | - | - | 2.40E-03 | U | 2.00E-03 | U | 2.00E-05 | U | 0.007 | - | 1 | - | - | - | - | - | 1.36E+09 | 2.29E+02 | nc |
| Bifenox | 42576-02-3 | No | No | - | - | - | - | 9.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 4.42E-06 | - | 3.98E-01 | 3.68E+03 | 1.36E+09 | 7.39E+02 | nc |
| Bipenthrin | 82657-04-3 | No | No | - | - | - | - | 1.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 4.09E-05 | - | 1.00E-03 | 2.27E+06 | 1.36E+09 | 1.23E+03 | nc |
| Biphenyl, 1,1'- | 92-52-4 | No | Yes | 8.00E-03 | U | - | - | 5.00E-01 | U | 4.00E-04 | U | 1 | - | 1 | 1.14E+05 | 1.26E-02 | - | 7.48E+00 | 5.13E+03 | 1.36E+09 | 1.99E+01 | nc |
| Bis(2-chloro-1-methylethyl) ether | 108-60-1 | No | Yes | - | - | - | - | 4.00E-02 | U | - | - | 1 | - | 1 | 3.50E+04 | 3.03E-03 | 1.02E+03 | 1.70E+03 | 8.29E+01 | 1.36E+09 | 4.67E+03 | cs |
| Bis(2-chloroethoxy)methane | 111-91-1 | No | No | - | - | - | - | 3.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.57E-04 | - | 7.80E+03 | 1.44E+01 | 1.36E+09 | 2.46E+02 | nc |
| Bis(2-chloroethyl)ether | 111-44-4 | No | Yes | 1.10E+00 | U | 3.30E-04 | U | - | - | - | - | 1 | - | 1 | 4.25E+04 | 6.95E-04 | 5.05E+03 | 1.72E+04 | 3.22E+01 | 1.36E+09 | 1.03E+00 | ca |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | No | No | 1.40E-02 | U | 2.40E-06 | U | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.10E-05 | - | 2.70E-01 | 1.20E+05 | 1.36E+09 | 1.64E+02 | ca* |
| Bis(Octanoyloxy)Di-N-Butyl Stannane | 4731-77-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 6.15E+04 | 6.83E-01 | - | 1.01E-03 | 5.06E+04 | 1.36E+09 | - | - |
| Bis(chloromethyl)ether | 542-88-1 | No | Yes | 2.20E+02 | U | 6.20E-02 | U | - | - | - | - | 1 | - | 1 | 1.88E+03 | 1.78E-01 | 4.22E+03 | 2.20E+04 | 9.70E+00 | 1.36E+09 | 3.62E-04 | ca |
| Bis(oleoyloxy)dibutyl tin | 13323-62-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.91E+06 | 1.53E+02 | - | 1.43E-13 | 8.27E+09 | 1.36E+09 | - | - |
| Bisphenol A | 80-05-7 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 4.09E-10 | - | 1.20E+02 | 3.77E+04 | 1.36E+09 | 4.10E+03 | nc |
| Boron And Borates Only | 7440-42-8 | No | No | - | - | - | - | 2.00E-01 | U | 2.00E-02 | U | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 2.33E+04 | nc |

Site-specific

Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Boron Trichloride | 10294-34-5 | No | Yes | - | - | - | - | 2.00E+00 | U | 2.00E-02 | U | 1 | - | 1 | - | 7.48E-01 | - | - | - | 1.36E+09 | 2.29E+05 | cm |
| Boron Trifluoride | 7637-07-2 | No | Yes | - | - | - | - | 4.00E-02 | U | 1.30E-02 | U | 1 | - | 1 | - | - | - | 3.32E+06 | - | 1.36E+09 | 4.67E+03 | nc |
| Bromacil | 314-40-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 5.27E-09 | - | 8.15E+02 | 6.66E+01 | 1.36E+09 | - | - |
| Bromate | 15541-45-4 | No | No | 7.00E-01 | U | - | - | 4.00E-03 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 4.67E+00 | ca |
| Bromine | 7726-95-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | 2.55E+05 | 3.36E+04 | - | 1.36E+09 | - | - |
| Bromo-2-chloroethane, 1- | 107-04-0 | No | Yes | 2.00E+00 | U | 6.00E-04 | U | - | - | - | - | 1 | - | 1 | 5.92E+03 | 3.72E-02 | 2.38E+03 | 6.90E+03 | 3.96E+01 | 1.36E+09 | 1.13E-01 | ca |
| Bromo-3-fluorobenzene, 1- | 1073-06-9 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.12E+04 | 1.02E-01 | 8.96E+02 | 3.78E+02 | 3.75E+02 | 1.36E+09 | - | - |
| Bromo-4-Ethylbenzene, 1- | 1585-07-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.54E+04 | 1.28E-01 | 1.03E+02 | 2.33E+01 | 7.16E+02 | 1.36E+09 | - | - |
| Bromoacetic acid | 79-08-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.67E-07 | - | 1.75E+06 | 1.44E+00 | 1.36E+09 | - | - |
| Bromoacetophenone, 3- | 2142-63-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.60E-04 | - | 3.44E+02 | 8.32E+01 | 1.36E+09 | - | - |
| Bromobenzene | 108-86-1 | No | Yes | - | - | - | - | 8.00E-03 | U | 6.00E-02 | U | 1 | - | 1 | 8.37E+03 | 1.01E-01 | 6.79E+02 | 4.46E+02 | 2.34E+02 | 1.36E+09 | 1.78E+02 | nc |
| Bromochloromethane | 74-97-5 | No | Yes | - | - | - | - | - | - | 4.00E-02 | U | 1 | - | 1 | 3.58E+03 | 5.97E-02 | 4.03E+03 | 1.67E+04 | 2.17E+01 | 1.36E+09 | 6.27E+01 | nc |
| Bromodichloromethane | 75-27-4 | No | Yes | 6.20E-02 | U | 3.70E-05 | U | 2.00E-02 | U | - | - | 1 | - | 1 | 3.96E+03 | 8.67E-02 | 9.31E+02 | 3.03E+03 | 3.18E+01 | 1.36E+09 | 1.28E+00 | ca |
| Bromodiphenyl Ether, p- | 101-55-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.86E+05 | 4.78E-03 | 2.69E+01 | 1.45E+00 | 3.08E+03 | 1.36E+09 | - | - |
| Bromofluorobenzene, p- | 460-00-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.14E+04 | 1.02E-01 | 3.22E+02 | 1.36E+02 | 3.75E+02 | 1.36E+09 | - | - |
| Bromoform | 75-25-2 | No | Yes | 7.90E-03 | U | 1.10E-06 | U | 2.00E-02 | U | - | - | 1 | - | 1 | 9.70E+03 | 2.19E-02 | 9.14E+02 | 3.10E+03 | 3.18E+01 | 1.36E+09 | 8.57E+01 | ca* |
| Bromomethane | 74-83-9 | No | Yes | - | - | - | - | 1.40E-03 | U | 5.00E-03 | U | 1 | - | 1 | 1.40E+03 | 3.00E-01 | 3.59E+03 | 1.52E+04 | 1.32E+01 | 1.36E+09 | 3.01E+00 | nc |
| Bromophenol, p- | 106-41-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 6.17E-06 | - | 1.40E+04 | 3.00E+02 | 1.36E+09 | - | - |
| Bromophenyl-phenyl phthalate, 4- | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Bromophos | 2104-96-3 | No | Yes | - | - | - | - | 5.00E-03 | U | - | - | 1 | - | 1 | 1.24E+05 | 8.38E-03 | - | 3.00E-01 | 2.02E+03 | 1.36E+09 | 5.84E+02 | nc |
| Bromopropane, 1- | 106-94-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.14E+03 | 2.99E-01 | 9.66E+02 | 2.45E+03 | 3.96E+01 | 1.36E+09 | - | - |
| Bromopyridine, 2- | 109-04-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.15E-04 | - | 2.08E+04 | 1.15E+02 | 1.36E+09 | - | - |
| Bromotrichloromethane | 75-62-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.30E+04 | 1.52E-02 | 3.18E+02 | 8.69E+02 | 4.39E+01 | 1.36E+09 | - | - |
| Bromoxynil | 1689-84-5 | No | No | 1.03E-01 | U | - | - | 1.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 5.40E-09 | - | 1.30E+02 | 3.30E+02 | 1.36E+09 | 2.23E+01 | ca* |
| Bromoxynil Octanoate | 1689-99-2 | No | Yes | - | - | - | - | 1.50E-02 | U | - | - | 1 | - | 1 | 4.75E+05 | 1.30E-03 | - | 8.00E-02 | 4.25E+03 | 1.36E+09 | 1.75E+03 | nc |
| Butadiene, 1,3- | 106-99-0 | No | Yes | 3.40E+00 | U | 3.00E-05 | U | - | - | 2.00E-03 | U | 1 | - | 1 | 8.67E+02 | 3.01E+00 | 6.67E+02 | 7.35E+02 | 3.96E+01 | 1.36E+09 | 2.59E-01 | ca** |
| Butanediol, 2,3- | 513-85-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.18E-06 | - | 1.00E+06 | 1.00E+00 | 1.36E+09 | - | - |
| Butanoic acid, 4-(2,4-dichlorophenoxy)- | 94-82-6 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 9.36E-08 | - | 4.60E+01 | 3.70E+02 | 1.36E+09 | 2.46E+03 | nc |
| Butanol | 35296-72-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.12E+04 | 3.70E-04 | 1.47E+04 | 1.25E+05 | 2.92E+00 | 1.36E+09 | - | - |
| Butanol, N- | 71-36-3 | No | Yes | - | - | - | - | 1.00E-01 | U | - | - | 1 | - | 1 | 3.00E+04 | 3.60E-04 | 7.64E+03 | 6.32E+04 | 3.47E+00 | 1.36E+09 | 1.17E+04 | cs |
| Butanone-2, 4-chloro-4,4-difluoro | 1515-16-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Butyl Alcohol, t- | 75-65-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.87E+04 | 3.70E-04 | - | 1.00E+06 | 2.11E+00 | 1.36E+09 | - | - |
| Butyl Benzyl Phthalate | 85-68-7 | No | No | 1.90E-03 | U | - | - | 2.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 5.15E-05 | - | 2.69E+00 | 7.16E+03 | 1.36E+09 | 1.21E+03 | ca* |
| Butyl Formate, tert- | 762-75-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.35E+03 | 2.82E-02 | 1.71E+03 | 1.12E+04 | 7.91E+00 | 1.36E+09 | - | - |
| Butyl alcohol, sec- | 78-92-2 | No | Yes | - | - | - | - | 2.00E+00 | U | 3.00E+01 | U | 1 | - | 1 | 2.92E+04 | 3.70E-04 | 2.13E+04 | 1.81E+05 | 2.92E+00 | 1.36E+09 | 1.45E+05 | cs |
| Butylacetate | 123-86-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.55E+03 | 1.15E-02 | 1.79E+03 | 8.40E+03 | 1.85E+01 | 1.36E+09 | - | - |
| Butylate | 2008-41-5 | No | Yes | - | - | - | - | 5.00E-02 | U | - | - | 1 | - | 1 | 8.64E+04 | 3.45E-03 | - | 4.50E+01 | 3.86E+02 | 1.36E+09 | 5.84E+03 | nc |
| Butylated hydroxyanisole | 25013-16-5 | No | No | 2.00E-04 | U | 5.70E-08 | U | - | - | - | - | 1 | 0.1 | 1 | - | 4.78E-05 | - | 2.13E+02 | 8.41E+02 | 1.36E+09 | 1.15E+04 | ca |
| Butylated hydroxytoluene | 128-37-0 | No | No | 3.60E-03 | U | - | - | 3.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 1.68E-04 | - | 6.00E-01 | 1.48E+04 | 1.36E+09 | 6.38E+02 | ca* |
| Butylbenzene, n- | 104-51-8 | No | Yes | - | - | - | - | 5.00E-02 | U | - | - | 1 | - | 1 | 8.14E+03 | 6.50E-01 | 1.07E+02 | 1.18E+01 | 1.48E+03 | 1.36E+09 | 5.84E+03 | cs |
| Butylbenzene, sec- | 135-98-8 | No | Yes | - | - | - | - | 1.00E-01 | U | - | - | 1 | - | 1 | 7.34E+03 | 7.20E-01 | 1.45E+02 | 1.76E+01 | 1.33E+03 | 1.36E+09 | 1.17E+04 | cs |
| Butylbenzene, tert- | 98-06-6 | No | Yes | - | - | - | - | 1.00E-01 | U | - | - | 1 | - | 1 | 7.35E+03 | 5.40E-01 | 1.83E+02 | 2.95E+01 | 1.00E+03 | 1.36E+09 | 1.17E+04 | cs |
| Butylchloride, t- | 507-20-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.70E+03 | 5.23E-01 | 1.33E+03 | 2.88E+03 | 4.39E+01 | 1.36E+09 | - | - |
| Butylphthalyl Butylglycolate | 85-70-1 | No | No | - | - | - | - | 1.00E+00 | U | - | - | 1 | 0.1 | 1 | - | 8.42E-07 | - | 8.80E+00 | 1.12E+04 | 1.36E+09 | 8.21E+04 | nc |
| Butyltin | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Cacodylic Acid | 75-60-5 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 7.36E-13 | - | 2.00E+06 | 4.39E+01 | 1.36E+09 | 1.64E+03 | nc |
| Cadmium (Diet) | 7440-43-9 | No | No | - | - | 1.80E-03 | U | 1.00E-03 | U | 1.00E-05 | U | 0.025 | 0.001 | 1 | - | - | - | - | - | 1.36E+09 | 9.82E+01 | nc |

Site-specific
Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] | |
|----------------------------------|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|-------------|----|
| Calcium | 7440-70-2 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | | |
| Calcium Chromate | 13765-19-0 | Yes | No | 5.00E-01 | U | 1.50E-01 | U | 2.00E-02 | U | 2.00E-04 | U | 0.025 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 6.18E+00 ca | |
| Calcium Cyanide | 592-01-8 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 1.17E+02 nc | |
| Calcium pyrophosphate | 7790-76-3 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 5.68E+06 cm | |
| Caprolactam | 105-60-2 | No | No | - | - | - | - | 5.00E-01 | U | 2.20E-03 | U | 1 | 0.1 | 1 | - | 1.03E-06 | - | 7.72E+05 | 2.45E+01 | 1.36E+09 | 3.98E+04 | nc | |
| Captan | 2425-06-1 | No | No | 1.50E-01 | U | 4.30E-05 | U | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.01E-07 | - | 1.40E+00 | 7.83E+02 | 1.36E+09 | 1.53E+01 | ca* | |
| Captan | 133-06-2 | No | No | 2.30E-03 | U | 6.60E-07 | U | 1.30E-01 | U | - | - | 1 | 0.1 | 1 | - | 2.86E-07 | - | 5.10E+02 | 2.52E+02 | 1.36E+09 | 9.99E+02 | ca* | |
| Carbaryl | 63-25-2 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 1.34E-07 | - | 1.10E+02 | 3.55E+02 | 1.36E+09 | 8.21E+03 | nc | |
| Carbazole | 86-74-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.74E-06 | - | 1.80E+00 | 9.16E+03 | 1.36E+09 | | | |
| Carbofuran | 1563-66-2 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.26E-07 | - | 3.20E+02 | 9.53E+01 | 1.36E+09 | 4.10E+02 | nc | |
| Carbon Disulfide | 75-15-0 | No | Yes | - | - | - | - | 1.00E-01 | U | 7.00E-01 | U | 1 | - | 1 | 1.17E+03 | 5.89E-01 | 7.38E+02 | 2.16E+03 | 2.17E+01 | 1.36E+09 | 3.48E+02 | nc | |
| Carbon Tetrachloride | 56-23-5 | No | Yes | 7.00E-02 | U | 6.00E-06 | U | 4.00E-03 | U | 1.00E-01 | U | 1 | - | 1 | 1.49E+03 | 1.13E+00 | 4.58E+02 | 7.93E+02 | 4.39E+01 | 1.36E+09 | 2.87E+00 | ca* | |
| Carbonyl Sulfide | 463-58-1 | No | Yes | - | - | - | - | - | - | 1.00E-01 | U | 1 | - | 1 | 6.45E+02 | 2.49E+01 | 5.88E+03 | 1.22E+03 | 1.00E+00 | 1.36E+09 | 2.83E+01 | nc | |
| Carbosulfan | 55285-14-8 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.09E-05 | - | 3.00E-01 | 1.20E+04 | 1.36E+09 | 8.21E+02 | nc | |
| Carboxin | 5234-68-4 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 1.31E-08 | - | 1.47E+02 | 1.69E+02 | 1.36E+09 | 8.21E+03 | nc | |
| Catechol | 120-80-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.91E-08 | - | 4.61E+05 | 2.45E+02 | 1.36E+09 | | | |
| Ceric oxide | 1306-38-3 | No | No | - | - | - | - | - | - | 9.00E-04 | U | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | 5.36E+05 | cm |
| Cerium, Stable | 7440-45-1 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | | |
| Chloral | 75-87-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.55E+05 | 1.19E-07 | 3.39E+03 | 3.00E+04 | 2.14E+00 | 1.36E+09 | | | |
| Chloral Hydrate | 302-17-0 | No | Yes | - | - | - | - | 1.00E-01 | U | - | - | 1 | - | 1 | 1.45E+05 | 2.33E-07 | - | 7.93E+05 | 1.00E+00 | 1.36E+09 | 1.17E+04 | nc | |
| Chloramben | 133-90-4 | No | No | - | - | - | - | 1.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.58E-09 | - | 7.00E+02 | 2.14E+01 | 1.36E+09 | 1.23E+03 | nc | |
| Chloramine | 127-65-1 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | | |
| Chloranil | 118-75-2 | No | No | 4.03E-01 | U | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.34E-08 | - | 2.50E+02 | 3.08E+02 | 1.36E+09 | 5.70E+00 | ca | |
| Chlorate (ClO3) as | 14866-68-3 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | | |
| Chlordane | 12789-03-6 | No | Yes | 3.50E-01 | U | 1.00E-04 | U | 5.00E-04 | U | 7.00E-04 | U | 1 | 0.04 | 1 | 1.53E+06 | 1.99E-03 | - | 5.60E-02 | 6.75E+04 | 1.36E+09 | 7.66E+00 | ca** | |
| Chlordane (alpha) | 5103-71-9 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.48E+06 | 1.99E-03 | - | 5.60E-02 | 6.75E+04 | 1.36E+09 | | | |
| Chlordane (gamma) | 5103-74-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.48E+06 | 1.99E-03 | - | 5.60E-02 | 6.75E+04 | 1.36E+09 | | | |
| Chlordecone (Kepone) | 143-50-0 | No | No | 1.00E+01 | U | 4.60E-03 | U | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 2.20E-06 | - | 2.70E+00 | 1.75E+04 | 1.36E+09 | 2.30E-01 | ca | |
| Chlorfenvinphos | 470-90-6 | No | No | - | - | - | - | 7.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.18E-06 | - | 1.24E+02 | 1.26E+03 | 1.36E+09 | 5.74E+01 | nc | |
| Chloride | 16887-00-6 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | | |
| Chlorimuron, Ethyl- | 90982-32-4 | No | No | - | - | - | - | 9.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 7.44E-14 | - | 1.20E+03 | 7.18E+01 | 1.36E+09 | 7.39E+03 | nc | |
| Chlorinated Hydrocarbons (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | | |
| Chlorine | 7782-50-5 | No | Yes | - | - | - | - | 1.00E-01 | U | 1.45E-04 | U | 1 | - | 1 | 1.22E+03 | 4.78E-01 | 2.78E+03 | 6.30E+03 | - | 1.36E+09 | 7.76E-02 | nc | |
| Chlorine Dioxide | 10049-04-4 | No | Yes | - | - | - | - | 3.00E-02 | U | 2.00E-04 | U | 1 | - | 1 | - | 1.64E+00 | - | - | - | 1.36E+09 | 3.40E+03 | nc | |
| Chlorite | 14998-27-7 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | | |
| Chlorite (Sodium Salt) | 7758-19-2 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | - | 1 | - | - | - | - | 6.40E+05 | - | 1.36E+09 | 3.50E+03 | nc |
| Chloro-1,1-difluoroethane, 1- | 75-68-3 | No | Yes | - | - | - | - | - | - | 5.00E+01 | U | 1 | - | 1 | 1.03E+03 | 2.40E+00 | 1.14E+03 | 1.40E+03 | 4.39E+01 | 1.36E+09 | 2.25E+04 | cs | |
| Chloro-1,3-butadiene, 2- | 126-99-8 | No | Yes | - | - | 3.00E-04 | U | 2.00E-02 | U | 2.00E-02 | U | 1 | - | 1 | 1.08E+03 | 2.29E+00 | 7.86E+02 | 8.75E+02 | 6.07E+01 | 1.36E+09 | 4.41E-02 | ca | |
| Chloro-2-methylaniline HCl, 4- | 3165-93-3 | No | No | 4.60E-01 | U | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 6.38E-05 | - | 9.54E+02 | 3.52E+02 | 1.36E+09 | 5.00E+00 | ca | |
| Chloro-2-methylaniline, 4- | 95-69-2 | No | No | 1.00E-01 | U | 7.70E-05 | U | 3.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 8.14E-05 | - | 9.54E+02 | 1.85E+02 | 1.36E+09 | 2.30E+01 | ca* | |
| Chloro-2-methylphenol, 4- | 1570-64-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.62E-05 | - | 4.00E+03 | 4.92E+02 | 1.36E+09 | | | |
| Chloro-4-methylphenol | 35421-08-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | | |
| Chloro-6-fluorophenol, 2- | 2040-90-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | | |
| Chloroacetaldehyde, 2- | 107-20-0 | No | Yes | 2.70E-01 | U | - | - | - | - | - | - | 1 | - | 1 | 1.62E+04 | 9.77E-04 | 1.18E+04 | 1.11E+05 | 1.00E+00 | 1.36E+09 | 1.21E+01 | ca | |
| Chloroacetamide | 79-07-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.61E-07 | - | 9.00E+04 | 5.69E+00 | 1.36E+09 | | | |
| Chloroacetic Acid | 79-11-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.79E-07 | - | 8.58E+05 | 1.44E+00 | 1.36E+09 | | | |

Site-specific

Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|------------------------------------|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Chloroacetophenone, 2- | 532-27-4 | No | No | - | - | - | - | - | - | 3.00E-05 | U | 1 | 0.1 | 1 | - | 1.41E-04 | - | 1.10E+03 | 9.89E+01 | 1.36E+09 | 1.79E+04 | nc |
| Chloroaniline | 27134-26-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.20E-04 | - | 8.16E+03 | 1.15E+02 | 1.36E+09 | - | - |
| Chloroaniline, 3- | 108-42-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.09E-05 | - | 5.40E+03 | 1.13E+02 | 1.36E+09 | - | - |
| Chloroaniline, p- | 106-47-8 | No | No | 2.00E-01 | U | - | - | 4.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 4.74E-05 | - | 3.90E+03 | 1.13E+02 | 1.36E+09 | 1.15E+01 | ca* |
| Chlorobenzene | 108-90-7 | No | Yes | - | - | - | - | 2.00E-02 | U | 5.00E-02 | U | 1 | - | 1 | 6.45E+03 | 1.27E-01 | 7.61E+02 | 4.98E+02 | 2.34E+02 | 1.36E+09 | 1.33E+02 | nc |
| Chlorobenzene sulfonic acid, p- | 98-66-8 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 7.60E-08 | - | 3.06E+05 | 1.61E+01 | 1.36E+09 | 8.21E+03 | nc |
| Chlorobenzenes (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Chlorobenzilate | 510-15-6 | No | No | 1.10E-01 | U | 3.10E-05 | U | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.96E-06 | - | 1.30E+01 | 1.54E+03 | 1.36E+09 | 2.09E+01 | ca* |
| Chlorobenzoic Acid, 2- | 118-91-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | - | - | 2.66E-06 | - | 2.09E+03 | 2.71E+01 | 1.36E+09 | - | - |
| Chlorobenzoic Acid, p- | 74-11-3 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.28E-06 | - | 7.20E+01 | 2.66E+01 | 1.36E+09 | 2.46E+03 | nc |
| Chlorobenzotrifluoride, 3-nitro-4- | 121-17-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.55E+05 | 5.60E-03 | 5.48E+02 | 3.56E+01 | 2.55E+03 | 1.36E+09 | - | - |
| Chlorobenzotrifluoride, 4- | 98-56-6 | No | Yes | - | - | - | - | 3.00E-03 | U | 3.00E-01 | U | 1 | - | 1 | 6.77E+03 | 1.42E+00 | 2.91E+02 | 2.90E+01 | 1.61E+03 | 1.36E+09 | 2.51E+02 | nc |
| Chlorobiphenyl, p- | 2051-62-9 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.29E+05 | 2.34E-02 | - | 1.34E+00 | 8.23E+03 | 1.36E+09 | - | - |
| Chlorobutane, 1- | 109-69-3 | No | Yes | - | - | - | - | 4.00E-02 | U | - | - | 1 | - | 1 | 1.76E+03 | 6.83E-01 | 7.29E+02 | 1.10E+03 | 7.22E+01 | 1.36E+09 | 4.67E+03 | cs |
| Chlorobutane, 2- | 78-86-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.46E+03 | 9.85E-01 | 6.51E+02 | 1.00E+03 | 6.07E+01 | 1.36E+09 | - | - |
| Chlorocyclopentadiene | 41851-50-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.88E+03 | 9.16E-01 | 1.01E+03 | 9.70E+02 | 1.28E+02 | 1.36E+09 | - | - |
| Chlorodibromoethane | 73506-94-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Chlorodifluoromethane | 75-45-6 | No | Yes | - | - | - | - | - | - | 5.00E+01 | U | 1 | - | 1 | 9.40E+02 | 1.66E+00 | 1.68E+03 | 2.77E+03 | 3.18E+01 | 1.36E+09 | 2.06E+04 | cs |
| Chloroethanol, 2- | 107-07-3 | No | Yes | - | - | - | - | 2.00E-02 | U | - | - | 1 | - | 1 | 7.81E+04 | 3.11E-05 | 1.11E+05 | 1.00E+06 | 1.90E+00 | 1.36E+09 | 2.34E+03 | nc |
| Chloroethylvinyl ether, 2- | 110-75-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.60E+03 | 3.58E-01 | 1.18E+02 | 4.29E+02 | 1.77E+01 | 1.36E+09 | - | - |
| Chloroform | 67-66-3 | No | Yes | 3.10E-02 | U | 2.30E-05 | U | 1.00E-02 | U | 9.77E-02 | U | 1 | - | 1 | 2.63E+03 | 1.50E-01 | 2.54E+03 | 7.95E+03 | 3.18E+01 | 1.36E+09 | 1.38E+00 | ca* |
| Chloromethane | 74-87-3 | No | Yes | - | - | - | - | - | - | 9.00E-02 | U | 1 | - | 1 | 1.17E+03 | 3.61E-01 | 1.32E+03 | 5.32E+03 | 1.32E+01 | 1.36E+09 | 4.63E+01 | nc |
| Chloromethyl Methyl Ether | 107-30-2 | No | Yes | 2.40E+00 | U | 6.90E-04 | U | - | - | - | - | 1 | - | 1 | 5.33E+03 | 1.24E-02 | 9.32E+03 | 6.94E+04 | 5.32E+00 | 1.36E+09 | 8.86E-02 | ca |
| Chloronaphthalene, Beta- | 91-58-7 | No | Yes | - | - | - | - | 8.00E-02 | U | - | - | 1 | 0.13 | 1 | 7.99E+04 | 1.31E-02 | - | 1.17E+01 | 2.48E+03 | 1.36E+09 | 6.03E+03 | nc |
| Chloronaphthalene, alpha- | 90-13-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 7.59E+04 | 1.45E-02 | 2.66E+02 | 1.74E+01 | 2.53E+03 | 1.36E+09 | - | - |
| Chloronitrobenzene, o- | 88-73-3 | No | No | 3.00E-01 | U | - | - | 3.00E-03 | U | 1.00E-05 | U | 1 | 0.1 | 1 | - | 3.80E-04 | - | 4.41E+02 | 3.71E+02 | 1.36E+09 | 7.66E+00 | ca* |
| Chloronitrobenzene, p- | 100-00-5 | No | No | 6.00E-02 | U | - | - | 7.00E-04 | U | 2.00E-03 | U | 1 | 0.1 | 1 | - | 2.00E-04 | - | 2.25E+02 | 3.63E+02 | 1.36E+09 | 3.83E+01 | ca** |
| Chlorooctadecane, 1- | 3386-33-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | - | 2.48E+04 | 4.13E+01 | - | 0.00E+00 | 3.22E+05 | 1.36E+09 | - | - |
| Chlorophenol, 2- | 95-57-8 | No | Yes | - | - | - | - | 5.00E-03 | U | - | - | 1 | - | 1 | 1.39E+05 | 4.58E-04 | 2.74E+04 | 1.13E+04 | 3.88E+02 | 1.36E+09 | 5.84E+02 | nc |
| Chlorophenol, 3- | 108-43-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.41E-05 | - | 2.60E+04 | 3.00E+02 | 1.36E+09 | - | - |
| Chlorophenol, 4- | 106-48-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.56E-05 | - | 2.40E+04 | 3.00E+02 | 1.36E+09 | - | - |
| Chlorophenols (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Chlorophenyl Methyl Sulfide, p- | 123-09-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 6.92E+04 | 4.74E-03 | 5.23E+02 | 1.19E+02 | 7.16E+02 | 1.36E+09 | - | - |
| Chlorophenyl Methyl Sulfoxide | 934-73-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.00E-07 | - | 7.07E+03 | 7.33E+01 | 1.36E+09 | - | - |
| Chlorophenyl phenyl ether, 4- | 7005-72-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.16E+05 | 3.68E-03 | - | 3.30E+00 | 3.08E+03 | 1.36E+09 | - | - |
| Chloropicrin | 76-06-2 | No | Yes | - | - | - | - | - | - | 4.00E-04 | U | 1 | - | 1 | 4.68E+03 | 8.38E-02 | 6.17E+02 | 1.62E+03 | 4.42E+01 | 1.36E+09 | 8.20E-01 | nc |
| Chloropropane, 2- | 75-29-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.30E+03 | 7.15E-01 | 1.32E+03 | 3.10E+03 | 3.18E+01 | 1.36E+09 | - | - |
| Chlorothalonil | 1897-45-6 | No | No | 3.10E-03 | U | 8.90E-07 | U | 1.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 8.18E-05 | - | 8.10E-01 | 1.04E+03 | 1.36E+09 | 7.41E+02 | ca** |
| Chlorotoluene, o- | 95-49-8 | No | Yes | - | - | - | - | 2.00E-02 | U | - | - | 1 | - | 1 | 8.12E+03 | 1.46E-01 | 9.07E+02 | 3.74E+02 | 3.83E+02 | 1.36E+09 | 2.34E+03 | cs |
| Chlorotoluene, p- | 106-43-4 | No | Yes | - | - | - | - | 2.00E-02 | U | - | - | 1 | - | 1 | 7.29E+03 | 1.79E-01 | 2.53E+02 | 1.06E+02 | 3.75E+02 | 1.36E+09 | 2.34E+03 | cs |
| Chlorozotocin | 54749-90-5 | No | No | 2.40E+02 | U | 6.90E-02 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.50E-20 | - | 1.83E+03 | 1.00E+01 | 1.36E+09 | 9.57E-03 | ca |
| Chlorpropham | 101-21-3 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.33E-05 | - | 8.90E+01 | 3.51E+02 | 1.36E+09 | 4.10E+03 | nc |
| Chlorpyrifos | 2921-88-2 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.20E-04 | - | 1.12E+00 | 7.28E+03 | 1.36E+09 | 8.21E+01 | nc |
| Chlorpyrifos Methyl | 5598-13-0 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.53E-04 | - | 4.76E+00 | 2.19E+03 | 1.36E+09 | 8.21E+02 | nc |
| Chlorsulfuron | 64902-72-3 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.40E-14 | - | 3.10E+04 | 3.22E+02 | 1.36E+09 | 1.64E+03 | nc |
| Chlorthal-dimethyl | 1861-32-1 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 8.91E-05 | - | 5.00E-01 | 5.11E+02 | 1.36E+09 | 8.21E+02 | nc |

Site-specific
Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Chlorthiophos | 60238-56-4 | No | No | - | - | - | - | 8.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 4.91E-05 | - | 3.00E-01 | 1.28E+04 | 1.36E+09 | 6.57E+01 | nc |
| Chromium(III), Insoluble Salts | 16065-83-1 | No | No | - | - | - | - | 1.50E+00 | U | - | - | 0.013 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.75E+05 | cm |
| Chromium(VI) | 18540-29-9 | Yes | No | 5.00E-01 | U | 8.40E-02 | U | 3.00E-03 | U | 1.00E-04 | U | 0.025 | - | 1 | - | - | - | 1.69E+06 | - | 1.36E+09 | 6.33E+00 | ca* |
| Chromium, Total | 7440-47-3 | No | No | - | - | - | - | - | - | - | - | 0.013 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Chrysene | 218-01-9 | Yes | No | 1.00E-03 | U | 6.00E-07 | U | - | - | - | - | 1 | 0.13 | 1 | - | 2.14E-04 | - | 2.00E-03 | 1.81E+05 | 1.36E+09 | 2.11E+03 | ca |
| Clofentazine | 74115-24-5 | No | No | - | - | - | - | 1.30E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.59E-08 | - | 1.00E+00 | 3.02E+04 | 1.36E+09 | 1.07E+03 | nc |
| Cobalt | 7440-48-4 | No | No | - | - | 9.00E-03 | U | 3.00E-04 | U | 6.00E-06 | U | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.47E+01 | nc |
| Complex Mixtures of Aliphatic and Aromatic Hydrocarbons | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Copper | 7440-50-8 | No | No | - | - | - | - | 4.00E-02 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 4.67E+03 | nc |
| Copper Cyanide | 544-92-3 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.84E+02 | nc |
| Coronene | 191-07-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.13 | 1 | - | 8.67E-07 | - | 1.40E-04 | 6.35E+06 | 1.36E+09 | - | - |
| Creosote | 8001-58-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Cresol, m- | 108-39-4 | No | No | - | - | - | - | 5.00E-02 | U | 6.00E-01 | U | 1 | 0.1 | 1 | - | 3.50E-05 | - | 2.27E+04 | 3.00E+02 | 1.36E+09 | 4.10E+03 | nc |
| Cresol, o- | 95-48-7 | No | No | - | - | - | - | 5.00E-02 | U | 6.00E-01 | U | 1 | 0.1 | 1 | - | 4.91E-05 | - | 2.59E+04 | 3.07E+02 | 1.36E+09 | 4.10E+03 | nc |
| Cresol, p- | 106-44-5 | No | No | - | - | - | - | 1.00E-01 | U | 6.00E-01 | U | 1 | 0.1 | 1 | - | 4.09E-05 | - | 2.15E+04 | 3.00E+02 | 1.36E+09 | 8.21E+03 | nc |
| Cresol, p-chloro-m- | 59-50-7 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 1.00E-04 | - | 3.83E+03 | 4.92E+02 | 1.36E+09 | 8.21E+03 | nc |
| Cresols | 1319-77-3 | No | No | - | - | - | - | 1.00E-01 | U | 6.00E-01 | U | 1 | 0.1 | 1 | - | 2.53E-05 | - | 9.07E+03 | 3.07E+02 | 1.36E+09 | 8.21E+03 | nc |
| Crotonaldehyde | 4170-30-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.89E+04 | 7.93E-04 | 2.01E+04 | 1.81E+05 | 1.79E+00 | 1.36E+09 | - | - |
| Crotonaldehyde, trans- | 123-73-9 | No | Yes | 1.90E+00 | U | - | - | 1.00E-03 | U | - | - | 1 | - | 1 | 1.89E+04 | 7.93E-04 | 1.66E+04 | 1.50E+05 | 1.79E+00 | 1.36E+09 | 1.72E+00 | ca* |
| Cumene | 98-82-8 | No | Yes | - | - | - | - | 1.00E-01 | U | 4.00E-01 | U | 1 | - | 1 | 6.21E+03 | 4.70E-01 | 2.68E+02 | 6.13E+01 | 6.98E+02 | 1.36E+09 | 9.95E+02 | cs |
| Cupferron | 135-20-6 | No | No | 2.20E-01 | U | 6.30E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.48E-07 | - | 6.08E+05 | 7.62E+02 | 1.36E+09 | 1.04E+01 | ca |
| Cyanazine | 21725-46-2 | No | No | 8.40E-01 | U | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.05E-10 | - | 1.70E+02 | 1.34E+02 | 1.36E+09 | 2.74E+00 | ca* |
| Cyanide (CN-) | 57-12-5 | No | Yes | - | - | - | - | 6.00E-04 | U | 8.00E-04 | U | 1 | - | 1 | 5.33E+04 | 4.15E-03 | 9.54E+05 | 9.54E+04 | - | 1.36E+09 | 1.47E+01 | nc |
| Cyanide (total complex) | NA | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Cyanogen | 460-19-5 | No | Yes | - | - | - | - | 1.00E-03 | U | - | - | 1 | - | 1 | - | 2.21E-01 | - | 8.00E+03 | - | 1.36E+09 | 1.17E+02 | nc |
| Cyanogen Bromide | 506-68-3 | No | Yes | - | - | - | - | 9.00E-02 | U | - | - | 1 | - | 1 | - | 1.00E+00 | - | - | - | 1.36E+09 | 1.05E+04 | nc |
| Cyanogen Chloride | 506-77-4 | No | Yes | - | - | - | - | 5.00E-02 | U | - | - | 1 | - | 1 | - | 7.87E-02 | - | 6.00E+04 | - | 1.36E+09 | 5.84E+03 | nc |
| Cyclohexane | 110-82-7 | No | Yes | - | - | - | - | - | - | 6.00E+00 | U | 1 | - | 1 | 1.04E+03 | 6.13E+00 | 1.18E+02 | 5.50E+01 | 1.46E+02 | 1.36E+09 | 2.74E+03 | cs |
| Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro- | 87-84-3 | No | No | 2.00E-02 | U | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.92E-05 | - | 5.50E-02 | 2.81E+03 | 1.36E+09 | 1.15E+02 | ca* |
| Cyclohexanone | 108-94-1 | No | Yes | - | - | - | - | 5.00E+00 | U | 7.00E-01 | U | 1 | - | 1 | 4.17E+04 | 3.68E-04 | 5.11E+03 | 2.50E+04 | 1.74E+01 | 1.36E+09 | 1.25E+04 | cs |
| Cyclohexene | 110-83-8 | No | Yes | - | - | - | - | 5.00E-03 | U | 1.00E+00 | U | 1 | - | 1 | 1.46E+03 | 1.86E+00 | 2.83E+02 | 2.13E+02 | 1.46E+02 | 1.36E+09 | 3.06E+02 | cs |
| Cyclohexylamine | 108-91-8 | No | Yes | - | - | - | - | 2.00E-01 | U | - | - | 1 | - | 1 | 7.46E+04 | 1.70E-04 | 2.93E+05 | 1.00E+06 | 3.22E+01 | 1.36E+09 | 2.34E+04 | nc |
| Cyclopentadiene | 542-92-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.49E+03 | 8.59E-01 | 1.34E+03 | 1.80E+03 | 8.00E+01 | 1.36E+09 | - | - |
| Cyfluthrin | 68359-37-5 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.19E-06 | - | 3.00E-03 | 1.31E+05 | 1.36E+09 | 2.05E+03 | nc |
| Cyhalothrin | 68085-85-8 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 6.05E-05 | - | 5.00E-03 | 3.41E+05 | 1.36E+09 | 8.21E+01 | nc |
| Cypermethrin | 52315-07-8 | No | No | - | - | - | - | 6.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.72E-05 | - | 4.00E-03 | 7.98E+04 | 1.36E+09 | 4.92E+03 | nc |
| Cyromazine | 66215-27-8 | No | No | - | - | - | - | 1.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.31E-12 | - | 1.30E+04 | 2.87E+01 | 1.36E+09 | 1.23E+03 | nc |
| DDD | 72-54-8 | No | No | 2.40E-01 | U | 6.90E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | 2.70E-04 | - | 9.00E-02 | 1.18E+05 | 1.36E+09 | 9.57E+00 | ca |
| DDD, o,p'- | 53-19-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.34E-04 | - | 1.00E-01 | 1.20E+05 | 1.36E+09 | - | - |
| DDE, p,p'- | 72-55-9 | No | Yes | 3.40E-01 | U | 9.70E-05 | U | - | - | - | - | 1 | - | 1 | 2.11E+06 | 1.70E-03 | - | 4.00E-02 | 1.18E+05 | 1.36E+09 | 9.28E+00 | ca |
| DDT | 50-29-3 | No | No | 3.40E-01 | U | 9.70E-05 | U | 5.00E-04 | U | - | - | 1 | 0.03 | 1 | - | 3.40E-04 | - | 5.50E-03 | 1.69E+05 | 1.36E+09 | 8.53E+00 | ca** |
| DDT, o,p'- | 789-02-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.03E-04 | - | 8.50E-02 | 1.72E+05 | 1.36E+09 | - | - |
| DDT/DDE/DDD (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Dalapon | 75-99-0 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.31E-06 | - | 5.02E+05 | 3.23E+00 | 1.36E+09 | 2.46E+03 | nc |
| Daminozide | 1596-84-5 | No | No | 1.80E-02 | U | 5.10E-06 | U | 1.50E-01 | U | - | - | 1 | 0.1 | 1 | - | 1.73E-08 | - | 1.00E+05 | 1.00E+01 | 1.36E+09 | 1.28E+02 | ca* |

Site-specific

Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'-(BDE-209) | 1163-19-5 | No | No | 7.00E-04 | U | - | - | 7.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 4.87E-07 | - | 1.00E-04 | 2.76E+05 | 1.36E+09 | 5.74E+02 | nc |
| Decane | 124-18-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.13E+03 | 2.11E+02 | 2.53E+00 | 5.20E-02 | 1.45E+03 | 1.36E+09 | - | - |
| Decanol, n- | 112-30-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 6.32E+04 | 1.31E-03 | 3.19E+01 | 3.70E+01 | 1.27E+02 | 1.36E+09 | - | - |
| Deltamethrin | 52918-63-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.04E-04 | - | 2.00E-03 | 7.98E+04 | 1.36E+09 | - | - |
| Demeton | 8065-48-3 | No | No | - | - | - | - | 4.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 1.56E-04 | - | 6.66E+02 | - | 1.36E+09 | 3.28E+00 | nc |
| Di(2-ethylhexyl)adipate | 103-23-1 | No | No | 1.20E-03 | U | - | - | 6.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 1.77E-05 | - | 7.80E-01 | 3.60E+04 | 1.36E+09 | 1.91E+03 | ca* |
| Di-n-butyltin bis(2-ethylhexanoate) | 2781-10-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 9.38E+04 | 9.08E-01 | - | 4.81E-03 | 8.16E+04 | 1.36E+09 | - | - |
| Di-n-butyltin bis(methyl maleate) | 15546-11-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.42E-08 | - | 6.05E+00 | 3.01E+01 | 1.36E+09 | - | - |
| Di-n-butyltin bis(n-butyl maleate) | 15546-16-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 7.81E-08 | - | 5.26E-03 | 1.10E+03 | 1.36E+09 | - | - |
| Di-n-butyltin dilaurate | 77-58-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.19E+05 | 6.58E+00 | - | 3.00E+00 | 6.16E+06 | 1.36E+09 | - | - |
| Di-n-butyltin distearate | 5847-55-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.69E+06 | 1.97E+02 | - | 5.75E-14 | 8.27E+09 | 1.36E+09 | - | - |
| Di-n-hexylphthalate | 84-75-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 9.65E+05 | 1.05E-03 | 3.85E+00 | 5.00E-02 | 1.28E+04 | 1.36E+09 | - | - |
| Diallate | 2303-16-4 | No | No | 6.10E-02 | U | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.55E-04 | - | 1.40E+01 | 6.44E+02 | 1.36E+09 | 3.77E+01 | ca |
| Diammonium phosphate | 7783-28-0 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Diazinon | 333-41-5 | No | No | - | - | - | - | 7.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 4.62E-06 | - | 4.00E+01 | 3.03E+03 | 1.36E+09 | 5.74E+01 | nc |
| Dibenz[a,h]anthracene | 53-70-3 | Yes | No | 1.00E+00 | U | 6.00E-04 | U | - | - | - | - | 1 | 0.13 | 1 | - | 5.76E-06 | - | 2.49E-03 | 1.91E+06 | 1.36E+09 | 2.11E+00 | ca |
| Dibenzo(a,e)pyrene | 192-65-4 | No | No | 1.20E+01 | U | 1.10E-03 | U | - | - | - | - | 1 | 0.13 | 1 | - | 5.76E-07 | - | 8.02E-05 | 6.48E+06 | 1.36E+09 | 1.76E-01 | ca |
| Dibenzofuran | 132-64-9 | No | Yes | - | - | - | - | 1.00E-03 | U | - | - | 1 | 0.03 | 1 | 1.56E+05 | 8.71E-03 | - | 3.10E+00 | 9.16E+03 | 1.36E+09 | 1.04E+02 | nc |
| Dibenzothiophene | 132-65-0 | No | Yes | - | - | - | - | 1.00E-02 | U | - | - | 1 | - | 1 | 5.25E+05 | 1.38E-03 | - | 1.47E+00 | 9.16E+03 | 1.36E+09 | 1.17E+03 | nc |
| Dibromo-3-chloropropane, 1,2- | 96-12-8 | Yes | Yes | 8.00E-01 | U | 6.00E-03 | U | 2.00E-04 | U | 2.00E-04 | U | 1 | - | 1 | 3.20E+04 | 6.01E-03 | 9.80E+02 | 1.23E+03 | 1.16E+02 | 1.36E+09 | 6.44E-02 | ca* |
| Dibromoacetic acid | 631-64-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.81E-07 | - | 2.11E+06 | 2.25E+00 | 1.36E+09 | - | - |
| Dibromobenzene, 1,3- | 108-36-1 | No | Yes | - | - | - | - | 4.00E-04 | U | - | - | 1 | - | 1 | 1.93E+04 | 5.07E-02 | 1.59E+02 | 6.75E+01 | 3.75E+02 | 1.36E+09 | 4.67E+01 | nc |
| Dibromobenzene, 1,4- | 106-37-6 | No | Yes | - | - | - | - | 1.00E-02 | U | - | - | 1 | - | 1 | 2.20E+04 | 3.65E-02 | - | 2.00E+01 | 3.75E+02 | 1.36E+09 | 1.17E+03 | nc |
| Dibromochloromethane | 124-48-1 | No | Yes | 8.40E-02 | U | - | - | 2.00E-02 | U | - | - | 1 | - | 1 | 7.95E+03 | 3.20E-02 | 8.02E+02 | 2.70E+03 | 3.18E+01 | 1.36E+09 | 3.89E+01 | ca* |
| Dibromodichloromethane | 594-18-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.32E+04 | 4.95E-03 | - | 4.79E+02 | 4.39E+01 | 1.36E+09 | - | - |
| Dibromodiphenyl Ether, p,p'- | 2050-47-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 6.05E+05 | 7.65E-04 | - | 1.80E-01 | 4.94E+03 | 1.36E+09 | - | - |
| Dibromoethane, 1,2- | 106-93-4 | No | Yes | 2.00E+00 | U | 6.00E-04 | U | 9.00E-03 | U | 9.00E-03 | U | 1 | - | 1 | 8.64E+03 | 2.66E-02 | 1.34E+03 | 3.91E+03 | 3.96E+01 | 1.36E+09 | 1.59E-01 | ca |
| Dibromomethane (Methylene Bromide) | 74-95-3 | No | Yes | - | - | - | - | - | - | 4.00E-03 | U | 1 | - | 1 | 5.65E+03 | 3.36E-02 | 2.82E+03 | 1.19E+04 | 2.17E+01 | 1.36E+09 | 9.89E+00 | nc |
| Dibutoxy di-n-butyltin | 3349-36-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 5.98E+04 | 3.02E+00 | - | 4.45E+00 | 2.62E+05 | 1.36E+09 | - | - |
| Dibutyl Phthalate | 84-74-2 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 7.40E-05 | - | 1.12E+01 | 1.16E+03 | 1.36E+09 | 8.21E+03 | nc |
| Dibutylbis((1-oxoisooctyl)oxy)stannane | 85702-74-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Dibutylbis(octadeca-9(Z),12(Z),15(Z)-trienoyloxy)stannane | 95873-60-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.46E+06 | 9.16E+01 | - | 7.88E-07 | 8.27E+09 | 1.36E+09 | - | - |
| Dibutylbis(octadeca-9(Z),12(Z)-dienoyloxy)stannane | 85391-79-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Dibutylbis(palmitoyloxy)stannane | 13323-63-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.73E+05 | 6.38E+01 | - | 7.44E-07 | 7.50E+08 | 1.36E+09 | - | - |
| Dibutyltin Compounds | NA | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | 2.46E+01 | nc |
| Dibutyltin diacetate | 1067-33-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.27E+04 | 2.28E-02 | 1.86E+00 | 6.00E+00 | 3.44E+01 | 1.36E+09 | - | - |
| Dibutyltin dichloride | 683-18-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.10E+04 | 1.25E-01 | - | 9.20E+01 | 1.86E+03 | 1.36E+09 | - | - |
| Dibutyltin oxide | 818-08-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | 6.73E-01 | 1.28E+03 | 1.36E+09 | - | - |
| Dicalcium phosphate | 7757-93-9 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Dicamba | 1918-00-9 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 8.91E-08 | - | 8.31E+03 | 2.90E+01 | 1.36E+09 | 2.46E+03 | nc |
| Dichloro-2-butene, 1,4- | 764-41-0 | No | Yes | - | - | 4.20E-03 | U | - | - | - | - | 1 | - | 1 | 3.21E+03 | 3.48E-01 | 5.56E+02 | 5.80E+02 | 1.32E+02 | 1.36E+09 | 9.39E-03 | ca |
| Dichloro-2-butene, cis-1,4- | 1476-11-5 | No | Yes | - | - | 4.20E-03 | U | - | - | - | - | 1 | - | 1 | 1.11E+04 | 2.71E-02 | 5.20E+02 | 5.80E+02 | 1.32E+02 | 1.36E+09 | 3.25E-02 | ca |
| Dichloro-2-butene, trans-1,4- | 110-57-6 | No | Yes | - | - | 4.20E-03 | U | - | - | - | - | 1 | - | 1 | 1.12E+04 | 2.71E-02 | 7.63E+02 | 8.50E+02 | 1.32E+02 | 1.36E+09 | 3.26E-02 | ca |

Site-specific
Composite Worker Screening Levels (RSL) for Soil
 Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|-----------------------------------|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Dichloroacetic Acid | 79-43-6 | No | No | 5.00E-02 | U | - | - | 4.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 3.43E-07 | - | 1.00E+06 | 2.25E+00 | 1.36E+09 | 4.60E+01 | ca** |
| Dichloroaniline, 2,4- | 554-00-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 6.46E-05 | - | 6.20E+02 | 1.85E+02 | 1.36E+09 | - | - |
| Dichloroaniline, 3,4- | 95-76-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.01E+05 | 5.97E-04 | - | 9.20E+01 | 1.85E+02 | 1.36E+09 | - | - |
| Dichlorobenzene | 25321-22-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.03E+04 | 7.85E-02 | 1.93E+02 | 8.00E+01 | 3.83E+02 | 1.36E+09 | - | - |
| Dichlorobenzene, 1,2- | 95-50-1 | No | Yes | - | - | - | - | 9.00E-02 | U | 2.00E-01 | U | 1 | - | 1 | 1.17E+04 | 7.85E-02 | 3.76E+02 | 1.56E+02 | 3.83E+02 | 1.36E+09 | 9.33E+02 | cs |
| Dichlorobenzene, 1,3- | 541-73-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 9.91E+03 | 1.08E-01 | 2.96E+02 | 1.25E+02 | 3.75E+02 | 1.36E+09 | - | - |
| Dichlorobenzene, 1,4- | 106-46-7 | No | Yes | 5.40E-03 | U | 1.10E-05 | U | 7.00E-02 | U | 8.00E-01 | U | 1 | - | 1 | 1.04E+04 | 9.85E-02 | - | 8.13E+01 | 3.75E+02 | 1.36E+09 | 1.14E+01 | ca |
| Dichlorobenzidine, 3,3'- | 91-94-1 | No | No | 4.50E-01 | U | 3.40E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.16E-09 | - | 3.10E+00 | 3.19E+03 | 1.36E+09 | 5.11E+00 | ca |
| Dichlorobenzoic acid, -3,5 | 51-36-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.43E-06 | - | 1.47E+02 | 4.26E+01 | 1.36E+09 | - | - |
| Dichlorobenzophenone, 4,4'- | 90-98-2 | No | No | - | - | - | - | 9.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 4.37E-05 | - | 8.29E-01 | 2.93E+03 | 1.36E+09 | 7.39E+02 | nc |
| Dichlorobenzotrifluoride, 3,4- | 328-84-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.15E+04 | 1.05E+00 | 3.02E+02 | 1.88E+01 | 2.63E+03 | 1.36E+09 | - | - |
| Dichlorodifluoromethane | 75-71-8 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 1 | - | 1 | 8.41E+02 | 1.40E+01 | 8.44E+02 | 2.80E+02 | 4.39E+01 | 1.36E+09 | 3.68E+01 | nc |
| Dichlorodiisopropyl ether, 2,2'- | 39638-32-9 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.31E+04 | 1.36E-02 | 2.35E+02 | 6.23E+02 | 4.58E+01 | 1.36E+09 | - | - |
| Dichloroethane, 1,1- | 75-34-3 | No | Yes | 5.70E-03 | U | 1.60E-06 | U | 2.00E-01 | U | - | - | 1 | - | 1 | 2.08E+03 | 2.30E-01 | 1.69E+03 | 5.04E+03 | 3.18E+01 | 1.36E+09 | 1.55E+01 | ca |
| Dichloroethane, 1,2- | 107-06-2 | No | Yes | 9.10E-02 | U | 2.60E-05 | U | 6.00E-03 | U | 7.00E-03 | U | 1 | - | 1 | 4.58E+03 | 4.82E-02 | 2.98E+03 | 8.60E+03 | 3.96E+01 | 1.36E+09 | 2.04E+00 | ca** |
| Dichloroethylene, 1,1- | 75-35-4 | No | Yes | - | - | - | - | 5.00E-02 | U | 2.00E-01 | U | 1 | - | 1 | 1.15E+03 | 1.07E+00 | 1.19E+03 | 2.42E+03 | 3.18E+01 | 1.36E+09 | 9.94E+01 | nc |
| Dichloroethylene, 1,2-cis- | 156-59-2 | No | Yes | - | - | - | - | 2.00E-03 | U | - | - | 1 | - | 1 | 2.50E+03 | 1.67E-01 | 2.37E+03 | 6.41E+03 | 3.96E+01 | 1.36E+09 | 2.34E+02 | nc |
| Dichloroethylene, 1,2-trans- | 156-60-5 | No | Yes | - | - | - | - | 2.00E-02 | U | - | - | 1 | - | 1 | 1.75E+03 | 3.83E-01 | 1.85E+03 | 4.52E+03 | 3.96E+01 | 1.36E+09 | 2.34E+03 | cs |
| Dichlorophenol, 2,3- | 576-24-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.26E-05 | - | 3.60E+03 | 5.02E+02 | 1.36E+09 | - | - |
| Dichlorophenol, 2,4- | 120-83-2 | No | No | - | - | - | - | 3.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.75E-04 | - | 5.55E+03 | 1.47E+02 | 1.36E+09 | 2.46E+02 | nc |
| Dichlorophenol, 2,5- | 583-78-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.26E-05 | - | 2.00E+03 | 4.92E+02 | 1.36E+09 | - | - |
| Dichlorophenol, 2,6- | 87-65-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.09E-04 | - | 1.90E+03 | 5.02E+02 | 1.36E+09 | - | - |
| Dichlorophenol, 3,4- | 95-77-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.26E-05 | - | 9.26E+03 | 4.92E+02 | 1.36E+09 | - | - |
| Dichlorophenols (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Dichlorophenoxy Acetic Acid, 2,4- | 94-75-7 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.05 | 1 | - | 1.45E-06 | - | 6.77E+02 | 2.96E+01 | 1.36E+09 | 9.64E+02 | nc |
| Dichloropropane, 1,2- | 78-87-5 | No | Yes | 3.70E-02 | U | 3.70E-05 | U | 4.00E-02 | U | 4.00E-03 | U | 1 | - | 1 | 3.79E+03 | 1.15E-01 | 1.36E+03 | 2.80E+03 | 6.07E+01 | 1.36E+09 | 1.24E+00 | ca** |
| Dichloropropane, 1,3- | 142-28-9 | No | Yes | - | - | - | - | 2.00E-02 | U | - | - | 1 | - | 1 | 6.76E+03 | 3.99E-02 | 1.49E+03 | 2.75E+03 | 7.22E+01 | 1.36E+09 | 2.34E+03 | cs |
| Dichloropropane, 2,2- | 594-20-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.60E+03 | 6.58E-01 | 1.91E+02 | 3.91E+02 | 4.39E+01 | 1.36E+09 | - | - |
| Dichloropropanol, 2,3- | 616-23-9 | No | No | - | - | - | - | 3.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.47E-07 | - | 6.42E+04 | 5.57E+00 | 1.36E+09 | 2.46E+02 | nc |
| Dichloropropene, 1,1- | 563-58-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | - | 1.18E+03 | 2.04E+00 | - | 7.49E+02 | 6.07E+01 | 1.36E+09 | - | - |
| Dichloropropene, 1,3- | 542-75-6 | No | Yes | 1.00E-01 | U | 4.00E-06 | U | 3.00E-02 | U | 2.00E-02 | U | 1 | - | 1 | 3.56E+03 | 1.45E-01 | 1.57E+03 | 2.80E+03 | 7.22E+01 | 1.36E+09 | 8.18E+00 | ca** |
| Dichloropropene, 2,3- | 78-88-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.09E+03 | 1.70E-01 | 1.07E+03 | 2.15E+03 | 6.07E+01 | 1.36E+09 | - | - |
| Dichloropropene, cis-1,3- | 10061-01-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.04E+03 | 1.11E-01 | 1.21E+03 | 2.18E+03 | 7.22E+01 | 1.36E+09 | - | - |
| Dichloropropene, trans-1,3- | 10061-02-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 7.04E+03 | 3.56E-02 | 1.51E+03 | 2.80E+03 | 7.22E+01 | 1.36E+09 | - | - |
| Dichlorvos | 62-73-7 | No | No | 2.90E-01 | U | 8.30E-05 | U | 5.00E-04 | U | 5.00E-04 | U | 1 | 0.1 | 1 | - | 2.35E-05 | - | 8.00E+03 | 5.40E+01 | 1.36E+09 | 7.92E+00 | ca** |
| Dicrotophos | 141-66-2 | No | No | - | - | - | - | 7.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 2.06E-09 | - | 1.00E+06 | 1.66E+01 | 1.36E+09 | 5.74E+00 | nc |
| Dicyclohexylamine | 101-83-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 6.25E+04 | 2.25E-03 | 1.22E+02 | 1.07E+02 | 1.73E+02 | 1.36E+09 | - | - |
| Dicyclopentadiene | 77-73-6 | No | Yes | - | - | - | - | 8.00E-02 | U | 3.00E-04 | U | 1 | - | 1 | 4.11E+03 | 2.56E+00 | 2.56E+02 | 2.65E+01 | 1.51E+03 | 1.36E+09 | 5.40E-01 | nc |
| Dieldrin | 60-57-1 | No | No | 1.60E+01 | U | 4.60E-03 | U | 5.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 4.09E-04 | - | 1.95E-01 | 2.01E+04 | 1.36E+09 | 1.44E-01 | ca* |
| Diepoxybutane | 1464-53-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.46E+05 | 1.45E-06 | 1.15E+05 | 1.00E+06 | 2.53E+00 | 1.36E+09 | - | - |
| Diethanolamine | 111-42-2 | No | No | - | - | - | - | 2.00E-03 | U | 2.00E-04 | U | 1 | 0.1 | 1 | - | 1.58E-09 | - | 1.00E+06 | 1.00E+00 | 1.36E+09 | 1.64E+02 | nc |
| Diethyl Phthalate | 84-66-2 | No | No | - | - | - | - | 8.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 2.49E-05 | - | 1.08E+03 | 1.05E+02 | 1.36E+09 | 6.57E+04 | nc |
| Diethyl sulfate | 64-67-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.51E-04 | - | 7.00E+03 | 2.82E+01 | 1.36E+09 | - | - |
| Diethyl-p-nitrophenylphosphate | 311-45-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.46E-09 | - | 3.64E+03 | 1.31E+02 | 1.36E+09 | - | - |

Site-specific

Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|-------------------------------------|-------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Diethylene Glycol Dinitrate (DEGDN) | 693-21-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.59E-05 | - | 3.90E+03 | 3.22E+01 | 1.36E+09 | - | - |
| Diethylene Glycol Monobutyl Ether | 112-34-5 | No | No | - | - | - | - | 3.00E-02 | U | 1.00E-04 | U | 1 | 0.1 | 1 | - | 2.94E-07 | - | 1.00E+06 | 1.00E+01 | 1.36E+09 | 2.36E+03 | nc |
| Diethylene Glycol Monoethyl Ether | 111-90-0 | No | No | - | - | - | - | 6.00E-02 | U | 3.00E-04 | U | 1 | 0.1 | 1 | - | 9.12E-07 | - | 1.00E+06 | 1.00E+00 | 1.36E+09 | 4.79E+03 | nc |
| Diethylene-glycol | 111-46-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.22E-08 | - | 1.00E+06 | 1.00E+00 | 1.36E+09 | - | - |
| Diethylformamide | 617-84-5 | No | Yes | - | - | - | - | 1.00E-03 | U | - | - | 1 | - | 1 | 1.39E+05 | 5.31E-06 | 1.12E+05 | 1.00E+06 | 2.06E+00 | 1.36E+09 | 1.17E+02 | nc |
| Diethylphosphorodithioate | 298-06-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.30E+04 | 1.52E-02 | 2.15E-02 | 6.40E-02 | 3.88E+01 | 1.36E+09 | - | - |
| Diethylstilbestrol | 56-53-1 | No | No | 3.50E+02 | U | 1.00E-01 | U | - | - | - | - | 1 | 0.1 | 1 | - | 2.37E-10 | - | 1.20E+01 | 2.74E+05 | 1.36E+09 | 6.57E-03 | ca |
| Difenzoquat | 43222-48-6 | No | No | - | - | - | - | 8.30E-02 | U | - | - | 1 | 0.1 | 1 | - | - | - | 8.17E+05 | 7.84E+04 | 1.36E+09 | 6.81E+03 | nc |
| Diflubenzuron | 35367-38-5 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.88E-07 | - | 8.00E-02 | 4.63E+02 | 1.36E+09 | 1.64E+03 | nc |
| Difluoroethane, 1,1- | 75-37-6 | No | Yes | - | - | - | - | - | - | 4.00E+01 | U | 1 | - | 1 | 1.15E+03 | 8.30E-01 | 1.43E+03 | 3.20E+03 | 3.18E+01 | 1.36E+09 | 2.01E+04 | cs |
| Difluoropropane, 2,2- | 420-45-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 7.58E+02 | 2.10E+01 | 6.90E+02 | 1.59E+02 | 4.39E+01 | 1.36E+09 | - | - |
| Dihydrosafrole | 94-58-6 | No | Yes | 4.40E-02 | U | 1.30E-05 | U | - | - | - | - | 1 | - | 1 | 1.23E+05 | 4.99E-04 | - | 5.69E+01 | 2.07E+02 | 1.36E+09 | 4.53E+01 | ca |
| Diisopropyl Ether | 108-20-3 | No | Yes | - | - | - | - | - | - | 7.00E-01 | U | 1 | - | 1 | 3.05E+03 | 1.05E-01 | 2.26E+03 | 8.80E+03 | 2.28E+01 | 1.36E+09 | 9.36E+02 | nc |
| Diisopropyl Methylphosphonate | 1445-75-6 | No | Yes | - | - | - | - | 8.00E-02 | U | - | - | 1 | - | 1 | 3.81E+04 | 1.79E-03 | 5.30E+02 | 1.50E+03 | 4.22E+01 | 1.36E+09 | 9.34E+03 | cs |
| Dimagnesium phosphate | 7782-75-4 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Dimethipin | 55290-64-7 | No | No | - | - | - | - | 2.18E-02 | U | - | - | 1 | 0.1 | 1 | - | 9.40E-10 | - | 4.60E+03 | 1.00E+01 | 1.36E+09 | 1.79E+03 | nc |
| Dimethoate | 60-51-5 | No | No | - | - | - | - | 2.20E-03 | U | - | - | 1 | 0.1 | 1 | - | 9.93E-09 | - | 2.33E+04 | 1.28E+01 | 1.36E+09 | 1.81E+02 | nc |
| Dimethoxybenzidine, 3,3'- | 119-90-4 | No | No | 1.60E+00 | U | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.92E-09 | - | 6.00E+01 | 5.09E+02 | 1.36E+09 | 1.44E+00 | ca |
| Dimethyl Sulfate | 77-78-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.64E-04 | - | 2.80E+04 | 8.49E+00 | 1.36E+09 | - | - |
| Dimethyl Sulfide | 75-18-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.97E+03 | 6.58E-02 | 5.34E+03 | 2.20E+04 | 2.17E+01 | 1.36E+09 | - | - |
| Dimethyl methylphosphonate | 756-79-6 | No | No | 1.70E-03 | U | - | - | 6.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 5.56E-06 | - | 1.00E+06 | 5.41E+00 | 1.36E+09 | 1.35E+03 | ca** |
| Dimethylamino azobenzene [p-] | 60-11-7 | No | No | 4.60E+00 | U | 1.30E-03 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.64E-08 | - | 2.30E-01 | 2.03E+03 | 1.36E+09 | 5.00E-01 | ca |
| Dimethylaniline HCl, 2,4- | 21436-96-4 | No | No | 5.80E-01 | U | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 9.48E-05 | - | 3.65E+03 | 3.52E+02 | 1.36E+09 | 3.96E+00 | ca |
| Dimethylaniline, 2,4- | 95-68-1 | No | No | 2.00E-01 | U | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.02E-04 | - | 6.07E+03 | 1.85E+02 | 1.36E+09 | 1.15E+01 | ca* |
| Dimethylaniline, N,N- | 121-69-7 | No | Yes | 2.70E-02 | U | - | - | 2.00E-03 | U | - | - | 1 | - | 1 | 3.13E+04 | 2.32E-03 | 8.30E+02 | 1.45E+03 | 7.87E+01 | 1.36E+09 | 1.21E+02 | ca** |
| Dimethylbenz(a)anthracene, 7,12- | 57-97-6 | Yes | No | 2.50E+02 | U | 7.10E-02 | U | - | - | - | - | 1 | 0.13 | 1 | - | 1.54E-04 | - | 6.10E-02 | 4.94E+05 | 1.36E+09 | 8.44E-03 | ca |
| Dimethylbenzidine, 3,3'- | 119-93-7 | No | No | 1.10E+01 | U | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.57E-09 | - | 1.30E+03 | 3.19E+03 | 1.36E+09 | 2.09E-01 | ca |
| Dimethylcyclohexylamine, n,n- | 98-94-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.79E+04 | 9.61E-04 | - | 1.05E+04 | 3.60E+01 | 1.36E+09 | - | - |
| Dimethylethyl Lead | 107584-40-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Dimethylformamide | 68-12-2 | No | Yes | - | - | - | - | 1.00E-01 | U | 3.00E-02 | U | 1 | - | 1 | 1.27E+05 | 3.02E-06 | 1.06E+05 | 1.00E+06 | 1.00E+00 | 1.36E+09 | 1.46E+03 | nc |
| Dimethylhydrazine, 1,1- | 57-14-7 | No | Yes | - | - | - | - | 1.00E-04 | U | 2.00E-06 | U | 1 | - | 1 | 2.77E+04 | 5.27E-04 | 1.72E+05 | 1.00E+06 | 1.20E+01 | 1.36E+09 | 2.42E-02 | nc |
| Dimethylhydrazine, 1,2- | 540-73-8 | No | Yes | 5.50E+02 | U | 1.60E-01 | U | - | - | - | - | 1 | - | 1 | 1.68E+05 | 2.84E-06 | 1.89E+05 | 1.00E+06 | 1.49E+01 | 1.36E+09 | 4.06E-03 | ca |
| Dimethylmercury | 593-74-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.26E+03 | 8.71E-02 | 2.19E+03 | 8.86E+03 | 2.17E+01 | 1.36E+09 | - | - |
| Dimethylphenethylamine | 122-09-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 5.85E-05 | - | 1.86E+04 | 1.08E+03 | 1.36E+09 | - | - |
| Dimethylphenol, 2,4- | 105-67-9 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.89E-05 | - | 7.87E+03 | 4.92E+02 | 1.36E+09 | 1.64E+03 | nc |
| Dimethylphenol, 2,6- | 576-26-1 | No | No | - | - | - | - | 6.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 2.72E-04 | - | 6.05E+03 | 5.02E+02 | 1.36E+09 | 4.92E+01 | nc |
| Dimethylphenol, 3,4- | 95-65-8 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.70E-05 | - | 4.76E+03 | 4.92E+02 | 1.36E+09 | 8.21E+01 | nc |
| Dimethylphthalate | 131-11-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 8.05E-06 | - | 4.00E+03 | 3.16E+01 | 1.36E+09 | - | - |
| Dimethylterephthalate | 120-61-6 | No | Yes | - | - | - | - | 1.00E-01 | U | - | - | 1 | - | 1 | 2.14E+04 | 5.48E-03 | - | 1.90E+01 | 3.10E+01 | 1.36E+09 | 1.17E+04 | nc |
| Dimethylvinylchloride | 513-37-1 | No | Yes | 4.50E-02 | U | 1.30E-05 | U | - | - | - | - | 1 | - | 1 | 5.48E+03 | 4.84E-02 | 4.73E+02 | 1.00E+03 | 6.07E+01 | 1.36E+09 | 4.83E+00 | ca |
| Dinitro-o-cresol, 4,6- | 534-52-1 | No | No | - | - | - | - | 8.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 5.72E-05 | - | 1.98E+02 | 7.54E+02 | 1.36E+09 | 6.57E+00 | nc |
| Dinitro-o-cyclohexyl Phenol, 4,6- | 131-89-5 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.26E-06 | - | 1.50E+01 | 1.65E+04 | 1.36E+09 | 1.64E+02 | nc |
| Dinitroaniline, 3,5- | 618-87-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.21E-09 | - | 1.29E+03 | 1.69E+02 | 1.36E+09 | - | - |
| Dinitrobenzene, 1,2- | 528-29-0 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 2.18E-06 | - | 1.33E+02 | 3.59E+02 | 1.36E+09 | 8.21E+00 | nc |
| Dinitrobenzene, 1,3- | 99-65-0 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 2.00E-06 | - | 5.33E+02 | 3.52E+02 | 1.36E+09 | 8.21E+00 | nc |
| Dinitrobenzene, 1,4- | 100-25-4 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 3.43E-06 | - | 6.90E+01 | 3.52E+02 | 1.36E+09 | 8.21E+00 | nc |

Site-specific
Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Dinitrophenol, 2,4- | 51-28-5 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 3.52E-06 | - | 2.79E+03 | 4.61E+02 | 1.36E+09 | 1.64E+02 | nc |
| Dinitrophenols | 25550-58-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.13E-06 | - | 5.60E+00 | 4.70E+02 | 1.36E+09 | - | - |
| Dinitrosopentamethylenetetramine, N,N- | 101-25-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.02E-04 | - | 5.70E-03 | 5.80E+01 | 1.36E+09 | - | - |
| Dinitrotoluene Mixture, 2,4/2,6- | NA | No | No | 6.80E-01 | U | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.62E-05 | - | 2.70E+02 | 5.87E+02 | 1.36E+09 | 3.38E+00 | ca |
| Dinitrotoluene, 2,3- | 602-01-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | - | - | 3.79E-06 | - | 2.70E+02 | 5.87E+02 | 1.36E+09 | - | - |
| Dinitrotoluene, 2,4- | 121-14-2 | No | No | 3.10E-01 | U | 8.90E-05 | U | 2.00E-03 | U | - | - | 1 | 0.102 | 1 | - | 2.21E-06 | - | 2.00E+02 | 5.76E+02 | 1.36E+09 | 7.37E+00 | ca* |
| Dinitrotoluene, 2,5- | 619-15-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | - | - | 3.79E-06 | - | 2.20E+02 | 5.76E+02 | 1.36E+09 | - | - |
| Dinitrotoluene, 2,6- | 606-20-2 | No | No | 1.50E+00 | U | - | - | 3.00E-04 | U | - | - | 1 | 0.099 | 1 | - | 3.05E-05 | - | 1.82E+02 | 5.87E+02 | 1.36E+09 | 1.54E+00 | ca* |
| Dinitrotoluene, 2-Amino-4,6- | 35572-78-2 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.006 | 1 | - | 1.34E-09 | - | 1.22E+03 | 2.83E+02 | 1.36E+09 | 2.28E+02 | nc |
| Dinitrotoluene, 3,4- | 610-39-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | - | - | 3.79E-06 | - | 1.79E+02 | 5.76E+02 | 1.36E+09 | - | - |
| Dinitrotoluene, 3,5- | 618-85-9 | No | No | - | - | - | - | - | - | - | - | - | - | - | - | 3.79E-06 | - | 1.45E+02 | 5.64E+02 | 1.36E+09 | - | - |
| Dinitrotoluene, 4-Amino-2,6- | 19406-51-0 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.009 | 1 | - | 1.34E-09 | - | 1.22E+03 | 2.83E+02 | 1.36E+09 | 2.25E+02 | nc |
| Dinitrotoluene, Technical grade | 25321-14-6 | No | No | 4.50E-01 | U | - | - | 9.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 3.79E-06 | - | 2.70E+02 | 5.87E+02 | 1.36E+09 | 5.11E+00 | ca* |
| Dinoseb | 88-85-7 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.86E-05 | - | 5.20E+01 | 4.29E+03 | 1.36E+09 | 8.21E+01 | nc |
| Dioxane, 1,4- | 123-91-1 | No | Yes | 1.00E-01 | U | 5.00E-06 | U | 3.00E-02 | U | 3.00E-02 | U | 1 | - | 1 | 3.97E+04 | 1.96E-04 | 1.16E+05 | 1.00E+06 | 2.63E+00 | 1.36E+09 | 2.45E+01 | ca* |
| Diphenamid | 957-51-7 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.48E-09 | - | 2.60E+02 | 4.80E+03 | 1.36E+09 | 2.46E+03 | nc |
| Diphenyl Sulfone | 127-63-9 | No | No | - | - | - | - | 8.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.02E-05 | - | 3.14E+02 | 1.11E+03 | 1.36E+09 | 6.57E+01 | nc |
| Diphenylamine | 122-39-4 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 1.10E-04 | - | 5.30E+01 | 8.26E+02 | 1.36E+09 | 8.21E+03 | nc |
| Diphenylhydrazine, 1,2- | 122-66-7 | No | No | 8.00E-01 | U | 2.20E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.95E-05 | - | 2.21E+02 | 1.51E+03 | 1.36E+09 | 2.87E+00 | ca |
| Dipotassium phosphate | 7758-11-4 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Diquat | 85-00-7 | No | No | - | - | - | - | 2.20E-03 | U | - | - | 1 | 0.1 | 1 | - | 5.81E-12 | - | 7.08E+05 | 9.27E+03 | 1.36E+09 | 1.81E+02 | nc |
| Direct Black 38 | 1937-37-7 | No | No | 7.10E+00 | U | 1.40E-01 | U | - | - | - | - | 1 | 0.1 | 1 | - | 3.36E-38 | - | 3.00E+03 | 2.42E+08 | 1.36E+09 | 3.23E-01 | ca |
| Direct Blue 6 | 2602-46-2 | No | No | 7.40E+00 | U | 1.40E-01 | U | - | - | - | - | 1 | 0.1 | 1 | - | 3.72E-42 | - | 1.37E-04 | 7.91E+08 | 1.36E+09 | 3.10E-01 | ca |
| Direct Brown 95 | 16071-86-6 | No | No | 6.70E+00 | U | 1.40E-01 | U | - | - | - | - | 1 | 0.1 | 1 | - | - | - | 1.00E+06 | 6.99E+06 | 1.36E+09 | 3.42E-01 | ca |
| Direct Sky Blue | 2610-05-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.50E-42 | - | 4.00E+04 | 2.88E+08 | 1.36E+09 | - | - |
| Disodium phosphate | 7558-79-4 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Disulfoton | 298-04-4 | No | No | - | - | - | - | 4.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 8.83E-05 | - | 1.63E+01 | 8.38E+02 | 1.36E+09 | 3.28E+00 | nc |
| Dithiane, 1,4- | 505-29-3 | No | Yes | - | - | - | - | 1.00E-02 | U | - | - | 1 | - | 1 | 4.54E+04 | 1.72E-03 | - | 3.00E+03 | 1.46E+02 | 1.36E+09 | 1.17E+03 | nc |
| Diundecyl Phthalate | 3648-20-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | - | 1.47E+07 | 2.29E-03 | - | 1.11E+00 | 5.16E+06 | 1.36E+09 | - | - |
| Diuron | 330-54-1 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.06E-08 | - | 4.20E+01 | 1.09E+02 | 1.36E+09 | 1.64E+02 | nc |
| Dodine | 2439-10-3 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.68E-09 | - | 6.30E+02 | 2.48E+03 | 1.36E+09 | 1.64E+03 | nc |
| EPTC | 759-94-4 | No | Yes | - | - | - | - | 5.00E-02 | U | - | - | 1 | - | 1 | 1.17E+05 | 6.50E-04 | - | 3.75E+02 | 1.64E+02 | 1.36E+09 | 5.84E+03 | nc |
| Endosulfan | 115-29-7 | No | Yes | - | - | - | - | 6.00E-03 | U | - | - | 1 | - | 1 | 4.09E+05 | 2.66E-03 | - | 3.25E-01 | 6.76E+03 | 1.36E+09 | 7.01E+02 | nc |
| Endosulfan I | 959-98-8 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 2.90E-04 | - | 5.10E-01 | 6.76E+03 | 1.36E+09 | - | - |
| Endosulfan II | 33213-65-9 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 1.60E-05 | - | 4.50E-01 | 6.76E+03 | 1.36E+09 | - | - |
| Endosulfan Sulfate | 1031-07-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.33E-05 | - | 4.80E-01 | 9.85E+03 | 1.36E+09 | - | - |
| Endothall | 145-73-3 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.57E-14 | - | 1.00E+05 | 1.94E+01 | 1.36E+09 | 1.64E+03 | nc |
| Endrin | 72-20-8 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 2.60E-04 | - | 2.50E-01 | 2.01E+04 | 1.36E+09 | 2.46E+01 | nc |
| Endrin aldehyde | 7421-93-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.71E-04 | - | 2.40E-02 | 3.27E+03 | 1.36E+09 | - | - |
| Endrin ketone | 53494-70-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 8.26E-07 | - | 2.22E-01 | 9.72E+03 | 1.36E+09 | - | - |
| Epichlorohydrin | 106-89-8 | No | Yes | 9.90E-03 | U | 1.20E-06 | U | 6.00E-03 | U | 1.00E-03 | U | 1 | - | 1 | 1.89E+04 | 1.24E-03 | 1.05E+04 | 6.59E+04 | 9.91E+00 | 1.36E+09 | 8.18E+00 | nc |
| Epoxybutane, 1,2- | 106-88-7 | No | Yes | - | - | - | - | - | - | 2.00E-02 | U | 1 | - | 1 | 7.66E+03 | 7.36E-03 | 1.53E+04 | 9.50E+04 | 9.91E+00 | 1.36E+09 | 6.71E+01 | nc |
| Ethanol | 64-17-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.14E+04 | 2.04E-04 | 1.06E+05 | 1.00E+06 | 1.05E+00 | 1.36E+09 | - | - |
| Ethanol, 2-(2-methoxyethoxy)- | 111-77-3 | No | No | - | - | - | - | 4.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 6.75E-10 | - | 1.00E+06 | 1.00E+00 | 1.36E+09 | 3.28E+03 | nc |
| Ethephon | 16672-87-0 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.33E-10 | - | 1.00E+06 | 5.03E+00 | 1.36E+09 | 4.10E+02 | nc |
| Ethion | 563-12-2 | No | No | - | - | - | - | 5.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.55E-05 | - | 2.00E+00 | 8.82E+02 | 1.36E+09 | 4.10E+01 | nc |

Site-specific
Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---------------------------------|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Ethoxy Propanol | 52125-53-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.46E+05 | 3.02E-06 | 3.96E+04 | 3.66E+05 | 1.36E+00 | 1.36E+09 | | |
| Ethoxyethanol Acetate, 2- | 111-15-9 | No | Yes | - | - | - | - | 1.00E-01 | U | 6.00E-02 | U | 1 | - | 1 | 6.14E+04 | 1.31E-04 | 2.38E+04 | 1.87E+05 | 4.54E+00 | 1.36E+09 | 1.42E+03 | nc |
| Ethoxyethanol, 2- | 110-80-5 | No | Yes | - | - | - | - | 9.00E-02 | U | 2.00E-01 | U | 1 | - | 1 | 9.84E+04 | 1.92E-05 | 1.06E+05 | 1.00E+06 | 1.00E+00 | 1.36E+09 | 4.74E+03 | nc |
| Ethyl Acetate | 141-78-6 | No | Yes | - | - | - | - | 9.00E-01 | U | 7.00E-02 | U | 1 | - | 1 | 8.62E+03 | 5.48E-03 | 1.08E+04 | 8.00E+04 | 5.58E+00 | 1.36E+09 | 2.64E+02 | nc |
| Ethyl Acrylate | 140-88-5 | No | Yes | - | - | - | - | 5.00E-03 | U | 8.00E-03 | U | 1 | - | 1 | 6.34E+03 | 1.39E-02 | 2.50E+03 | 1.50E+04 | 1.07E+01 | 1.36E+09 | 2.14E+01 | nc |
| Ethyl Chloride | 75-00-3 | No | Yes | - | - | - | - | - | - | 1.00E+01 | U | 1 | - | 1 | 1.29E+03 | 4.54E-01 | 2.12E+03 | 6.71E+03 | 2.17E+01 | 1.36E+09 | 5.66E+03 | cs |
| Ethyl Ether | 60-29-7 | No | Yes | - | - | - | - | 2.00E-01 | U | - | - | 1 | - | 1 | 3.13E+03 | 5.03E-02 | 1.01E+04 | 6.04E+04 | 9.70E+00 | 1.36E+09 | 2.34E+04 | cs |
| Ethyl Methacrylate | 97-63-2 | No | Yes | - | - | - | - | - | - | 3.00E-01 | U | 1 | - | 1 | 5.78E+03 | 2.34E-02 | 1.11E+03 | 5.40E+03 | 1.67E+01 | 1.36E+09 | 7.59E+02 | nc |
| Ethyl methane sulfonate | 62-50-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.06E-05 | - | 1.35E+05 | 7.89E+00 | 1.36E+09 | | |
| Ethyl-p-nitrophenyl Phosphonate | 2104-64-5 | No | No | - | - | - | - | 1.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 1.82E-05 | - | 3.11E+00 | 1.55E+04 | 1.36E+09 | 8.21E-01 | nc |
| Ethylbenzene | 100-41-4 | No | Yes | 1.10E-02 | U | 2.50E-06 | U | 1.00E-01 | U | 1.00E+00 | U | 1 | - | 1 | 5.67E+03 | 3.22E-01 | 4.79E+02 | 1.69E+02 | 4.46E+02 | 1.36E+09 | 2.54E+01 | ca* |
| Ethylene Cyanohydrin | 109-78-4 | No | No | - | - | - | - | 7.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.07E-07 | - | 1.00E+06 | 1.00E+00 | 1.36E+09 | 5.74E+03 | nc |
| Ethylene Diamine | 107-15-3 | No | Yes | - | - | - | - | 9.00E-02 | U | - | - | 1 | - | 1 | 1.80E+05 | 7.07E-08 | 1.89E+05 | 1.00E+06 | 1.49E+01 | 1.36E+09 | 1.05E+04 | nc |
| Ethylene Glycol | 107-21-1 | No | No | - | - | - | - | 2.00E+00 | U | 4.00E-01 | U | 1 | 0.1 | 1 | - | 2.45E-06 | - | 1.00E+06 | 1.00E+00 | 1.36E+09 | 1.64E+05 | cm |
| Ethylene Glycol Monobutyl Ether | 111-76-2 | No | No | - | - | - | - | 1.00E-01 | U | 1.60E+00 | U | 1 | 0.1 | 1 | - | 6.54E-05 | - | 1.00E+06 | 2.82E+00 | 1.36E+09 | 8.21E+03 | nc |
| Ethylene Oxide | 75-21-8 | Yes | Yes | 3.10E-01 | U | 3.00E-03 | U | - | - | 3.00E-02 | U | 1 | - | 1 | 6.09E+03 | 6.05E-03 | 1.21E+05 | 1.00E+06 | 3.24E+00 | 1.36E+09 | 2.48E-02 | ca |
| Ethylene Thiourea | 96-45-7 | No | No | 4.50E-02 | U | 1.30E-05 | U | 8.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 5.56E-10 | - | 2.00E+04 | 1.30E+01 | 1.36E+09 | 6.57E+00 | nc |
| Ethyleneimine | 151-56-4 | No | Yes | 6.50E+01 | U | 1.90E-02 | U | - | - | - | - | 1 | - | 1 | 2.39E+04 | 4.95E-04 | 1.54E+05 | 1.00E+06 | 9.04E+00 | 1.36E+09 | 1.18E-02 | ca |
| Ethylphenol, 4- | 123-07-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.16E-05 | - | 4.90E+03 | 5.73E+02 | 1.36E+09 | | |
| Ethylphthalyl Ethyl Glycolate | 84-72-0 | No | No | - | - | - | - | 3.00E+00 | U | - | - | 1 | 0.1 | 1 | - | 2.71E-07 | - | 2.17E+02 | 1.02E+03 | 1.36E+09 | 2.46E+05 | cm |
| Famphur | 52-85-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 6.58E-07 | - | 1.09E+02 | 1.89E+02 | 1.36E+09 | | |
| Fenamiphos | 22224-92-6 | No | No | - | - | - | - | 2.50E-04 | U | - | - | 1 | 0.1 | 1 | - | 4.95E-08 | - | 3.29E+02 | 3.98E+02 | 1.36E+09 | 2.05E+01 | nc |
| Fenpropathrin | 39515-41-8 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.12E-04 | - | 3.30E-01 | 2.25E+04 | 1.36E+09 | 2.05E+03 | nc |
| Fenvalerate | 51630-58-1 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.41E-06 | - | 2.40E-02 | 3.17E+05 | 1.36E+09 | 2.05E+03 | nc |
| Fluometuron | 2164-17-2 | No | No | - | - | - | - | 1.30E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.07E-07 | - | 1.10E+02 | 2.85E+02 | 1.36E+09 | 1.07E+03 | nc |
| Fluoranthene | 206-44-0 | No | No | - | - | - | - | 4.00E-02 | U | - | - | 1 | 0.13 | 1 | - | 3.62E-04 | - | 2.60E-01 | 5.55E+04 | 1.36E+09 | 3.01E+03 | nc |
| Fluorene | 86-73-7 | No | Yes | - | - | - | - | 4.00E-02 | U | - | - | 1 | 0.13 | 1 | 2.81E+05 | 3.93E-03 | - | 1.69E+00 | 9.16E+03 | 1.36E+09 | 3.01E+03 | nc |
| Fluoride | 16984-48-8 | No | No | - | - | - | - | 4.00E-02 | U | 1.30E-02 | U | 1 | - | 1 | - | - | - | 1.69E+00 | - | 1.36E+09 | 4.67E+03 | nc |
| Fluorine (Soluble Fluoride) | 7782-41-4 | No | No | - | - | - | - | 6.00E-02 | U | 1.30E-02 | U | 1 | - | 1 | - | - | - | 1.69E+00 | - | 1.36E+09 | 7.00E+03 | nc |
| Fluorobenzene | 462-06-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.71E+03 | 2.56E-01 | 2.39E+03 | 1.54E+03 | 2.34E+02 | 1.36E+09 | | |
| Fluorobiphenyl, 2- | 321-60-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.24E+05 | 1.97E-02 | - | 1.39E+01 | 8.40E+03 | 1.36E+09 | | |
| Fluorophenol, 2- | 367-12-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.12E+05 | 1.32E-04 | 2.74E+04 | 1.41E+04 | 3.07E+02 | 1.36E+09 | | |
| Fluridone | 59756-60-4 | No | No | - | - | - | - | 8.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.31E-07 | - | 1.20E+01 | 5.68E+04 | 1.36E+09 | 6.57E+03 | nc |
| Flurprimidol | 56425-91-3 | No | No | - | - | - | - | 1.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 5.36E-08 | - | 1.14E+02 | 2.19E+03 | 1.36E+09 | 1.23E+03 | nc |
| Flusilazole | 85509-19-9 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 9.20E-08 | - | 5.40E+01 | 8.11E+04 | 1.36E+09 | 1.64E+02 | nc |
| Flutolanil | 66332-96-5 | No | No | - | - | - | - | 5.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 1.30E-07 | - | 6.53E+00 | 2.56E+03 | 1.36E+09 | 4.10E+04 | nc |
| Fluvalinate | 69409-94-5 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 5.93E-07 | - | 5.00E-03 | 7.30E+05 | 1.36E+09 | 8.21E+02 | nc |
| Folpet | 133-07-3 | No | No | - | - | - | - | 9.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.13E-06 | - | 8.00E-01 | 1.77E+01 | 1.36E+09 | 7.39E+03 | nc |
| Fomesafen | 72178-02-0 | No | No | - | - | - | - | 2.50E-03 | U | - | - | 1 | 0.1 | 1 | - | 3.08E-11 | - | 5.00E+01 | 1.55E+03 | 1.36E+09 | 2.05E+02 | nc |
| Fonofos | 944-22-9 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.85E-04 | - | 1.57E+01 | 8.56E+02 | 1.36E+09 | 1.64E+02 | nc |
| Formaldehyde | 50-00-0 | No | Yes | - | - | 1.30E-05 | U | 2.00E-01 | U | 9.83E-03 | U | 1 | - | 1 | 7.77E+04 | 1.38E-05 | 4.24E+04 | 4.00E+05 | 1.00E+00 | 1.36E+09 | 7.33E+01 | ca** |
| Formic Acid | 64-18-6 | No | Yes | - | - | - | - | 9.00E-01 | U | 3.00E-04 | U | 1 | - | 1 | 9.30E+04 | 6.83E-06 | 1.06E+05 | 1.00E+06 | 1.00E+00 | 1.36E+09 | 1.22E+01 | nc |
| Fosetyl-AL | 39148-24-8 | No | No | - | - | - | - | 2.50E+00 | U | - | - | 1 | 0.1 | 1 | - | 1.29E-12 | - | 1.11E+05 | 6.49E+03 | 1.36E+09 | 2.05E+05 | cm |
| Fuel Oil Number 2 | 68476-30-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | | |
| Furan | 110-00-9 | No | Yes | - | - | - | - | 1.00E-03 | U | - | - | 1 | 0.03 | 1 | 2.62E+03 | 2.21E-01 | 6.22E+03 | 1.00E+04 | 8.00E+01 | 1.36E+09 | 1.04E+02 | nc |

Site-specific

Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] | |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|---|
| Furazolidone | 67-45-8 | No | No | 3.80E+00 | U | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.33E-09 | - | 4.00E+01 | 8.58E+02 | 1.36E+09 | 6.05E-01 | ca | |
| Furfural | 98-01-1 | No | Yes | - | - | - | - | 3.00E-03 | U | 5.00E-02 | U | 1 | - | 1 | 4.86E+04 | 1.54E-04 | 1.01E+04 | 7.41E+04 | 6.08E+00 | 1.36E+09 | 2.64E+02 | nc | |
| Furium | 531-82-8 | No | No | 1.50E+00 | U | 4.30E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 5.44E-14 | - | 4.21E+03 | 5.78E+02 | 1.36E+09 | 1.53E+00 | ca | |
| Furmecycloz | 60568-05-0 | No | No | 3.00E-02 | U | 8.60E-06 | U | - | - | - | - | 1 | 0.1 | 1 | - | 2.82E-07 | - | 3.00E-01 | 4.29E+02 | 1.36E+09 | 7.66E+01 | ca | |
| Gadolinium | 7440-54-2 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Gallium | 7440-55-3 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Germanium | 7440-56-4 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Glufosinate, Ammonium | 77182-82-2 | No | No | - | - | - | - | 6.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.81E-12 | - | 1.37E+06 | 1.00E+01 | 1.36E+09 | 4.92E+02 | nc | |
| Glutaraldehyde | 111-30-8 | No | No | - | - | - | - | - | - | 8.00E-05 | U | 1 | 0.1 | 1 | - | 1.35E-06 | - | 2.24E+05 | 1.00E+00 | 1.36E+09 | 4.76E+04 | nc | |
| Glycerol | 56-81-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 7.07E-07 | - | 1.00E+06 | 1.00E+00 | 1.36E+09 | - | - | |
| Glycidyl | 765-34-4 | No | Yes | - | - | - | - | 4.00E-04 | U | 1.00E-03 | U | 1 | - | 1 | 8.44E+04 | 2.09E-05 | 1.06E+05 | 1.00E+06 | 1.00E+00 | 1.36E+09 | 2.06E+01 | nc | |
| Glyphosate | 1071-83-6 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 8.59E-11 | - | 1.05E+04 | 2.10E+03 | 1.36E+09 | 8.21E+03 | nc | |
| Guanidine | 113-00-8 | No | Yes | - | - | - | - | 1.00E-02 | U | - | - | 1 | - | 1 | 1.45E+05 | 9.57E-10 | - | 1.84E+03 | 1.20E+01 | 1.36E+09 | 1.17E+03 | nc | |
| Guanidine Chloride | 50-01-1 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 8.87E-17 | - | 1.00E+06 | - | 1.36E+09 | 1.64E+03 | nc | |
| Guanidine Nitrate | 506-93-4 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.66E-17 | - | 1.00E+06 | 2.28E+01 | 1.36E+09 | 2.46E+03 | nc | |
| HCDD, 1,2,3,4,6,7,8,- | 35822-46-9 | No | Yes | 1.30E+03 | U | 3.80E-01 | U | 1.00E-06 | U | 4.00E-06 | U | 1 | 0.03 | 1 | 2.43E+06 | 7.15E-03 | - | 2.40E-06 | 1.16E+06 | 1.36E+09 | 2.17E-03 | ca* | |
| Haloacetic acids | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | - | 1.36E+09 | - | - |
| Haloxyfop, Methyl | 69806-40-2 | No | No | - | - | - | - | 5.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 1.30E-05 | - | 9.30E+00 | 5.45E+03 | 1.36E+09 | 4.10E+00 | nc | |
| Heptachlor | 76-44-8 | No | Yes | 4.50E+00 | U | 1.30E-03 | U | 5.00E-04 | U | - | - | 1 | - | 1 | 4.80E+05 | 1.20E-02 | - | 1.80E-01 | 4.13E+04 | 1.36E+09 | 6.26E-01 | ca* | |
| Heptachlor Epoxide | 1024-57-3 | No | Yes | 9.10E+00 | U | 2.60E-03 | U | 1.30E-05 | U | - | - | 1 | - | 1 | 8.42E+05 | 8.59E-04 | - | 2.00E-01 | 1.01E+04 | 1.36E+09 | 3.30E-01 | ca** | |
| Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189) | 39635-31-9 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 0.14 | 1 | 2.43E+06 | 2.07E-03 | - | 7.53E-04 | 3.50E+05 | 1.36E+09 | 5.16E-01 | ca** | |
| Heptachlorodibenzofuran, 1,2,3,4,6,7,8- | 67562-39-4 | No | Yes | 1.30E+03 | U | 3.80E-01 | U | 7.00E-08 | U | 4.00E-06 | U | 1 | 0.03 | 1 | 6.28E+06 | 5.76E-04 | - | 1.35E-06 | 6.50E+05 | 1.36E+09 | 2.21E-03 | ca** | |
| Heptanal, n- | 111-71-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 7.82E+03 | 1.10E-02 | 2.09E+02 | 1.25E+03 | 1.09E+01 | 1.36E+09 | - | - | |
| Heptane, N- | 142-82-5 | No | Yes | - | - | - | - | 3.00E-04 | U | 4.00E-01 | U | 1 | - | 1 | 8.95E+02 | 8.18E+01 | 5.79E+01 | 3.40E+00 | 2.40E+02 | 1.36E+09 | 2.86E+01 | nc | |
| Heptanol, n- | 111-70-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.43E+04 | 7.69E-04 | 3.78E+02 | 1.67E+03 | 2.10E+01 | 1.36E+09 | - | - | |
| Hexabromobenzene | 87-82-1 | No | Yes | - | - | - | - | 2.00E-03 | U | - | - | 1 | - | 1 | 3.80E+05 | 1.15E-03 | - | 1.60E-04 | 2.81E+03 | 1.36E+09 | 2.34E+02 | nc | |
| Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153) | 68631-49-2 | No | No | - | - | - | - | 2.00E-04 | U | - | - | 1 | 0.1 | 1 | - | - | - | 9.00E-04 | - | 1.36E+09 | 1.64E+01 | nc | |
| Hexachlorobenzene | 118-74-1 | No | Yes | 1.60E+00 | U | 4.60E-04 | U | 8.00E-04 | U | - | - | 1 | - | 1 | 6.80E+04 | 6.95E-02 | - | 6.20E-03 | 6.20E+03 | 1.36E+09 | 9.60E-01 | ca* | |
| Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167) | 52663-72-6 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 0.14 | 1 | 1.58E+06 | 2.80E-03 | - | 2.23E-03 | 2.09E+05 | 1.36E+09 | 5.11E-01 | ca** | |
| Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157) | 69782-90-7 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 0.14 | 1 | 1.04E+06 | 6.62E-03 | - | 1.65E-03 | 2.14E+05 | 1.36E+09 | 5.03E-01 | ca** | |
| Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156) | 38380-08-4 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 0.14 | 1 | 1.11E+06 | 5.85E-03 | - | 5.33E-03 | 2.14E+05 | 1.36E+09 | 5.04E-01 | ca** | |
| Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169) | 32774-16-6 | No | Yes | 3.90E+03 | U | 1.14E+00 | U | 2.33E-08 | U | 1.33E-06 | U | 1 | 0.14 | 1 | 1.58E+06 | 2.80E-03 | - | 5.10E-04 | 2.09E+05 | 1.36E+09 | 5.11E-04 | ca** | |
| Hexachlorobutadiene | 87-68-3 | No | Yes | 7.80E-02 | U | 2.20E-05 | U | 1.00E-03 | U | - | - | 1 | - | 1 | 1.08E+04 | 4.21E-01 | 1.68E+01 | 3.20E+00 | 8.45E+02 | 1.36E+09 | 5.26E+00 | ca* | |
| Hexachlorocyclohexane, Alpha- | 319-84-6 | No | No | 6.30E+00 | U | 1.80E-03 | U | 8.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.74E-04 | - | 2.00E+00 | 2.81E+03 | 1.36E+09 | 3.65E-01 | ca | |
| Hexachlorocyclohexane, Beta- | 319-85-7 | No | No | 1.80E+00 | U | 5.30E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.80E-05 | - | 2.40E-01 | 2.81E+03 | 1.36E+09 | 1.28E+00 | ca | |
| Hexachlorocyclohexane, Delta- | 319-86-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.10E-04 | - | 3.14E+01 | 2.81E+03 | 1.36E+09 | - | - | |
| Hexachlorocyclohexane, Epsilon | 6108-10-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.10E-04 | - | 8.00E+00 | 2.81E+03 | 1.36E+09 | - | - | |
| Hexachlorocyclohexane, Gamma- (Lindane) | 58-89-9 | No | No | 1.10E+00 | U | 3.10E-04 | U | 3.00E-04 | U | - | - | 1 | 0.04 | 1 | - | 2.10E-04 | - | 7.30E+00 | 2.81E+03 | 1.36E+09 | 2.54E+00 | ca* | |
| Hexachlorocyclohexane, Technical | 608-73-1 | No | No | 1.80E+00 | U | 5.10E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 2.10E-04 | - | 8.00E+00 | 2.81E+03 | 1.36E+09 | 1.28E+00 | ca | |
| Hexachlorocyclopentadiene | 77-47-4 | No | Yes | - | - | - | - | 6.00E-03 | U | 2.00E-04 | U | 1 | - | 1 | 8.52E+03 | 1.10E+00 | 1.57E+01 | 1.80E+00 | 1.40E+03 | 1.36E+09 | 7.46E-01 | nc | |
| Hexachlorodibenzo-p-dioxin | 34465-46-8 | No | No | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 0.03 | 1 | - | 2.33E-04 | - | 4.00E-06 | 6.95E+05 | 1.36E+09 | 2.23E-04 | ca** | |
| Hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8- | 39227-28-6 | No | No | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 0.03 | 1 | - | 1.61E-04 | - | 4.40E-06 | 6.95E+05 | 1.36E+09 | 2.23E-04 | ca** | |
| Hexachlorodibenzo-p-dioxin, Mixture | NA | No | No | 6.20E+03 | U | 1.30E+00 | U | - | - | - | - | 1 | 0.03 | 1 | - | 2.33E-04 | - | 4.00E-06 | 6.95E+05 | 1.36E+09 | 4.68E-04 | ca | |
| Hexachlorodibenzofuran, 1,2,3,4,7,8- | 70648-26-9 | No | Yes | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 0.03 | 1 | 2.88E+06 | 1.59E-03 | - | 2.98E-06 | 3.89E+05 | 1.36E+09 | 2.18E-04 | ca** | |
| Hexachloroethane | 67-72-1 | No | Yes | 4.00E-02 | U | 1.10E-05 | U | 7.00E-04 | U | 3.00E-02 | U | 1 | - | 1 | 8.01E+03 | 1.59E-01 | - | 5.00E+01 | 1.97E+02 | 1.36E+09 | 8.05E+00 | ca** | |
| Hexachlorophene | 70-30-4 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 2.24E-11 | - | 1.40E+02 | 6.69E+05 | 1.36E+09 | 2.46E+01 | nc | |

Site-specific

Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Hexachloropropene | 1888-71-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.07E+04 | 1.92E-01 | 4.37E+01 | 1.70E+01 | 4.06E+02 | 1.36E+09 | | |
| Hexadecanoic Acid | 57-10-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 5.55E+05 | 8.18E-04 | - | 4.00E-02 | 3.52E+03 | 1.36E+09 | | |
| Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) | 121-82-4 | No | No | 1.10E-01 | U | - | - | 3.00E-03 | U | - | - | 1 | 0.015 | 1 | - | 8.22E-10 | - | 5.97E+01 | 8.91E+01 | 1.36E+09 | 2.80E+01 | ca* |
| Hexamethylene Diisocyanate, 1,6- | 822-06-0 | No | Yes | - | - | - | - | - | - | 1.00E-05 | U | 1 | - | 1 | 3.01E+05 | 1.96E-03 | 3.40E+03 | 1.17E+02 | 4.82E+03 | 1.36E+09 | 1.32E+00 | nc |
| Hexamethylphosphoramide | 680-31-9 | No | No | - | - | - | - | 4.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 8.18E-07 | - | 1.00E+06 | 1.00E+01 | 1.36E+09 | 3.28E+01 | nc |
| Hexane, N- | 110-54-3 | No | Yes | - | - | - | - | - | - | 7.00E-01 | U | 1 | - | 1 | 8.29E+02 | 7.36E+01 | 1.41E+02 | 9.50E+00 | 1.32E+02 | 1.36E+09 | 2.54E+02 | cs |
| Hexanedioic Acid | 124-04-9 | No | No | - | - | - | - | 2.00E+00 | U | - | - | 1 | 0.1 | 1 | - | 1.93E-10 | - | 3.08E+04 | 2.43E+01 | 1.36E+09 | 1.64E+05 | cm |
| Hexanol, n- | 111-27-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.92E+04 | 6.99E-04 | 9.98E+02 | 5.90E+03 | 1.15E+01 | 1.36E+09 | | |
| Hexanone, 2- | 591-78-6 | No | Yes | - | - | - | - | 5.00E-03 | U | 3.00E-02 | U | 1 | - | 1 | 1.33E+04 | 3.81E-03 | 3.28E+03 | 1.72E+04 | 1.50E+01 | 1.36E+09 | 1.34E+02 | nc |
| Hexazinone | 51235-04-2 | No | No | - | - | - | - | 3.30E-02 | U | - | - | 1 | 0.1 | 1 | - | 9.24E-11 | - | 3.30E+04 | 1.29E+02 | 1.36E+09 | 2.71E+03 | nc |
| Hexythiazox | 78587-05-0 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 9.69E-07 | - | 5.00E-01 | 2.12E+03 | 1.36E+09 | 2.05E+03 | nc |
| HpCDD, 2,3,7,8- | 37871-00-4 | No | Yes | 1.30E+03 | U | 3.80E-01 | U | 7.00E-08 | U | 4.00E-06 | U | 1 | 0.03 | 1 | 2.43E+06 | 7.15E-03 | - | 1.41E-06 | 1.16E+06 | 1.36E+09 | 2.17E-03 | ca** |
| HpCDF, 1,2,3,4,7,8,9- | 55673-89-7 | No | Yes | 1.30E+03 | U | 3.80E-01 | U | 7.00E-08 | U | 4.00E-06 | U | 1 | 0.03 | 1 | 6.28E+06 | 5.76E-04 | - | 1.35E-06 | 6.50E+05 | 1.36E+09 | 2.21E-03 | ca** |
| HpCDF, 2,3,7,8- | 38998-75-3 | No | Yes | 1.30E+03 | U | 3.80E-01 | U | 7.00E-08 | U | 4.00E-06 | U | 1 | 0.03 | 1 | 6.28E+06 | 5.76E-04 | - | 1.35E-06 | 6.50E+05 | 1.36E+09 | 2.21E-03 | ca** |
| HxCDD, 1,2,3,6,7,8- | 57653-85-7 | No | No | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 0.03 | 1 | - | 7.93E-05 | - | 2.65E-05 | 6.95E+05 | 1.36E+09 | 2.23E-04 | ca** |
| HxCDD, 1,2,3,7,8,9- | 19408-74-3 | No | No | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 0.03 | 1 | - | 7.93E-05 | - | 2.65E-05 | 6.95E+05 | 1.36E+09 | 2.23E-04 | ca** |
| HxCDF, 1,2,3,6,7,8- | 57117-44-9 | No | Yes | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 0.03 | 1 | 2.88E+06 | 1.59E-03 | - | 3.49E-04 | 3.89E+05 | 1.36E+09 | 2.18E-04 | ca** |
| HxCDF, 1,2,3,7,8,9- | 72918-21-9 | No | No | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 0.03 | 1 | - | 3.47E-04 | - | 1.56E-03 | 3.89E+05 | 1.36E+09 | 2.23E-04 | ca** |
| HxCDF, 2,3,4,6,7,8- | 60851-34-5 | No | No | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 0.03 | 1 | - | 2.78E-04 | - | 5.89E-05 | 3.89E+05 | 1.36E+09 | 2.23E-04 | ca** |
| HxCDF, 2,3,7,8- | 55684-94-1 | No | No | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 0.03 | 1 | - | 3.47E-04 | - | 1.56E-03 | 3.97E+05 | 1.36E+09 | 2.23E-04 | ca** |
| Hydramethylnon | 67485-29-4 | No | No | - | - | - | - | 1.70E-02 | U | - | - | 1 | 0.1 | 1 | - | 8.99E-05 | - | 6.00E-03 | 1.80E+08 | 1.36E+09 | 1.40E+03 | nc |
| Hydrazine | 302-01-2 | No | Yes | 3.00E+00 | U | 4.90E-03 | U | - | - | 3.00E-05 | U | 1 | - | 1 | - | 2.50E-05 | - | 1.00E+06 | - | 1.36E+09 | 1.09E+00 | ca |
| Hydrazine Sulfate | 10034-93-2 | No | No | 3.00E+00 | U | 4.90E-03 | U | - | - | - | - | 1 | - | 1 | - | - | - | 3.06E+04 | - | 1.36E+09 | 1.09E+00 | ca |
| Hydrogen Chloride | 7647-01-0 | No | Yes | - | - | - | - | - | - | 2.00E-02 | U | 1 | - | 1 | - | 8.34E+07 | - | 6.73E+05 | - | 1.36E+09 | 1.19E+07 | cm |
| Hydrogen Cyanide | 74-90-8 | No | Yes | - | - | - | - | 6.00E-04 | U | 8.00E-04 | U | 1 | - | 1 | 5.22E+04 | 5.44E-03 | 1.00E+07 | 1.00E+06 | - | 1.36E+09 | 1.45E+01 | nc |
| Hydrogen Fluoride | 7664-39-3 | No | Yes | - | - | - | - | 4.00E-02 | U | 1.40E-02 | U | 1 | - | 1 | - | 4.25E-03 | - | 1.00E+06 | - | 1.36E+09 | 4.67E+03 | nc |
| Hydrogen Selenide | 7783-07-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Hydrogen Sulfate | 12143-45-2 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Hydrogen Sulfide | 7783-06-4 | No | Yes | - | - | - | - | - | - | 2.00E-03 | U | 1 | - | 1 | - | 3.50E-01 | - | 3.74E+03 | - | 1.36E+09 | 1.19E+06 | cm |
| Hydroquinone | 123-31-9 | No | No | 6.00E-02 | U | - | - | 4.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.93E-09 | - | 7.20E+04 | 2.41E+02 | 1.36E+09 | 3.83E+01 | ca* |
| Imazalil | 35554-44-0 | No | No | 6.11E-02 | U | - | - | 2.50E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.06E-07 | - | 1.80E+02 | 8.50E+03 | 1.36E+09 | 3.76E+01 | ca** |
| Imazaquin | 81335-37-7 | No | No | - | - | - | - | 2.50E-01 | U | - | - | 1 | 0.1 | 1 | - | 2.83E-16 | - | 9.00E+01 | 2.39E+03 | 1.36E+09 | 2.05E+04 | nc |
| Imazethapyr | 81335-77-5 | No | No | - | - | - | - | 2.50E+00 | U | - | - | 1 | 0.1 | 1 | - | 4.25E-15 | - | 1.40E+03 | 3.39E+02 | 1.36E+09 | 2.05E+05 | cm |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | Yes | No | 1.00E-01 | U | 6.00E-05 | U | - | - | - | - | 1 | 0.13 | 1 | - | 1.42E-05 | - | 1.90E-04 | 1.95E+06 | 1.36E+09 | 2.11E+01 | ca |
| Indium | 7440-74-6 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Iodide | 20461-54-5 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Iodine | 7553-56-2 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | - | 1 | - | - | - | 3.30E+02 | - | 1.36E+09 | 1.17E+03 | nc |
| Iodomethane | 74-88-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.85E+03 | 2.15E-01 | 3.03E+03 | 1.38E+04 | 1.32E+01 | 1.36E+09 | | |
| Iodopropynyl Butylcarbamate (IPBC) | 55406-53-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.91E-06 | - | 1.56E+02 | 2.85E+02 | 1.36E+09 | | |
| Iprodione | 36734-19-7 | No | No | - | - | - | - | 4.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.28E-07 | - | 1.39E+01 | 5.25E+01 | 1.36E+09 | 3.28E+03 | nc |
| Iron | 7439-89-6 | No | No | - | - | - | - | 7.00E-01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 8.18E+04 | nc |
| Iron Sulfide | 11126-12-8 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Isobutyl Alcohol | 78-83-1 | No | Yes | - | - | - | - | 3.00E-01 | U | - | - | 1 | - | 1 | 2.81E+04 | 4.00E-04 | 1.00E+04 | 8.50E+04 | 2.92E+00 | 1.36E+09 | 3.50E+04 | cs |
| Isodrin | 465-73-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.68E+06 | 1.80E-03 | - | 1.70E-02 | 8.20E+04 | 1.36E+09 | | |

Site-specific

Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|----------------------------------|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-----|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Isophorone | 78-59-1 | No | No | 9.50E-04 | U | - | - | 2.00E-01 | U | 2.00E+00 | U | 1 | 0.1 | 1 | - | 2.71E-04 | - | 1.20E+04 | 6.52E+01 | 1.36E+09 | 2.42E+03 | ca** |
| Isopropalin | 33820-53-0 | No | Yes | - | - | - | - | 1.50E-02 | U | - | - | 1 | - | 1 | 4.19E+05 | 4.54E-03 | - | 1.10E-01 | 1.14E+04 | 1.36E+09 | 1.75E+03 | nc |
| Isopropanol | 67-63-0 | No | Yes | - | - | - | - | 2.00E+00 | U | 2.00E-01 | U | 1 | - | 1 | 2.77E+04 | 3.31E-04 | 1.09E+05 | 1.00E+06 | 1.53E+00 | 1.36E+09 | 2.41E+03 | nc |
| Isopropyl Methyl Phosphonic Acid | 1832-54-8 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 2.81E-07 | - | 5.04E+04 | 7.71E+00 | 1.36E+09 | 8.21E+03 | nc |
| Isopropyltoluene, p- | 99-87-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.52E+03 | 4.50E-01 | 1.62E+02 | 2.34E+01 | 1.12E+03 | 1.36E+09 | - | - |
| Isosafrole | 120-58-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.48E+03 | 1.47E+00 | 2.33E+02 | 1.44E+02 | 2.07E+02 | 1.36E+09 | - | - |
| Isoxaben | 82558-50-7 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 5.19E-08 | - | 1.42E+00 | 1.26E+03 | 1.36E+09 | 4.10E+03 | nc |
| JP-4 | 50815-00-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 4.09E+02 | - | 5.70E+01 | - | 1.36E+09 | - | - |
| JP-5 | NA | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 2.41E-03 | 5.40E-01 | 5.00E+00 | 1.25E+00 | 1.36E+09 | - | - |
| JP-7 | NA | No | Yes | - | - | - | - | - | - | 3.00E-01 | U | 1 | - | 1 | - | 4.09E-01 | - | 1.04E+01 | - | 1.36E+09 | 1.79E+08 | cm |
| JP-8 | NA | No | Yes | - | - | - | - | - | - | - | - | - | - | - | - | 2.41E-03 | 1.34E+00 | 1.24E+01 | 1.25E+00 | 1.36E+09 | - | - |
| Kerosene | 8008-20-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 4.09E-01 | - | 1.04E+01 | - | 1.36E+09 | - | - |
| Lactofen | 77501-63-4 | No | No | - | - | - | - | 8.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.93E-05 | - | 1.00E-01 | 2.30E+04 | 1.36E+09 | 6.57E+02 | nc |
| Lactonitrile | 78-97-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.01E-04 | - | 4.66E+05 | 1.00E+00 | 1.36E+09 | - | - |
| Lanthanum | 7439-91-0 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Lead Alkyls | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Lead Chromate | 7758-97-6 | Yes | No | 5.00E-01 | U | 1.50E-01 | U | 2.00E-02 | U | 2.00E-04 | U | 0.025 | - | 1 | - | - | - | 1.70E-01 | - | 1.36E+09 | 6.18E+00 | ca |
| Lead Phosphate | 7446-27-7 | No | No | 8.50E-03 | U | 1.20E-05 | U | - | - | - | - | 1 | - | 1 | - | - | - | 0.00E+00 | - | 1.36E+09 | 3.85E+02 | ca |
| Lead acetate | 301-04-2 | No | No | 8.50E-03 | U | 1.20E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | - | - | 1.60E+03 | 1.00E+00 | 1.36E+09 | 2.70E+02 | ca |
| Lead and Compounds | 7439-92-1 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Lead subacetate | 1335-32-6 | No | No | 8.50E-03 | U | 1.20E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | - | - | 6.25E+04 | 1.04E+01 | 1.36E+09 | 2.70E+02 | ca |
| Lewisite | 541-25-3 | No | Yes | - | - | - | - | 5.00E-06 | U | - | - | 1 | - | 1 | 2.56E+04 | 8.91E-03 | 3.84E+02 | 5.00E+02 | 1.11E+02 | 1.36E+09 | 5.84E-01 | nc |
| Linuron | 330-55-2 | No | No | - | - | - | - | 7.70E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.56E-07 | - | 7.50E+01 | 3.40E+02 | 1.36E+09 | 6.32E+02 | nc |
| Lithium | 7439-93-2 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 2.34E+02 | nc |
| Lithium Perchlorate | 7791-03-9 | No | No | - | - | - | - | 7.00E-04 | U | - | - | 1 | - | 1 | - | - | - | 5.87E+05 | - | 1.36E+09 | 8.18E+01 | nc |
| Lutetium | 7439-94-3 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| MCPA | 94-74-6 | No | No | - | - | - | - | 5.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 5.44E-08 | - | 6.30E+02 | 2.96E+01 | 1.36E+09 | 4.10E+01 | nc |
| MCPB | 94-81-5 | No | No | - | - | - | - | 4.40E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.11E-07 | - | 4.80E+01 | 9.84E+01 | 1.36E+09 | 3.61E+02 | nc |
| M CPP | 93-65-2 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 7.44E-07 | - | 6.20E+02 | 4.85E+01 | 1.36E+09 | 8.21E+01 | nc |
| Magnesium | 7439-95-4 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Malathion | 121-75-5 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.00E-07 | - | 1.43E+02 | 3.13E+01 | 1.36E+09 | 1.64E+03 | nc |
| Maleic Anhydride | 108-31-6 | No | No | - | - | - | - | 1.00E-01 | U | 7.00E-04 | U | 1 | 0.1 | 1 | - | 1.61E-04 | - | 1.63E+05 | 1.00E+00 | 1.36E+09 | 8.05E+03 | nc |
| Maleic Hydrazide | 123-33-1 | No | No | - | - | - | - | 5.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 1.08E-09 | - | 4.51E+03 | 3.30E+00 | 1.36E+09 | 4.10E+04 | nc |
| Malononitrile | 109-77-3 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 5.36E-06 | - | 1.33E+05 | 3.33E+00 | 1.36E+09 | 8.21E+00 | nc |
| Mancozeb | 8018-01-7 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 6.21E-10 | - | 6.20E+00 | 6.08E+02 | 1.36E+09 | 2.46E+03 | nc |
| Maneb | 12427-38-2 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.99E-07 | - | 6.00E+00 | 6.08E+02 | 1.36E+09 | 4.10E+02 | nc |
| Manganese (Non-diet) | 7439-96-5 | No | No | - | - | - | - | 2.40E-02 | U | 5.00E-05 | U | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 2.56E+03 | nc |
| Mechlorethamine | 51-75-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.19E-04 | - | 1.20E+04 | 8.85E+01 | 1.36E+09 | - | - |
| Mephosfolan | 950-10-7 | No | No | - | - | - | - | 9.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 4.87E-09 | - | 5.70E+01 | 6.36E+02 | 1.36E+09 | 7.39E+00 | nc |
| Mepiquat Chloride | 24307-26-4 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.76E-10 | - | 5.00E+05 | 6.62E+01 | 1.36E+09 | 2.46E+03 | nc |
| Mercaptobenzothiazole, 2- | 149-30-4 | No | No | 1.10E-02 | U | - | - | 4.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.48E-06 | - | 1.20E+02 | 1.36E+03 | 1.36E+09 | 2.09E+02 | ca** |
| Mercuric Chloride | 7487-94-7 | No | No | - | - | - | - | 3.00E-04 | U | 3.00E-04 | U | 0.07 | - | 1 | - | - | - | 6.90E+04 | - | 1.36E+09 | 3.50E+01 | nc |
| Mercury (elemental) | 7439-97-6 | No | Yes | - | - | - | - | - | - | 3.00E-04 | U | 1 | - | 1 | 3.47E+04 | 3.52E-01 | 3.13E+00 | 6.00E-02 | - | 1.36E+09 | 4.56E+00 | cs |
| Merphos | 150-50-5 | No | Yes | - | - | - | - | 3.00E-05 | U | - | - | 1 | - | 1 | 1.94E+06 | 9.28E-04 | - | 3.50E-03 | 4.90E+04 | 1.36E+09 | 3.50E+00 | nc |
| Merphos Oxide | 78-48-8 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.20E-05 | - | 2.30E+00 | 2.35E+03 | 1.36E+09 | 8.21E+00 | nc |
| Metalaxyl | 57837-19-1 | No | No | - | - | - | - | 6.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.21E-07 | - | 8.40E+03 | 3.86E+01 | 1.36E+09 | 4.92E+03 | nc |

Site-specific
Composite Worker Screening Levels (RSL) for Soil
 Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-----|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Methacrylonitrile | 126-98-7 | No | Yes | - | - | - | - | 1.00E-04 | U | 3.00E-02 | U | 1 | - | 1 | 6.80E+03 | 1.01E-02 | 4.59E+03 | 2.54E+04 | 1.31E+01 | 1.36E+09 | 1.03E+01 | nc |
| Methamidophos | 10265-92-6 | No | No | - | - | - | - | 5.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 3.55E-08 | - | 1.00E+06 | 5.41E+00 | 1.36E+09 | 4.10E+00 | nc |
| Methanol | 67-56-1 | No | Yes | - | - | - | - | 2.00E+00 | U | 2.00E+01 | U | 1 | - | 1 | 2.91E+04 | 1.86E-04 | 1.06E+05 | 1.00E+06 | 1.00E+00 | 1.36E+09 | 1.22E+05 | cs |
| Methapyrilene | 91-80-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.32E-10 | - | 6.01E+02 | 1.86E+03 | 1.36E+09 | - | - |
| Methidathion | 950-37-8 | No | No | - | - | - | - | 1.50E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.93E-07 | - | 1.87E+02 | 2.12E+01 | 1.36E+09 | 1.23E+02 | nc |
| Methomyl | 16752-77-5 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 8.05E-10 | - | 5.80E+04 | 1.00E+01 | 1.36E+09 | 2.05E+03 | nc |
| Methoxy-5-nitroaniline, 2- | 99-59-2 | No | No | 4.90E-02 | U | 1.40E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | 5.11E-07 | - | 1.15E+02 | 7.13E+01 | 1.36E+09 | 4.69E+01 | ca |
| Methoxychlor | 72-43-5 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 8.30E-06 | - | 1.00E-01 | 2.69E+04 | 1.36E+09 | 4.10E+02 | nc |
| Methoxyethanol Acetate, 2- | 110-49-6 | No | Yes | - | - | - | - | 8.00E-03 | U | 1.00E-03 | U | 1 | - | 1 | 1.24E+05 | 1.27E-05 | 1.15E+05 | 1.00E+06 | 2.49E+00 | 1.36E+09 | 5.12E+01 | nc |
| Methoxyethanol, 2- | 109-86-4 | No | Yes | - | - | - | - | 5.00E-03 | U | 2.00E-02 | U | 1 | - | 1 | 1.01E+05 | 1.35E-05 | 1.06E+05 | 1.00E+06 | 1.00E+00 | 1.36E+09 | 3.52E+02 | nc |
| Methyl Acetate | 79-20-9 | No | Yes | - | - | - | - | 1.00E+00 | U | - | - | 1 | - | 1 | 8.12E+03 | 4.70E-03 | 2.90E+04 | 2.43E+05 | 3.06E+00 | 1.36E+09 | 1.17E+05 | cs |
| Methyl Acrylate | 96-33-3 | No | Yes | - | - | - | - | - | - | 2.00E-02 | U | 1 | - | 1 | 6.97E+03 | 8.14E-03 | 6.75E+04 | 4.94E+04 | 5.84E+00 | 1.36E+09 | 6.11E+01 | nc |
| Methyl Ethyl Ketone (2-Butanone) | 78-93-3 | No | Yes | - | - | - | - | 6.00E-01 | U | 5.00E+00 | U | 1 | - | 1 | 1.22E+04 | 2.33E-03 | 2.84E+04 | 2.23E+05 | 4.51E+00 | 1.36E+09 | 1.93E+04 | nc |
| Methyl Hydrazine | 60-34-4 | No | Yes | - | - | 1.00E-03 | U | 1.00E-03 | U | 2.00E-05 | U | 1 | - | 1 | 5.04E+04 | 1.24E-04 | 1.80E+05 | 1.00E+06 | 1.33E+01 | 1.36E+09 | 4.40E-01 | nc |
| Methyl Isobutyl Ketone (4-methyl-2-pentanone) | 108-10-1 | No | Yes | - | - | - | - | - | - | 3.00E+00 | U | 1 | - | 1 | 1.06E+04 | 5.64E-03 | 3.36E+03 | 1.90E+04 | 1.26E+01 | 1.36E+09 | 1.39E+04 | cs |
| Methyl Isocyanate | 624-83-9 | No | Yes | - | - | - | - | - | - | 1.00E-03 | U | 1 | - | 1 | 4.40E+03 | 3.79E-02 | 1.01E+04 | 2.92E+04 | 3.96E+01 | 1.36E+09 | 1.93E+00 | nc |
| Methyl Mercaptan | 74-93-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.78E+03 | 1.28E-01 | 3.13E+03 | 1.54E+04 | 1.32E+01 | 1.36E+09 | - | - |
| Methyl Mercury | 22967-92-6 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.17E+01 | nc |
| Methyl Methacrylate | 80-62-6 | No | Yes | - | - | - | - | 1.40E+00 | U | 7.00E-01 | U | 1 | - | 1 | 6.34E+03 | 1.30E-02 | 2.36E+03 | 1.50E+04 | 9.14E+00 | 1.36E+09 | 1.92E+03 | nc |
| Methyl Parathion | 298-00-0 | No | No | - | - | - | - | 2.50E+04 | U | - | - | 1 | 0.1 | 1 | - | 4.09E-06 | - | 3.77E+01 | 7.29E+02 | 1.36E+09 | 2.05E+01 | nc |
| Methyl Phosphonic Acid | 993-13-5 | No | No | - | - | - | - | 6.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 4.99E-10 | - | 2.00E+04 | 1.41E+00 | 1.36E+09 | 4.92E+03 | nc |
| Methyl Styrene (Mixed Isomers) | 25013-15-4 | No | Yes | - | - | - | - | 6.00E-03 | U | 4.00E-02 | U | 1 | - | 1 | 2.43E+04 | 1.07E-01 | 3.93E+02 | 8.90E+01 | 7.16E+02 | 1.36E+09 | 2.65E+02 | nc |
| Methyl dicyclohexylamine, n- | 7560-83-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.74E+04 | 4.95E-03 | - | 3.19E+02 | 1.77E+02 | 1.36E+09 | - | - |
| Methyl methanesulfonate | 66-27-3 | No | No | 9.90E-02 | U | 2.80E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.65E-04 | - | 2.00E+05 | 4.33E+00 | 1.36E+09 | 2.32E+01 | ca |
| Methyl tert-Butyl Ether (MTBE) | 1634-04-4 | No | Yes | 1.80E-03 | U | 2.60E-07 | U | - | - | 3.00E+00 | U | 1 | - | 1 | 4.90E+03 | 2.40E-02 | 8.88E+03 | 5.10E+04 | 1.16E+01 | 1.36E+09 | 2.05E+02 | ca* |
| Methyl-1,4-benzenediamine dihydrochloride, 2- | 615-45-2 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 2.61E-16 | - | 1.00E+06 | 2.02E+02 | 1.36E+09 | 2.46E+01 | nc |
| Methyl-2-Pentanol, 4- | 108-11-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.72E+04 | 1.82E-03 | 2.45E+03 | 1.64E+04 | 8.16E+00 | 1.36E+09 | - | - |
| Methyl-5-Nitroaniline, 2- | 99-55-8 | No | No | 9.00E-03 | U | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.39E-07 | - | 1.00E+04 | 1.79E+02 | 1.36E+09 | 2.55E+02 | ca** |
| Methyl-N-nitro-N-nitrosoguanidine, N- | 70-25-7 | No | No | 8.30E+00 | U | 2.40E-03 | U | - | - | - | - | 1 | 0.1 | 1 | - | 4.99E-11 | - | 2.67E+05 | 7.20E+01 | 1.36E+09 | 2.77E-01 | ca |
| Methylaniline Hydrochloride, 2- | 636-21-5 | No | No | 1.30E-01 | U | 3.70E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | 8.59E-05 | - | 8.29E+03 | 1.15E+02 | 1.36E+09 | 1.77E+01 | ca |
| Methylarsonic acid | 124-58-3 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | - | - | 2.56E+05 | 4.39E+01 | 1.36E+09 | 8.21E+02 | nc |
| Methylaziridine, 2- | 75-55-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.20E+04 | 4.09E-04 | 1.87E+05 | 1.00E+06 | 1.45E+01 | 1.36E+09 | - | - |
| Methylbenzene,1,4-diamine monohydrochloride, 2- | 74612-12-7 | No | No | - | - | - | - | 2.00E-04 | U | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | 1.64E+01 | nc |
| Methylbenzene-1,4-diamine sulfate, 2- | 615-50-9 | No | No | 1.00E-01 | U | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | 2.30E+01 | ca** |
| Methylcholanthrene, 3- | 56-49-5 | Yes | No | 2.20E+01 | U | 6.30E-03 | U | - | - | - | - | 1 | 0.1 | 1 | - | 2.14E-04 | - | 2.90E-03 | 9.62E+05 | 1.36E+09 | 1.04E-01 | ca |
| Methylcyclohexane | 108-87-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 9.90E+02 | 1.76E+01 | 6.77E+01 | 1.40E+01 | 2.34E+02 | 1.36E+09 | - | - |
| Methylcyclohexylamine, n- | 100-60-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.18E+04 | 1.23E-03 | 5.70E+03 | 1.75E+04 | 3.76E+01 | 1.36E+09 | - | - |
| Methylcyclopentane | 96-37-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.86E+02 | 1.48E+01 | 1.54E+02 | 4.20E+01 | 1.28E+02 | 1.36E+09 | - | - |
| Methylene Chloride | 75-09-2 | Yes | Yes | 2.00E-03 | U | 1.00E-08 | U | 6.00E-03 | U | 6.00E-01 | U | 1 | - | 1 | 2.19E+03 | 1.33E-01 | 3.32E+03 | 1.30E+04 | 2.17E+01 | 1.36E+09 | 3.16E+02 | nc |
| Methylene-bis(2-chloroaniline), 4,4'- | 101-14-4 | Yes | No | 1.00E-01 | U | 4.30E-04 | U | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.66E-09 | - | 1.39E+01 | 5.70E+03 | 1.36E+09 | 2.30E+01 | ca** |
| Methylene-bis(N,N-dimethyl) Aniline, 4,4'- | 101-61-1 | No | No | 4.60E-02 | U | 1.30E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | 4.37E-08 | - | 4.14E+00 | 2.67E+03 | 1.36E+09 | 5.00E+01 | ca |
| Methylenebisbenzenamine, 4,4'- | 101-77-9 | No | No | 1.60E+00 | U | 4.60E-04 | U | - | - | 2.00E-02 | U | 1 | 0.1 | 1 | - | 2.17E-09 | - | 1.00E+03 | 2.13E+03 | 1.36E+09 | 1.44E+00 | ca |
| Methylenediphenyl Diisocyanate | 101-68-8 | No | No | - | - | - | - | - | - | 6.00E-04 | U | 1 | 0.1 | 1 | - | 3.66E-05 | - | 8.29E-01 | 2.85E+05 | 1.36E+09 | 3.57E+05 | cm |

Site-specific

Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Methylisothiocyanate | 556-61-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.48E+04 | 1.83E-03 | - | 7.60E+03 | 1.07E+01 | 1.36E+09 | - | - |
| Methylnaphthalene | 1321-94-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 5.86E+04 | 2.10E-02 | - | 2.50E+01 | 2.53E+03 | 1.36E+09 | - | - |
| Methylnaphthalene, 1- | 90-12-0 | No | Yes | 2.90E-02 | U | - | - | 7.00E-02 | U | - | - | 1 | 0.13 | 1 | 5.86E+04 | 2.10E-02 | 3.94E+02 | 2.58E+01 | 2.53E+03 | 1.36E+09 | 7.27E+01 | ca* |
| Methylnaphthalene, 2- | 91-57-6 | No | Yes | - | - | - | - | 4.00E-03 | U | - | - | 1 | 0.13 | 1 | 5.80E+04 | 2.12E-02 | - | 2.46E+01 | 2.48E+03 | 1.36E+09 | 3.01E+02 | nc |
| Methylstyrene, Alpha- | 98-83-9 | No | Yes | - | - | - | - | 7.00E-02 | U | - | - | 1 | - | 1 | 1.28E+04 | 1.04E-01 | 5.00E+02 | 1.16E+02 | 6.98E+02 | 1.36E+09 | 8.18E+03 | cs |
| Methyltriethyl Lead | 1762-28-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.63E+03 | 2.54E+01 | 1.32E+01 | 1.92E+00 | 3.31E+02 | 1.36E+09 | - | - |
| Metolachlor | 51218-45-2 | No | No | - | - | - | - | 1.50E-01 | U | - | - | 1 | 0.1 | 1 | - | 3.68E-07 | - | 5.30E+02 | 4.89E+02 | 1.36E+09 | 1.23E+04 | nc |
| Metribuzin | 21087-64-9 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 4.78E-09 | - | 1.05E+03 | 5.31E+01 | 1.36E+09 | 2.05E+03 | nc |
| Metsulfuron-methyl | 74223-64-6 | No | No | - | - | - | - | 2.50E-01 | U | - | - | 1 | 0.1 | 1 | - | 5.40E-15 | - | 9.50E+03 | 9.25E+01 | 1.36E+09 | 2.05E+04 | nc |
| Mineral oils | 8012-95-1 | No | Yes | - | - | - | - | 3.00E+00 | U | - | - | 1 | - | 1 | 1.38E+03 | 3.34E+02 | 3.41E-01 | 3.70E-03 | 4.82E+03 | 1.36E+09 | 3.50E+05 | cs |
| Mirex | 2385-85-5 | No | Yes | 1.80E+01 | U | 5.10E-03 | U | 2.00E-04 | U | - | - | 1 | - | 1 | 8.57E+05 | 3.32E-02 | - | 8.50E-02 | 3.57E+05 | 1.36E+09 | 1.67E-01 | ca |
| Molinate | 2212-67-1 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.68E-04 | - | 9.70E+02 | 1.82E+02 | 1.36E+09 | 1.64E+02 | nc |
| Molybdenum | 7439-98-7 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.84E+02 | nc |
| Monoaluminum phosphate | 13530-50-2 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Monoammonium phosphate | 7722-76-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Monobutyltin Compounds | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Monocalcium phosphate | 7758-23-8 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Monochloramine | 10599-90-3 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.17E+04 | nc |
| Monochlorobutanes | 25154-42-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Monochlorophenols (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Monocyclic aromatic hydrocarbons (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Monomagnesium phosphate | 7757-86-0 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Monomethylaniline | 100-61-8 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 3.63E-04 | - | 5.62E+03 | 8.21E+01 | 1.36E+09 | 1.64E+02 | nc |
| Monopotassium phosphate | 7778-77-0 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Monosodium phosphate | 7558-80-7 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | 4.87E+05 | - | 1.36E+09 | 5.68E+06 | cm |
| Myclobutanil | 88671-89-0 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.75E-07 | - | 1.42E+02 | 6.08E+03 | 1.36E+09 | 2.05E+03 | nc |
| N,N'-Diphenyl-1,4-benzenediamine | 74-31-7 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 8.38E-09 | - | 7.35E+00 | 5.19E+04 | 1.36E+09 | 2.46E+01 | nc |
| N-Methyl dithiocarbamate | 137-42-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | 7.22E+05 | 5.87E+01 | 1.36E+09 | - | - |
| Naled | 300-76-5 | No | Yes | - | - | - | - | 2.00E-03 | U | - | - | 1 | - | 1 | 5.70E+04 | 2.66E-03 | - | 1.50E+00 | 1.27E+02 | 1.36E+09 | 2.34E+02 | nc |
| Naphtha, High Flash Aromatic (HFAN) | 64742-95-6 | No | Yes | - | - | - | - | 3.00E-02 | U | 1.00E-01 | U | 1 | - | 1 | - | 1.80E-02 | - | 3.10E+01 | - | 1.36E+09 | 3.50E+03 | nc |
| Naphthalene | 91-20-3 | No | Yes | - | - | 3.40E-05 | U | 2.00E-02 | U | 3.00E-03 | U | 1 | 0.13 | 1 | 4.63E+04 | 1.80E-02 | - | 3.10E+01 | 1.54E+03 | 1.36E+09 | 1.67E+01 | ca** |
| Naphthol, 2- | 135-19-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.12E-06 | - | 7.55E+02 | 1.98E+03 | 1.36E+09 | - | - |
| Naphthoquinone, 1,4- | 130-15-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 8.05E-08 | - | 6.68E+02 | 4.54E+02 | 1.36E+09 | - | - |
| Naphthylamine, 1- | 134-32-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.54E-06 | - | 1.70E+03 | 2.53E+03 | 1.36E+09 | - | - |
| Naphthylamine, 2- | 91-59-8 | No | No | 1.80E+00 | U | 0.00E+00 | U | - | - | - | - | 1 | 0.1 | 1 | - | 3.31E-06 | - | 1.89E+02 | 2.48E+03 | 1.36E+09 | 1.28E+00 | ca |
| Napropamide | 15299-99-7 | No | No | - | - | - | - | 1.20E-01 | U | - | - | 1 | 0.1 | 1 | - | 3.44E-08 | - | 7.30E+01 | 3.22E+03 | 1.36E+09 | 9.85E+03 | nc |
| Neodymium Chloride (Stable, Nonradioactive) | 10024-93-8 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | 1.00E+06 | - | 1.36E+09 | - | - |
| Niagara Blue 4B | 2429-74-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.50E-42 | - | 5.89E-03 | 2.82E+08 | 1.36E+09 | - | - |
| Nickel Acetate | 373-02-4 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 1 | 0.1 | 1 | - | - | - | 1.66E+05 | 1.00E+00 | 1.36E+09 | 8.15E+02 | nc |
| Nickel Carbonate | 3333-67-3 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 1 | 0.1 | 1 | - | - | - | 9.30E+01 | - | 1.36E+09 | 8.15E+02 | nc |
| Nickel Carbonyl | 13463-39-3 | No | Yes | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 1 | - | 1 | - | 2.04E+01 | - | 1.80E+02 | - | 1.36E+09 | 1.11E+03 | nc |
| Nickel Hydroxide | 12054-48-7 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.11E+03 | nc |

Site-specific
Composite Worker Screening Levels (RSL) for Soil
 Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|------------------------------|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Nickel Oxide | 1313-99-1 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 2.00E-05 | U | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.16E+03 | nc |
| Nickel Refinery Dust | NA | No | No | - | - | 2.40E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.11E+03 | nc |
| Nickel Soluble Salts | 7440-02-0 | No | No | - | - | 2.60E-04 | U | 2.00E-02 | U | 9.00E-05 | U | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 2.24E+03 | nc |
| Nickel Subulfide | 12035-72-2 | No | No | 1.70E+00 | U | 4.80E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.92E+00 | ca |
| Nickelocene | 1271-28-9 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | 8.15E+02 | nc |
| Nicotinonitrile | 100-54-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.12E-05 | - | 1.35E+05 | 4.72E+01 | 1.36E+09 | - | - |
| Niobium | 7440-03-1 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Nitrate | 14797-55-8 | No | No | - | - | - | - | 1.60E+00 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.87E+05 | cm |
| Nitrate + Nitrite (as N) | NA | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Nitric Acid | 7697-37-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Nitric Oxide | 10102-43-9 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | 9.49E+04 | - | 1.36E+09 | - | - |
| Nitrite | 14797-65-0 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.17E+04 | nc |
| Nitroaniline, 2- | 88-74-4 | No | No | - | - | - | - | 1.00E-02 | U | 5.00E-05 | U | 1 | 0.1 | 1 | - | 2.41E-06 | - | 1.47E+03 | 1.11E+02 | 1.36E+09 | 7.99E+02 | nc |
| Nitroaniline, 3- | 99-09-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.23E-07 | - | 1.20E+03 | 1.09E+02 | 1.36E+09 | - | - |
| Nitroaniline, 4- | 100-01-6 | No | No | 2.00E-02 | U | - | - | 4.00E-03 | U | 6.00E-03 | U | 1 | 0.1 | 1 | - | 5.15E-08 | - | 7.28E+02 | 1.09E+02 | 1.36E+09 | 1.15E+02 | ca** |
| Nitrobenzene | 98-95-3 | No | Yes | - | - | 4.00E-05 | U | 2.00E-03 | U | 9.00E-03 | U | 1 | - | 1 | 7.31E+04 | 9.81E-04 | 3.04E+03 | 2.09E+03 | 2.26E+02 | 1.36E+09 | 2.24E+01 | ca** |
| Nitrobiphenyl, 4- | 92-93-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.45E-04 | - | 1.23E+00 | 7.97E+03 | 1.36E+09 | - | - |
| Nitrocellulose | 9004-70-0 | No | No | - | - | - | - | 3.00E+03 | U | - | - | 1 | 0.1 | 1 | - | 1.35E-21 | - | 1.00E+06 | 1.00E+01 | 1.36E+09 | 2.46E+08 | cm |
| Nitrodiphenylamine, 2- | 119-75-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.71E-06 | - | 2.77E+01 | 1.31E+03 | 1.36E+09 | - | - |
| Nitrofurantoin | 67-20-9 | No | No | - | - | - | - | 7.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 5.44E-11 | - | 7.95E+01 | 1.17E+02 | 1.36E+09 | 5.74E+03 | nc |
| Nitrofurazone | 59-87-0 | No | No | 1.30E+00 | U | 3.70E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.27E-11 | - | 2.10E+02 | 3.50E+02 | 1.36E+09 | 1.77E+00 | ca |
| Nitrogen Dioxide | 10102-44-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Nitroglycerin | 55-63-0 | No | No | 1.70E-02 | U | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 3.54E-06 | - | 1.38E+03 | 1.16E+02 | 1.36E+09 | 8.21E+00 | nc |
| Nitroguanidine | 556-88-7 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 1.82E-14 | - | 4.40E+03 | 2.07E+01 | 1.36E+09 | 8.21E+03 | nc |
| Nitromethane | 75-52-5 | No | Yes | - | - | 8.80E-06 | U | - | - | 5.00E-03 | U | 1 | - | 1 | 1.69E+04 | 1.17E-03 | 1.80E+04 | 1.11E+05 | 1.03E+01 | 1.36E+09 | 2.36E+01 | ca** |
| Nitrophenol, 2- | 88-75-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.20E+05 | 5.23E-04 | - | 2.50E+03 | 2.97E+02 | 1.36E+09 | - | - |
| Nitrophenol, 2-amino-4- | 99-57-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 9.12E-11 | - | 9.25E+02 | 1.43E+02 | 1.36E+09 | - | - |
| Nitrophenol, 3- | 554-84-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 8.18E-08 | - | 1.35E+04 | 2.91E+02 | 1.36E+09 | - | - |
| Nitrophenol, 4- | 100-02-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.70E-08 | - | 1.16E+04 | 2.91E+02 | 1.36E+09 | - | - |
| Nitrophenol, 4-amino-2- | 119-34-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 9.12E-11 | - | 1.10E+04 | 1.43E+02 | 1.36E+09 | - | - |
| Nitropropane, 2- | 79-46-9 | No | Yes | - | - | 2.70E-03 | U | - | - | 2.00E-02 | U | 1 | - | 1 | 1.31E+04 | 4.87E-03 | 4.86E+03 | 1.70E+04 | 3.08E+01 | 1.36E+09 | 5.96E-02 | ca |
| Nitropyrene, 4- | 57835-92-4 | No | No | 1.20E+00 | U | 1.10E-04 | U | - | - | - | - | 1 | 0.13 | 1 | - | 1.00E-06 | - | 6.79E-02 | 8.61E+04 | 1.36E+09 | 1.76E+00 | ca |
| Nitroquinoline-1-oxide, 4- | 56-57-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.11E-12 | - | 2.34E+03 | 4.01E+03 | 1.36E+09 | - | - |
| Nitroso-N-ethylurea, N- | 759-73-9 | Yes | No | 2.70E+01 | U | 7.70E-03 | U | - | - | - | - | 1 | 0.1 | 1 | - | 5.40E-09 | - | 1.30E+04 | 2.10E+01 | 1.36E+09 | 8.51E-02 | ca |
| Nitroso-N-methylurea, N- | 684-93-5 | Yes | No | 1.20E+02 | U | 3.40E-02 | U | - | - | - | - | 1 | 0.1 | 1 | - | 4.05E-09 | - | 1.44E+04 | 1.10E+01 | 1.36E+09 | 1.91E-02 | ca |
| Nitroso-di-N-butylamine, N- | 924-16-3 | No | Yes | 5.40E+00 | U | 1.60E-03 | U | - | - | - | - | 1 | - | 1 | 2.43E+05 | 5.40E-04 | - | 1.27E+03 | 9.15E+02 | 1.36E+09 | 4.57E-01 | ca |
| Nitroso-di-N-propylamine, N- | 621-64-7 | No | No | 7.00E+00 | U | 2.00E-03 | U | - | - | - | - | 1 | 0.1 | 1 | - | 2.20E-04 | - | 1.30E+04 | 2.75E+02 | 1.36E+09 | 3.28E-01 | ca |
| Nitrosodiethanolamine, N- | 1116-54-7 | No | No | 2.80E+00 | U | 8.00E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.98E-10 | - | 1.00E+06 | 1.00E+00 | 1.36E+09 | 8.21E-01 | ca |
| Nitrosodimethylamine, N- | 55-18-5 | Yes | No | 1.50E+02 | U | 4.30E-02 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.48E-04 | - | 1.06E+05 | 8.29E+01 | 1.36E+09 | 1.53E-02 | ca |
| Nitrosodimethylamine, N- | 62-75-9 | Yes | Yes | 5.10E+01 | U | 1.40E-02 | U | 8.00E-06 | U | 4.00E-05 | U | 1 | - | 1 | 8.23E+04 | 7.44E-05 | 2.37E+05 | 1.00E+06 | 2.28E+01 | 1.36E+09 | 3.39E-02 | ca* |
| Nitrosodiphenylamine, N- | 86-30-6 | No | No | 4.90E-03 | U | 2.60E-06 | U | - | - | - | - | 1 | 0.1 | 1 | - | 4.95E-05 | - | 3.50E+01 | 2.63E+03 | 1.36E+09 | 4.69E+02 | ca |
| Nitrosomethylethylamine, N- | 10595-95-6 | No | Yes | 2.20E+01 | U | 6.30E-03 | U | - | - | - | - | 1 | - | 1 | 1.21E+05 | 5.89E-05 | 1.08E+05 | 3.00E+05 | 4.35E+01 | 1.36E+09 | 9.12E-02 | ca |
| Nitrosomethylvinylamine, N- | 4549-40-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.09E+04 | 1.47E-04 | 1.08E+04 | 3.00E+04 | 4.35E+01 | 1.36E+09 | - | - |
| Nitrosomorpholine [N-] | 59-89-2 | No | No | 6.70E+00 | U | 1.90E-03 | U | - | - | - | - | 1 | 0.1 | 1 | - | 1.00E-06 | - | 1.00E+06 | 2.25E+01 | 1.36E+09 | 3.43E-01 | ca |

Site-specific
Composite Worker Screening Levels (RSL) for Soil
 Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Nitrosopiperidine [N-] | 100-75-4 | No | No | 9.40E+00 | U | 2.70E-03 | U | - | - | - | - | 1 | 0.1 | 1 | - | 3.45E-05 | 7.65E+04 | 1.68E+02 | 1.36E+09 | 2.44E-01 | ca | |
| Nitrosopyrrolidine, N- | 930-55-2 | No | No | 2.10E+00 | U | 6.10E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 2.00E-06 | 1.00E+06 | 9.19E+01 | 1.36E+09 | 1.09E+00 | ca | |
| Nitrotoluene, 4-Amino-2- | 119-32-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.39E-07 | 1.40E+03 | 1.79E+02 | 1.36E+09 | - | - | |
| Nitrotoluene, m- | 99-08-1 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 3.80E-04 | 5.00E+02 | 3.63E+02 | 1.36E+09 | 8.21E+00 | nc | |
| Nitrotoluene, o- | 88-72-2 | No | Yes | 2.20E-01 | U | - | - | 9.00E-04 | U | - | - | 1 | - | 1 | 1.37E+05 | 5.11E-04 | 1.51E+03 | 6.50E+02 | 3.71E+02 | 1.36E+09 | 1.49E+01 | ca** |
| Nitrotoluene, p- | 99-99-0 | No | No | 1.60E-02 | U | - | - | 4.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.30E-04 | - | 4.42E+02 | 3.63E+02 | 1.36E+09 | 1.44E+02 | ca** |
| Nonachlor, trans- | 39765-80-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.71E+06 | 1.01E-03 | 1.04E-02 | 1.13E+05 | 1.36E+09 | - | - | |
| Nonane, n- | 111-84-2 | No | Yes | - | - | - | - | 3.00E-04 | U | 2.00E-02 | U | 1 | - | 1 | 1.04E+03 | 1.39E+02 | 6.86E+00 | 2.20E-01 | 7.96E+02 | 1.36E+09 | 7.25E+00 | cs |
| Nonanol, n- | 143-08-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.65E+04 | 1.26E-03 | 7.27E+01 | 1.40E+02 | 6.98E+01 | 1.36E+09 | - | - |
| Norflurazon | 27314-13-2 | No | No | - | - | - | - | 1.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.40E-08 | - | 3.37E+01 | 3.12E+03 | 1.36E+09 | 1.23E+03 | nc |
| OCDD | 3268-87-9 | No | No | 3.90E+01 | U | 1.14E-02 | U | 2.33E-06 | U | 1.33E-04 | U | 1 | 0.03 | 1 | - | 2.76E-04 | - | 2.29E-07 | 1.94E+06 | 1.36E+09 | 7.44E-02 | ca** |
| OCDF | 39001-02-0 | No | No | 3.90E+01 | U | 1.14E-02 | U | 2.33E-06 | U | 1.33E-04 | U | 1 | 0.03 | 1 | - | 7.73E-05 | - | 4.09E-07 | 1.09E+06 | 1.36E+09 | 7.44E-02 | ca** |
| Octabromodiphenyl Ether | 32536-52-0 | No | No | - | - | - | - | 3.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 3.06E-06 | - | 1.11E-08 | 9.90E+04 | 1.36E+09 | 2.46E+02 | nc |
| Octachlorostyrene | 29082-74-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 6.09E+05 | 9.40E-03 | - | 1.74E-03 | 5.51E+04 | 1.36E+09 | - | - |
| Octadecanoic Acid | 57-11-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.95E-05 | - | 5.97E-01 | 1.17E+04 | 1.36E+09 | - | - |
| Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) | 2691-41-0 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.006 | 1 | - | 3.54E-08 | - | 5.00E+00 | 5.32E+02 | 1.36E+09 | 5.70E+03 | nc |
| Octahydrotrimethylmethylethylphenanthrenol | 511-15-9 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.40E-05 | - | 1.15E-01 | 3.95E+05 | 1.36E+09 | - | - |
| Octamethylpyrophosphoramidate | 152-16-9 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.54E-08 | - | 1.00E+06 | 2.01E+01 | 1.36E+09 | 1.64E+02 | nc |
| Octanol, n- | 111-87-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.88E+04 | 1.00E-03 | 1.78E+02 | 5.40E+02 | 3.83E+01 | 1.36E+09 | - | - |
| Octanone, 2- | 111-13-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.54E+04 | 7.69E-03 | 3.60E+02 | 8.99E+02 | 4.98E+01 | 1.36E+09 | - | - |
| Octanone, 3- | 106-68-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.88E+04 | 5.31E-03 | 1.08E+03 | 2.60E+03 | 5.21E+01 | 1.36E+09 | - | - |
| Octyl Phthalate, di-N- | 117-84-0 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.05E-04 | - | 2.20E-02 | 1.41E+05 | 1.36E+09 | 8.21E+02 | nc |
| Oleic acid | 112-80-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 6.92E+05 | 1.83E-03 | 8.08E-01 | 1.15E-02 | 1.17E+04 | 1.36E+09 | - | - |
| Oleum | 8014-95-7 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Oryzalin | 19044-88-3 | No | No | 7.79E-03 | U | - | - | 1.40E-01 | U | - | - | 1 | 0.1 | 1 | - | 7.81E-08 | - | 2.50E+00 | 8.25E+02 | 1.36E+09 | 2.95E+02 | ca* |
| Oxadiazon | 19666-30-9 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.97E-06 | - | 7.00E-01 | 5.00E+03 | 1.36E+09 | 4.10E+02 | nc |
| Oxamyl | 23135-22-0 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 9.69E-09 | - | 2.80E+05 | 1.00E+01 | 1.36E+09 | 2.05E+03 | nc |
| Oxychlorane | 27304-13-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.52E-06 | - | 2.30E-02 | 1.55E+04 | 1.36E+09 | - | - |
| Oxyfluorfen | 42874-03-3 | No | No | 7.32E-02 | U | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.35E-05 | - | 1.16E-01 | 3.99E+04 | 1.36E+09 | 3.14E+01 | ca* |
| Ozone | 10028-15-6 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | 4.94E+03 | - | 1.36E+09 | - | - |
| Paclobutrazol | 76738-62-0 | No | No | - | - | - | - | 1.30E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.39E-09 | - | 2.60E+01 | 9.23E+02 | 1.36E+09 | 1.07E+03 | nc |
| Paraquat Dichloride | 1910-42-5 | No | No | - | - | - | - | 4.50E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.32E-11 | - | 6.20E+05 | 6.78E+03 | 1.36E+09 | 3.69E+02 | nc |
| Parathion | 56-38-2 | No | No | - | - | - | - | 6.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.22E-05 | - | 1.10E+01 | 2.42E+03 | 1.36E+09 | 4.92E+02 | nc |
| PeCDD, 2,3,7,8- | 36088-22-9 | No | No | 1.30E+05 | U | 3.80E+01 | U | 7.00E-10 | U | 4.00E-08 | U | 1 | 0.03 | 1 | - | 8.99E-05 | - | 1.20E-04 | 4.33E+05 | 1.36E+09 | 2.23E-05 | ca** |
| PeCDF, 1,2,3,7,8- | 57117-41-6 | No | No | 3.90E+03 | U | 1.14E+00 | U | 2.33E-08 | U | 1.33E-06 | U | 1 | 0.03 | 1 | - | 2.05E-04 | - | 2.35E-04 | 2.33E+05 | 1.36E+09 | 7.44E-04 | ca** |
| PeCDF, 2,3,4,7,8- | 57117-31-4 | No | No | 3.90E+04 | U | 1.14E+01 | U | 2.33E-09 | U | 1.33E-07 | U | 1 | 0.03 | 1 | - | 2.05E-04 | - | 2.35E-04 | 2.33E+05 | 1.36E+09 | 7.44E-05 | ca** |
| Pebulate | 1114-71-2 | No | Yes | - | - | - | - | 5.00E-02 | U | - | - | 1 | - | 1 | 4.49E+04 | 9.69E-03 | - | 1.00E+02 | 2.99E+02 | 1.36E+09 | 5.84E+03 | nc |
| Pendimethalin | 40487-42-1 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.50E-05 | - | 3.30E-01 | 5.62E+03 | 1.36E+09 | 2.46E+03 | nc |
| Pentabromodiphenyl Ether | 32534-81-9 | No | Yes | - | - | - | - | 2.00E-03 | U | - | - | 1 | - | 1 | 5.14E+05 | 4.42E-03 | 3.13E-01 | 2.40E-03 | 2.17E+04 | 1.36E+09 | 2.34E+02 | cs |
| Pentabromodiphenyl ether, 2,2',4,4',5'- (BDE-99) | 60348-60-9 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 4.82E-05 | - | 7.86E-05 | 2.17E+04 | 1.36E+09 | 8.21E+00 | nc |
| Pentachloroaniline | 527-20-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.74E-05 | - | 2.98E-02 | 1.24E+04 | 1.36E+09 | - | - |
| Pentachlorobenzene | 608-93-5 | No | Yes | - | - | - | - | 8.00E-04 | U | - | - | 1 | - | 1 | 8.13E+04 | 2.87E-02 | - | 8.31E-01 | 3.71E+03 | 1.36E+09 | 9.34E+01 | nc |
| Pentachlorobiphenyl, 2',3,4,4',5'- (PCB 123) | 65510-44-3 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 0.14 | 1 | 7.35E+05 | 7.77E-03 | - | 1.60E-02 | 1.31E+05 | 1.36E+09 | 4.94E-01 | ca** |
| Pentachlorobiphenyl, 2,3',4,4',5'- (PCB 118) | 31508-00-6 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 0.14 | 1 | 5.89E+05 | 1.18E-02 | - | 1.34E-02 | 1.28E+05 | 1.36E+09 | 4.86E-01 | ca** |
| Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105) | 32598-14-4 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 0.14 | 1 | 6.01E+05 | 1.16E-02 | - | 3.40E-03 | 1.31E+05 | 1.36E+09 | 4.87E-01 | ca** |

Site-specific

Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Pentachlorobiphenyl, 2,3,4,4',5'- (PCB 114) | 74472-37-0 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 0.14 | 1 | 1.05E+06 | 3.78E-03 | - | 1.60E-02 | 1.31E+05 | 1.36E+09 | 5.03E-01 | ca** |
| Pentachlorobiphenyl, 3,3',4,4',5'- (PCB 126) | 57465-28-8 | No | Yes | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 0.14 | 1 | 7.26E+05 | 7.77E-03 | - | 7.33E-03 | 1.28E+05 | 1.36E+09 | 1.48E-04 | ca** |
| Pentachlorocyclopentadiene | 25329-35-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.42E+04 | 2.45E-01 | - | 1.01E+01 | 9.41E+02 | 1.36E+09 | - | - |
| Pentachlorodibenzo-p-dioxin, 1,2,3,7,8- | 40321-76-4 | No | No | 1.30E+05 | U | 3.80E+01 | U | 7.00E-10 | U | 4.00E-08 | U | 1 | 0.03 | 1 | - | 1.07E-04 | - | 1.53E-04 | 4.16E+05 | 1.36E+09 | 2.23E-05 | ca** |
| Pentachloroethane | 76-01-7 | No | Yes | 9.00E-02 | U | - | - | - | - | - | - | 1 | - | 1 | 9.64E+03 | 7.93E-02 | 4.56E+02 | 4.90E+02 | 1.36E+02 | 1.36E+09 | 3.63E+01 | ca |
| Pentachloronitrobenzene | 82-68-8 | No | Yes | 2.60E-01 | U | - | - | 3.00E-03 | U | - | - | 1 | - | 1 | 4.31E+05 | 1.81E-03 | - | 4.40E-01 | 6.00E+03 | 1.36E+09 | 1.26E+01 | ca* |
| Pentachlorophenol | 87-86-5 | No | No | 4.00E-01 | U | 5.10E-06 | U | 5.00E-03 | U | - | - | 1 | 0.25 | 1 | - | 1.00E-06 | - | 1.40E+01 | 5.92E+02 | 1.36E+09 | 3.97E+00 | ca* |
| Pentaerythritol tetranitrate (PETN) | 78-11-5 | No | No | 4.00E-03 | U | - | - | 2.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 5.40E-08 | - | 4.30E+01 | 6.48E+02 | 1.36E+09 | 1.64E+02 | nc |
| Pentamethyl dipropylentriamine | 3855-32-1 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.00E-09 | - | 1.00E+06 | 1.21E+02 | 1.36E+09 | - | - |
| Pentane, n- | 109-66-0 | No | Yes | - | - | - | - | - | - | 1.00E+00 | U | 1 | - | 1 | 7.79E+02 | 5.11E+01 | 3.88E+02 | 3.80E+01 | 7.22E+01 | 1.36E+09 | 3.41E+02 | nc |
| Pentyl Alcohol, N- | 71-41-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.84E+04 | 5.31E-04 | 3.04E+03 | 2.20E+04 | 6.33E+00 | 1.36E+09 | - | - |
| Perchlorate and Perchlorate Salts | 14797-73-0 | No | No | - | - | - | - | 7.00E-04 | U | - | - | 1 | - | 1 | - | - | - | 2.45E+05 | - | 1.36E+09 | 8.18E+01 | nc |
| Perfluorobutane Sulfonate (PFBS) | 375-73-5 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | - | - | 5.66E+04 | 6.17E+01 | 1.36E+09 | 1.64E+03 | nc |
| Perfluorooctane Sulfonate (PFOS) | 1763-23-1 | No | No | - | - | - | - | 2.00E-05 | U | - | - | 1 | 0.1 | 1 | - | - | - | 6.80E+02 | 3.72E+02 | 1.36E+09 | 1.64E+00 | nc |
| Perfluorooctanoic acid (PFOA) | 335-67-1 | No | No | 7.00E-02 | U | - | - | 2.00E-05 | U | - | - | 1 | 0.1 | 1 | - | - | - | 9.50E+03 | 1.15E+02 | 1.36E+09 | 1.64E+00 | nc |
| Permethrin | 52645-53-1 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 7.65E-05 | - | 6.00E-03 | 1.19E+05 | 1.36E+09 | 4.10E+03 | nc |
| Perylene | 198-55-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.13 | 1 | - | 1.49E-04 | - | 4.00E-04 | 5.99E+05 | 1.36E+09 | - | - |
| Pesticides (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Pesticides, organochlorinated (each) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Pesticides, organochlorinated (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Phenacetin | 62-44-2 | No | No | 2.20E-03 | U | 6.30E-07 | U | - | - | - | - | 1 | 0.1 | 1 | - | 8.71E-09 | - | 7.66E+02 | 4.10E+01 | 1.36E+09 | 1.04E+03 | ca |
| Phenanthrene | 85-01-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | 0.13 | 1 | 6.43E+05 | 1.73E-03 | - | 1.15E+00 | 1.67E+04 | 1.36E+09 | - | - |
| Phenmedipham | 13684-63-4 | No | No | - | - | - | - | 2.40E-01 | U | - | - | 1 | 0.1 | 1 | - | 3.44E-11 | - | 4.70E+00 | 2.59E+03 | 1.36E+09 | 1.97E+04 | nc |
| Phenol | 108-95-2 | No | No | - | - | - | - | 3.00E-01 | U | 2.00E-01 | U | 1 | 0.1 | 1 | - | 1.36E-05 | - | 8.28E+04 | 1.87E+02 | 1.36E+09 | 2.46E+04 | nc |
| Phenol, 2-(1-methylethoxy)-, methylcarbamate | 114-26-1 | No | No | - | - | - | - | 4.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 5.85E-08 | - | 1.86E+03 | 6.00E+01 | 1.36E+09 | 3.28E+02 | nc |
| Phenothiazine | 92-84-2 | No | No | - | - | - | - | 5.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.14E-06 | - | 1.59E+00 | 1.48E+03 | 1.36E+09 | 4.10E+01 | nc |
| Phenyl Isothiocyanate | 103-72-0 | No | Yes | - | - | - | - | 2.00E-04 | U | - | - | 1 | - | 1 | 7.08E+03 | 1.21E-01 | 1.29E+02 | 8.99E+01 | 2.19E+02 | 1.36E+09 | 2.34E+01 | nc |
| Phenylenediamine, m- | 108-45-2 | No | No | - | - | - | - | 6.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 5.11E-08 | - | 2.38E+05 | 3.38E+01 | 1.36E+09 | 4.92E+02 | nc |
| Phenylenediamine, o- | 95-54-5 | No | No | 1.20E-01 | U | - | - | 4.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.94E-07 | - | 4.04E+04 | 3.45E+01 | 1.36E+09 | 1.91E+01 | ca* |
| Phenylenediamine, p- | 106-50-3 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 2.75E-08 | - | 3.70E+04 | 3.38E+01 | 1.36E+09 | 8.21E+01 | nc |
| Phenylmercuric Acetate | 62-38-4 | No | No | - | - | - | - | 8.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 2.31E-08 | - | 4.37E+03 | 5.64E+01 | 1.36E+09 | 6.57E+00 | nc |
| Phenylphenol, 2- | 90-43-7 | No | No | 1.94E-03 | U | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.29E-05 | - | 7.00E+02 | 6.72E+03 | 1.36E+09 | 1.18E+03 | ca |
| Phorate | 298-02-2 | No | No | - | - | - | - | 2.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.79E-04 | - | 5.00E+01 | 4.60E+02 | 1.36E+09 | 1.64E+01 | nc |
| Phosgene | 75-44-5 | No | Yes | - | - | - | - | - | - | 3.00E-04 | U | 1 | - | 1 | 9.81E+02 | 6.83E-01 | 1.61E+03 | 6.83E+03 | 1.00E+00 | 1.36E+09 | 1.29E-01 | nc |
| Phosmet | 732-11-6 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.43E-07 | - | 2.44E+01 | 1.00E+01 | 1.36E+09 | 1.64E+03 | nc |
| Phosphine | 7803-51-2 | No | Yes | - | - | - | - | 3.00E-04 | U | 3.00E-04 | U | 1 | - | 1 | - | 9.98E-01 | - | 2.60E+05 | - | 1.36E+09 | 3.50E+01 | nc |
| Phosphoric Acid | 7664-38-2 | No | No | - | - | - | - | 4.86E+01 | U | 1.00E-02 | U | 1 | - | 1 | - | - | - | 5.48E+06 | - | 1.36E+09 | 2.91E+06 | cm |
| Phosphorus (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Phosphorus pentoxide | 1314-56-3 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Phosphorus, White | 7723-14-0 | No | Yes | - | - | - | - | 2.00E-05 | U | - | - | 1 | - | 1 | 6.92E+03 | 8.60E-02 | - | 3.00E+00 | 1.12E+03 | 1.36E+09 | 2.34E+00 | nc |
| Phthalates (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Phthalic Acid, P- | 100-21-0 | No | No | - | - | - | - | 1.00E+00 | U | - | - | 1 | 0.1 | 1 | - | 1.59E-11 | - | 1.50E+01 | 7.92E+01 | 1.36E+09 | 8.21E+04 | nc |
| Phthalic Acid, m- | 121-91-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.59E-11 | - | 1.30E+02 | 7.92E+01 | 1.36E+09 | - | - |
| Phthalic Acid, o- | 88-99-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 8.18E-10 | - | 6.97E+03 | 8.09E+01 | 1.36E+09 | - | - |
| Phthalic Anhydride | 85-44-9 | No | No | - | - | - | - | 2.00E+00 | U | 2.00E-02 | U | 1 | 0.1 | 1 | - | 6.66E-07 | - | 6.20E+03 | 1.00E+01 | 1.36E+09 | 1.62E+05 | cm |
| Picloram | 1918-02-1 | No | No | - | - | - | - | 7.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.18E-12 | - | 4.30E+02 | 3.88E+01 | 1.36E+09 | 5.74E+03 | nc |

Site-specific

Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Picoline, 2- | 109-06-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 7.64E+04 | 4.07E-04 | 7.90E+05 | 1.00E+06 | 1.15E+02 | 1.36E+09 | | |
| Picramic Acid (2-Amino-4,6-dinitrophenol) | 96-91-3 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 3.99E-10 | - | 1.40E+03 | 2.27E+02 | 1.36E+09 | 8.21E+00 | nc |
| Picric Acid (2,4,6-Trinitrophenol) | 88-89-1 | No | No | - | - | - | - | 9.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 6.95E-10 | - | 1.27E+04 | 2.25E+03 | 1.36E+09 | 7.39E+01 | nc |
| Piperidine | 110-89-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.11E+04 | 1.82E-04 | 4.28E+05 | 1.00E+06 | 5.47E+01 | 1.36E+09 | | |
| Pirimiphos, Methyl | 29232-93-7 | No | No | - | - | - | - | 6.67E-05 | U | - | - | 1 | 0.1 | 1 | - | 2.87E-05 | - | 8.60E+00 | 3.75E+02 | 1.36E+09 | 5.47E+00 | nc |
| Polybrominated Biphenyls | 59536-65-1 | No | No | 3.00E+01 | U | 8.60E-03 | U | 7.00E-06 | U | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | 7.66E-02 | ca** |
| Polychlorinated Biphenyls (high risk) | 1336-36-3 | No | Yes | 2.00E+00 | U | 5.71E-04 | U | - | - | - | - | 1 | 0.14 | 1 | 5.32E+05 | 1.70E-02 | - | 7.00E-01 | 7.81E+04 | 1.36E+09 | 9.42E-01 | ca |
| Polycyclic aromatic hydrocarbons (PAH), Total | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.13 | 1 | - | - | - | - | - | 1.36E+09 | | |
| Polycyclic aromatic hydrocarbons (PAH), Total (high molecular weight) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.13 | 1 | - | - | - | - | - | 1.36E+09 | | |
| Polycyclic aromatic hydrocarbons (PAH), Total (low molecular weight) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.13 | 1 | - | - | - | - | - | 1.36E+09 | | |
| Polycyclic chlorinated hydrocarbons (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | | |
| Polymeric Methylene Diphenyl Diisocyanate (PMDI) | 9016-87-9 | No | No | - | - | - | - | - | - | 6.00E-04 | U | 1 | 0.1 | 1 | - | 5.40E-10 | - | 1.76E-06 | 1.00E+10 | 1.36E+09 | 3.57E+05 | cm |
| Polyphosphoric acid | 8017-16-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Potassium | 7440-09-7 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Potassium Cyanide | 151-50-8 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | - | 1 | - | - | - | 7.20E+05 | - | 1.36E+09 | 2.34E+02 | nc |
| Potassium Perchlorate | 7778-74-7 | No | No | - | - | - | - | 7.00E-04 | U | - | - | 1 | - | 1 | - | - | - | 1.50E+04 | - | 1.36E+09 | 8.18E+01 | nc |
| Potassium Perfluorobutane Sulfonate | 29420-49-3 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.59E-11 | - | 4.62E+04 | - | 1.36E+09 | 1.64E+03 | nc |
| Potassium Perfluorooctane Sulfonate | 2795-39-3 | No | No | - | - | - | - | 2.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 8.18E-05 | - | 6.80E+02 | - | 1.36E+09 | 1.64E+00 | nc |
| Potassium Silver Cyanide | 506-61-6 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.84E+02 | nc |
| Potassium tripolyphosphate | 13845-36-8 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Praseodymium | 7440-10-0 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Praseodymium Chloride (Stable, Nonradioactive) | 10361-79-2 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | 9.61E+05 | - | 1.36E+09 | | |
| Prochloraz | 67747-09-5 | No | No | 1.50E-01 | U | - | - | 9.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 6.70E-07 | - | 3.40E+01 | 2.43E+03 | 1.36E+09 | 1.53E+01 | ca* |
| Profluralin | 26399-36-0 | No | Yes | - | - | - | - | 6.00E-03 | U | - | - | 1 | - | 1 | 4.19E+05 | 1.19E-02 | - | 1.00E-01 | 3.05E+04 | 1.36E+09 | 7.01E+02 | nc |
| Promethium | 7440-12-2 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Prometon | 1610-18-0 | No | No | - | - | - | - | 1.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.72E-08 | - | 7.50E+02 | 1.37E+02 | 1.36E+09 | 1.23E+03 | nc |
| Prometryn | 7287-19-6 | No | No | - | - | - | - | 4.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 4.87E-07 | - | 3.30E+01 | 6.56E+02 | 1.36E+09 | 3.28E+03 | nc |
| Propachlor | 1918-16-7 | No | No | - | - | - | - | 1.30E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.47E-05 | - | 5.80E+02 | 2.05E+02 | 1.36E+09 | 1.07E+03 | nc |
| Propanil | 709-98-8 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 6.99E-08 | - | 1.52E+02 | 1.76E+02 | 1.36E+09 | 4.10E+02 | nc |
| Propanoic acid, 2-(2,4-dichlorophenoxy)- | 120-36-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.55E-09 | - | 3.50E+02 | 4.85E+01 | 1.36E+09 | | |
| Propargite | 2312-35-8 | No | No | 3.27E-02 | U | - | - | 4.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.62E-05 | - | 2.15E-01 | 3.67E+04 | 1.36E+09 | 7.03E+01 | ca* |
| Propargyl Alcohol | 107-19-7 | No | Yes | - | - | - | - | 2.00E-03 | U | - | - | 1 | - | 1 | 6.28E+04 | 4.70E-05 | 1.11E+05 | 1.00E+06 | 1.90E+00 | 1.36E+09 | 2.34E+02 | nc |
| Propazine | 139-40-2 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.88E-07 | - | 8.60E+00 | 3.44E+02 | 1.36E+09 | 1.64E+03 | nc |
| Propham | 122-42-9 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 7.52E-06 | - | 1.79E+02 | 2.19E+02 | 1.36E+09 | 1.64E+03 | nc |
| Propiconazole | 60207-90-1 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 7.03E-08 | - | 1.10E+02 | 1.56E+03 | 1.36E+09 | 8.21E+03 | nc |
| Propionaldehyde | 123-38-6 | No | Yes | - | - | - | - | - | - | 8.00E-03 | U | 1 | - | 1 | 8.96E+03 | 3.00E-03 | 3.26E+04 | 3.06E+05 | 1.00E+00 | 1.36E+09 | 3.14E+01 | nc |
| Propionitrile | 107-12-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.50E+04 | 1.51E-03 | 1.56E+04 | 1.03E+05 | 8.51E+00 | 1.36E+09 | | |
| Propionitrile, 3-(NN-dimethylamino) | 1738-25-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.89E+05 | 8.22E-07 | 1.60E+05 | 1.00E+06 | 9.97E+00 | 1.36E+09 | | |
| Propyl Alcohol, n- | 71-23-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.91E+04 | 3.03E-04 | 1.11E+05 | 1.00E+06 | 1.90E+00 | 1.36E+09 | | |
| Propyl benzene | 103-65-1 | No | Yes | - | - | - | - | 1.00E-01 | U | 1.00E+00 | U | 1 | - | 1 | 6.99E+03 | 4.29E-01 | 2.64E+02 | 5.22E+01 | 8.13E+02 | 1.36E+09 | 2.43E+03 | cs |
| Propylene | 115-07-1 | No | Yes | - | - | - | - | - | - | 3.00E+00 | U | 1 | - | 1 | 7.03E+02 | 8.01E+00 | 3.49E+02 | 2.00E+02 | 2.17E+01 | 1.36E+09 | 9.24E+02 | cs |
| Propylene Glycol | 57-55-6 | No | No | - | - | - | - | 2.00E+01 | U | - | - | 1 | 0.1 | 1 | - | 5.27E-07 | - | 1.00E+06 | 1.00E+00 | 1.36E+09 | 1.64E+06 | cm |

Site-specific

Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Propylene Glycol Dinitrate | 6423-43-4 | No | No | - | | - | | - | | 2.72E-04 | U | 1 | 0.1 | 1 | - | 3.85E-05 | - | 3.26E+03 | 6.07E+01 | 1.36E+09 | 1.62E+05 | cm |
| Propylene Glycol Monoethyl Ether | 1569-02-4 | No | Yes | - | | - | | - | | - | | 1 | - | 1 | 1.46E+05 | 3.02E-06 | 3.95E+04 | 3.66E+05 | 1.30E+00 | 1.36E+09 | | |
| Propylene Glycol Monomethyl Ether | 107-98-2 | No | Yes | - | | - | | 7.00E-01 | U | 2.00E+00 | U | 1 | - | 1 | 7.83E+04 | 3.76E-05 | 1.06E+05 | 1.00E+06 | 1.00E+00 | 1.36E+09 | 3.73E+04 | nc |
| Propylene Oxide | 75-56-9 | No | Yes | 2.40E-01 | U | 3.70E-06 | U | - | | 3.00E-02 | U | 1 | - | 1 | 1.03E+04 | 2.85E-03 | 7.77E+04 | 5.90E+05 | 5.19E+00 | 1.36E+09 | 9.73E+00 | ca* |
| Propylamide | 23950-58-5 | No | No | - | | - | | 7.50E-02 | U | - | | 1 | 0.1 | 1 | - | 3.99E-07 | - | 1.50E+01 | 4.05E+02 | 1.36E+09 | 6.15E+03 | nc |
| Prussian Blue (Ferric Ferrocyanide) | 14038-43-8 | No | No | - | | - | | - | | - | | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | | |
| Pyrazinyl phosphorothioate, O,O-diethyl O-2- | 297-97-2 | No | No | - | | - | | - | | - | | 1 | 0.1 | 1 | - | 3.52E-05 | - | 1.14E+03 | 3.95E+02 | 1.36E+09 | | |
| Pyrene | 129-00-0 | No | Yes | - | | - | | 3.00E-02 | U | - | | 1 | 0.13 | 1 | 2.38E+06 | 4.87E-04 | - | 1.35E-01 | 5.43E+04 | 1.36E+09 | 2.26E+03 | nc |
| Pyridine | 110-86-1 | No | Yes | - | | - | | 1.00E-03 | U | - | | 1 | - | 1 | 5.54E+04 | 4.50E-04 | 5.30E+05 | 1.00E+06 | 7.17E+01 | 1.36E+09 | 1.17E+02 | nc |
| Quinalphos | 13593-03-8 | No | No | - | | - | | 5.00E-04 | U | - | | 1 | 0.1 | 1 | - | 1.90E-06 | - | 2.20E+01 | 4.19E+03 | 1.36E+09 | 4.10E+01 | nc |
| Quinoline | 91-22-5 | No | No | 3.00E+00 | U | - | | - | | - | | 1 | 0.1 | 1 | - | 6.83E-05 | - | 6.11E+03 | 1.54E+03 | 1.36E+09 | 7.66E-01 | ca |
| Quizalofop-ethyl | 76578-14-8 | No | No | - | | - | | 9.00E-03 | U | - | | 1 | 0.1 | 1 | - | 4.33E-07 | - | 3.00E-01 | 7.74E+03 | 1.36E+09 | 7.39E+02 | nc |
| Refractory Ceramic Fibers | NA | No | No | - | | - | | - | | 3.00E-02 | U | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.79E+07 | cm |
| Resmethrin | 10453-86-8 | No | No | - | | - | | 3.00E-02 | U | - | | 1 | 0.1 | 1 | - | 5.44E-06 | - | 3.79E-02 | 3.11E+05 | 1.36E+09 | 2.46E+03 | nc |
| Resorcinol | 108-46-3 | No | No | - | | - | | - | | - | | 1 | 0.1 | 1 | - | 4.04E-09 | - | 7.17E+05 | 2.41E+02 | 1.36E+09 | | |
| Ronnel | 299-84-3 | No | Yes | - | | - | | 5.00E-02 | U | - | | 1 | - | 1 | 4.64E+05 | 1.31E-03 | - | 1.00E+00 | 4.46E+03 | 1.36E+09 | 5.84E+03 | nc |
| Rotenone | 83-79-4 | No | No | - | | - | | 4.00E-03 | U | - | | 1 | 0.1 | 1 | - | 4.58E-12 | - | 2.00E-01 | 2.61E+05 | 1.36E+09 | 3.28E+02 | nc |
| Rubidium | 7440-17-7 | No | No | - | | - | | - | | - | | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Rubidium Chloride | 7791-11-9 | No | No | - | | - | | - | | - | | 1 | - | 1 | - | - | - | 9.39E+07 | - | 1.36E+09 | | |
| Rubidium Hydroxide | 1310-82-3 | No | No | - | | - | | - | | - | | 1 | - | 1 | - | - | - | 1.73E+06 | - | 1.36E+09 | | |
| Rubidium Iodide | 7790-29-6 | No | No | - | | - | | - | | - | | 1 | - | 1 | - | - | - | 1.65E+06 | - | 1.36E+09 | | |
| Safrole | 94-59-7 | Yes | No | 2.20E-01 | U | 6.30E-05 | U | - | | - | | 1 | 0.1 | 1 | - | 3.71E-04 | - | 1.21E+02 | 2.07E+02 | 1.36E+09 | 1.04E+01 | ca |
| Samarium Chloride (Stable, Nonradioactive) | 10361-82-7 | No | No | - | | - | | - | | - | | 1 | - | 1 | - | - | - | 9.38E+05 | - | 1.36E+09 | | |
| Samarium Nitrate (Stable, Nonradioactive) | 10361-83-8 | No | No | - | | - | | - | | - | | 1 | - | 1 | - | - | - | 1.44E+06 | - | 1.36E+09 | | |
| Scandium | 7440-20-2 | No | No | - | | - | | - | | - | | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Selenious Acid | 7783-00-8 | No | No | - | | - | | 5.00E-03 | U | - | | 1 | - | 1 | - | - | - | 9.00E+05 | - | 1.36E+09 | 5.84E+02 | nc |
| Selenite | 14124-67-5 | No | No | - | | - | | - | | - | | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Selenium | 7782-49-2 | No | No | - | | - | | 5.00E-03 | U | 2.00E-02 | U | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.84E+02 | nc |
| Selenium Sulfide | 7446-34-6 | No | No | - | | - | | 5.00E-03 | U | 2.00E-02 | U | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.84E+02 | nc |
| Selenourea | 630-10-4 | No | Yes | - | | - | | - | | - | | 1 | - | 1 | - | - | 1.72E+05 | 1.00E+06 | 1.20E+01 | 1.36E+09 | | |
| Sethoxydim | 74051-80-2 | No | No | - | | - | | 1.40E-01 | U | - | | 1 | 0.1 | 1 | - | 8.83E-10 | - | 2.50E+01 | 4.37E+03 | 1.36E+09 | 1.15E+04 | nc |
| Silica (crystalline, respirable) | 7631-86-9 | No | No | - | | - | | - | | 3.00E-03 | U | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.79E+06 | cm |
| Silicon | 7440-21-3 | No | No | - | | - | | - | | - | | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Silver | 7440-22-4 | No | No | - | | - | | 5.00E-03 | U | - | | 0.04 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.84E+02 | nc |
| Silver Cyanide | 506-64-9 | No | No | - | | - | | 1.00E-01 | U | - | | 0.04 | - | 1 | - | - | - | 2.30E+01 | - | 1.36E+09 | 1.17E+04 | nc |
| Simazine | 122-34-9 | No | No | 1.20E-01 | U | - | | 5.00E-03 | U | - | | 1 | 0.1 | 1 | - | 3.85E-08 | - | 6.20E+00 | 1.47E+02 | 1.36E+09 | 1.91E+01 | ca* |
| Sodium | 7440-23-5 | No | No | - | | - | | - | | - | | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | | |
| Sodium Acifluorfen | 62476-59-9 | No | No | - | | - | | 1.30E-02 | U | - | | 1 | 0.1 | 1 | - | 2.47E-09 | - | 2.50E+05 | 3.88E+03 | 1.36E+09 | 1.07E+03 | nc |
| Sodium Azide | 26628-22-8 | No | No | - | | - | | 4.00E-03 | U | - | | 1 | - | 1 | - | - | - | 4.08E+05 | - | 1.36E+09 | 4.67E+02 | nc |
| Sodium Cyanide | 143-33-9 | No | No | - | | - | | 1.00E-03 | U | - | | 1 | - | 1 | - | - | - | 5.82E+05 | - | 1.36E+09 | 1.17E+02 | nc |
| Sodium Dichromate | 10588-01-9 | Yes | No | 5.00E-01 | U | 1.50E-01 | U | 2.00E-02 | U | 2.00E-04 | U | 0.025 | - | 1 | - | - | - | 1.87E+06 | - | 1.36E+09 | 6.18E+00 | ca |
| Sodium Diethyldithiocarbamate | 148-18-5 | No | No | 2.70E-01 | U | - | | 3.00E-02 | U | - | | 1 | 0.1 | 1 | - | - | - | 3.64E+05 | 2.05E+02 | 1.36E+09 | 8.51E+00 | ca |
| Sodium Fluoride | 7681-49-4 | No | No | - | | - | | 5.00E-02 | U | 1.30E-02 | U | 1 | - | 1 | - | - | - | 4.22E+04 | - | 1.36E+09 | 5.84E+03 | nc |
| Sodium Fluoroacetate | 62-74-8 | No | No | - | | - | | 2.00E-05 | U | - | | 1 | 0.1 | 1 | - | 4.46E-05 | - | 1.11E+06 | 1.44E+00 | 1.36E+09 | 1.64E+00 | nc |
| Sodium Hydroxide | 1310-73-2 | No | No | - | | - | | - | | - | | 1 | - | 1 | - | - | - | 4.20E+05 | - | 1.36E+09 | | |
| Sodium Metavanadate | 13718-26-8 | No | No | - | | - | | 1.00E-03 | U | - | | 1 | - | 1 | - | - | - | 2.10E+05 | - | 1.36E+09 | 1.17E+02 | nc |

Site-specific
Composite Worker Screening Levels (RSL) for Soil
 Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Sodium Perchlorate | 7601-89-0 | No | No | - | - | - | - | 7.00E-04 | U | - | - | 1 | - | 1 | - | - | - | 2.10E+06 | - | 1.36E+09 | 8.18E+01 | nc |
| Sodium Tungstate | 13472-45-2 | No | No | - | - | - | - | 8.00E-04 | U | - | - | 1 | - | 1 | - | - | - | 7.42E+05 | - | 1.36E+09 | 9.34E+01 | nc |
| Sodium Tungstate Dihydrate | 10213-10-2 | No | No | - | - | - | - | 8.00E-04 | U | - | - | 1 | - | 1 | - | - | - | 7.42E+05 | - | 1.36E+09 | 9.34E+01 | nc |
| Sodium acid pyrophosphate | 7758-16-9 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Sodium aluminum phosphate (acidic) | 7785-88-8 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Sodium aluminum phosphate (anhydrous) | 10279-59-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Sodium aluminum phosphate (tetrahydrate) | 10305-76-7 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Sodium hexametaphosphate | 10124-56-8 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Sodium polyphosphate | 68915-31-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Sodium trimetaphosphate | 7785-84-4 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Sodium tripolyphosphate | 7758-29-4 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Stearyl Acetate | 822-23-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.74E+04 | 8.87E-01 | - | 5.57E-04 | 8.27E+04 | 1.36E+09 | - | - |
| Stirofos (Tetrachlorovinphos) | 961-11-5 | No | No | 2.40E-02 | U | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 7.52E-08 | - | 1.10E+01 | 1.38E+03 | 1.36E+09 | 9.57E+01 | ca* |
| Strontium Chromate | 7789-06-2 | Yes | No | 5.00E-01 | U | 1.50E-01 | U | 2.00E-02 | U | 2.00E-04 | U | 0.025 | - | 1 | - | - | - | 1.06E+03 | - | 1.36E+09 | 6.18E+00 | ca |
| Strontium, Stable | 7440-24-6 | No | No | - | - | - | - | 6.00E-01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 7.01E+04 | nc |
| Strychnine | 57-24-9 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 3.09E-12 | - | 1.60E+02 | 5.40E+03 | 1.36E+09 | 2.46E+01 | nc |
| Styrene | 100-42-5 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E+00 | U | 1 | - | 1 | 9.36E+03 | 1.12E-01 | 8.67E+02 | 3.10E+02 | 4.46E+02 | 1.36E+09 | 3.49E+03 | cs |
| Styrene-Acrylonitrile (SAN) Trimer | NA | No | No | - | - | - | - | 3.00E-03 | U | - | - | 1 | 0.1 | 1 | - | - | - | 8.49E+01 | - | 1.36E+09 | 2.46E+02 | nc |
| Sulfate | 14808-79-8 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | 1.00E+06 | - | 1.36E+09 | - | - |
| Sulfide | 18496-25-8 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Sulfite | 14265-45-3 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Sulfolane | 126-33-0 | No | No | - | - | - | - | 1.00E-03 | U | 2.00E-03 | U | 1 | 0.1 | 1 | - | 1.98E-04 | - | 1.00E+06 | 9.08E+00 | 1.36E+09 | 8.21E+01 | nc |
| Sulfonylbis(4-chlorobenzene), 1,1'- | 80-07-9 | No | No | - | - | - | - | 8.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 5.60E-06 | - | 2.39E+00 | 2.86E+03 | 1.36E+09 | 6.57E+01 | nc |
| Sulfur | 7704-34-9 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Sulfur Dioxide | 7446-09-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | 3.31E-02 | - | 1.07E+05 | - | 1.36E+09 | - | - |
| Sulfur Mustard | 505-60-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.78E+04 | 1.00E-03 | 1.05E+03 | 6.84E+02 | 2.40E+02 | 1.36E+09 | - | - |
| Sulfur Trioxide | 7446-11-9 | No | Yes | - | - | - | - | - | - | 1.00E-03 | U | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.95E+05 | cm |
| Sulfuric Acid | 7664-93-9 | No | No | - | - | - | - | - | - | 1.00E-03 | U | 1 | - | 1 | - | - | - | 1.00E+06 | - | 1.36E+09 | 5.95E+05 | cm |
| Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester | 140-57-8 | No | No | 2.50E-02 | U | 7.10E-06 | U | 5.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 7.77E-06 | - | 5.90E-01 | 5.55E+03 | 1.36E+09 | 9.19E+01 | ca* |
| TCDD, 2,3,7,8- | 1746-01-6 | No | Yes | 1.30E+05 | U | 3.80E+01 | U | 7.00E-10 | U | 4.00E-08 | U | 1 | 0.03 | 1 | 1.96E+06 | 2.04E-03 | - | 2.00E-04 | 2.49E+05 | 1.36E+09 | 2.16E-05 | ca** |
| TCDF, 2,3,7,8- | 51207-31-9 | No | Yes | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 0.03 | 1 | 2.49E+06 | 6.83E-04 | - | 6.92E-04 | 1.40E+05 | 1.36E+09 | 2.17E-04 | ca** |
| TCMTB | 21564-17-0 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.65E-10 | - | 1.25E+02 | 3.37E+03 | 1.36E+09 | 2.46E+03 | nc |
| Tebuthiuron | 34014-18-1 | No | No | - | - | - | - | 7.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 4.91E-09 | - | 2.50E+03 | 4.24E+01 | 1.36E+09 | 5.74E+03 | nc |
| Technetium | 7440-26-8 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Tellurium | 13494-80-9 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | 0.00E+00 | - | 1.36E+09 | - | - |
| Temephos | 3383-96-8 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 8.01E-08 | - | 2.70E-01 | 9.51E+04 | 1.36E+09 | 1.64E+03 | nc |
| Terbacil | 5902-51-2 | No | No | - | - | - | - | 1.30E-02 | U | - | - | 1 | 0.1 | 1 | - | 4.91E-09 | - | 7.10E+02 | 5.01E+01 | 1.36E+09 | 1.07E+03 | nc |
| Terbufos | 13071-79-9 | No | Yes | - | - | - | - | 2.50E-05 | U | - | - | 1 | - | 1 | 2.64E+05 | 9.81E-04 | 3.09E+01 | 5.07E+00 | 9.99E+02 | 1.36E+09 | 2.92E+00 | nc |
| Terbutryn | 886-50-0 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 8.79E-07 | - | 2.50E+01 | 6.07E+02 | 1.36E+09 | 8.21E+01 | nc |
| Test Chemical | NA | No | No | - | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |

Site-specific

Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|---------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Tetrabromodiphenyl ether, 2,2',4,4'- (BDE-47) | 5436-43-1 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.21E-04 | - | 1.46E-03 | 1.32E+04 | 1.36E+09 | 8.21E+00 | nc |
| Tetrabutyl Lead | 1920-90-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.65E+03 | 3.25E+02 | - | 1.44E-02 | 7.88E+04 | 1.36E+09 | - | - |
| Tetrachloroaniline, 2,3,5,6- | 3481-20-7 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.35E-05 | - | 9.49E+00 | 7.42E+03 | 1.36E+09 | - | - |
| Tetrachlorobenzene, 1,2,3,4- | 634-66-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 5.99E+04 | 3.11E-02 | - | 5.92E+00 | 2.27E+03 | 1.36E+09 | - | - |
| Tetrachlorobenzene, 1,2,4,5- | 95-94-3 | No | Yes | - | - | - | - | 3.00E-04 | U | - | - | 1 | - | 1 | 5.07E+04 | 4.09E-02 | - | 5.95E-01 | 2.22E+03 | 1.36E+09 | 3.50E+01 | nc |
| Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77) | 32598-13-3 | No | No | 1.30E+01 | U | 3.80E-03 | U | 7.00E-06 | U | 4.00E-04 | U | 1 | 0.14 | 1 | - | 3.84E-04 | - | 5.69E-04 | 7.81E+04 | 1.36E+09 | 1.58E-01 | ca** |
| Tetrachlorobiphenyl, 3,4,4',5'- (PCB 81) | 70362-50-4 | No | Yes | 3.90E+01 | U | 1.14E-02 | U | 2.33E-06 | U | 1.33E-04 | U | 1 | 0.14 | 1 | 5.09E+05 | 9.12E-03 | - | 3.22E-02 | 7.81E+04 | 1.36E+09 | 4.80E-02 | ca** |
| Tetrachloroethane, 1,1,1,2- | 630-20-6 | No | Yes | 2.60E-02 | U | 7.40E-06 | U | 3.00E-02 | U | - | - | 1 | - | 1 | 5.68E+03 | 1.02E-01 | 6.80E+02 | 1.07E+03 | 8.60E+01 | 1.36E+09 | 8.76E+00 | ca |
| Tetrachloroethane, 1,1,2,2- | 79-34-5 | No | Yes | 2.00E-01 | U | 5.80E-05 | U | 2.00E-02 | U | - | - | 1 | - | 1 | 1.51E+04 | 1.50E-02 | 1.90E+03 | 2.83E+03 | 9.49E+01 | 1.36E+09 | 2.67E+00 | ca |
| Tetrachloroethylene | 127-18-4 | No | Yes | 2.10E-03 | U | 2.60E-07 | U | 6.00E-03 | U | 4.00E-02 | U | 1 | - | 1 | 2.35E+03 | 7.24E-01 | 1.66E+02 | 2.06E+02 | 9.49E+01 | 1.36E+09 | 3.88E+01 | nc |
| Tetrachlorophenol, 2,3,4,5- | 4901-51-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 6.91E-06 | - | 2.87E+01 | 4.74E+03 | 1.36E+09 | - | - |
| Tetrachlorophenol, 2,3,4,6- | 58-90-2 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.61E-04 | - | 2.30E+01 | 2.80E+02 | 1.36E+09 | 2.46E+03 | nc |
| Tetrachlorophenols (total) | 25167-83-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.61E-04 | - | 2.30E+01 | 2.97E+03 | 1.36E+09 | - | - |
| Tetrachloroterephthalate, 2,3,5,6- | 2136-79-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.69E-11 | - | 1.75E+02 | 1.31E+03 | 1.36E+09 | - | - |
| Tetrachlorotoluene, p- alpha, alpha, alpha- | 5216-25-1 | No | Yes | 2.00E+01 | U | - | - | - | - | - | - | 1 | - | 1 | 1.06E+05 | 7.89E-03 | - | 4.04E+00 | 1.61E+03 | 1.36E+09 | 1.64E-01 | ca |
| Tetraethyl Dithiopyrophosphate | 3689-24-5 | No | No | - | - | - | - | 5.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.82E-04 | - | 3.00E+01 | 2.66E+02 | 1.36E+09 | 4.10E+01 | nc |
| Tetraethyl Lead | 78-00-2 | No | Yes | - | - | - | - | 1.00E-07 | U | - | - | 1 | - | 1 | 1.91E+03 | 2.32E+01 | 2.43E+00 | 2.90E-01 | 6.48E+02 | 1.36E+09 | 1.17E-02 | nc |
| Tetrafluoroethane, 1,1,1,2- | 811-97-2 | No | Yes | - | - | - | - | 8.00E+01 | U | - | - | 1 | - | 1 | 1.22E+03 | 2.04E+00 | 2.04E+03 | 2.04E+03 | 8.60E+01 | 1.36E+09 | 4.28E+04 | cs |
| Tetrahydrofuran | 109-99-9 | No | Yes | - | - | - | - | 9.00E-01 | U | 2.00E+00 | U | 1 | 0.03 | 1 | 1.20E+04 | 2.88E-03 | 1.65E+05 | 1.00E+06 | 1.08E+01 | 1.36E+09 | 9.43E+03 | nc |
| Tetrahydrothiophene | 110-01-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 8.24E+03 | 2.50E-02 | 2.18E+03 | 3.73E+03 | 8.00E+01 | 1.36E+09 | - | - |
| Tetramethyl Lead | 75-74-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.31E+03 | 2.49E+01 | - | 1.50E+01 | 4.39E+01 | 1.36E+09 | - | - |
| Tetramethylcyclohexane | 30501-43-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Tetrapotassium phosphate | 7320-34-5 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Tetrapropyl Lead | 3440-75-3 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.65E+03 | 1.05E+02 | - | 5.82E-03 | 7.15E+03 | 1.36E+09 | - | - |
| Tetrasodium pyrophosphate | 7722-88-5 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | 8.14E+04 | - | 1.36E+09 | 5.68E+06 | cm |
| Tetryl (Trinitrophenylmethylnitramine) | 479-45-8 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.00065 | 1 | - | 1.11E-07 | - | 7.40E+01 | 4.61E+03 | 1.36E+09 | 2.33E+02 | nc |
| Thallic Oxide | 1314-32-5 | No | No | - | - | - | - | 2.00E-05 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 2.34E+00 | nc |
| Thallium (I) Nitrate | 10102-45-1 | No | No | - | - | - | - | 1.00E-05 | U | - | - | 1 | - | 1 | - | - | - | 9.55E+04 | - | 1.36E+09 | 1.17E+00 | nc |
| Thallium (Soluble Salts) | 7440-28-0 | No | No | - | - | - | - | 1.00E-05 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.17E+00 | nc |
| Thallium Acetate | 563-68-8 | No | Yes | - | - | - | - | 1.00E-05 | U | - | - | 1 | - | 1 | - | - | - | 2.80E+04 | 1.51E+00 | 1.36E+09 | 1.17E+00 | nc |
| Thallium Carbonate | 6533-73-9 | No | Yes | - | - | - | - | 2.00E-05 | U | - | - | 1 | - | 1 | - | - | - | 5.20E+04 | 2.88E+00 | 1.36E+09 | 2.34E+00 | nc |
| Thallium Chloride | 7791-12-0 | No | No | - | - | - | - | 1.00E-05 | U | - | - | 1 | - | 1 | - | - | - | 2.90E+03 | - | 1.36E+09 | 1.17E+00 | nc |
| Thallium Selenite | 12039-52-0 | No | No | - | - | - | - | 1.00E-05 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 1.17E+00 | nc |
| Thallium Sulfate | 7446-18-6 | No | No | - | - | - | - | 2.00E-05 | U | - | - | 1 | - | 1 | - | - | - | 5.47E+04 | - | 1.36E+09 | 2.34E+00 | nc |
| Thifensulfuron-methyl | 79277-27-3 | No | No | - | - | - | - | 4.30E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.67E-12 | - | 2.24E+03 | 5.08E+01 | 1.36E+09 | 3.53E+03 | nc |
| Thiobencarb | 28249-77-6 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.09E-05 | - | 2.80E+01 | 1.63E+03 | 1.36E+09 | 8.21E+02 | nc |
| Thiocyanates | NA | No | No | - | - | - | - | 2.00E-04 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 2.34E+01 | nc |
| Thiocyanic Acid | 463-56-9 | No | Yes | - | - | - | - | 2.00E-04 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 2.34E+01 | nc |
| Thiodiglycol | 111-48-8 | No | No | - | - | - | - | 7.00E-02 | U | - | - | 1 | 0.0075 | 1 | - | 7.56E-08 | - | 1.00E+06 | 1.00E+00 | 1.36E+09 | 7.92E+03 | nc |
| Thiofanox | 39196-18-4 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 3.84E-07 | - | 5.20E+03 | 7.24E+01 | 1.36E+09 | 2.46E+01 | nc |
| Thiophanate, Methyl | 23564-05-8 | No | No | 1.16E-02 | U | - | - | 2.67E-02 | U | - | - | 1 | 0.1 | 1 | - | 4.95E-08 | - | 2.66E+01 | 3.27E+02 | 1.36E+09 | 1.98E+02 | ca* |
| Thiophene | 110-02-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.18E+03 | 9.28E-02 | 1.80E+03 | 3.01E+03 | 8.00E+01 | 1.36E+09 | - | - |
| Thiram | 137-26-8 | No | No | - | - | - | - | 1.50E-02 | U | - | - | 1 | 0.1 | 1 | - | 7.44E-06 | - | 3.00E+01 | 6.11E+02 | 1.36E+09 | 1.23E+03 | nc |
| Thorium | 7440-29-1 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Thymol | 89-83-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.97E-05 | - | 9.00E+02 | 1.47E+03 | 1.36E+09 | - | - |
| Tin | 7440-31-5 | No | No | - | - | - | - | 6.00E-01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 7.01E+04 | nc |

Site-specific
Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---|-------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-----|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Titanium | 7440-32-6 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Titanium Tetrachloride | 7550-45-0 | No | Yes | - | - | - | - | - | - | 1.00E-04 | U | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.95E+04 | nc |
| Toluene | 108-88-3 | No | Yes | - | - | - | - | 8.00E-02 | U | 5.00E+00 | U | 1 | - | 1 | 4.29E+03 | 2.71E-01 | 8.18E+02 | 5.26E+02 | 2.34E+02 | 1.36E+09 | 4.69E+03 | cs |
| Toluene-2,4-diisocyanate | 584-84-9 | No | Yes | - | - | 1.10E-05 | U | - | - | 8.00E-06 | U | 1 | - | 1 | 7.61E+05 | 4.54E-04 | - | 3.76E+01 | 7.42E+03 | 1.36E+09 | 2.67E+00 | nc |
| Toluene-2,5-diamine | 95-70-5 | No | No | 1.80E-01 | U | - | - | 2.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 3.04E-07 | - | 7.72E+04 | 5.54E+01 | 1.36E+09 | 1.28E+01 | ca** |
| Toluene-2,6-diisocyanate | 91-08-7 | No | Yes | - | - | 1.10E-05 | U | - | - | 8.00E-06 | U | 1 | - | 1 | 6.32E+05 | 4.54E-04 | 1.71E+03 | 3.76E+01 | 7.58E+03 | 1.36E+09 | 2.21E+00 | nc |
| Toluenediamine, 2,3- | 2687-25-4 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.04E-07 | - | 2.46E+04 | 5.65E+01 | 1.36E+09 | - | - |
| Toluenediamine, 3,4- | 496-72-0 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.06E-07 | - | 2.69E+04 | 5.54E+01 | 1.36E+09 | - | - |
| Toluidine, o- (Methylaniline, 2-) | 95-53-4 | No | No | 1.60E-02 | U | 5.10E-05 | U | - | - | - | - | 1 | 0.1 | 1 | - | 8.09E-05 | - | 1.66E+04 | 1.15E+02 | 1.36E+09 | 1.44E+02 | ca |
| Toluidine, p- | 106-49-0 | No | No | 3.00E-02 | U | - | - | 4.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 8.26E-05 | - | 6.50E+03 | 1.13E+02 | 1.36E+09 | 7.66E+01 | ca** |
| Total Petroleum Hydrocarbons (Aliphatic High) | NA | No | Yes | - | - | - | - | 3.00E+00 | U | - | - | 1 | - | 1 | 1.06E+03 | 3.34E+02 | 3.41E-01 | 3.70E-03 | 4.82E+03 | 1.36E+09 | 3.50E+05 | cs |
| Total Petroleum Hydrocarbons (Aliphatic Low) | NA | No | Yes | - | - | - | - | - | - | 6.00E-01 | U | 1 | - | 1 | 8.29E+02 | 7.36E+01 | 1.41E+02 | 9.50E+00 | 1.32E+02 | 1.36E+09 | 2.18E+02 | cs |
| Total Petroleum Hydrocarbons (Aliphatic Medium) | NA | No | Yes | - | - | - | - | 1.00E-02 | U | 1.00E-01 | U | 1 | - | 1 | 1.04E+03 | 1.39E+02 | 6.86E+00 | 2.20E-01 | 7.96E+02 | 1.36E+09 | 4.40E+01 | cs |
| Total Petroleum Hydrocarbons (Aromatic High) | NA | No | No | - | - | - | - | 4.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.62E-04 | - | 2.60E-01 | 5.55E+04 | 1.36E+09 | 3.28E+03 | nc |
| Total Petroleum Hydrocarbons (Aromatic Low) | NA | No | Yes | - | - | - | - | 4.00E-03 | U | 3.00E-02 | U | 1 | - | 1 | 3.54E+03 | 2.27E-01 | 1.82E+03 | 1.79E+03 | 1.46E+02 | 1.36E+09 | 4.23E+01 | nc |
| Total Petroleum Hydrocarbons (Aromatic Medium) | NA | No | Yes | - | - | - | - | 4.00E-03 | U | 3.00E-03 | U | 1 | - | 1 | 5.24E+04 | 1.96E-02 | - | 2.78E+01 | 2.01E+03 | 1.36E+09 | 6.00E+01 | nc |
| Toxaphene | 8001-35-2 | No | No | 1.10E+00 | U | 3.20E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 2.45E-04 | - | 5.50E-01 | 7.72E+04 | 1.36E+09 | 2.09E+00 | ca |
| Tralometrin | 66841-25-6 | No | No | - | - | - | - | 7.50E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.61E-08 | - | 8.00E-02 | 1.91E+05 | 1.36E+09 | 6.15E+02 | nc |
| Tri-n-butyltin | 688-73-3 | No | Yes | - | - | - | - | 3.00E-04 | U | - | - | 1 | - | 1 | 3.36E+03 | 6.21E+01 | - | 7.30E-03 | 8.09E+03 | 1.36E+09 | 3.50E+01 | nc |
| Triacetin | 102-76-1 | No | No | - | - | - | - | 8.00E+01 | U | - | - | 1 | 0.1 | 1 | - | 5.03E-07 | - | 5.80E+04 | 4.07E+01 | 1.36E+09 | 6.57E+06 | cm |
| Triadimefon | 43121-43-3 | No | No | - | - | - | - | 3.40E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.32E-09 | - | 7.15E+01 | 2.99E+02 | 1.36E+09 | 2.79E+03 | nc |
| Triallate | 2303-17-5 | No | Yes | 7.17E-02 | U | - | - | 2.50E-02 | U | - | - | 1 | - | 1 | 3.62E+05 | 4.91E-04 | - | 4.00E+00 | 1.01E+03 | 1.36E+09 | 4.56E+01 | ca* |
| Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate) | 15136-87-5 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Triasulfuron | 82097-50-5 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.32E-11 | - | 3.20E+01 | 4.27E+02 | 1.36E+09 | 8.21E+02 | nc |
| Triaziquone | 68-76-8 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.78E-14 | - | 1.07E+05 | 1.07E+02 | 1.36E+09 | - | - |
| Tribenuron-methyl | 101200-48-0 | No | No | - | - | - | - | 8.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 4.17E-12 | - | 5.00E+01 | 9.47E+01 | 1.36E+09 | 6.57E+02 | nc |
| Tribromobenzene, 1,2,4- | 615-54-3 | No | Yes | - | - | - | - | 5.00E-03 | U | - | - | 1 | - | 1 | 4.84E+04 | 1.39E-02 | - | 4.90E+00 | 6.14E+02 | 1.36E+09 | 5.84E+02 | nc |
| Tribromochloromethane | 594-15-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.10E+04 | 1.62E-03 | - | 2.35E+02 | 4.39E+01 | 1.36E+09 | - | - |
| Tribromodiphenyl Ether | 49690-94-0 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 7.79E+05 | 8.30E-04 | - | 2.68E-01 | 8.25E+03 | 1.36E+09 | - | - |
| Tribromophenol, 2,4,6- | 118-79-6 | No | No | - | - | - | - | 9.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.45E-06 | - | 7.00E+01 | 8.05E+02 | 1.36E+09 | 7.39E+02 | nc |
| Tributyl Phosphate | 126-73-8 | No | No | 9.00E-03 | U | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 5.76E-05 | - | 2.80E+02 | 2.35E+03 | 1.36E+09 | 2.55E+02 | ca** |
| Tributyltin | 56573-85-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.12E+03 | 5.27E+01 | - | 1.70E+01 | 1.21E+04 | 1.36E+09 | - | - |
| Tributyltin Compounds | NA | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | 2.46E+01 | nc |
| Tributyltin Oxide | 56-35-9 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.23E-05 | - | 1.95E+01 | 2.59E+07 | 1.36E+09 | 2.46E+01 | nc |
| Tributyltin chloride | 1461-22-9 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.67E+04 | 3.12E+00 | 1.25E+03 | 1.70E+01 | 1.21E+04 | 1.36E+09 | - | - |
| Tributyltin fluoride | 1983-10-4 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.74E+03 | 3.39E+01 | - | 6.00E+00 | 1.21E+04 | 1.36E+09 | - | - |
| Tributyltin linoleate | 24124-25-2 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.21E+05 | 1.71E+02 | - | 1.98E-07 | 2.55E+07 | 1.36E+09 | - | - |
| Tributyltin methacrylate | 2155-70-6 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.02E+04 | 1.96E+00 | - | 1.27E+00 | 4.92E+03 | 1.36E+09 | - | - |
| Tributyltin naphthenate | 85409-17-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Tricaine Methanesulfonate | 886-86-2 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 6.66E-07 | - | 1.00E+05 | 5.90E+01 | 1.36E+09 | - | - |

Site-specific
Composite Worker Screening Levels (RSL) for Soil
 Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Tricalcium phosphate | 7758-87-4 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Trichloro-1,2,2-trifluoroethane, 1,1,2- | 76-13-1 | No | Yes | - | - | - | - | 3.00E+01 | U | 5.00E+00 | U | 1 | - | 1 | 1.29E+03 | 2.15E+01 | 9.10E+02 | 1.70E+02 | 1.97E+02 | 1.36E+09 | 2.81E+03 | cs |
| Trichloro-2'-hydroxydiphenylether | 3380-34-5 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.04E-07 | - | 1.00E+01 | 2.34E+04 | 1.36E+09 | - | - |
| Trichloroacetic Acid | 76-03-9 | No | No | 7.00E-02 | U | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 5.52E-07 | - | 5.46E+04 | 3.23E+00 | 1.36E+09 | 3.28E+01 | ca* |
| Trichloroaniline HCl, 2,4,6- | 33663-50-2 | No | No | 2.90E-02 | U | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 2.94E-12 | - | 2.10E+01 | 1.27E+03 | 1.36E+09 | 7.92E+01 | ca |
| Trichloroaniline, 2,4,5- | 636-30-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 3.17E-05 | - | 5.16E+01 | 6.67E+02 | 1.36E+09 | - | - |
| Trichloroaniline, 2,4,6- | 634-93-5 | No | No | 7.00E-03 | U | - | - | 3.00E-05 | U | - | - | 1 | 0.1 | 1 | - | 5.48E-05 | - | 4.00E+01 | 4.44E+03 | 1.36E+09 | 2.46E+00 | nc |
| Trichlorobenzene | 12002-48-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 3.46E+04 | 7.73E-02 | - | 3.00E+01 | 1.33E+03 | 1.36E+09 | - | - |
| Trichlorobenzene, 1,2,3- | 87-61-6 | No | Yes | - | - | - | - | 8.00E-04 | U | - | - | 1 | - | 1 | 3.22E+04 | 5.11E-02 | - | 1.80E+01 | 1.38E+03 | 1.36E+09 | 9.34E+01 | nc |
| Trichlorobenzene, 1,2,4- | 120-82-1 | No | Yes | 2.90E-02 | U | - | - | 1.00E-02 | U | 2.00E-03 | U | 1 | - | 1 | 2.99E+04 | 5.81E-02 | 4.05E+02 | 4.90E+01 | 1.36E+03 | 1.36E+09 | 2.57E+01 | nc |
| Trichloroethane, 1,1,1- | 71-55-6 | No | Yes | - | - | - | - | 2.00E+00 | U | 5.00E+00 | U | 1 | - | 1 | 1.65E+03 | 7.03E-01 | 6.40E+02 | 1.29E+03 | 4.39E+01 | 1.36E+09 | 3.56E+03 | cs |
| Trichloroethane, 1,1,2- | 79-00-5 | No | Yes | 5.70E-02 | U | 1.60E-05 | U | 4.00E-03 | U | 2.00E-04 | U | 1 | - | 1 | 7.22E+03 | 3.37E-02 | 2.16E+03 | 4.59E+03 | 6.07E+01 | 1.36E+09 | 6.31E-01 | nc |
| Trichloroethylene | 79-01-6 | Yes | Yes | 4.60E-02 | U | 4.10E-06 | U | 5.00E-04 | U | 2.00E-03 | U | 1 | - | 1 | 2.21E+03 | 4.03E-01 | 6.92E+02 | 1.28E+03 | 6.07E+01 | 1.36E+09 | 1.87E+00 | nc |
| Trichlorofluoromethane | 75-69-4 | No | Yes | - | - | - | - | 3.00E-01 | U | - | - | 1 | - | 1 | 1.04E+03 | 3.97E+00 | 1.23E+03 | 1.10E+03 | 4.39E+01 | 1.36E+09 | 3.50E+04 | cs |
| Trichlorophenol, 2,4,5- | 95-95-4 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 6.62E-05 | - | 1.20E+03 | 1.60E+03 | 1.36E+09 | 8.21E+03 | nc |
| Trichlorophenol, 2,4,6- | 88-06-2 | No | No | 1.10E-02 | U | 3.10E-06 | U | 1.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.06E-04 | - | 8.00E+02 | 3.81E+02 | 1.36E+09 | 8.21E+01 | nc |
| Trichlorophenoxyacetic Acid, 2,4,5- | 93-76-5 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.55E-07 | - | 2.78E+02 | 1.07E+02 | 1.36E+09 | 8.21E+02 | nc |
| Trichlorophenoxypropionic acid, -2,4,5 | 93-72-1 | No | No | - | - | - | - | 8.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 3.70E-07 | - | 7.10E+01 | 1.75E+02 | 1.36E+09 | 6.57E+02 | nc |
| Trichloropropane, 1,1,2- | 598-77-6 | No | Yes | - | - | - | - | 5.00E-03 | U | - | - | 1 | - | 1 | 1.50E+04 | 1.30E-02 | 1.28E+03 | 1.90E+03 | 9.49E+01 | 1.36E+09 | 5.84E+02 | nc |
| Trichloropropane, 1,2,3- | 96-18-4 | Yes | Yes | 3.00E+01 | U | - | - | 4.00E-03 | U | 3.00E-04 | U | 1 | - | 1 | 1.57E+04 | 1.40E-02 | 1.40E+03 | 1.75E+03 | 1.16E+02 | 1.36E+09 | 1.09E-01 | ca* |
| Trichloropropene, 1,2,3- | 96-19-5 | No | Yes | - | - | - | - | 3.00E-03 | U | 3.00E-04 | U | 1 | - | 1 | 2.34E+03 | 7.20E-01 | 3.11E+02 | 3.34E+02 | 1.16E+02 | 1.36E+09 | 3.07E-01 | nc |
| Trichlorotoluene, 2,3,6- | 2077-46-5 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 4.23E+04 | 6.13E-02 | - | 6.97E+00 | 2.27E+03 | 1.36E+09 | - | - |
| Trichlorotoluene, alpha 2,6- | 2014-83-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 7.03E+04 | 1.17E-02 | - | 1.30E+01 | 1.20E+03 | 1.36E+09 | - | - |
| Trichlorophenols (total) | NA | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Tricresyl Phosphate (TCP) | 1330-78-5 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 3.30E-05 | - | 3.60E-01 | 4.71E+04 | 1.36E+09 | 1.64E+03 | nc |
| Tridiphan | 58138-08-2 | No | No | - | - | - | - | 3.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.68E-05 | - | 1.14E+00 | 3.45E+03 | 1.36E+09 | 2.46E+02 | nc |
| Tridymite | 15468-32-3 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Triethyl Lead | 5224-23-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.30E+03 | 1.40E+01 | 5.67E+03 | 1.39E+03 | 2.21E+02 | 1.36E+09 | - | - |
| Triethyl phosphorothioate [O,O,O-] | 126-68-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.81E+04 | 1.10E-02 | 2.33E+02 | 2.50E+02 | 1.38E+02 | 1.36E+09 | - | - |
| Triethylamine | 121-44-8 | No | Yes | - | - | - | - | - | - | 7.00E-03 | U | 1 | - | 1 | 1.58E+04 | 6.09E-03 | 2.78E+04 | 6.86E+04 | 5.08E+01 | 1.36E+09 | 4.85E+01 | nc |
| Triethylene Glycol | 112-27-6 | No | No | - | - | - | - | 2.00E+00 | U | - | - | 1 | 0.1 | 1 | - | 1.29E-09 | - | 1.00E+06 | 1.00E+01 | 1.36E+09 | 1.64E+05 | cm |
| Trifluoroethane, 1,1,1- | 420-46-2 | No | Yes | - | - | - | - | - | - | 2.00E+01 | U | 1 | - | 1 | 7.12E+02 | 3.15E+01 | 4.81E+03 | 7.61E+02 | 4.39E+01 | 1.36E+09 | 6.23E+03 | cs |
| Trifluralin | 1582-09-8 | No | Yes | 7.70E-03 | U | - | - | 7.50E-03 | U | - | - | 1 | - | 1 | 5.12E+05 | 4.21E-03 | - | 1.84E-01 | 1.64E+04 | 1.36E+09 | 4.25E+02 | ca** |
| Trimagnesium phosphate | 7757-87-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Trimethyl Lead | 7442-13-9 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.12E+03 | 5.97E+00 | 3.08E+02 | 2.17E+02 | 3.18E+01 | 1.36E+09 | - | - |
| Trimethyl Phosphate | 512-56-1 | No | No | 2.00E-02 | U | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.94E-07 | - | 5.00E+05 | 1.06E+01 | 1.36E+09 | 1.15E+02 | ca** |
| Trimethyl-4-Propenyl-naphthalene, 1,2,3- | 26137-53-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 5.05E+05 | 9.55E-03 | - | 9.43E-02 | 3.94E+04 | 1.36E+09 | - | - |
| Trimethylbenzene, 1,2,3- | 526-73-8 | No | Yes | - | - | - | - | 1.00E-02 | U | 6.00E-02 | U | 1 | - | 1 | 9.44E+03 | 1.78E-01 | 2.93E+02 | 7.52E+01 | 6.27E+02 | 1.36E+09 | 2.05E+02 | nc |
| Trimethylbenzene, 1,2,4- | 95-63-6 | No | Yes | - | - | - | - | 1.00E-02 | U | 6.00E-02 | U | 1 | - | 1 | 7.91E+03 | 2.52E-01 | 2.18E+02 | 5.70E+01 | 6.14E+02 | 1.36E+09 | 1.76E+02 | nc |
| Trimethylbenzene, 1,3,5- | 108-67-8 | No | Yes | - | - | - | - | 1.00E-02 | U | 6.00E-02 | U | 1 | - | 1 | 6.61E+03 | 3.59E-01 | 1.82E+02 | 4.82E+01 | 6.02E+02 | 1.36E+09 | 1.51E+02 | nc |
| Trimethylethyl Lead | 1762-26-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.44E+03 | 1.44E+01 | 2.56E+01 | 7.65E+00 | 8.60E+01 | 1.36E+09 | - | - |
| Trimethylpentane, 2,2,4- | 540-84-1 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 9.37E+02 | 1.24E+02 | 6.10E+01 | 2.44E+00 | 2.40E+02 | 1.36E+09 | - | - |
| Trimethylpentene, 2,4,4- | 25167-70-8 | No | Yes | - | - | - | - | 1.00E-02 | U | - | - | 1 | - | 1 | 1.00E+03 | 3.05E+01 | 2.95E+01 | 4.04E+00 | 2.40E+02 | 1.36E+09 | 1.17E+03 | cs |
| Trinitrobenzene, 1,3,5- | 99-35-4 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.019 | 1 | - | 2.66E-07 | - | 2.78E+02 | 1.68E+03 | 1.36E+09 | 3.24E+03 | nc |

Site-specific
Composite Worker Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | ABS | RBA | Volatilization Factor (m ³ /kg) | Henry's Law Constant (unitless) | Soil Saturation Concentration (mg/kg) | S (mg/L) | Koc (cm ³ /g) | Particulate Emission Factor (m ³ /kg) | Screening Level (mg/kg) | [basis] |
|---------------------------------------|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|-------|-----|--|---------------------------------|---------------------------------------|----------|--------------------------|--|-------------------------|---------|
| Trinitrotoluene, 2,4,6- | 118-96-7 | No | No | 3.00E-02 | U | - | - | 5.00E-04 | U | - | - | 1 | 0.032 | 1 | - | 8.50E-07 | - | 1.15E+02 | 2.81E+03 | 1.36E+09 | 5.14E+01 | nc |
| Triphenylphosphine Oxide | 791-28-6 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.15E-08 | - | 6.28E+01 | 1.95E+03 | 1.36E+09 | 1.64E+03 | nc |
| Triphenyltin | 668-34-8 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 2.02E+06 | 3.21E-03 | - | 1.37E-01 | 3.36E+05 | 1.36E+09 | - | - |
| Tripotassium phosphate | 7778-53-2 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Tripropyl Lead | 6618-03-7 | No | Yes | - | - | - | - | - | - | - | - | 1 | - | 1 | 1.67E+03 | 3.27E+01 | 3.08E+00 | 2.15E-01 | 1.34E+03 | 1.36E+09 | - | - |
| Tris(1,3-Dichloro-2-propyl) Phosphate | 13674-87-8 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.07E-07 | - | 7.00E+00 | 1.11E+04 | 1.36E+09 | 1.64E+03 | nc |
| Tris(1-chloro-2-propyl)phosphate | 13674-84-5 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 2.44E-06 | - | 1.20E+03 | 1.60E+03 | 1.36E+09 | 8.21E+02 | nc |
| Tris(2,3-dibromopropyl)phosphate | 126-72-7 | No | Yes | 2.30E+00 | U | 6.60E-04 | U | - | - | - | - | 1 | - | 1 | 9.03E+05 | 8.91E-04 | 4.67E+02 | 8.00E+00 | 9.71E+03 | 1.36E+09 | 1.31E+00 | ca |
| Tris(2-chloroethyl)phosphate | 115-96-8 | No | No | 2.00E-02 | U | - | - | 7.00E-03 | U | - | - | 1 | 0.1 | 1 | - | 1.35E-04 | - | 7.00E+03 | 3.88E+02 | 1.36E+09 | 1.15E+02 | ca** |
| Tris(2-ethylhexyl)phosphate | 78-42-2 | No | No | 3.20E-03 | U | - | - | 1.00E-01 | U | - | - | 1 | 0.1 | 1 | - | 3.21E-06 | - | 6.00E-01 | 2.47E+06 | 1.36E+09 | 7.18E+02 | ca* |
| Trisbutoxyethyl Phosphate | 78-51-3 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 4.91E-10 | - | 1.10E+03 | 1.27E+03 | 1.36E+09 | - | - |
| Trisodium phosphate | 7601-54-9 | No | No | - | - | - | - | 4.86E+01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.68E+06 | cm |
| Trithion | 786-19-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 8.79E-06 | - | 6.30E-01 | 8.31E+03 | 1.36E+09 | - | - |
| Tungsten | 7440-33-7 | No | No | - | - | - | - | 8.00E-04 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 9.34E+01 | nc |
| Uranium (Soluble Salts) | NA | No | No | - | - | - | - | 2.00E-04 | U | 4.00E-05 | U | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 2.33E+01 | nc |
| Urea | 57-13-6 | No | No | - | - | - | - | - | - | - | - | 1 | 0.1 | 1 | - | 1.38E-05 | - | 5.45E+05 | 3.15E+00 | 1.36E+09 | - | - |
| Urethane | 51-79-6 | Yes | No | 1.00E+00 | U | 2.90E-04 | U | - | - | - | - | 1 | 0.1 | 1 | - | 2.63E-06 | - | 4.80E+05 | 1.21E+01 | 1.36E+09 | 2.30E+00 | ca |
| Vanadium Pentoxide | 1314-62-1 | No | No | - | - | 8.30E-03 | U | 9.00E-03 | U | 7.00E-06 | U | 0.026 | - | 1 | - | - | - | 7.00E+02 | - | 1.36E+09 | 8.39E+02 | nc |
| Vanadium Sulfate | 36907-42-3 | No | No | - | - | - | - | - | - | - | - | 0.026 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Vanadium and Compounds | 7440-62-2 | No | No | - | - | - | - | 5.04E-03 | U | 1.00E-04 | U | 0.026 | - | 1 | - | - | - | - | - | 1.36E+09 | 5.83E+02 | nc |
| Vanadyl Sulfate | 27774-13-6 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Vernolate | 1929-77-7 | No | Yes | - | - | - | - | 1.00E-03 | U | - | - | 1 | - | 1 | 1.23E+05 | 1.26E-03 | - | 9.00E+01 | 2.99E+02 | 1.36E+09 | 1.17E+02 | nc |
| Vinclozolin | 50471-44-8 | No | No | - | - | - | - | 1.20E-03 | U | - | - | 1 | 0.1 | 1 | - | 7.11E-07 | - | 2.60E+00 | 2.84E+02 | 1.36E+09 | 9.85E+01 | nc |
| Vinyl Acetate | 108-05-4 | No | Yes | - | - | - | - | 1.00E+00 | U | 2.00E-01 | U | 1 | - | 1 | 4.40E+03 | 2.09E-02 | 2.75E+03 | 2.00E+04 | 5.58E+00 | 1.36E+09 | 3.84E+02 | nc |
| Vinyl Bromide | 593-60-2 | No | Yes | - | - | 3.20E-05 | U | - | - | 3.00E-03 | U | 1 | - | 1 | 1.37E+03 | 5.03E-01 | 2.47E+03 | 7.60E+03 | 2.17E+01 | 1.36E+09 | 5.25E-01 | ca** |
| Vinyl Chloride | 75-01-4 | Yes | Yes | 7.20E-01 | U | 4.40E-06 | U | 3.00E-03 | U | 1.00E-01 | U | 1 | - | 1 | 9.55E+02 | 1.14E+00 | 3.92E+03 | 8.80E+03 | 2.17E+01 | 1.36E+09 | 1.68E+00 | ca* |
| Warfarin | 81-81-2 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.1 | 1 | - | 1.13E-07 | - | 1.70E+01 | 4.26E+02 | 1.36E+09 | 2.46E+01 | nc |
| Xylene, P- | 106-42-3 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 1 | - | 1 | 5.58E+03 | 2.82E-01 | 3.89E+02 | 1.62E+02 | 3.75E+02 | 1.36E+09 | 2.42E+02 | nc |
| Xylene, m- | 108-38-3 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 1 | - | 1 | 5.46E+03 | 2.94E-01 | 3.87E+02 | 1.61E+02 | 3.75E+02 | 1.36E+09 | 2.37E+02 | nc |
| Xylene, o- | 95-47-6 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 1 | - | 1 | 6.45E+03 | 2.12E-01 | 4.34E+02 | 1.78E+02 | 3.83E+02 | 1.36E+09 | 2.79E+02 | nc |
| Xylenes | 1330-20-7 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 1 | - | 1 | 5.74E+03 | 2.71E-01 | 2.60E+02 | 1.06E+02 | 3.83E+02 | 1.36E+09 | 2.49E+02 | nc |
| Ytterbium | 7440-64-4 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Yttrium | 7440-65-5 | No | No | - | - | - | - | - | - | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | - | - |
| Zinc Cyanide | 557-21-1 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 1 | - | 1 | - | - | - | 4.70E+00 | - | 1.36E+09 | 5.84E+03 | nc |
| Zinc Phosphide | 1314-84-7 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.50E+01 | nc |
| Zinc and Compounds | 7440-66-6 | No | No | - | - | - | - | 3.00E-01 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 3.50E+04 | nc |
| Zineb | 12122-67-7 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.1 | 1 | - | 1.11E-07 | - | 1.00E+01 | 1.35E+03 | 1.36E+09 | 4.10E+03 | nc |
| Zirconium | 7440-67-7 | No | No | - | - | - | - | 8.00E-05 | U | - | - | 1 | - | 1 | - | - | - | - | - | 1.36E+09 | 9.34E+00 | nc |

**Site-specific
 Equation Inputs for Soil to Groundwater**

| Variable | Value |
|---|----------|
| THQ (target hazard quotient) unitless | 0.1 |
| TR (target risk) unitless | 0.000001 |
| LT (lifetime) years | 70 |
| K (volatilization factor of Andelman) L/m ³ | 0.5 |
| I _{sc} (apparent thickness of stratum corneum) cm | 0.001 |
| ED _{res} (exposure duration - resident) years | 26 |
| ED _{res-c} (exposure duration - child) years | 6 |
| ED _{res-a} (exposure duration - adult) years | 20 |
| ED ₀₋₂ (mutagenic exposure duration first phase) years | 2 |
| ED ₂₋₆ (mutagenic exposure duration second phase) years | 4 |
| ED ₆₋₁₆ (mutagenic exposure duration third phase) years | 10 |
| ED ₁₆₋₂₆ (mutagenic exposure duration fourth phase) years | 10 |
| EF _{res} (exposure frequency) days/year | 350 |
| EF _{res-c} (exposure frequency - child) days/year | 350 |
| EF _{res-a} (exposure frequency - adult) days/year | 350 |
| EF ₀₋₂ (mutagenic exposure frequency first phase) days/year | 350 |
| EF ₂₋₆ (mutagenic exposure frequency second phase) days/year | 350 |
| EF ₆₋₁₆ (mutagenic exposure frequency third phase) days/year | 350 |
| EF ₁₆₋₂₆ (mutagenic exposure frequency fourth phase) days/year | 350 |
| ET _{event res-adj} (age-adjusted exposure time) hours/event | 0.67077 |
| ET _{res-madj} (mutagenic age-adjusted exposure time) hours/event | 0.67077 |
| ET _{res} (exposure time) hours/day | 24 |
| ET _{res-c} (dermal exposure time - child) hours/event | 0.54 |
| ET _{res-a} (dermal exposure time - adult) hours/event | 0.71 |
| ET _{res-c} (inhalation exposure time - child) hours/day | 24 |
| ET _{res-a} (inhalation exposure time - adult) hours/day | 24 |
| ET ₀₋₂ (mutagenic inhalation exposure time first phase) hours/day | 24 |
| ET ₂₋₆ (mutagenic inhalation exposure time second phase) hours/day | 24 |
| ET ₆₋₁₆ (mutagenic inhalation exposure time third phase) hours/day | 24 |
| ET ₁₆₋₂₆ (mutagenic inhalation exposure time fourth phase) hours/day | 24 |
| ET ₀₋₂ (mutagenic dermal exposure time first phase) hours/event | 0.54 |
| ET ₂₋₆ (mutagenic dermal exposure time second phase) hours/event | 0.54 |
| ET ₆₋₁₆ (mutagenic dermal exposure time third phase) hours/event | 0.71 |
| ET ₁₆₋₂₆ (mutagenic dermal exposure time fourth phase) hours/event | 0.71 |
| BW _{res-a} (body weight - adult) kg | 80 |
| BW _{res-c} (body weight - child) kg | 15 |
| BW ₀₋₂ (mutagenic body weight) kg | 15 |
| BW ₂₋₆ (mutagenic body weight) kg | 15 |
| BW ₆₋₁₆ (mutagenic body weight) kg | 80 |
| BW ₁₆₋₂₆ (mutagenic body weight) kg | 80 |
| IFW _{res-adj} (adjusted intake factor) L/kg | 327.95 |
| IFW _{res-adj} (adjusted intake factor) L/kg | 327.95 |
| IFWM _{res-adj} (mutagenic adjusted intake factor) L/kg | 1019.9 |
| IFWM _{res-adj} (mutagenic adjusted intake factor) L/kg | 1019.9 |
| IRW _{res-c} (water intake rate - child) L/day | 0.78 |
| IRW _{res-a} (water intake rate - adult) L/day | 2.5 |

**Site-specific
 Equation Inputs for Soil to Groundwater**

| Variable | Value |
|--|---------|
| IRW ₀₋₂ (mutagenic water intake rate) L/day | 0.78 |
| IRW ₂₋₆ (mutagenic water intake rate) L/day | 0.78 |
| IRW ₆₋₁₆ (mutagenic water intake rate) L/day | 2.5 |
| IRW ₁₆₋₂₆ (mutagenic water intake rate) L/day | 2.5 |
| EV _{res-a} (events - adult) per day | 1 |
| EV _{res-c} (events - child) per day | 1 |
| EV ₀₋₂ (mutagenic events) per day | 1 |
| EV ₂₋₆ (mutagenic events) per day | 1 |
| EV ₆₋₁₆ (mutagenic events) per day | 1 |
| EV ₁₆₋₂₆ (mutagenic events) per day | 1 |
| DFW _{res-adj} (age-adjusted dermal factor) cm ² -event/kg | 2610650 |
| DFWM _{res-adj} (mutagenic age-adjusted dermal factor) cm ² -event/kg | 8191633 |
| DFW _{res-adj} (age-adjusted dermal factor) cm ² -event/kg | 2610650 |
| DFWM _{res-adj} (mutagenic age-adjusted dermal factor) cm ² -event/kg | 8191633 |
| SA _{res-c} (skin surface area - child) cm ² | 6365 |
| SA _{res-a} (skin surface area - adult) cm ² | 19652 |
| SA ₀₋₂ (mutagenic skin surface area) cm ² | 6365 |
| SA ₂₋₆ (mutagenic skin surface area) cm ² | 6365 |
| SA ₆₋₁₆ (mutagenic skin surface area) cm ² | 19652 |
| SA ₁₆₋₂₆ (mutagenic skin surface area) cm ² | 19652 |
| DAF (dilution attenuation factor) | 1 |
| w (water-filled soil porosity) L _{water} /L _{soil} | 0.3 |
| p _b (dry soil bulk density) kg/L | 1.5 |
| DAF (dilution attenuation factor - calculated; used to calculate C _w) | 1 |
| d _s (depth of source) m - site-specific | . |
| d _a (aquifer thickness) m - site-specific | . |
| d (mixing zone depth) m - site-specific | . |
| L (source length parallel to ground water flow) m | . |
| i (hydraulic gradient) m/m | . |
| K (aquifer hydraulic conductivity) m/yr | . |
| I (infiltration rate) m/yr | 0.18 |
| t (time) yr | |
| ED _{res} (exposure duration) yr | 70 |
| foc (fraction organic carbon in soil) g/g | 0.002 |
| p _s (soil particle density) kg/L | 2.65 |

Output generated 06MAY2017:14:08:04

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Acephate | 30560-19-1 | No | No | - | - | - | - | 1.20E-03 | OP | - | - | 2.00E-02 | 1.00E+01 | 2.05E-11 | 1 | - | 5.29E-04 |
| Acetaldehyde | 75-07-0 | No | Yes | - | - | 2.20E-06 | I | - | - | 9.00E-03 | IR | 2.00E-03 | 1.00E+00 | 2.73E-03 | 1 | - | 3.80E-04 |
| Acetochlor | 34256-82-1 | No | No | - | - | - | - | 2.00E-02 | IR | - | - | 5.97E-01 | 2.98E+02 | 9.12E-07 | 1 | - | 2.81E-02 |
| Acetone | 67-64-1 | No | Yes | - | - | - | - | 9.00E-01 | IR | 3.09E+01 | AT | 4.73E-03 | 2.36E+00 | 1.43E-03 | 1 | - | 2.88E-01 |
| Acetone Cyanohydrin | 75-86-5 | No | No | - | - | - | - | - | - | 2.00E-03 | SC | 2.00E-03 | 1.00E+00 | 8.05E-08 | 1 | - | - |
| Acetonitrile | 75-05-8 | No | Yes | - | - | - | - | - | - | 6.00E-02 | IR | 9.34E-03 | 4.67E+00 | 1.41E-03 | 1 | - | 2.62E-03 |
| Acetophenone | 98-86-2 | No | Yes | - | - | - | - | 1.00E-01 | IR | - | - | 1.04E-01 | 5.19E+01 | 4.25E-04 | 1 | - | 5.84E-02 |
| Acetylaminofluorene, 2- | 53-96-3 | No | No | 3.80E+00 | C | 1.30E-03 | C | - | - | - | - | 4.41E+00 | 2.21E+03 | 7.85E-09 | 1 | - | 7.23E-05 |
| Acifluorfen | 50594-66-6 | No | No | - | - | - | - | - | - | - | - | 7.76E+00 | 3.88E+03 | 2.47E-09 | 1 | - | - |
| Acridine | 260-94-6 | No | No | - | - | - | - | - | - | - | - | 3.27E+01 | 1.64E+04 | 1.62E-05 | 1 | - | - |
| Acrolein | 107-02-8 | No | Yes | - | - | - | - | 5.00E-04 | IR | 2.00E-05 | IR | 2.00E-03 | 1.00E+00 | 4.99E-03 | 1 | - | 8.41E-07 |
| Acrylamide | 79-06-1 | Yes | No | 5.00E-01 | I | 1.00E-04 | I | 2.00E-03 | IR | 6.00E-03 | IR | 1.14E-02 | 5.69E+00 | 6.95E-08 | 1 | - | 1.06E-05 |
| Acrylic Acid | 79-10-7 | No | Yes | - | - | - | - | 5.00E-01 | IR | 1.00E-03 | IR | 2.88E-03 | 1.44E+00 | 1.51E-05 | 1 | - | 4.23E-05 |
| Acrylonitrile | 107-13-1 | No | Yes | 5.40E-01 | I | 6.80E-05 | I | 4.00E-02 | AT | 2.00E-03 | IR | 1.70E-02 | 8.51E+00 | 5.64E-03 | 1 | - | 1.14E-05 |
| Adiponitrile | 111-69-3 | No | No | - | - | - | - | - | - | 6.00E-03 | PP | 4.04E-02 | 2.02E+01 | 4.95E-08 | 1 | - | - |
| Alachlor | 15972-60-8 | No | No | 5.60E-02 | C | - | - | 1.00E-02 | IR | - | - | 6.25E-01 | 3.12E+02 | 3.40E-07 | 1 | 1.65E-03 | 8.73E-04 |
| Daminozide | 1596-84-5 | No | No | 1.80E-02 | C | 5.10E-06 | C | 1.50E-01 | IR | - | - | 2.00E-02 | 1.00E+01 | 1.73E-08 | 1 | - | 9.52E-04 |
| Aldicarb | 116-06-3 | No | No | - | - | - | - | 1.00E-03 | IR | - | - | 4.93E-02 | 2.46E+01 | 5.89E-08 | 1 | 7.48E-04 | 4.93E-04 |
| Aldicarb Sulfone | 1646-88-4 | No | No | - | - | - | - | 1.00E-03 | IR | - | - | 2.00E-02 | 1.00E+01 | 1.38E-07 | 1 | 4.40E-04 | 4.41E-04 |
| Aldicarb sulfoxide | 1646-87-3 | No | No | - | - | - | - | - | - | - | - | 2.00E-02 | 1.00E+01 | 3.96E-08 | 1 | 8.80E-04 | - |
| Aldrin | 309-00-2 | No | Yes | 1.70E+01 | I | 4.90E-03 | I | 3.00E-05 | IR | - | - | 1.64E+02 | 8.20E+04 | 1.80E-03 | 1 | - | 1.51E-04 |
| Aliphatic Chlorinated Hydrocarbons (each) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Aliphatic Chlorinated Hydrocarbons (total) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Alizarin Red Compounds | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Allyl Alcohol | 107-18-6 | No | Yes | - | - | - | - | 5.00E-03 | IR | 1.00E-04 | SC | 3.81E-03 | 1.90E+00 | 2.04E-04 | 1 | - | 4.24E-06 |
| Allyl Chloride | 107-05-1 | No | Yes | 2.10E-02 | C | 6.00E-06 | C | - | - | 1.00E-03 | IR | 7.92E-02 | 3.96E+01 | 4.50E-01 | 1 | - | 6.66E-05 |
| Aluminum | 7429-90-5 | No | No | - | - | - | - | 1.00E+00 | PP | 5.00E-03 | PP | 1.50E+03 | - | 0.00E+00 | 1 | - | 3.00E+03 |
| Aluminum Phosphide | 20859-73-8 | No | No | - | - | - | - | 4.00E-04 | IR | - | - | - | - | 0.00E+00 | 1 | - | - |
| Hydramethylnon | 67485-29-4 | No | No | - | - | - | - | 1.70E-02 | OP | - | - | 3.59E+05 | 1.80E+08 | 8.99E-05 | 1 | - | 1.21E+04 |
| Ametryn | 834-12-8 | No | No | - | - | - | - | 9.00E-03 | IR | - | - | 8.56E-01 | 4.28E+02 | 9.93E-08 | 1 | - | 1.61E-02 |
| Amino-4-chlorobenzotrifluoride, 3- | 121-50-6 | No | Yes | - | - | - | - | - | - | - | - | 1.58E+00 | 7.90E+02 | 5.03E-04 | 1 | - | - |
| Aminoazobenzene, p- | 60-09-3 | No | No | - | - | - | - | - | - | - | - | 3.62E+00 | 1.81E+03 | 3.56E-09 | 1 | - | - |
| Aminobiphenyl, 4- | 92-67-1 | No | No | 2.10E+01 | C | 6.00E-03 | C | - | - | - | - | 4.94E+00 | 2.47E+03 | 5.97E-06 | 1 | - | 1.53E-05 |
| Aminophenol, m- | 591-27-5 | No | No | - | - | - | - | 8.00E-02 | PP | - | - | 1.80E-01 | 9.02E+01 | 8.09E-09 | 1 | - | 6.07E-02 |
| Aminophenol, o- | 95-55-6 | No | No | - | - | - | - | 4.00E-03 | SC | - | - | 1.84E-01 | 9.20E+01 | 8.09E-09 | 1 | - | 3.05E-03 |
| Aminophenol, p- | 123-30-8 | No | No | - | - | - | - | 2.00E-02 | PP | - | - | 1.80E-01 | 9.02E+01 | 1.47E-08 | 1 | - | 1.52E-02 |
| Aminopyridine, 4- | 504-24-5 | No | No | - | - | - | - | - | - | - | - | 6.91E-02 | 3.46E+01 | 1.15E-07 | 1 | - | - |
| Amitraz | 33089-61-1 | No | No | - | - | - | - | 2.50E-03 | IR | - | - | 5.15E+02 | 2.57E+05 | 4.04E-04 | 1 | - | 4.21E-01 |
| Ammonium Sulfamate | 7773-06-0 | No | No | - | - | - | - | 2.00E-01 | IR | - | - | - | - | 0.00E+00 | 1 | - | - |
| Amyl Alcohol, tert- | 75-85-4 | No | Yes | - | - | - | - | - | - | 3.00E-03 | SC | 8.28E-03 | 4.14E+00 | 5.64E-04 | 1 | - | 1.30E-04 |
| Aniline | 62-53-3 | No | No | 5.70E-03 | I | 1.60E-06 | C | 7.00E-03 | PP | 1.00E-03 | IR | 1.40E-01 | 7.02E+01 | 8.26E-05 | 1 | - | 4.56E-03 |
| Anilinobenzothiazole | 1843-21-6 | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Anthraquinone, 9,10- | 84-65-1 | No | No | 4.00E-02 | P | - | - | 2.00E-03 | SC | - | - | 1.00E+01 | 5.01E+03 | 9.61E-07 | 1 | - | 1.44E-02 |
| Antimony (metallic) | 7440-36-0 | No | No | - | - | - | - | 4.00E-04 | IR | - | - | 4.50E+01 | - | 0.00E+00 | 1 | 2.71E-01 | 3.52E-02 |
| Antimony Pentoxide | 1314-60-9 | No | No | - | - | - | - | 5.00E-04 | HE | - | - | - | - | 0.00E+00 | 1 | - | - |
| Antimony Potassium Tartrate | 11071-15-1 | No | No | - | - | - | - | - | - | - | - | 2.68E-02 | 1.34E+01 | - | 1 | - | - |
| Antimony Tetroxide | 1332-81-6 | No | No | - | - | - | - | 4.00E-04 | HE | - | - | - | - | 0.00E+00 | 1 | - | - |

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| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Antimony Trioxide | 1309-64-4 | No | No | - | - | - | - | - | - | 2.00E-04 | IR | - | - | 0.00E+00 | 1 | - | - |
| Antimony Trichloride | 10025-91-9 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Clofentazine | 74115-24-5 | No | No | - | - | - | - | 1.30E-02 | IR | - | - | 6.04E+01 | 3.02E+04 | 1.59E-08 | 1 | - | 1.41E+00 |
| Arsenic Salts | NA | No | No | - | - | - | - | - | - | - | - | 2.90E+01 | - | 0.00E+00 | 1 | - | - |
| Arsenic, Inorganic | 7440-38-2 | No | No | 1.50E+00 | I | 4.30E-03 | I | 3.00E-04 | IR | 1.50E-05 | CA | 2.90E+01 | - | 0.00E+00 | 1 | 2.92E-01 | 1.51E-03 |
| Arsine | 7784-42-1 | No | No | - | - | - | - | 3.50E-06 | CA | 5.00E-05 | IR | - | - | 0.00E+00 | 1 | - | - |
| Asulam | 3337-71-1 | No | No | - | - | - | - | 3.60E-02 | OP | - | - | 5.56E-02 | 2.78E+01 | 6.99E-11 | 1 | - | 1.84E-02 |
| Atrazine | 1912-24-9 | No | No | 2.30E-01 | C | - | - | 3.50E-02 | IR | - | - | 4.49E-01 | 2.25E+02 | 9.65E-08 | 1 | 1.95E-03 | 1.96E-04 |
| Auramine | 492-80-8 | No | No | 8.80E-01 | C | 2.50E-04 | C | - | - | - | - | 8.91E+00 | 4.46E+03 | 1.49E-07 | 1 | - | 6.07E-04 |
| Avermectin B1 | 65195-55-3 | No | No | - | - | - | - | 4.00E-04 | IR | - | - | 1.75E+03 | 8.77E+05 | 5.40E-26 | 1 | - | 1.41E+00 |
| Azobenzene | 103-33-3 | No | Yes | 1.10E-01 | I | 3.10E-05 | I | - | - | - | - | 7.52E+00 | 3.76E+03 | 5.52E-04 | 1 | - | 9.29E-04 |
| Azodicarbonamide | 123-77-3 | No | No | - | - | - | - | 1.00E+00 | PP | 7.00E-06 | PP | 1.39E-01 | 6.96E+01 | 3.35E-11 | 1 | - | 6.80E-01 |
| Barium | 7440-39-3 | No | No | - | - | - | - | 2.00E-01 | IR | 5.00E-04 | HE | 4.10E+01 | - | 0.00E+00 | 1 | 8.24E+01 | 1.55E+01 |
| Barium Chromate | 10294-40-3 | Yes | No | 5.00E-01 | C | 1.50E-01 | C | 2.00E-02 | CA | 2.00E-04 | CA | - | - | 0.00E+00 | 1 | - | - |
| Cyfluthrin | 68359-37-5 | No | No | - | - | - | - | 2.50E-02 | IR | - | - | 2.61E+02 | 1.31E+05 | 1.19E-06 | 1 | - | 3.13E+00 |
| Benfluralin | 1861-40-1 | No | Yes | - | - | - | - | 5.00E-03 | OP | - | - | 3.28E+01 | 1.64E+04 | 1.19E-02 | 1 | - | 9.39E-02 |
| Benomyl | 17804-35-2 | No | No | - | - | - | - | 5.00E-02 | IR | - | - | 6.72E-01 | 3.36E+02 | 2.02E-10 | 1 | - | 8.47E-02 |
| Bentazon | 25057-89-0 | No | No | - | - | - | - | 3.00E-02 | IR | - | - | 2.00E-02 | 1.00E+01 | 8.91E-08 | 1 | - | 1.24E-02 |
| Benzaldehyde | 100-52-7 | No | Yes | 4.00E-03 | P | - | - | 1.00E-01 | IR | - | - | 2.22E-02 | 1.11E+01 | 1.09E-03 | 1 | - | 4.15E-03 |
| Benzamide, N,N-diethyl-3-methyl (DEET) | 134-62-3 | No | No | - | - | - | - | - | - | - | - | 2.27E-01 | 1.13E+02 | 8.50E-07 | 1 | - | - |
| Benzene | 71-43-2 | No | Yes | 5.50E-02 | I | 7.80E-06 | I | 4.00E-03 | IR | 3.00E-02 | IR | 2.92E-01 | 1.46E+02 | 2.27E-01 | 1 | 2.56E-03 | 2.33E-04 |
| Benzene, Ethyldimethyl | 29224-55-3 | No | Yes | - | - | - | - | - | - | - | - | 2.39E+00 | 1.20E+03 | 4.17E-01 | 1 | - | - |
| Benzene, Ethylmethyl | 25550-14-5 | No | Yes | - | - | - | - | - | - | - | - | 1.43E+00 | 7.16E+02 | 2.05E-01 | 1 | - | - |
| Benzene, Methylpropenyl | 768-00-3 | No | Yes | - | - | - | - | - | - | - | - | 2.66E+00 | 1.33E+03 | 2.78E-01 | 1 | - | - |
| Benzene, Methylpropyl | 28729-54-6 | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Benzene, Trimethyl | 25551-13-7 | No | Yes | - | - | - | - | - | - | - | - | 1.20E+00 | 6.02E+02 | 3.59E-01 | 1 | - | - |
| Benzenediamine-2-methyl sulfate, 1,4- | 6369-59-1 | No | No | 1.00E-01 | X | - | - | 3.00E-04 | SC | - | - | 7.68E-02 | 3.84E+01 | 8.86E-22 | 1 | - | 1.67E-04 |
| Benzenethiol | 108-98-5 | No | Yes | - | - | - | - | 1.00E-03 | PP | - | - | 4.68E-01 | 2.34E+02 | 1.37E-02 | 1 | - | 1.12E-03 |
| Benzidine | 92-87-5 | Yes | No | 2.30E+02 | I | 6.70E-02 | I | 3.00E-03 | IR | - | - | 2.38E+00 | 1.19E+03 | 2.11E-09 | 1 | - | 2.75E-07 |
| Benzofluoranthenes, total | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Benzofluorene, 2,3- | 243-17-4 | No | No | - | - | - | - | - | - | - | - | 1.94E+02 | 9.70E+04 | 1.60E-04 | 1 | - | - |
| Benzoic Acid | 65-85-0 | No | No | - | - | - | - | 4.00E+00 | IR | - | - | 1.20E-03 | 6.00E-01 | 1.56E-06 | 1 | - | 1.51E+00 |
| Benzoic acid, 3,5-dichloro- | 51-36-5 | No | No | - | - | - | - | - | - | - | - | 8.52E-02 | 4.26E+01 | 2.43E-06 | 1 | - | - |
| Benzoic acid, 4-hydroxy-, methyl ester | 99-76-3 | No | No | - | - | - | - | - | - | - | - | 1.73E-01 | 8.63E+01 | 9.12E-08 | 1 | - | - |
| Benzothiazole | 95-16-9 | No | No | - | - | - | - | - | - | - | - | 1.69E+00 | 8.47E+02 | 1.53E-05 | 1 | - | - |
| Benzotrchloride | 98-07-7 | No | Yes | 1.30E+01 | I | - | - | - | - | - | - | 2.00E+00 | 1.00E+03 | 1.06E-02 | 1 | - | 6.59E-06 |
| Benzyl Alcohol | 100-51-6 | No | No | - | - | - | - | 1.00E-01 | PP | - | - | 4.29E-02 | 2.15E+01 | 1.38E-05 | 1 | - | 4.76E-02 |
| Benzyl Chloride | 100-44-7 | No | Yes | 1.70E-01 | I | 4.90E-05 | C | 2.00E-03 | PP | 1.00E-03 | PP | 8.92E-01 | 4.46E+02 | 1.68E-02 | 1 | - | 9.76E-05 |
| Beryllium and compounds | 7440-41-7 | No | No | - | - | 2.40E-03 | I | 2.00E-03 | IR | 2.00E-05 | IR | 7.90E+02 | - | 0.00E+00 | 1 | 3.16E+00 | 1.95E+00 |
| Dicrotophos | 141-66-2 | No | No | - | - | - | - | 7.00E-05 | OP | - | - | 3.32E-02 | 1.66E+01 | 2.06E-09 | 1 | - | 3.27E-05 |
| Bifenox | 42576-02-3 | No | No | - | - | - | - | 9.00E-03 | PP | - | - | 7.36E+00 | 3.68E+03 | 4.42E-06 | 1 | - | 7.64E-02 |
| Biphenrin | 82657-04-3 | No | No | - | - | - | - | 1.50E-02 | IR | - | - | 4.54E+03 | 2.27E+06 | 4.09E-05 | 1 | - | 1.37E+02 |
| Biphenyl, 1,1'- | 92-52-4 | No | Yes | 8.00E-03 | I | - | - | 5.00E-01 | IR | 4.00E-04 | SC | 1.03E+01 | 5.13E+03 | 1.26E-02 | 1 | - | 8.72E-04 |
| Bis(2-chloroethoxy)methane | 111-91-1 | No | No | - | - | - | - | 3.00E-03 | PP | - | - | 2.88E-02 | 1.44E+01 | 1.57E-04 | 1 | - | 1.35E-03 |
| Bis(2-chloroethyl)ether | 111-44-4 | No | Yes | 1.10E+00 | I | 3.30E-04 | I | - | - | - | - | 6.44E-02 | 3.22E+01 | 6.95E-04 | 1 | - | 3.61E-06 |
| Bis(2-chloro-1-methylethyl) ether | 108-60-1 | No | Yes | - | - | - | - | 4.00E-02 | IR | - | - | 1.66E-01 | 8.29E+01 | 3.03E-03 | 1 | - | 2.61E-02 |
| Bis(chloromethyl)ether | 542-88-1 | No | Yes | 2.20E+02 | I | 6.20E-02 | I | - | - | - | - | 1.94E-02 | 9.70E+00 | 1.78E-01 | 1 | - | 1.69E-08 |

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|-----------------------------------|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Bisphenol A | 80-05-7 | No | No | - | - | - | - | 5.00E-02 | IR | - | - | 7.53E+01 | 3.77E+04 | 4.09E-10 | 1 | - | 5.79E+00 |
| Boron And Borates Only | 7440-42-8 | No | No | - | - | - | - | 2.00E-01 | IR | 2.00E-02 | HE | 3.00E+00 | - | 0.00E+00 | 1 | - | 1.28E+00 |
| Boron Trifluoride | 7637-07-2 | No | Yes | - | - | - | - | 4.00E-02 | CA | 1.30E-02 | CA | - | - | 0.00E+00 | 1 | - | - |
| Boron Trichloride | 10294-34-5 | No | Yes | - | - | - | - | 2.00E+00 | PP | 2.00E-02 | PP | - | - | 0.00E+00 | 1 | - | - |
| Bromacil | 314-40-9 | No | No | - | - | - | - | - | - | - | - | 1.33E-01 | 6.66E+01 | 5.27E-09 | 1 | - | - |
| Bromate | 15541-45-4 | No | No | 7.00E-01 | I | - | - | 4.00E-03 | IR | - | - | 7.50E+00 | - | 0.00E+00 | 1 | 7.70E-02 | 8.52E-04 |
| Bromine | 7726-95-6 | No | Yes | - | - | - | - | - | - | - | - | 7.50E+00 | - | 0.00E+00 | 1 | - | - |
| Bromo-2-chloroethane, 1- | 107-04-0 | No | Yes | 2.00E+00 | X | 6.00E-04 | X | - | - | - | - | 7.92E-02 | 3.96E+01 | 3.72E-02 | 1 | - | 2.10E-06 |
| Bromo-3-fluorobenzene, 1- | 1073-06-9 | No | Yes | - | - | - | - | - | - | - | - | 7.51E-01 | 3.75E+02 | 1.02E-01 | 1 | - | - |
| Bromo-4-Ethylbenzene, 1- | 1585-07-5 | No | Yes | - | - | - | - | - | - | - | - | 1.43E+00 | 7.16E+02 | 1.28E-01 | 1 | - | - |
| Bromoacetic acid | 79-08-3 | No | No | - | - | - | - | - | - | - | - | 2.88E-03 | 1.44E+00 | 2.67E-07 | 1 | - | - |
| Bromoacetophenone, 3- | 2142-63-4 | No | No | - | - | - | - | - | - | - | - | 1.66E-01 | 8.32E+01 | 1.60E-04 | 1 | - | - |
| Bromobenzene | 108-86-1 | No | Yes | - | - | - | - | 8.00E-03 | IR | 6.00E-02 | IR | 4.68E-01 | 2.34E+02 | 1.01E-01 | 1 | - | 4.21E-03 |
| Bromochloromethane | 74-97-5 | No | Yes | - | - | - | - | - | - | 4.00E-02 | SC | 4.35E-02 | 2.17E+01 | 5.97E-02 | 1 | - | 2.08E-03 |
| Bromodichloromethane | 75-27-4 | No | Yes | 6.20E-02 | I | 3.70E-05 | C | 2.00E-02 | IR | - | - | 6.36E-02 | 3.18E+01 | 8.67E-02 | 1 | 2.17E-02 | 3.65E-05 |
| Bromodiphenyl Ether, p- | 101-55-3 | No | Yes | - | - | - | - | - | - | - | - | 6.15E+00 | 3.08E+03 | 4.78E-03 | 1 | - | - |
| Bromofluorobenzene, p- | 460-00-4 | No | Yes | - | - | - | - | - | - | - | - | 7.51E-01 | 3.75E+02 | 1.02E-01 | 1 | - | - |
| Bromoform | 75-25-2 | No | Yes | 7.90E-03 | I | 1.10E-06 | I | 2.00E-02 | IR | - | - | 6.36E-02 | 3.18E+01 | 2.19E-02 | 1 | 2.12E-02 | 8.73E-04 |
| Bromomethane | 74-83-9 | No | Yes | - | - | - | - | 1.40E-03 | IR | 5.00E-03 | IR | 2.64E-02 | 1.32E+01 | 3.00E-01 | 1 | - | 1.91E-04 |
| Bromophenol, p- | 106-41-2 | No | No | - | - | - | - | - | - | - | - | 6.01E-01 | 3.00E+02 | 6.17E-06 | 1 | - | - |
| Bromophos | 2104-96-3 | No | Yes | - | - | - | - | 5.00E-03 | HE | - | - | 4.04E+00 | 2.02E+03 | 8.38E-03 | 1 | - | 1.50E-02 |
| Bromopropane, 1- | 106-94-5 | No | Yes | - | - | - | - | - | - | - | - | 7.92E-02 | 3.96E+01 | 2.99E-01 | 1 | - | - |
| Bromopyridine, 2- | 109-04-6 | No | No | - | - | - | - | - | - | - | - | 2.30E-01 | 1.15E+02 | 3.15E-04 | 1 | - | - |
| Bromotrichloromethane | 75-62-7 | No | Yes | - | - | - | - | - | - | - | - | 8.78E-02 | 4.39E+01 | 1.52E-02 | 1 | - | - |
| Bromoxynil | 1689-84-5 | No | No | 1.03E-01 | O | - | - | 1.50E-02 | OP | - | - | 6.60E-01 | 3.30E+02 | 5.40E-09 | 1 | - | 5.22E-04 |
| Bromoxynil Octanoate | 1689-99-2 | No | Yes | - | - | - | - | 1.50E-02 | OP | - | - | 8.50E+00 | 4.25E+03 | 1.30E-03 | 1 | - | 8.97E-02 |
| Butadiene, 1,3- | 106-99-0 | No | Yes | 3.40E+00 | C | 3.00E-05 | I | - | - | 2.00E-03 | IR | 7.92E-02 | 3.96E+01 | 3.01E+00 | 1 | - | 9.93E-06 |
| Butanediol, 2,3- | 513-85-9 | No | No | - | - | - | - | - | - | - | - | 2.00E-03 | 1.00E+00 | 1.18E-06 | 1 | - | - |
| Butanol | 35296-72-1 | No | Yes | - | - | - | - | - | - | - | - | 5.84E-03 | 2.92E+00 | 3.70E-04 | 1 | - | - |
| Butanol, N- | 71-36-3 | No | Yes | - | - | - | - | 1.00E-01 | IR | - | - | 6.94E-03 | 3.47E+00 | 3.60E-04 | 1 | - | 4.07E-02 |
| Butanone-2, 4-chloro-4,4-difluoro | 1515-16-8 | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Butyl alcohol, sec- | 78-92-2 | No | Yes | - | - | - | - | 2.00E+00 | PP | 3.00E+01 | PP | 5.84E-03 | 2.92E+00 | 3.70E-04 | 1 | - | 4.99E-01 |
| Butyl Alcohol, t- | 75-65-0 | No | Yes | - | - | - | - | - | - | - | - | 4.22E-03 | 2.11E+00 | 3.70E-04 | 1 | - | - |
| Butyl Formate, tert- | 762-75-4 | No | Yes | - | - | - | - | - | - | - | - | 1.58E-02 | 7.91E+00 | 2.82E-02 | 1 | - | - |
| Butylacetate | 123-86-4 | No | Yes | - | - | - | - | - | - | - | - | 3.71E-02 | 1.85E+01 | 1.15E-02 | 1 | - | - |
| Butylate | 2008-41-5 | No | Yes | - | - | - | - | 5.00E-02 | IR | - | - | 7.71E-01 | 3.86E+02 | 3.45E-03 | 1 | - | 4.47E-02 |
| Butylated hydroxyanisole | 25013-16-5 | No | No | 2.00E-04 | C | 5.70E-08 | C | - | - | - | - | 1.68E+00 | 8.41E+02 | 4.78E-05 | 1 | - | 2.87E-01 |
| Butylated hydroxytoluene | 128-37-0 | No | No | 3.60E-03 | P | - | - | 3.00E-01 | PP | - | - | 2.95E+01 | 1.48E+04 | 1.68E-04 | 1 | - | 1.01E-01 |
| Butylbenzene, n- | 104-51-8 | No | Yes | - | - | - | - | 5.00E-02 | PP | - | - | 2.96E+00 | 1.48E+03 | 6.50E-01 | 1 | - | 3.23E-01 |
| Butylbenzene, sec- | 135-98-8 | No | Yes | - | - | - | - | 1.00E-01 | SC | - | - | 2.66E+00 | 1.33E+03 | 7.20E-01 | 1 | - | 5.87E-01 |
| Butylbenzene, tert- | 98-06-6 | No | Yes | - | - | - | - | 1.00E-01 | SC | - | - | 2.00E+00 | 1.00E+03 | 5.40E-01 | 1 | - | 1.55E-01 |
| Butylchloride, t- | 507-20-0 | No | Yes | - | - | - | - | - | - | - | - | 8.78E-02 | 4.39E+01 | 5.23E-01 | 1 | - | - |
| Butyltin | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Cacodylic Acid | 75-60-5 | No | No | - | - | - | - | 2.00E-02 | AT | - | - | 8.78E-02 | 4.39E+01 | 7.36E-13 | 1 | - | 1.15E-02 |
| Cadmium (Water) | 7440-43-9 | No | No | - | - | 1.80E-03 | I | 5.00E-04 | IR | 1.00E-05 | AT | 7.50E+01 | - | 0.00E+00 | 1 | 3.76E-01 | 6.93E-02 |
| Calcium | 7440-70-2 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Calcium Chromate | 13765-19-0 | Yes | No | 5.00E-01 | C | 1.50E-01 | C | 2.00E-02 | CA | 2.00E-04 | CA | - | - | 0.00E+00 | 1 | - | - |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|----------------------------------|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Caprolactam | 105-60-2 | No | No | - | - | - | - | 5.00E-01 | IR | 2.20E-03 | CA | 4.90E-02 | 2.45E+01 | 1.03E-06 | 1 | - | 2.47E-01 |
| Captafol | 2425-06-1 | No | No | 1.50E-01 | C | 4.30E-05 | C | 2.00E-03 | IR | - | - | 1.57E+00 | 7.83E+02 | 2.01E-07 | 1 | - | 7.12E-04 |
| Captan | 133-06-2 | No | No | 2.30E-03 | C | 6.60E-07 | C | 1.30E-01 | IR | - | - | 5.04E-01 | 2.52E+02 | 2.86E-07 | 1 | - | 2.18E-02 |
| Carbaryl | 63-25-2 | No | No | - | - | - | - | 1.00E-01 | IR | - | - | 7.10E-01 | 3.55E+02 | 1.34E-07 | 1 | - | 1.68E-01 |
| Carbazole | 86-74-8 | No | No | - | - | - | - | - | - | - | - | 1.83E+01 | 9.16E+03 | 4.74E-06 | 1 | - | - |
| Carbofuran | 1563-66-2 | No | No | - | - | - | - | 5.00E-03 | IR | - | - | 1.91E-01 | 9.53E+01 | 1.26E-07 | 1 | 1.56E-02 | 3.66E-03 |
| Carbon Disulfide | 75-15-0 | No | Yes | - | - | - | - | 1.00E-01 | IR | 7.00E-01 | IR | 4.35E-02 | 2.17E+01 | 5.89E-01 | 1 | - | 2.40E-02 |
| Carbon Tetrachloride | 56-23-5 | No | Yes | 7.00E-02 | I | 6.00E-06 | I | 4.00E-03 | IR | 1.00E-01 | IR | 8.78E-02 | 4.39E+01 | 1.13E+00 | 1 | 1.94E-03 | 1.77E-04 |
| Carbonyl Sulfide | 463-58-1 | No | Yes | - | - | - | - | - | - | 1.00E-01 | PP | 2.00E-03 | 1.00E+00 | 2.49E+01 | 1 | - | 5.07E-02 |
| Carbosulfan | 55285-14-8 | No | No | - | - | - | - | 1.00E-02 | IR | - | - | 2.39E+01 | 1.20E+04 | 2.09E-05 | 1 | - | 1.24E-01 |
| Carboxin | 5234-68-4 | No | No | - | - | - | - | 1.00E-01 | IR | - | - | 3.39E-01 | 1.69E+02 | 1.31E-08 | 1 | - | 1.03E-01 |
| Catechol | 120-80-9 | No | No | - | - | - | - | - | - | - | - | 4.91E-01 | 2.45E+02 | 4.91E-08 | 1 | - | - |
| Ceric oxide | 1306-38-3 | No | No | - | - | - | - | - | - | 9.00E-04 | IR | - | - | 0.00E+00 | 1 | - | - |
| Cerium, Stable | 7440-45-1 | No | No | - | - | - | - | - | - | - | - | 8.50E+02 | - | 0.00E+00 | 1 | - | - |
| Chloral | 75-87-6 | No | Yes | - | - | - | - | - | - | - | - | 4.28E-03 | 2.14E+00 | 1.19E-07 | 1 | - | - |
| Chloral Hydrate | 302-17-0 | No | Yes | - | - | - | - | 1.00E-01 | IR | - | - | 2.00E-03 | 1.00E+00 | 2.33E-07 | 1 | - | 4.00E-02 |
| Chloramben | 133-90-4 | No | No | - | - | - | - | 1.50E-02 | IR | - | - | 4.27E-02 | 2.14E+01 | 1.58E-09 | 1 | - | 7.02E-03 |
| Chloramine | 127-65-1 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Chloranil | 118-75-2 | No | No | 4.03E-01 | H | - | - | - | - | - | - | 6.16E-01 | 3.08E+02 | 1.34E-08 | 1 | - | 1.50E-04 |
| Chlorate (ClO3) as | 14866-68-3 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Chlordane | 12789-03-6 | No | Yes | 3.50E-01 | I | 1.00E-04 | I | 5.00E-04 | IR | 7.00E-04 | IR | 1.35E+02 | 6.75E+04 | 1.99E-03 | 1 | 2.71E-01 | 2.71E-03 |
| Chlordane (alpha) | 5103-71-9 | No | Yes | - | - | - | - | - | - | - | - | 1.35E+02 | 6.75E+04 | 1.99E-03 | 1 | - | - |
| Chlordane (gamma) | 5103-74-2 | No | Yes | - | - | - | - | - | - | - | - | 1.35E+02 | 6.75E+04 | 1.99E-03 | 1 | - | - |
| Chlordecone (Kepone) | 143-50-0 | No | No | 1.00E+01 | I | 4.60E-03 | C | 3.00E-04 | IR | - | - | 3.50E+01 | 1.75E+04 | 2.20E-06 | 1 | - | 1.24E-04 |
| Chlorfenvinphos | 470-90-6 | No | No | - | - | - | - | 7.00E-04 | AT | - | - | 2.53E+00 | 1.26E+03 | 1.18E-06 | 1 | - | 3.06E-03 |
| Chloride | 16887-00-6 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Chlorimuron, Ethyl- | 90982-32-4 | No | No | - | - | - | - | 9.00E-02 | OP | - | - | 1.44E-01 | 7.18E+01 | 7.44E-14 | 1 | - | 6.04E-02 |
| Chlorinated Hydrocarbons (total) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Chlorine | 7782-50-5 | No | Yes | - | - | - | - | 1.00E-01 | IR | 1.45E-04 | AT | 2.50E-01 | - | 0.00E+00 | 1 | - | 1.36E-05 |
| Chlorine Dioxide | 10049-04-4 | No | Yes | - | - | - | - | 3.00E-02 | IR | 2.00E-04 | IR | - | - | 0.00E+00 | 1 | - | - |
| Chlorite | 14998-27-7 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Chlorite (Sodium Salt) | 7758-19-2 | No | No | - | - | - | - | 3.00E-02 | IR | - | - | - | - | 0.00E+00 | 1 | - | - |
| Chloro-2-methylphenol, 4- | 1570-64-5 | No | No | - | - | - | - | - | - | - | - | 9.84E-01 | 4.92E+02 | 4.62E-05 | 1 | - | - |
| Chloro-4-methylphenol | 35421-08-0 | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Chloro-1,1-difluoroethane, 1- | 75-68-3 | No | Yes | - | - | - | - | - | - | 5.00E+01 | IR | 8.78E-02 | 4.39E+01 | 2.40E+00 | 1 | - | 5.24E+00 |
| Chloro-1,3-butadiene, 2- | 126-99-8 | No | Yes | - | - | 3.00E-04 | I | 2.00E-02 | HE | 2.00E-02 | IR | 1.21E-01 | 6.07E+01 | 2.29E+00 | 1 | - | 9.85E-06 |
| Chloro-2-methylaniline HCl, 4- | 3165-93-3 | No | No | 4.60E-01 | H | - | - | - | - | - | - | 7.04E-01 | 3.52E+02 | 6.38E-05 | 1 | - | 1.53E-04 |
| Chloro-2-methylaniline, 4- | 95-69-2 | No | No | 1.00E-01 | P | 7.70E-05 | C | 3.00E-03 | SC | - | - | 3.69E-01 | 1.85E+02 | 8.14E-05 | 1 | - | 3.97E-04 |
| Chloro-6-fluorophenol, 2- | 2040-90-6 | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Chloroacetaldehyde, 2- | 107-20-0 | No | Yes | 2.70E-01 | X | - | - | - | - | - | - | 2.00E-03 | 1.00E+00 | 9.77E-04 | 1 | - | 5.79E-05 |
| Chloroacetamide | 79-07-2 | No | No | - | - | - | - | - | - | - | - | 1.14E-02 | 5.69E+00 | 1.61E-07 | 1 | - | - |
| Chloroacetic Acid | 79-11-8 | No | No | - | - | - | - | - | - | - | - | 2.88E-03 | 1.44E+00 | 3.79E-07 | 1 | 1.22E-02 | - |
| Chloroacetophenone, 2- | 532-27-4 | No | No | - | - | - | - | - | - | 3.00E-05 | IR | 1.98E-01 | 9.89E+01 | 1.41E-04 | 1 | - | - |
| Chloroaniline | 27134-26-5 | No | No | - | - | - | - | - | - | - | - | 2.30E-01 | 1.15E+02 | 2.20E-04 | 1 | - | - |
| Chloroaniline, 3- | 108-42-9 | No | No | - | - | - | - | - | - | - | - | 2.25E-01 | 1.13E+02 | 4.09E-05 | 1 | - | - |
| Chloroaniline, p- | 106-47-8 | No | No | 2.00E-01 | P | - | - | 4.00E-03 | IR | - | - | 2.25E-01 | 1.13E+02 | 4.74E-05 | 1 | - | 1.55E-04 |
| Chlorobenzene | 108-90-7 | No | Yes | - | - | - | - | 2.00E-02 | IR | 5.00E-02 | PP | 4.68E-01 | 2.34E+02 | 1.27E-01 | 1 | 6.79E-02 | 5.28E-03 |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Screening Levels (RSL) for Soil to Groundwater

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|---|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Chlorobenzene sulfonic acid, p- | 98-66-8 | No | No | - | - | - | - | 1.00E-01 | SC | - | - | 3.21E-02 | 1.61E+01 | 7.60E-08 | 1 | - | 4.65E-02 |
| Chlorobenzenes (total) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Chlorobenzilate | 510-15-6 | No | No | 1.10E-01 | C | 3.10E-05 | C | 2.00E-02 | IR | - | - | 3.08E+00 | 1.54E+03 | 2.96E-06 | 1 | - | 1.03E-03 |
| Chlorobenzoic Acid, 2- | 118-91-2 | No | No | - | - | - | - | - | - | - | - | 5.42E-02 | 2.71E+01 | 2.66E-06 | 1 | - | - |
| Chlorobenzoic Acid, p- | 74-11-3 | No | No | - | - | - | - | 3.00E-02 | SC | - | - | 5.31E-02 | 2.66E+01 | 3.28E-06 | 1 | - | 1.29E-02 |
| Chlorobenzotrifluoride, 3-nitro-4- | 121-17-5 | No | Yes | - | - | - | - | - | - | - | - | 5.09E+00 | 2.55E+03 | 5.60E-03 | 1 | - | - |
| Chlorobenzotrifluoride, 4- | 98-56-6 | No | Yes | - | - | - | - | 3.00E-03 | PP | 3.00E-01 | PP | 3.21E+00 | 1.61E+03 | 1.42E+00 | 1 | - | 1.22E-02 |
| Chlorobiphenyl, p- | 2051-62-9 | No | Yes | - | - | - | - | - | - | - | - | 1.65E+01 | 8.23E+03 | 2.34E-02 | 1 | - | - |
| Chlorobutane, 1- | 109-69-3 | No | Yes | - | - | - | - | 4.00E-02 | PP | - | - | 1.44E-01 | 7.22E+01 | 6.83E-01 | 1 | - | 2.58E-02 |
| Chlorobutane, 2- | 78-86-4 | No | Yes | - | - | - | - | - | - | - | - | 1.21E-01 | 6.07E+01 | 9.85E-01 | 1 | - | - |
| Chlorocyclopentadiene | 41851-50-7 | No | Yes | - | - | - | - | - | - | - | - | 2.57E-01 | 1.28E+02 | 9.16E-01 | 1 | - | - |
| Chlorodibromoethane | 73506-94-2 | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Chlorodifluoromethane | 75-45-6 | No | Yes | - | - | - | - | - | - | 5.00E+01 | IR | 6.36E-02 | 3.18E+01 | 1.66E+00 | 1 | - | 4.30E+00 |
| Chloroethanol, 2- | 107-07-3 | No | Yes | - | - | - | - | 2.00E-02 | PP | - | - | 3.81E-03 | 1.90E+00 | 3.11E-05 | 1 | - | 8.13E-03 |
| Chloroethylvinyl ether, 2- | 110-75-8 | No | Yes | - | - | - | - | - | - | - | - | 3.54E-02 | 1.77E+01 | 3.58E-01 | 1 | - | - |
| Chloroform | 67-66-3 | No | Yes | 3.10E-02 | C | 2.30E-05 | I | 1.00E-02 | IR | 9.77E-02 | AT | 6.36E-02 | 3.18E+01 | 1.50E-01 | 1 | 2.22E-02 | 6.12E-05 |
| Chloromethane | 74-87-3 | No | Yes | - | - | - | - | - | - | 9.00E-02 | IR | 2.64E-02 | 1.32E+01 | 3.61E-01 | 1 | - | 4.86E-03 |
| Chloromethyl Methyl Ether | 107-30-2 | No | Yes | 2.40E+00 | C | 6.90E-04 | C | - | - | - | - | 1.06E-02 | 5.32E+00 | 1.24E-02 | 1 | - | 1.38E-06 |
| Chloronaphthalene, alpha- | 90-13-1 | No | Yes | - | - | - | - | - | - | - | - | 5.06E+00 | 2.53E+03 | 1.45E-02 | 1 | - | - |
| Chloronitrobenzene, o- | 88-73-3 | No | No | 3.00E-01 | P | - | - | 3.00E-03 | PP | 1.00E-05 | SC | 7.41E-01 | 3.71E+02 | 3.80E-04 | 1 | - | 2.22E-04 |
| Chloronitrobenzene, p- | 100-00-5 | No | No | 6.00E-02 | P | - | - | 7.00E-04 | PP | 2.00E-03 | PP | 7.26E-01 | 3.63E+02 | 2.00E-04 | 1 | - | 1.07E-03 |
| Chlorooctadecane, 1- | 3386-33-2 | No | Yes | - | - | - | - | - | - | - | - | 6.43E+02 | 3.22E+05 | 4.13E+01 | 1 | - | - |
| Chlorophenol, 2- | 95-57-8 | No | Yes | - | - | - | - | 5.00E-03 | IR | - | - | 7.76E-01 | 3.88E+02 | 4.58E-04 | 1 | - | 8.91E-03 |
| Chlorophenol, 3- | 108-43-0 | No | No | - | - | - | - | - | - | - | - | 6.01E-01 | 3.00E+02 | 1.41E-05 | 1 | - | - |
| Chlorophenol, 4- | 106-48-9 | No | No | - | - | - | - | - | - | - | - | 6.01E-01 | 3.00E+02 | 2.56E-05 | 1 | - | - |
| Chlorophenols (total) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Chlorophenyl phenyl ether, 4- | 7005-72-3 | No | Yes | - | - | - | - | - | - | - | - | 6.15E+00 | 3.08E+03 | 3.68E-03 | 1 | - | - |
| Chlorophenyl Methyl Sulfide, p- | 123-09-1 | No | Yes | - | - | - | - | - | - | - | - | 1.43E+00 | 7.16E+02 | 4.74E-03 | 1 | - | - |
| Chlorophenyl Methyl Sulfoxide | 934-73-6 | No | No | - | - | - | - | - | - | - | - | 1.47E-01 | 7.33E+01 | 3.00E-07 | 1 | - | - |
| Chloropicrin | 76-06-2 | No | Yes | - | - | - | - | - | - | 4.00E-04 | CA | 8.84E-02 | 4.42E+01 | 8.38E-02 | 1 | - | 2.47E-05 |
| Chloropropane, 2- | 75-29-6 | No | Yes | - | - | - | - | - | - | - | - | 6.36E-02 | 3.18E+01 | 7.15E-01 | 1 | - | - |
| Chlorothalonil | 1897-45-6 | No | No | 3.10E-03 | C | 8.90E-07 | C | 1.50E-02 | IR | - | - | 2.08E+00 | 1.04E+03 | 8.18E-05 | 1 | - | 4.96E-02 |
| Chlorotoluene, o- | 95-49-8 | No | Yes | - | - | - | - | 2.00E-02 | IR | - | - | 7.66E-01 | 3.83E+02 | 1.46E-01 | 1 | - | 2.32E-02 |
| Chlorotoluene, p- | 106-43-4 | No | Yes | - | - | - | - | 2.00E-02 | SC | - | - | 7.51E-01 | 3.75E+02 | 1.79E-01 | 1 | - | 2.41E-02 |
| Chlorozotocin | 54749-90-5 | No | No | 2.40E+02 | C | 6.90E-02 | C | - | - | - | - | 2.00E-02 | 1.00E+01 | 1.50E-20 | 1 | - | 7.14E-08 |
| Chlorpropham | 101-21-3 | No | No | - | - | - | - | 5.00E-02 | OP | - | - | 7.01E-01 | 3.51E+02 | 2.33E-05 | 1 | - | 6.42E-02 |
| Chlorpyrifos | 2921-88-2 | No | No | - | - | - | - | 1.00E-03 | AT | - | - | 1.46E+01 | 7.28E+03 | 1.20E-04 | 1 | - | 1.25E-02 |
| Chlorpyrifos Methyl | 5598-13-0 | No | No | - | - | - | - | 1.00E-02 | HE | - | - | 4.39E+00 | 2.19E+03 | 1.53E-04 | 1 | - | 5.45E-02 |
| Chlorsulfuron | 64902-72-3 | No | No | - | - | - | - | 2.00E-02 | OP | - | - | 6.44E-01 | 3.22E+02 | 1.40E-14 | 1 | - | 3.33E-02 |
| Chlorthiophos | 60238-56-4 | No | No | - | - | - | - | 8.00E-04 | HE | - | - | 2.56E+01 | 1.28E+04 | 4.91E-05 | 1 | - | 7.28E-03 |
| Chromium(III), Insoluble Salts | 16065-83-1 | No | No | - | - | - | - | 1.50E+00 | IR | - | - | 1.80E+06 | - | 0.00E+00 | 1 | - | 4.04E+06 |
| Chromium(VI) | 18540-29-9 | Yes | No | 5.00E-01 | J | 8.40E-02 | S | 3.00E-03 | IR | 1.00E-04 | IR | 1.90E+01 | - | 0.00E+00 | 1 | - | 6.72E-04 |
| Chromium, Total | 7440-47-3 | No | No | - | - | - | - | - | - | - | - | 1.80E+06 | - | 0.00E+00 | 1 | 1.80E+05 | - |
| Cobalt | 7440-48-4 | No | No | - | - | 9.00E-03 | P | 3.00E-04 | PP | 6.00E-06 | PP | 4.50E+01 | - | 0.00E+00 | 1 | - | 2.71E-02 |
| Complex Mixtures of Aliphatic and Aromatic Hydrocarbons | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Copper | 7440-50-8 | No | No | - | - | - | - | 4.00E-02 | HE | - | - | 3.50E+01 | - | 0.00E+00 | 1 | 4.58E+01 | 2.81E+00 |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H [*] | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------------|--|----------------------|-----------------------|
| Creosote | 8001-58-9 | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Cresol, m- | 108-39-4 | No | No | - | - | - | - | 5.00E-02 | IR | 6.00E-01 | CA | 6.01E-01 | 3.00E+02 | 3.50E-05 | 1 | - | 7.41E-02 |
| Cresol, o- | 95-48-7 | No | No | - | - | - | - | 5.00E-02 | IR | 6.00E-01 | CA | 6.13E-01 | 3.07E+02 | 4.91E-05 | 1 | - | 7.53E-02 |
| Cresol, p- | 106-44-5 | No | No | - | - | - | - | 1.00E-01 | AT | 6.00E-01 | CA | 6.01E-01 | 3.00E+02 | 4.09E-05 | 1 | - | 1.49E-01 |
| Cresol, p-chloro-m- | 59-50-7 | No | No | - | - | - | - | 1.00E-01 | AT | - | - | 9.84E-01 | 4.92E+02 | 1.00E-04 | 1 | - | 1.71E-01 |
| Cresols | 1319-77-3 | No | No | - | - | - | - | 1.00E-01 | AT | 6.00E-01 | CA | 6.13E-01 | 3.07E+02 | 2.53E-05 | 1 | - | 1.25E-01 |
| Crotonaldehyde | 4170-30-3 | No | Yes | - | - | - | - | - | - | - | - | 3.59E-03 | 1.79E+00 | 7.93E-04 | 1 | - | - |
| Crotonaldehyde, trans- | 123-73-9 | No | Yes | 1.90E+00 | H | - | - | 1.00E-03 | PP | - | - | 3.59E-03 | 1.79E+00 | 7.93E-04 | 1 | - | 8.23E-06 |
| Cumene | 98-82-8 | No | Yes | - | - | - | - | 1.00E-01 | IR | 4.00E-01 | IR | 1.40E+00 | 6.98E+02 | 4.70E-01 | 1 | - | 7.38E-02 |
| Cupferron | 135-20-6 | No | No | 2.20E-01 | C | 6.30E-05 | C | - | - | - | - | 1.52E+00 | 7.62E+02 | 1.48E-07 | 1 | - | 6.11E-04 |
| Cyanazine | 21725-46-2 | No | No | 8.40E-01 | H | - | - | 2.00E-03 | HE | - | - | 2.68E-01 | 1.34E+02 | 1.05E-10 | 1 | - | 4.11E-05 |
| Cyclohexane | 110-82-7 | No | Yes | - | - | - | - | - | - | 6.00E+00 | IR | 2.92E-01 | 1.46E+02 | 6.13E+00 | 1 | - | 1.30E+00 |
| Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro- | 87-84-3 | No | No | 2.00E-02 | X | - | - | 2.00E-02 | SC | - | - | 5.61E+00 | 2.81E+03 | 3.92E-05 | 1 | - | 1.61E-02 |
| Cyclohexanone | 108-94-1 | No | Yes | - | - | - | - | 5.00E+00 | IR | 7.00E-01 | PP | 3.48E-02 | 1.74E+01 | 3.68E-04 | 1 | - | 3.38E-02 |
| Cyclohexene | 110-83-8 | No | Yes | - | - | - | - | 5.00E-03 | PP | 1.00E+00 | SC | 2.92E-01 | 1.46E+02 | 1.86E+00 | 1 | - | 4.58E-03 |
| Cyclohexylamine | 108-91-8 | No | Yes | - | - | - | - | 2.00E-01 | IR | - | - | 6.43E-02 | 3.22E+01 | 1.70E-04 | 1 | - | 1.02E-01 |
| Cyclopentadiene | 542-92-7 | No | Yes | - | - | - | - | - | - | - | - | 1.60E-01 | 8.00E+01 | 8.59E-01 | 1 | - | - |
| Cyhalothrin | 68085-85-8 | No | No | - | - | - | - | 1.00E-03 | OP | - | - | 6.83E+02 | 3.41E+05 | 6.05E-05 | 1 | - | 1.37E+00 |
| Cypermethrin | 52315-07-8 | No | No | - | - | - | - | 6.00E-02 | OP | - | - | 1.60E+02 | 7.98E+04 | 1.72E-05 | 1 | - | 1.92E+01 |
| Cyromazine | 66215-27-8 | No | No | - | - | - | - | 1.50E-02 | OP | - | - | 5.75E-02 | 2.87E+01 | 2.31E-12 | 1 | - | 7.65E-03 |
| Barium Cyanide | 542-62-1 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Calcium Cyanide | 592-01-8 | No | No | - | - | - | - | 1.00E-03 | IR | - | - | - | - | 0.00E+00 | 1 | - | - |
| Copper Cyanide | 544-92-3 | No | No | - | - | - | - | 5.00E-03 | IR | - | - | - | - | 0.00E+00 | 1 | - | - |
| Cyanide (CN-) | 57-12-5 | No | Yes | - | - | - | - | 6.00E-04 | IR | 8.00E-04 | SU | 9.90E+00 | - | 0.00E+00 | 1 | 2.02E+00 | 1.48E-03 |
| Cyanide (total complex) | NA | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Cyanogen | 460-19-5 | No | Yes | - | - | - | - | 1.00E-03 | IR | - | - | - | - | 0.00E+00 | 1 | - | - |
| Cyanogen Bromide | 506-68-3 | No | Yes | - | - | - | - | 9.00E-02 | IR | - | - | - | - | 0.00E+00 | 1 | - | - |
| Cyanogen Chloride | 506-77-4 | No | Yes | - | - | - | - | 5.00E-02 | IR | - | - | - | - | 0.00E+00 | 1 | - | - |
| Hydrogen Cyanide | 74-90-8 | No | Yes | - | - | - | - | 6.00E-04 | IR | 8.00E-04 | IR | 9.90E+00 | - | 0.00E+00 | 1 | - | 1.48E-03 |
| Chlorthal-dimethyl | 1861-32-1 | No | No | - | - | - | - | 1.00E-02 | IR | - | - | 1.02E+00 | 5.11E+02 | 8.91E-05 | 1 | - | 1.52E-02 |
| Dalapon | 75-99-0 | No | No | - | - | - | - | 3.00E-02 | IR | - | - | 6.46E-03 | 3.23E+00 | 2.31E-06 | 1 | 4.13E-02 | 1.23E-02 |
| DDD | 72-54-8 | No | No | 2.40E-01 | I | 6.90E-05 | C | - | - | - | - | 2.35E+02 | 1.18E+05 | 2.70E-04 | 1 | - | 7.46E-03 |
| DDD, o,p'- | 53-19-0 | No | No | - | - | - | - | - | - | - | - | 2.40E+02 | 1.20E+05 | 3.34E-04 | 1 | - | - |
| DDT/DDE/DDD (total) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| DDE, p,p'- | 72-55-9 | No | Yes | 3.40E-01 | I | 9.70E-05 | C | - | - | - | - | 2.35E+02 | 1.18E+05 | 1.70E-03 | 1 | - | 1.09E-02 |
| DDT | 50-29-3 | No | No | 3.40E-01 | I | 9.70E-05 | I | 5.00E-04 | IR | - | - | 3.37E+02 | 1.69E+05 | 3.40E-04 | 1 | - | 7.73E-02 |
| DDT, o,p'- | 789-02-6 | No | No | - | - | - | - | - | - | - | - | 3.44E+02 | 1.72E+05 | 3.03E-04 | 1 | - | - |
| Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209) | 1163-19-5 | No | No | 7.00E-04 | I | - | - | 7.00E-03 | IR | - | - | 5.52E+02 | 2.76E+05 | 4.87E-07 | 1 | - | 7.76E+00 |
| Decane | 124-18-5 | No | Yes | - | - | - | - | - | - | - | - | 2.90E+00 | 1.45E+03 | 2.11E+02 | 1 | - | - |
| Decanol, n- | 112-30-1 | No | Yes | - | - | - | - | - | - | - | - | 2.54E-01 | 1.27E+02 | 1.31E-03 | 1 | - | - |
| Deltamethrin | 52918-63-5 | No | No | - | - | - | - | - | - | - | - | 1.60E+02 | 7.98E+04 | 2.04E-04 | 1 | - | - |
| Demeton | 8065-48-3 | No | No | - | - | - | - | 4.00E-05 | IR | - | - | - | - | 1.56E-04 | 1 | - | - |
| Di(2-ethylhexyl)adipate | 103-23-1 | No | No | 1.20E-03 | I | - | - | 6.00E-01 | IR | - | - | 7.20E+01 | 3.60E+04 | 1.77E-05 | 1 | 2.89E+01 | 4.69E+00 |
| Diallate | 2303-16-4 | No | No | 6.10E-02 | H | - | - | - | - | - | - | 1.29E+00 | 6.44E+02 | 1.55E-04 | 1 | - | 7.98E-04 |
| Diazinon | 333-41-5 | No | No | - | - | - | - | 7.00E-04 | AT | - | - | 6.07E+00 | 3.03E+03 | 4.62E-06 | 1 | - | 6.48E-03 |
| Dibenzothiophene | 132-65-0 | No | Yes | - | - | - | - | 1.00E-02 | SC | - | - | 1.83E+01 | 9.16E+03 | 1.38E-03 | 1 | - | 1.21E-01 |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H [*] | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------------|--|----------------------|-----------------------|
| Dibromo-3-chloropropane, 1,2- | 96-12-8 | Yes | Yes | 8.00E-01 | P | 6.00E-03 | P | 2.00E-04 | PP | 2.00E-04 | IR | 2.32E-01 | 1.16E+02 | 6.01E-03 | 1 | 8.64E-05 | 1.44E-07 |
| Dibromoacetic acid | 631-64-1 | No | No | - | - | - | - | - | - | - | - | 4.50E-03 | 2.25E+00 | 1.81E-07 | 1 | - | - |
| Dibromobenzene, 1,3- | 108-36-1 | No | Yes | - | - | - | - | 4.00E-04 | SC | - | - | 7.51E-01 | 3.75E+02 | 5.07E-02 | 1 | - | 5.07E-04 |
| Dibromobenzene, 1,4- | 106-37-6 | No | Yes | - | - | - | - | 1.00E-02 | IR | - | - | 7.51E-01 | 3.75E+02 | 3.65E-02 | 1 | - | 1.24E-02 |
| Dibromochloromethane | 124-48-1 | No | Yes | 8.40E-02 | I | - | - | 2.00E-02 | IR | - | - | 6.36E-02 | 3.18E+01 | 3.20E-02 | 1 | 2.13E-02 | 2.32E-04 |
| Dibromodichloromethane | 594-18-3 | No | Yes | - | - | - | - | - | - | - | - | 8.78E-02 | 4.39E+01 | 4.95E-03 | 1 | - | - |
| Dibromodiphenyl Ether, p,p'- | 2050-47-7 | No | Yes | - | - | - | - | - | - | - | - | 9.87E+00 | 4.94E+03 | 7.65E-04 | 1 | - | - |
| Dibromoethane, 1,2- | 106-93-4 | No | Yes | 2.00E+00 | I | 6.00E-04 | I | 9.00E-03 | IR | 9.00E-03 | IR | 7.92E-02 | 3.96E+01 | 2.66E-02 | 1 | 1.41E-05 | 2.10E-06 |
| Dibromomethane (Methylene Bromide) | 74-95-3 | No | Yes | - | - | - | - | - | - | 4.00E-03 | SC | 4.35E-02 | 2.17E+01 | 3.36E-02 | 1 | - | 2.06E-04 |
| Bis(Octanoyloxy)Di-N-Butyl Stannane | 4731-77-5 | No | Yes | - | - | - | - | - | - | - | - | 1.01E+02 | 5.06E+04 | 6.83E-01 | 1 | - | - |
| Bis(oleoyloxy)dibutyl tin | 13323-62-1 | No | Yes | - | - | - | - | - | - | - | - | 1.65E+07 | 8.27E+09 | 1.53E+02 | 1 | - | - |
| Di-n-butyltin bis(2-ethylhexanoate) | 2781-10-4 | No | Yes | - | - | - | - | - | - | - | - | 1.63E+02 | 8.16E+04 | 9.08E-01 | 1 | - | - |
| Di-n-butyltin bis(methyl maleate) | 15546-11-9 | No | No | - | - | - | - | - | - | - | - | 6.02E-02 | 3.01E+01 | 1.42E-08 | 1 | - | - |
| Di-n-butyltin bis(n-butyl maleate) | 15546-16-4 | No | No | - | - | - | - | - | - | - | - | 2.21E+00 | 1.10E+03 | 7.81E-08 | 1 | - | - |
| Di-n-butyltin dilaurate | 77-58-7 | No | Yes | - | - | - | - | - | - | - | - | 1.23E+04 | 6.16E+06 | 6.58E+00 | 1 | - | - |
| Di-n-butyltin distearate | 5847-55-2 | No | Yes | - | - | - | - | - | - | - | - | 1.65E+07 | 8.27E+09 | 1.97E+02 | 1 | - | - |
| Dibutoxy di-n-butyltin | 3349-36-8 | No | Yes | - | - | - | - | - | - | - | - | 5.24E+02 | 2.62E+05 | 3.02E+00 | 1 | - | - |
| Dibutylbis((1-oxoisooctyl)oxy)stannane | 85702-74-5 | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Dibutylbis(octadeca-9(Z),12(Z),15(Z)-tri-enoyloxy)stannane | 95873-60-2 | No | Yes | - | - | - | - | - | - | - | - | 1.65E+07 | 8.27E+09 | 9.16E+01 | 1 | - | - |
| Dibutylbis(octadeca-9(Z),12(Z)-dienoyloxy)stannane | 85391-79-3 | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Dibutylbis(palmitoyloxy)stannane | 13323-63-2 | No | Yes | - | - | - | - | - | - | - | - | 1.50E+06 | 7.50E+08 | 6.38E+01 | 1 | - | - |
| Dibutyltin Compounds | NA | No | No | - | - | - | - | 3.00E-04 | PP | - | - | - | - | - | 1 | - | - |
| Dibutyltin diacetate | 1067-33-0 | No | Yes | - | - | - | - | - | - | - | - | 6.89E-02 | 3.44E+01 | 2.28E-02 | 1 | - | - |
| Dibutyltin oxide | 818-08-6 | No | Yes | - | - | - | - | - | - | - | - | 2.55E+00 | 1.28E+03 | - | 1 | - | - |
| Dibutyltin dichloride | 683-18-1 | No | Yes | - | - | - | - | - | - | - | - | 3.72E+00 | 1.86E+03 | 1.25E-01 | 1 | - | - |
| Dicamba | 1918-00-9 | No | No | - | - | - | - | 3.00E-02 | IR | - | - | 5.80E-02 | 2.90E+01 | 8.91E-08 | 1 | - | 1.47E-02 |
| Dichloro-2-butene, cis-1,4- | 1476-11-5 | No | Yes | - | - | 4.20E-03 | P | - | - | - | - | 2.63E-01 | 1.32E+02 | 2.71E-02 | 1 | - | 6.22E-07 |
| Dichloro-2-butene, trans-1,4- | 110-57-6 | No | Yes | - | - | 4.20E-03 | P | - | - | - | - | 2.63E-01 | 1.32E+02 | 2.71E-02 | 1 | - | 6.22E-07 |
| Dichloro-2-butene, 1,4- | 764-41-0 | No | Yes | - | - | 4.20E-03 | P | - | - | - | - | 2.63E-01 | 1.32E+02 | 3.48E-01 | 1 | - | 6.61E-07 |
| Dichloroacetic Acid | 79-43-6 | No | No | 5.00E-02 | I | - | - | 4.00E-03 | IR | - | - | 4.50E-03 | 2.25E+00 | 3.43E-07 | 1 | 1.23E-02 | 3.14E-04 |
| Dichloroaniline, 2,4- | 554-00-7 | No | No | - | - | - | - | - | - | - | - | 3.69E-01 | 1.85E+02 | 6.46E-05 | 1 | - | - |
| Dichloroaniline, 3,4- | 95-76-1 | No | Yes | - | - | - | - | - | - | - | - | 3.69E-01 | 1.85E+02 | 5.97E-04 | 1 | - | - |
| Dichlorobenzene | 25321-22-6 | No | Yes | - | - | - | - | - | - | - | - | 7.66E-01 | 3.83E+02 | 7.85E-02 | 1 | - | - |
| Dichlorobenzene, 1,2- | 95-50-1 | No | Yes | - | - | - | - | 9.00E-02 | IR | 2.00E-01 | HE | 7.66E-01 | 3.83E+02 | 7.85E-02 | 1 | 5.84E-01 | 2.95E-02 |
| Dichlorobenzene, 1,3- | 541-73-1 | No | Yes | - | - | - | - | - | - | - | - | 7.51E-01 | 3.75E+02 | 1.08E-01 | 1 | - | - |
| Dichlorobenzene, 1,4- | 106-46-7 | No | Yes | 5.40E-03 | C | 1.10E-05 | C | 7.00E-02 | AT | 8.00E-01 | IR | 7.51E-01 | 3.75E+02 | 9.85E-02 | 1 | 7.20E-02 | 4.62E-04 |
| Dichlorobenzidine, 3,3'- | 91-94-1 | No | No | 4.50E-01 | I | 3.40E-04 | C | - | - | - | - | 6.38E+00 | 3.19E+03 | 1.16E-09 | 1 | - | 8.24E-04 |
| Dichlorobenzoic acid, -3,5 | 51-36-5 | No | No | - | - | - | - | - | - | - | - | 8.52E-02 | 4.26E+01 | 2.43E-06 | 1 | - | - |
| Dichlorobenzophenone, 4,4'- | 90-98-2 | No | No | - | - | - | - | 9.00E-03 | SC | - | - | 5.85E+00 | 2.93E+03 | 4.37E-05 | 1 | - | 4.70E-02 |
| Dichlorobenzotrifluoride, 3,4- | 328-84-7 | No | Yes | - | - | - | - | - | - | - | - | 5.26E+00 | 2.63E+03 | 1.05E+00 | 1 | - | - |
| Dichlorodifluoromethane | 75-71-8 | No | Yes | - | - | - | - | 2.00E-01 | IR | 1.00E-01 | SC | 8.78E-02 | 4.39E+01 | 1.40E+01 | 1 | - | 3.04E-02 |
| Dichlorodiisopropyl ether, 2,2'- | 39638-32-9 | No | Yes | - | - | - | - | - | - | - | - | 9.16E-02 | 4.58E+01 | 1.36E-02 | 1 | - | - |
| Dichloroethane, 1,1- | 75-34-3 | No | Yes | 5.70E-03 | C | 1.60E-06 | C | 2.00E-01 | PP | - | - | 6.36E-02 | 3.18E+01 | 2.30E-01 | 1 | - | 7.82E-04 |
| Dichloroethane, 1,2- | 107-06-2 | No | Yes | 9.10E-02 | I | 2.60E-05 | I | 6.00E-03 | SC | 7.00E-03 | PP | 7.92E-02 | 3.96E+01 | 4.82E-02 | 1 | 1.42E-03 | 4.84E-05 |
| Dichloroethylene, 1,1- | 75-35-4 | No | Yes | - | - | - | - | 5.00E-02 | IR | 2.00E-01 | IR | 6.36E-02 | 3.18E+01 | 1.07E+00 | 1 | 2.51E-03 | 1.02E-02 |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Screening Levels (RSL) for Soil to Groundwater

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|---|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Dichloroethylene, 1,2-cis- | 156-59-2 | No | Yes | - | - | - | - | 2.00E-03 | IR | - | - | 7.92E-02 | 3.96E+01 | 1.67E-01 | 1 | 2.06E-02 | 1.06E-03 |
| Dichloroethylene, 1,2-trans- | 156-60-5 | No | Yes | - | - | - | - | 2.00E-02 | IR | - | - | 7.92E-02 | 3.96E+01 | 3.83E-01 | 1 | 3.13E-02 | 1.13E-02 |
| Dichlorophenol, 2,6- | 87-65-0 | No | No | - | - | - | - | - | - | - | - | 1.00E+00 | 5.02E+02 | 1.09E-04 | 1 | - | - |
| Dichlorophenol, 3,4- | 95-77-2 | No | No | - | - | - | - | - | - | - | - | 9.84E-01 | 4.92E+02 | 1.26E-05 | 1 | - | - |
| Dichlorophenol, 2,3- | 576-24-9 | No | No | - | - | - | - | - | - | - | - | 1.00E+00 | 5.02E+02 | 1.26E-05 | 1 | - | - |
| Dichlorophenol, 2,4- | 120-83-2 | No | No | - | - | - | - | 3.00E-03 | IR | - | - | 2.94E-01 | 1.47E+02 | 1.75E-04 | 1 | - | 2.26E-03 |
| Dichlorophenol, 2,5- | 583-78-8 | No | No | - | - | - | - | - | - | - | - | 9.84E-01 | 4.92E+02 | 1.26E-05 | 1 | - | - |
| Dichlorophenols (total) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Dichlorophenoxy Acetic Acid, 2,4- | 94-75-7 | No | No | - | - | - | - | 1.00E-02 | IR | - | - | 5.93E-02 | 2.96E+01 | 1.45E-06 | 1 | 1.81E-02 | 4.53E-03 |
| Butanoic acid, 4-(2,4-dichlorophenoxy)- | 94-82-6 | No | No | - | - | - | - | 3.00E-02 | OP | - | - | 7.40E-01 | 3.70E+02 | 9.36E-08 | 1 | - | 4.24E-02 |
| Dichloropropane, 1,2- | 78-87-5 | No | Yes | 3.70E-02 | P | 3.70E-05 | P | 4.00E-02 | PP | 4.00E-03 | IR | 1.21E-01 | 6.07E+01 | 1.15E-01 | 1 | 1.66E-03 | 4.67E-05 |
| Dichloropropane, 1,3- | 142-28-9 | No | Yes | - | - | - | - | 2.00E-02 | PP | - | - | 1.44E-01 | 7.22E+01 | 3.99E-02 | 1 | - | 1.28E-02 |
| Dichloropropane, 2,2- | 594-20-7 | No | Yes | - | - | - | - | - | - | - | - | 8.78E-02 | 4.39E+01 | 6.58E-01 | 1 | - | - |
| Dichloropropanol, 2,3- | 616-23-9 | No | No | - | - | - | - | 3.00E-03 | IR | - | - | 1.11E-02 | 5.57E+00 | 1.47E-07 | 1 | - | 1.26E-03 |
| Dichloropropene, 1,3- | 542-75-6 | No | Yes | 1.00E-01 | I | 4.00E-06 | I | 3.00E-02 | IR | 2.00E-02 | IR | 1.44E-01 | 7.22E+01 | 1.45E-01 | 1 | - | 1.68E-04 |
| Dichloropropene, 2,3- | 78-88-6 | No | Yes | - | - | - | - | - | - | - | - | 1.21E-01 | 6.07E+01 | 1.70E-01 | 1 | - | - |
| Dichloropropene, cis-1,3- | 10061-01-5 | No | Yes | - | - | - | - | - | - | - | - | 1.44E-01 | 7.22E+01 | 1.11E-01 | 1 | - | - |
| Dichloropropene, trans-1,3- | 10061-02-6 | No | Yes | - | - | - | - | - | - | - | - | 1.44E-01 | 7.22E+01 | 3.56E-02 | 1 | - | - |
| Dichloropropene, 1,1- | 563-58-6 | No | Yes | - | - | - | - | - | - | - | - | 1.21E-01 | 6.07E+01 | 2.04E+00 | 1 | - | - |
| Dichlorvos | 62-73-7 | No | No | 2.90E-01 | I | 8.30E-05 | C | 5.00E-04 | IR | 5.00E-04 | IR | 1.08E-01 | 5.40E+01 | 2.35E-05 | 1 | - | 8.11E-05 |
| Dicyclohexylamine | 101-83-7 | No | Yes | - | - | - | - | - | - | - | - | 3.47E-01 | 1.73E+02 | 2.25E-03 | 1 | - | - |
| Dicyclopentadiene | 77-73-6 | No | Yes | - | - | - | - | 8.00E-02 | PP | 3.00E-04 | SC | 3.03E+00 | 1.51E+03 | 2.56E+00 | 1 | - | 2.16E-04 |
| Dieldrin | 60-57-1 | No | No | 1.60E+01 | I | 4.60E-03 | I | 5.00E-05 | IR | - | - | 4.02E+01 | 2.01E+04 | 4.09E-04 | 1 | - | 7.08E-05 |
| Diepoxybutane | 1464-53-5 | No | Yes | - | - | - | - | - | - | - | - | 5.06E-03 | 2.53E+00 | 1.45E-06 | 1 | - | - |
| Diethanolamine | 111-42-2 | No | No | - | - | - | - | 2.00E-03 | PP | 2.00E-04 | PP | 2.00E-03 | 1.00E+00 | 1.58E-09 | 1 | - | 8.10E-04 |
| Diethyl sulfate | 64-67-5 | No | No | - | - | - | - | - | - | - | - | 5.64E-02 | 2.82E+01 | 2.51E-04 | 1 | - | - |
| Diethyl-p-nitrophenylphosphate | 311-45-5 | No | No | - | - | - | - | - | - | - | - | 2.63E-01 | 1.31E+02 | 4.46E-09 | 1 | - | - |
| Diethylene-glycol | 111-46-6 | No | No | - | - | - | - | - | - | - | - | 2.00E-03 | 1.00E+00 | 1.22E-08 | 1 | - | - |
| Diethylene Glycol Dinitrate (DEGDN) | 693-21-0 | No | No | - | - | - | - | - | - | - | - | 6.44E-02 | 3.22E+01 | 1.59E-05 | 1 | - | - |
| Diethylene Glycol Monobutyl Ether | 112-34-5 | No | No | - | - | - | - | 3.00E-02 | PP | 1.00E-04 | PP | 2.00E-02 | 1.00E+01 | 2.94E-07 | 1 | - | 1.31E-02 |
| Diethylene Glycol Monoethyl Ether | 111-90-0 | No | No | - | - | - | - | 6.00E-02 | PP | 3.00E-04 | PP | 2.00E-03 | 1.00E+00 | 9.12E-07 | 1 | - | 2.43E-02 |
| Diethylformamide | 617-84-5 | No | Yes | - | - | - | - | 1.00E-03 | PP | - | - | 4.12E-03 | 2.06E+00 | 5.31E-06 | 1 | - | 4.07E-04 |
| Diethylphosphorodithioate | 298-06-6 | No | Yes | - | - | - | - | - | - | - | - | 7.75E-02 | 3.88E+01 | 1.52E-02 | 1 | - | - |
| Diethylstilbestrol | 56-53-1 | No | No | 3.50E+02 | C | 1.00E-01 | C | - | - | - | - | 5.48E+02 | 2.74E+05 | 2.37E-10 | 1 | - | 2.79E-05 |
| Difenzoquat | 43222-48-6 | No | No | - | - | - | - | 8.30E-02 | OP | - | - | 1.57E+02 | 7.84E+04 | - | 1 | - | 2.61E+01 |
| Diflubenzuron | 35367-38-5 | No | No | - | - | - | - | 2.00E-02 | IR | - | - | 9.26E-01 | 4.63E+02 | 1.88E-07 | 1 | - | 3.27E-02 |
| Difluoroethane, 1,1- | 75-37-6 | No | Yes | - | - | - | - | - | - | 4.00E+01 | IR | 6.36E-02 | 3.18E+01 | 8.30E-01 | 1 | - | 2.82E+00 |
| Difluoropropane, 2,2- | 420-45-1 | No | Yes | - | - | - | - | - | - | - | - | 8.78E-02 | 4.39E+01 | 2.10E+01 | 1 | - | - |
| Dihydrosafrole | 94-58-6 | No | Yes | 4.40E-02 | C | 1.30E-05 | C | - | - | - | - | 4.14E-01 | 2.07E+02 | 4.99E-04 | 1 | - | 1.86E-04 |
| Diisopropyl Ether | 108-20-3 | No | Yes | - | - | - | - | - | - | 7.00E-01 | PP | 4.56E-02 | 2.28E+01 | 1.05E-01 | 1 | - | 3.72E-02 |
| Diisopropyl Methylphosphonate | 1445-75-6 | No | Yes | - | - | - | - | 8.00E-02 | IR | - | - | 8.44E-02 | 4.22E+01 | 1.79E-03 | 1 | - | 4.51E-02 |
| Dimethipin | 55290-64-7 | No | No | - | - | - | - | 2.18E-02 | OP | - | - | 2.00E-02 | 1.00E+01 | 9.40E-10 | 1 | - | 9.60E-03 |
| Dimethoate | 60-51-5 | No | No | - | - | - | - | 2.20E-03 | OP | - | - | 2.55E-02 | 1.28E+01 | 9.93E-09 | 1 | - | 9.89E-04 |
| Dimethoxybenzidine, 3,3'- | 119-90-4 | No | No | 1.60E+00 | P | - | - | - | - | - | - | 1.02E+00 | 5.09E+02 | 1.92E-09 | 1 | - | 5.76E-05 |
| Dimethyl methylphosphonate | 756-79-6 | No | No | 1.70E-03 | P | - | - | 6.00E-02 | PP | - | - | 1.08E-02 | 5.41E+00 | 5.56E-06 | 1 | - | 9.65E-03 |
| Dimethyl Sulfate | 77-78-1 | No | No | - | - | - | - | - | - | - | - | 1.70E-02 | 8.49E+00 | 1.64E-04 | 1 | - | - |
| Dimethyl Sulfide | 75-18-3 | No | Yes | - | - | - | - | - | - | - | - | 4.35E-02 | 2.17E+01 | 6.58E-02 | 1 | - | - |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H [*] | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------------|--|----------------------|-----------------------|
| Dimethylamino azobenzene [p-] | 60-11-7 | No | No | 4.60E+00 | C | 1.30E-03 | C | - | - | - | - | 4.06E+00 | 2.03E+03 | 1.64E-08 | 1 | - | 2.15E-05 |
| Dimethylaniline HCl, 2,4- | 21436-96-4 | No | No | 5.80E-01 | H | - | - | - | - | - | - | 7.04E-01 | 3.52E+02 | 9.48E-05 | 1 | - | 1.21E-04 |
| Dimethylaniline, 2,4- | 95-68-1 | No | No | 2.00E-01 | P | - | - | 2.00E-03 | SC | - | - | 3.69E-01 | 1.85E+02 | 1.02E-04 | 1 | - | 2.10E-04 |
| Dimethylaniline, N,N- | 121-69-7 | No | Yes | 2.70E-02 | P | - | - | 2.00E-03 | IR | - | - | 1.57E-01 | 7.87E+01 | 2.32E-03 | 1 | - | 9.03E-04 |
| Dimethylbenzidine, 3,3'- | 119-93-7 | No | No | 1.10E+01 | P | - | - | - | - | - | - | 6.38E+00 | 3.19E+03 | 2.57E-09 | 1 | - | 4.30E-05 |
| Dimethylcyclohexylamine, n,n- | 98-94-2 | No | Yes | - | - | - | - | - | - | - | - | 7.21E-02 | 3.60E+01 | 9.61E-04 | 1 | - | - |
| Dimethylformamide | 68-12-2 | No | Yes | - | - | - | - | 1.00E-01 | PP | 3.00E-02 | IR | 2.00E-03 | 1.00E+00 | 3.02E-06 | 1 | - | 1.23E-03 |
| Dimethylhydrazine, 1,1- | 57-14-7 | No | Yes | - | - | - | - | 1.00E-04 | SC | 2.00E-06 | SC | 2.39E-02 | 1.20E+01 | 5.27E-04 | 1 | - | 9.32E-08 |
| Dimethylhydrazine, 1,2- | 540-73-8 | No | Yes | 5.50E+02 | C | 1.60E-01 | C | - | - | - | - | 2.97E-02 | 1.49E+01 | 2.84E-06 | 1 | - | 6.46E-09 |
| Dimethylphenethylamine | 122-09-8 | No | No | - | - | - | - | - | - | - | - | 2.16E+00 | 1.08E+03 | 5.85E-05 | 1 | - | - |
| Dimethylphenol, 2,4- | 105-67-9 | No | No | - | - | - | - | 2.00E-02 | IR | - | - | 9.84E-01 | 4.92E+02 | 3.89E-05 | 1 | - | 4.21E-02 |
| Dimethylphenol, 2,6- | 576-26-1 | No | No | - | - | - | - | 6.00E-04 | IR | - | - | 1.00E+00 | 5.02E+02 | 2.72E-04 | 1 | - | 1.27E-03 |
| Dimethylphenol, 3,4- | 95-65-8 | No | No | - | - | - | - | 1.00E-03 | IR | - | - | 9.84E-01 | 4.92E+02 | 1.70E-05 | 1 | - | 2.13E-03 |
| Dimethylvinylchloride | 513-37-1 | No | Yes | 4.50E-02 | C | 1.30E-05 | C | - | - | - | - | 1.21E-01 | 6.07E+01 | 4.84E-02 | 1 | - | 1.07E-04 |
| Dinitro-o-cresol, 4,6- | 534-52-1 | No | No | - | - | - | - | 8.00E-05 | SC | - | - | 1.51E+00 | 7.54E+02 | 5.72E-05 | 1 | - | 2.58E-04 |
| Dinitro-o-cyclohexyl Phenol, 4,6- | 131-89-5 | No | No | - | - | - | - | 2.00E-03 | IR | - | - | 3.31E+01 | 1.65E+04 | 2.26E-06 | 1 | - | 7.67E-02 |
| Dinitroaniline, 3,5- | 618-87-1 | No | No | - | - | - | - | - | - | - | - | 3.39E-01 | 1.69E+02 | 1.21E-09 | 1 | - | - |
| Dinitrobenzene, 1,2- | 528-29-0 | No | No | - | - | - | - | 1.00E-04 | PP | - | - | 7.18E-01 | 3.59E+02 | 2.18E-06 | 1 | - | 1.77E-04 |
| Dinitrobenzene, 1,3- | 99-65-0 | No | No | - | - | - | - | 1.00E-04 | IR | - | - | 7.03E-01 | 3.52E+02 | 2.00E-06 | 1 | - | 1.76E-04 |
| Dinitrobenzene, 1,4- | 100-25-4 | No | No | - | - | - | - | 1.00E-04 | PP | - | - | 7.03E-01 | 3.52E+02 | 3.43E-06 | 1 | - | 1.76E-04 |
| Dinitrophenol, 2,4- | 51-28-5 | No | No | - | - | - | - | 2.00E-03 | IR | - | - | 9.22E-01 | 4.61E+02 | 3.52E-06 | 1 | - | 4.36E-03 |
| Dinitrophenols | 25550-58-7 | No | No | - | - | - | - | - | - | - | - | 9.40E-01 | 4.70E+02 | 1.13E-06 | 1 | - | - |
| Dinitrosopentamethylenetetramine, N,N- | 101-25-7 | No | No | - | - | - | - | - | - | - | - | 1.16E-01 | 5.80E+01 | 2.02E-04 | 1 | - | - |
| Dinitrotoluene Mixture, 2,4/2,6- | NA | No | No | 6.80E-01 | I | - | - | - | - | - | - | 1.17E+00 | 5.87E+02 | 1.62E-05 | 1 | - | 1.46E-04 |
| Dinitrotoluene, 2,4- | 121-14-2 | No | No | 3.10E-01 | C | 8.90E-05 | C | 2.00E-03 | IR | - | - | 1.15E+00 | 5.76E+02 | 2.21E-06 | 1 | - | 3.21E-04 |
| Dinitrotoluene, 2,6- | 606-20-2 | No | No | 1.50E+00 | P | - | - | 3.00E-04 | SC | - | - | 1.17E+00 | 5.87E+02 | 3.05E-05 | 1 | - | 6.67E-05 |
| Dinitrotoluene, 2-Amino-4,6- | 35572-78-2 | No | No | - | - | - | - | 2.00E-03 | SU | - | - | 5.66E-01 | 2.83E+02 | 1.34E-09 | 1 | - | 2.96E-03 |
| Dinitrotoluene, 4-Amino-2,6- | 19406-51-0 | No | No | - | - | - | - | 2.00E-03 | SU | - | - | 5.66E-01 | 2.83E+02 | 1.34E-09 | 1 | - | 2.96E-03 |
| Dinitrotoluene, 2,3- | 602-01-7 | No | No | - | - | - | - | - | - | - | - | 1.17E+00 | 5.87E+02 | 3.79E-06 | 1 | - | - |
| Dinitrotoluene, 2,5- | 619-15-8 | No | No | - | - | - | - | - | - | - | - | 1.15E+00 | 5.76E+02 | 3.79E-06 | 1 | - | - |
| Dinitrotoluene, 3,4- | 610-39-9 | No | No | - | - | - | - | - | - | - | - | 1.15E+00 | 5.76E+02 | 3.79E-06 | 1 | - | - |
| Dinitrotoluene, 3,5- | 618-85-9 | No | No | - | - | - | - | - | - | - | - | 1.13E+00 | 5.64E+02 | 3.79E-06 | 1 | - | - |
| Dinitrotoluene, Technical grade | 25321-14-6 | No | No | 4.50E-01 | X | - | - | 9.00E-04 | SC | - | - | 1.17E+00 | 5.87E+02 | 3.79E-06 | 1 | - | 1.43E-04 |
| Dinoseb | 88-85-7 | No | No | - | - | - | - | 1.00E-03 | IR | - | - | 8.59E+00 | 4.29E+03 | 1.86E-05 | 1 | 6.15E-02 | 1.29E-02 |
| Dioxane, 1,4- | 123-91-1 | No | Yes | 1.00E-01 | I | 5.00E-06 | I | 3.00E-02 | IR | 3.00E-02 | IR | 5.27E-03 | 2.63E+00 | 1.96E-04 | 1 | - | 9.42E-05 |
| Diphenamid | 957-51-7 | No | No | - | - | - | - | 3.00E-02 | IR | - | - | 9.60E+00 | 4.80E+03 | 1.48E-09 | 1 | - | 5.16E-01 |
| Diphenyl Sulfone | 127-63-9 | No | No | - | - | - | - | 8.00E-04 | SC | - | - | 2.22E+00 | 1.11E+03 | 1.02E-05 | 1 | - | 3.59E-03 |
| Diphenylamine | 122-39-4 | No | No | - | - | - | - | 1.00E-01 | OP | - | - | 1.65E+00 | 8.26E+02 | 1.10E-04 | 1 | - | 2.33E-01 |
| Diphenylhydrazine, 1,2- | 122-66-7 | No | No | 8.00E-01 | I | 2.20E-04 | I | - | - | - | - | 3.01E+00 | 1.51E+03 | 1.95E-05 | 1 | - | 2.50E-04 |
| Diquat | 85-00-7 | No | No | - | - | - | - | 2.20E-03 | IR | - | - | 1.85E+01 | 9.27E+03 | 5.81E-12 | 1 | 3.75E-01 | 8.27E-02 |
| Direct Black 38 | 1937-37-7 | No | No | 7.10E+00 | C | 1.40E-01 | C | - | - | - | - | 4.84E+05 | 2.42E+08 | 3.36E-38 | 1 | - | 5.31E+00 |
| Direct Blue 6 | 2602-46-2 | No | No | 7.40E+00 | C | 1.40E-01 | C | - | - | - | - | 1.58E+06 | 7.91E+08 | 3.72E-42 | 1 | - | 1.67E+01 |
| Direct Brown 95 | 16071-86-6 | No | No | 6.70E+00 | C | 1.40E-01 | C | - | - | - | - | 1.40E+04 | 6.99E+06 | - | 1 | - | 1.62E-01 |
| Direct Sky Blue | 2610-05-1 | No | No | - | - | - | - | - | - | - | - | 5.76E+05 | 2.88E+08 | 3.50E-42 | 1 | - | - |
| Disulfoton | 298-04-4 | No | No | - | - | - | - | 4.00E-05 | IR | - | - | 1.68E+00 | 8.38E+02 | 8.83E-05 | 1 | - | 9.40E-05 |
| Dithiane, 1,4- | 505-29-3 | No | Yes | - | - | - | - | 1.00E-02 | IR | - | - | 2.92E-01 | 1.46E+02 | 1.72E-03 | 1 | - | 9.74E-03 |
| Diundecyl Phthalate | 3648-20-2 | No | Yes | - | - | - | - | - | - | - | - | 1.03E+04 | 5.16E+06 | 2.29E-03 | 1 | - | - |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Diuron | 330-54-1 | No | No | - | - | - | - | 2.00E-03 | IR | - | - | 2.18E-01 | 1.09E+02 | 2.06E-08 | 1 | - | 1.51E-03 |
| Dodine | 2439-10-3 | No | No | - | - | - | - | 2.00E-02 | OP | - | - | 4.96E+00 | 2.48E+03 | 3.68E-09 | 1 | - | 2.06E-01 |
| Hexachlorodibenzo-p-dioxin | 34465-46-8 | No | No | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1.39E+03 | 6.95E+05 | 2.33E-04 | 1 | - | 8.33E-06 |
| Hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8- | 39227-28-6 | No | No | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1.39E+03 | 6.95E+05 | 1.61E-04 | 1 | - | 8.33E-06 |
| Hexachlorodibenzo-p-dioxin, Mixture | NA | No | No | 6.20E+03 | I | 1.30E+00 | I | - | - | - | - | 1.39E+03 | 6.95E+05 | 2.33E-04 | 1 | - | 1.75E-05 |
| HpCDD, 2,3,7,8- | 37871-00-4 | No | Yes | 1.30E+03 | W | 3.80E-01 | W | 7.00E-08 | WH | 4.00E-06 | WH | 2.32E+03 | 1.16E+06 | 7.15E-03 | 1 | - | 2.75E-05 |
| HxCDD, 1,2,3,6,7,8- | 57653-85-7 | No | No | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1.39E+03 | 6.95E+05 | 7.93E-05 | 1 | - | 8.33E-06 |
| HxCDD, 1,2,3,7,8,9- | 19408-74-3 | No | No | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1.39E+03 | 6.95E+05 | 7.93E-05 | 1 | - | 8.33E-06 |
| Endosulfan | 115-29-7 | No | Yes | - | - | - | - | 6.00E-03 | IR | - | - | 1.35E+01 | 6.76E+03 | 2.66E-03 | 1 | - | 1.39E-01 |
| Endosulfan I | 959-98-8 | No | No | - | - | - | - | - | - | - | - | 1.35E+01 | 6.76E+03 | 2.90E-04 | 1 | - | - |
| Endosulfan II | 33213-65-9 | No | No | - | - | - | - | - | - | - | - | 1.35E+01 | 6.76E+03 | 1.60E-05 | 1 | - | - |
| Endosulfan Sulfate | 1031-07-8 | No | No | - | - | - | - | - | - | - | - | 1.97E+01 | 9.85E+03 | 1.33E-05 | 1 | - | - |
| Endothall | 145-73-3 | No | No | - | - | - | - | 2.00E-02 | IR | - | - | 3.88E-02 | 1.94E+01 | 1.57E-14 | 1 | 2.39E-02 | 9.15E-03 |
| Endrin | 72-20-8 | No | No | - | - | - | - | 3.00E-04 | IR | - | - | 4.02E+01 | 2.01E+04 | 2.60E-04 | 1 | 8.08E-02 | 9.22E-03 |
| Endrin ketone | 53494-70-5 | No | No | - | - | - | - | - | - | - | - | 1.94E+01 | 9.72E+03 | 8.26E-07 | 1 | - | - |
| Endrin aldehyde | 7421-93-4 | No | No | - | - | - | - | - | - | - | - | 6.54E+00 | 3.27E+03 | 1.71E-04 | 1 | - | - |
| Epichlorohydrin | 106-89-8 | No | Yes | 9.90E-03 | I | 1.20E-06 | I | 6.00E-03 | PP | 1.00E-03 | IR | 1.98E-02 | 9.91E+00 | 1.24E-03 | 1 | - | 4.51E-05 |
| Epoxybutane, 1,2- | 106-88-7 | No | Yes | - | - | - | - | - | - | 2.00E-02 | IR | 1.98E-02 | 9.91E+00 | 7.36E-03 | 1 | - | 9.20E-04 |
| EPTC | 759-94-4 | No | Yes | - | - | - | - | 5.00E-02 | OP | - | - | 3.28E-01 | 1.64E+02 | 6.50E-04 | 1 | - | 3.97E-02 |
| Ethanol | 64-17-5 | No | Yes | - | - | - | - | - | - | - | - | 2.09E-03 | 1.05E+00 | 2.04E-04 | 1 | - | - |
| Ethanol, 2-(2-methoxyethoxy)- | 111-77-3 | No | No | - | - | - | - | 4.00E-02 | PP | - | - | 2.00E-03 | 1.00E+00 | 6.75E-10 | 1 | - | 1.62E-02 |
| Ethephon | 16672-87-0 | No | No | - | - | - | - | 5.00E-03 | IR | - | - | 1.01E-02 | 5.03E+00 | 2.33E-10 | 1 | - | 2.10E-03 |
| Ethion | 563-12-2 | No | No | - | - | - | - | 5.00E-04 | IR | - | - | 1.76E+00 | 8.82E+02 | 1.55E-05 | 1 | - | 8.53E-04 |
| Ethoxy Propanol | 52125-53-8 | No | Yes | - | - | - | - | - | - | - | - | 2.73E-03 | 1.36E+00 | 3.02E-06 | 1 | - | - |
| Ethoxyethanol Acetate, 2- | 111-15-9 | No | Yes | - | - | - | - | 1.00E-01 | PP | 6.00E-02 | PP | 9.08E-03 | 4.54E+00 | 1.31E-04 | 1 | - | 2.46E-03 |
| Ethoxyethanol, 2- | 110-80-5 | No | Yes | - | - | - | - | 9.00E-02 | PP | 2.00E-01 | IR | 2.00E-03 | 1.00E+00 | 1.92E-05 | 1 | - | 6.84E-03 |
| Ethyl methane sulfonate | 62-50-0 | No | No | - | - | - | - | - | - | - | - | 1.58E-02 | 7.89E+00 | 1.06E-05 | 1 | - | - |
| Ethyl Acetate | 141-78-6 | No | Yes | - | - | - | - | 9.00E-01 | IR | 7.00E-02 | PP | 1.12E-02 | 5.58E+00 | 5.48E-03 | 1 | - | 3.07E-03 |
| Ethyl Acrylate | 140-88-5 | No | Yes | - | - | - | - | 5.00E-03 | PP | 8.00E-03 | PP | 2.13E-02 | 1.07E+01 | 1.39E-02 | 1 | - | 3.17E-04 |
| Ethyl Chloride | 75-00-3 | No | Yes | - | - | - | - | - | - | 1.00E+01 | IR | 4.35E-02 | 2.17E+01 | 4.54E-01 | 1 | - | 5.92E-01 |
| Ethyl Ether | 60-29-7 | No | Yes | - | - | - | - | 2.00E-01 | IR | - | - | 1.94E-02 | 9.70E+00 | 5.03E-02 | 1 | - | 8.80E-02 |
| Ethyl Methacrylate | 97-63-2 | No | Yes | - | - | - | - | - | - | 3.00E-01 | PP | 3.33E-02 | 1.67E+01 | 2.34E-02 | 1 | - | 1.47E-02 |
| Ethyl-p-nitrophenyl Phosphonate | 2104-64-5 | No | No | - | - | - | - | 1.00E-05 | IR | - | - | 3.09E+01 | 1.55E+04 | 1.82E-05 | 1 | - | 2.78E-04 |
| Ethylbenzene | 100-41-4 | No | Yes | 1.10E-02 | C | 2.50E-06 | C | 1.00E-01 | IR | 1.00E+00 | IR | 8.92E-01 | 4.46E+02 | 3.22E-01 | 1 | 7.85E-01 | 1.68E-03 |
| Ethylene Cyanohydrin | 109-78-4 | No | No | - | - | - | - | 7.00E-02 | PP | - | - | 2.00E-03 | 1.00E+00 | 3.07E-07 | 1 | - | 2.83E-02 |
| Ethylene Diamine | 107-15-3 | No | Yes | - | - | - | - | 9.00E-02 | PP | - | - | 2.97E-02 | 1.49E+01 | 7.07E-08 | 1 | - | 4.15E-02 |
| Ethylene Glycol | 107-21-1 | No | No | - | - | - | - | 2.00E+00 | IR | 4.00E-01 | CA | 2.00E-03 | 1.00E+00 | 2.45E-06 | 1 | - | 8.10E-01 |
| Ethylene Glycol Monobutyl Ether | 111-76-2 | No | No | - | - | - | - | 1.00E-01 | IR | 1.60E+00 | IR | 5.65E-03 | 2.82E+00 | 6.54E-05 | 1 | - | 4.07E-02 |
| Ethylene Oxide | 75-21-8 | Yes | Yes | 3.10E-01 | C | 3.00E-03 | I | - | - | 3.00E-02 | CA | 6.47E-03 | 3.24E+00 | 6.05E-03 | 1 | - | 1.39E-07 |
| Ethylene Thiourea | 96-45-7 | No | No | 4.50E-02 | C | 1.30E-05 | C | 8.00E-05 | IR | - | - | 2.59E-02 | 1.30E+01 | 5.56E-10 | 1 | - | 3.62E-05 |
| Ethyleneimine | 151-56-4 | No | Yes | 6.50E+01 | C | 1.90E-02 | C | - | - | - | - | 1.81E-02 | 9.04E+00 | 4.95E-04 | 1 | - | 5.17E-08 |
| Ethylphenol, 4- | 123-07-9 | No | No | - | - | - | - | - | - | - | - | 1.15E+00 | 5.73E+02 | 3.16E-05 | 1 | - | - |
| Ethylphthalyl Ethyl Glycolate | 84-72-0 | No | No | - | - | - | - | 3.00E+00 | IR | - | - | 2.04E+00 | 1.02E+03 | 2.71E-07 | 1 | - | 1.30E+01 |
| Famphur | 52-85-7 | No | No | - | - | - | - | - | - | - | - | 3.78E-01 | 1.89E+02 | 6.58E-07 | 1 | - | - |
| Fenamiphos | 22224-92-6 | No | No | - | - | - | - | 2.50E-04 | IR | - | - | 7.96E-01 | 3.98E+02 | 4.95E-08 | 1 | - | 4.35E-04 |
| Fenprothrin | 39515-41-8 | No | No | - | - | - | - | 2.50E-02 | IR | - | - | 4.50E+01 | 2.25E+04 | 3.12E-04 | 1 | - | 2.89E-01 |
| Fluometuron | 2164-17-2 | No | No | - | - | - | - | 1.30E-02 | IR | - | - | 5.71E-01 | 2.85E+02 | 1.07E-07 | 1 | - | 1.87E-02 |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|---|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Fluoride | 16984-48-8 | No | No | - | - | - | - | 4.00E-02 | CA | 1.30E-02 | CA | 1.50E+02 | - | 0.00E+00 | 1 | - | 1.20E+01 |
| Fluorine (Soluble Fluoride) | 7782-41-4 | No | No | - | - | - | - | 6.00E-02 | IR | 1.30E-02 | CA | 1.50E+02 | - | 0.00E+00 | 1 | 6.01E+02 | 1.80E+01 |
| Fluorobenzene | 462-06-6 | No | Yes | - | - | - | - | - | - | - | - | 4.68E-01 | 2.34E+02 | 2.56E-01 | 1 | - | - |
| Fluorobiphenyl, 2- | 321-60-8 | No | Yes | - | - | - | - | - | - | - | - | 1.68E+01 | 8.40E+03 | 1.97E-02 | 1 | - | - |
| Fluorophenol, 2- | 367-12-4 | No | Yes | - | - | - | - | - | - | - | - | 6.13E-01 | 3.07E+02 | 1.32E-04 | 1 | - | - |
| Fluridone | 59756-60-4 | No | No | - | - | - | - | 8.00E-02 | IR | - | - | 1.14E+02 | 5.68E+04 | 3.31E-07 | 1 | - | 1.64E+01 |
| Flurprimidol | 56425-91-3 | No | No | - | - | - | - | 1.50E-02 | OP | - | - | 4.38E+00 | 2.19E+03 | 5.36E-08 | 1 | - | 1.18E-01 |
| Flutolanil | 66332-96-5 | No | No | - | - | - | - | 5.00E-01 | OP | - | - | 5.12E+00 | 2.56E+03 | 1.30E-07 | 1 | - | 4.20E+00 |
| Fluvalinate | 69409-94-5 | No | No | - | - | - | - | 1.00E-02 | IR | - | - | 1.46E+03 | 7.30E+05 | 5.93E-07 | 1 | - | 2.93E+01 |
| Folpet | 133-07-3 | No | No | - | - | - | - | 9.00E-02 | OP | - | - | 3.54E-02 | 1.77E+01 | 3.13E-06 | 1 | - | 3.87E-02 |
| Fomesafen | 72178-02-0 | No | No | - | - | - | - | 2.50E-03 | OP | - | - | 3.09E+00 | 1.55E+03 | 3.08E-11 | 1 | - | 1.58E-02 |
| Fonofos | 944-22-9 | No | No | - | - | - | - | 2.00E-03 | IR | - | - | 1.71E+00 | 8.56E+02 | 2.85E-04 | 1 | - | 4.68E-03 |
| Formaldehyde | 50-00-0 | No | Yes | - | - | 1.30E-05 | I | 2.00E-01 | IR | 9.83E-03 | AT | 2.00E-03 | 1.00E+00 | 1.38E-05 | 1 | - | 8.73E-05 |
| Formic Acid | 64-18-6 | No | Yes | - | - | - | - | 9.00E-01 | PP | 3.00E-04 | SC | 2.00E-03 | 1.00E+00 | 6.83E-06 | 1 | - | 1.26E-05 |
| Fosetyl-AL | 39148-24-8 | No | No | - | - | - | - | 2.50E+00 | OP | - | - | 1.30E+01 | 6.49E+03 | 1.29E-12 | 1 | - | 6.60E+01 |
| Fuel Oil Number 2 | 68476-30-2 | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Furazolidone | 67-45-8 | No | No | 3.80E+00 | H | - | - | - | - | - | - | 1.72E+00 | 8.58E+02 | 1.33E-09 | 1 | - | 3.92E-05 |
| Furfural | 98-01-1 | No | Yes | - | - | - | - | 3.00E-03 | IR | 5.00E-02 | HE | 1.22E-02 | 6.08E+00 | 1.54E-04 | 1 | - | 8.05E-04 |
| Furium | 531-82-8 | No | No | 1.50E+00 | C | 4.30E-04 | C | - | - | - | - | 1.16E+00 | 5.78E+02 | 5.44E-14 | 1 | - | 6.85E-05 |
| Furmecyclox | 60568-05-0 | No | No | 3.00E-02 | I | 8.60E-06 | C | - | - | - | - | 8.58E-01 | 4.29E+02 | 2.82E-07 | 1 | - | 1.18E-03 |
| Dibenzofuran | 132-64-9 | No | Yes | - | - | - | - | 1.00E-03 | SC | - | - | 1.83E+01 | 9.16E+03 | 8.71E-03 | 1 | - | 1.46E-02 |
| Furan | 110-00-9 | No | Yes | - | - | - | - | 1.00E-03 | IR | - | - | 1.60E-01 | 8.00E+01 | 2.21E-01 | 1 | - | 7.31E-04 |
| Heptachlorodibenzofuran, 1,2,3,4,6,7,8- | 67562-39-4 | No | Yes | 1.30E+03 | W | 3.80E-01 | W | 7.00E-08 | WH | 4.00E-06 | WH | 1.30E+03 | 6.50E+05 | 5.76E-04 | 1 | - | 1.54E-05 |
| Hexachlorodibenzofuran, 1,2,3,4,7,8- | 70648-26-9 | No | Yes | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 7.79E+02 | 3.89E+05 | 1.59E-03 | 1 | - | 9.23E-07 |
| HpCDF, 1,2,3,4,7,8,9- | 55673-89-7 | No | Yes | 1.30E+03 | W | 3.80E-01 | W | 7.00E-08 | WH | 4.00E-06 | WH | 1.30E+03 | 6.50E+05 | 5.76E-04 | 1 | - | 1.54E-05 |
| HpCDF, 2,3,7,8- | 38998-75-3 | No | Yes | 1.30E+03 | W | 3.80E-01 | W | 7.00E-08 | WH | 4.00E-06 | WH | 1.30E+03 | 6.50E+05 | 5.76E-04 | 1 | - | 1.54E-05 |
| HxCDF, 1,2,3,6,7,8- | 57117-44-9 | No | Yes | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 7.79E+02 | 3.89E+05 | 1.59E-03 | 1 | - | 9.23E-07 |
| HxCDF, 1,2,3,7,8,9- | 72918-21-9 | No | No | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 7.79E+02 | 3.89E+05 | 3.47E-04 | 1 | - | 4.67E-06 |
| HxCDF, 2,3,4,6,7,8- | 60851-34-5 | No | No | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 7.79E+02 | 3.89E+05 | 2.78E-04 | 1 | - | 4.67E-06 |
| HxCDF, 2,3,7,8- | 55684-94-1 | No | No | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 7.94E+02 | 3.97E+05 | 3.47E-04 | 1 | - | 4.76E-06 |
| Gadolinium | 7440-54-2 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Gallium | 7440-55-3 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Germanium | 7440-56-4 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Glufosinate, Ammonium | 77182-82-2 | No | No | - | - | - | - | 6.00E-03 | OP | - | - | 2.00E-02 | 1.00E+01 | 1.81E-12 | 1 | - | 2.65E-03 |
| Glutaraldehyde | 111-30-8 | No | No | - | - | - | - | - | - | 8.00E-05 | CA | 2.00E-03 | 1.00E+00 | 1.35E-06 | 1 | - | - |
| Glycerol | 56-81-5 | No | No | - | - | - | - | - | - | - | - | 2.00E-03 | 1.00E+00 | 7.07E-07 | 1 | - | - |
| Glycidyl | 765-34-4 | No | Yes | - | - | - | - | 4.00E-04 | IR | 1.00E-03 | HE | 2.00E-03 | 1.00E+00 | 2.09E-05 | 1 | - | 3.34E-05 |
| Glyphosate | 1071-83-6 | No | No | - | - | - | - | 1.00E-01 | IR | - | - | 4.20E+00 | 2.10E+03 | 8.59E-11 | 1 | 3.08E+00 | 8.82E-01 |
| Guanidine Chloride | 50-01-1 | No | No | - | - | - | - | 2.00E-02 | PP | - | - | - | - | 8.87E-17 | 1 | - | - |
| Guanidine | 113-00-8 | No | Yes | - | - | - | - | 1.00E-02 | SC | - | - | 2.39E-02 | 1.20E+01 | 9.57E-10 | 1 | - | 4.49E-03 |
| Guanidine Nitrate | 506-93-4 | No | No | - | - | - | - | 3.00E-02 | SC | - | - | 4.56E-02 | 2.28E+01 | 3.66E-17 | 1 | - | 1.48E-02 |
| Azinphos-methyl | 86-50-0 | No | No | - | - | - | - | 3.00E-03 | AT | 1.00E-02 | AT | 1.04E-01 | 5.19E+01 | 9.77E-07 | 1 | - | 1.70E-03 |
| Haloacetic acids | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Haloxyfop, Methyl | 69806-40-2 | No | No | - | - | - | - | 5.00E-05 | IR | - | - | 1.09E+01 | 5.45E+03 | 1.30E-05 | 1 | - | 8.39E-04 |
| HCDD, 1,2,3,4,6,7,8,- | 35822-46-9 | No | Yes | 1.30E+03 | C | 3.80E-01 | C | 1.00E-06 | CA | 4.00E-06 | CA | 2.32E+03 | 1.16E+06 | 7.15E-03 | 1 | - | 2.75E-05 |
| Heptachlor | 76-44-8 | No | Yes | 4.50E+00 | I | 1.30E-03 | I | 5.00E-04 | IR | - | - | 8.25E+01 | 4.13E+04 | 1.20E-02 | 1 | 3.31E-02 | 1.15E-04 |
| Heptachlor Epoxide | 1024-57-3 | No | Yes | 9.10E+00 | I | 2.60E-03 | I | 1.30E-05 | IR | - | - | 2.02E+01 | 1.01E+04 | 8.59E-04 | 1 | 4.08E-03 | 2.84E-05 |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Heptanal, n- | 111-71-7 | No | Yes | - | - | - | - | - | - | - | - | 2.17E-02 | 1.09E+01 | 1.10E-02 | 1 | - | - |
| Heptane, N- | 142-82-5 | No | Yes | - | - | - | - | 3.00E-04 | SC | 4.00E-01 | PP | 4.79E-01 | 2.40E+02 | 8.18E+01 | 1 | - | 4.77E-03 |
| Heptanol, n- | 111-70-6 | No | Yes | - | - | - | - | - | - | - | - | 4.20E-02 | 2.10E+01 | 7.69E-04 | 1 | - | - |
| Hexabromobenzene | 87-82-1 | No | Yes | - | - | - | - | 2.00E-03 | IR | - | - | 5.61E+00 | 2.81E+03 | 1.15E-03 | 1 | - | 2.33E-02 |
| Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153) | 68631-49-2 | No | No | - | - | - | - | 2.00E-04 | IR | - | - | - | - | - | 1 | - | - |
| Hexachlorobenzene | 118-74-1 | No | Yes | 1.60E+00 | I | 4.60E-04 | I | 8.00E-04 | IR | - | - | 1.24E+01 | 6.20E+03 | 6.95E-02 | 1 | 1.26E-02 | 1.23E-04 |
| Hexachlorobutadiene | 87-68-3 | No | Yes | 7.80E-02 | I | 2.20E-05 | I | 1.00E-03 | PP | - | - | 1.69E+00 | 8.45E+02 | 4.21E-01 | 1 | - | 2.67E-04 |
| Hexachlorocyclohexane, Alpha- | 319-84-6 | No | No | 6.30E+00 | I | 1.80E-03 | I | 8.00E-03 | AT | - | - | 5.61E+00 | 2.81E+03 | 2.74E-04 | 1 | - | 4.21E-05 |
| Hexachlorocyclohexane, Beta- | 319-85-7 | No | No | 1.80E+00 | I | 5.30E-04 | I | - | - | - | - | 5.61E+00 | 2.81E+03 | 1.80E-05 | 1 | - | 1.47E-04 |
| Hexachlorocyclohexane, Delta- | 319-86-8 | No | No | - | - | - | - | - | - | - | - | 5.61E+00 | 2.81E+03 | 2.10E-04 | 1 | - | - |
| Hexachlorocyclohexane, Epsilon | 6108-10-7 | No | No | - | - | - | - | - | - | - | - | 5.61E+00 | 2.81E+03 | 2.10E-04 | 1 | - | - |
| Hexachlorocyclohexane, Gamma- (Lindane) | 58-89-9 | No | No | 1.10E+00 | C | 3.10E-04 | C | 3.00E-04 | IR | - | - | 5.61E+00 | 2.81E+03 | 2.10E-04 | 1 | 1.16E-03 | 2.41E-04 |
| Hexachlorocyclohexane, Technical | 608-73-1 | No | No | 1.80E+00 | I | 5.10E-04 | I | - | - | - | - | 5.61E+00 | 2.81E+03 | 2.10E-04 | 1 | - | 1.47E-04 |
| Hexachlorocyclopentadiene | 77-47-4 | No | Yes | - | - | - | - | 6.00E-03 | IR | 2.00E-04 | IR | 2.81E+00 | 1.40E+03 | 1.10E+00 | 1 | 1.55E-01 | 1.28E-04 |
| Hexachloroethane | 67-72-1 | No | Yes | 4.00E-02 | I | 1.10E-05 | C | 7.00E-04 | IR | 3.00E-02 | IR | 3.94E-01 | 1.97E+02 | 1.59E-01 | 1 | - | 2.00E-04 |
| Hexachlorophene | 70-30-4 | No | No | - | - | - | - | 3.00E-04 | IR | - | - | 1.34E+03 | 6.69E+05 | 2.24E-11 | 1 | - | 8.05E-01 |
| Hexachloropropene | 1888-71-7 | No | Yes | - | - | - | - | - | - | - | - | 8.13E-01 | 4.06E+02 | 1.92E-01 | 1 | - | - |
| Hexadecanoic Acid | 57-10-3 | No | Yes | - | - | - | - | - | - | - | - | 7.04E+00 | 3.52E+03 | 8.18E-04 | 1 | - | - |
| Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) | 121-82-4 | No | No | 1.10E-01 | I | - | - | 3.00E-03 | IR | - | - | 1.78E-01 | 8.91E+01 | 8.22E-10 | 1 | - | 2.66E-04 |
| Hexamethylene Diisocyanate, 1,6- | 822-06-0 | No | Yes | - | - | - | - | - | - | 1.00E-05 | IR | 9.64E+00 | 4.82E+03 | 1.96E-03 | 1 | - | 2.05E-05 |
| Hexamethylphosphoramide | 680-31-9 | No | No | - | - | - | - | 4.00E-04 | PP | - | - | 2.00E-02 | 1.00E+01 | 8.18E-07 | 1 | - | 1.76E-04 |
| Hexane, N- | 110-54-3 | No | Yes | - | - | - | - | - | - | 7.00E-01 | IR | 2.63E-01 | 1.32E+02 | 7.36E+01 | 1 | - | 1.03E+00 |
| Hexanedioic Acid | 124-04-9 | No | No | - | - | - | - | 2.00E+00 | PP | - | - | 4.87E-02 | 2.43E+01 | 1.93E-10 | 1 | - | 9.94E-01 |
| Hexanol, n- | 111-27-3 | No | Yes | - | - | - | - | - | - | - | - | 2.31E-02 | 1.15E+01 | 6.99E-04 | 1 | - | - |
| Hexanone, 2- | 591-78-6 | No | Yes | - | - | - | - | 5.00E-03 | IR | 3.00E-02 | IR | 3.00E-02 | 1.50E+01 | 3.81E-03 | 1 | - | 8.75E-04 |
| Hexazinone | 51235-04-2 | No | No | - | - | - | - | 3.30E-02 | IR | - | - | 2.59E-01 | 1.29E+02 | 9.24E-11 | 1 | - | 2.95E-02 |
| Hydrazine | 302-01-2 | No | Yes | 3.00E+00 | I | 4.90E-03 | I | - | - | 3.00E-05 | PP | - | - | 0.00E+00 | 1 | - | - |
| Hydrazine Sulfate | 10034-93-2 | No | No | 3.00E+00 | I | 4.90E-03 | I | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Hydrogen Chloride | 7647-01-0 | No | Yes | - | - | - | - | - | - | 2.00E-02 | IR | - | - | 0.00E+00 | 1 | - | - |
| Hydrogen Fluoride | 7664-39-3 | No | Yes | - | - | - | - | 4.00E-02 | CA | 1.40E-02 | CA | - | - | 0.00E+00 | 1 | - | - |
| Hydrogen Selenide | 7783-07-5 | No | Yes | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Hydrogen Sulfate | 12143-45-2 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Hydrogen Sulfide | 7783-06-4 | No | Yes | - | - | - | - | - | - | 2.00E-03 | IR | - | - | 0.00E+00 | 1 | - | - |
| Hydroquinone | 123-31-9 | No | No | 6.00E-02 | P | - | - | 4.00E-02 | PP | - | - | 4.81E-01 | 2.41E+02 | 1.93E-09 | 1 | - | 8.75E-04 |
| Imazalil | 35554-44-0 | No | No | 6.11E-02 | O | - | - | 2.50E-03 | OP | - | - | 1.70E+01 | 8.50E+03 | 1.06E-07 | 1 | - | 1.55E-02 |
| Imazaquin | 81335-37-7 | No | No | - | - | - | - | 2.50E-01 | IR | - | - | 4.77E+00 | 2.39E+03 | 2.83E-16 | 1 | - | 2.45E+00 |
| Indium | 7440-74-6 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Iodide | 20461-54-5 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Iodine | 7553-56-2 | No | No | - | - | - | - | 1.00E-02 | AT | - | - | 6.00E+01 | - | 0.00E+00 | 1 | - | 1.20E+00 |
| Iodomethane | 74-88-4 | No | Yes | - | - | - | - | - | - | - | - | 2.64E-02 | 1.32E+01 | 2.15E-01 | 1 | - | - |
| Iodopropynyl Butylcarbamate (IPBC) | 55406-53-6 | No | No | - | - | - | - | - | - | - | - | 5.70E-01 | 2.85E+02 | 4.91E-06 | 1 | - | - |
| Iprodione | 36734-19-7 | No | No | - | - | - | - | 4.00E-02 | IR | - | - | 1.05E-01 | 5.25E+01 | 1.28E-07 | 1 | - | 2.25E-02 |
| Iron | 7439-89-6 | No | No | - | - | - | - | 7.00E-01 | PP | - | - | 2.50E+01 | - | 0.00E+00 | 1 | - | 3.52E+01 |
| Iron Sulfide | 11126-12-8 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Isobutyl Alcohol | 78-83-1 | No | Yes | - | - | - | - | 3.00E-01 | IR | - | - | 5.84E-03 | 2.92E+00 | 4.00E-04 | 1 | - | 1.22E-01 |
| Isodrin | 465-73-6 | No | Yes | - | - | - | - | - | - | - | - | 1.64E+02 | 8.20E+04 | 1.80E-03 | 1 | - | - |

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Myrtle Beach, South Carolina
**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|----------------------------------|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Isophorone | 78-59-1 | No | No | 9.50E-04 | I | - | - | 2.00E-01 | IR | 2.00E+00 | CA | 1.30E-01 | 6.52E+01 | 2.71E-04 | 1 | - | 2.58E-02 |
| Isopropalin | 33820-53-0 | No | Yes | - | - | - | - | 1.50E-02 | IR | - | - | 2.29E+01 | 1.14E+04 | 4.54E-03 | 1 | - | 9.20E-02 |
| Isopropanol | 67-63-0 | No | Yes | - | - | - | - | 2.00E+00 | PP | 2.00E-01 | PP | 3.06E-03 | 1.53E+00 | 3.31E-04 | 1 | - | 8.38E-03 |
| Isopropyl Methyl Phosphonic Acid | 1832-54-8 | No | No | - | - | - | - | 1.00E-01 | IR | - | - | 1.54E-02 | 7.71E+00 | 2.81E-07 | 1 | - | 4.30E-02 |
| Isopropyltoluene, p- | 99-87-6 | No | Yes | - | - | - | - | - | - | - | - | 2.24E+00 | 1.12E+03 | 4.50E-01 | 1 | - | - |
| Isosafrole | 120-58-1 | No | Yes | - | - | - | - | - | - | - | - | 4.14E-01 | 2.07E+02 | 1.47E+00 | 1 | - | - |
| Isoxaben | 82558-50-7 | No | No | - | - | - | - | 5.00E-02 | IR | - | - | 2.52E+00 | 1.26E+03 | 5.19E-08 | 1 | - | 2.00E-01 |
| JP-4 | 50815-00-4 | No | Yes | - | - | - | - | - | - | - | - | - | - | 4.09E+02 | 1 | - | - |
| JP-5 | NA | No | Yes | - | - | - | - | - | - | - | - | 2.49E-03 | 1.25E+00 | 2.41E-03 | 1 | - | - |
| JP-7 | NA | No | Yes | - | - | - | - | - | - | 3.00E-01 | AT | - | - | 4.09E-01 | 1 | - | - |
| JP-8 | NA | No | Yes | - | - | - | - | - | - | - | - | 2.49E-03 | 1.25E+00 | 2.41E-03 | 1 | - | - |
| Kerosene | 8008-20-6 | No | Yes | - | - | - | - | - | - | - | - | - | - | 4.09E-01 | 1 | - | - |
| Lactofen | 77501-63-4 | No | No | - | - | - | - | 8.00E-03 | U | - | - | 4.60E+01 | 2.30E+04 | 1.93E-05 | 1 | - | 4.63E-01 |
| Lactonitrile | 78-97-7 | No | No | - | - | - | - | - | - | - | - | 2.00E-03 | 1.00E+00 | 4.01E-04 | 1 | - | - |
| Lanthanum | 7439-91-0 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Lead Alkyls | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Lead Chromate | 7758-97-6 | Yes | No | 5.00E-01 | U | 1.50E-01 | U | 2.00E-02 | U | 2.00E-04 | U | - | - | 0.00E+00 | 1 | - | - |
| Lead Phosphate | 7446-27-7 | No | No | 8.50E-03 | U | 1.20E-05 | U | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Lead acetate | 301-04-2 | No | No | 8.50E-03 | U | 1.20E-05 | U | - | - | - | - | 2.00E-03 | 1.00E+00 | - | 1 | - | 1.85E-03 |
| Lead and Compounds | 7439-92-1 | No | No | - | - | - | - | - | - | - | - | 9.00E+02 | - | 0.00E+00 | 1 | 1.35E+01 | - |
| Lead subacetate | 1335-32-6 | No | No | 8.50E-03 | U | 1.20E-05 | U | - | - | - | - | 2.08E-02 | 1.04E+01 | - | 1 | - | 2.02E-03 |
| Lewisite | 541-25-3 | No | Yes | - | - | - | - | 5.00E-06 | U | - | - | 2.22E-01 | 1.11E+02 | 8.91E-03 | 1 | - | 3.82E-06 |
| Linuron | 330-55-2 | No | No | - | - | - | - | 7.70E-03 | U | - | - | 6.80E-01 | 3.40E+02 | 2.56E-07 | 1 | - | 1.13E-02 |
| Lithium | 7439-93-2 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 3.00E+02 | - | 0.00E+00 | 1 | - | 1.20E+00 |
| Lithium Perchlorate | 7791-03-9 | No | No | - | - | - | - | 7.00E-04 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Lutetium | 7439-94-3 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| MCPA | 94-74-6 | No | No | - | - | - | - | 5.00E-04 | U | - | - | 5.92E-02 | 2.96E+01 | 5.44E-08 | 1 | - | 1.95E-04 |
| MCPB | 94-81-5 | No | No | - | - | - | - | 4.40E-03 | U | - | - | 1.97E-01 | 9.84E+01 | 1.11E-07 | 1 | - | 2.56E-03 |
| MCPP | 93-65-2 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 9.70E-02 | 4.85E+01 | 7.44E-07 | 1 | - | 4.65E-04 |
| Magnesium | 7439-95-4 | No | No | - | - | - | - | - | - | - | - | 4.50E+00 | - | 0.00E+00 | 1 | - | - |
| Malathion | 121-75-5 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 6.26E-02 | 3.13E+01 | 2.00E-07 | 1 | - | 1.02E-02 |
| Maleic Anhydride | 108-31-6 | No | No | - | - | - | - | 1.00E-01 | U | 7.00E-04 | U | 2.00E-03 | 1.00E+00 | 1.61E-04 | 1 | - | 3.85E-02 |
| Maleic Hydrazide | 123-33-1 | No | No | - | - | - | - | 5.00E-01 | U | - | - | 6.60E-03 | 3.30E+00 | 1.08E-09 | 1 | - | 2.07E-01 |
| Malonitrile | 109-77-3 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 6.66E-03 | 3.33E+00 | 5.36E-06 | 1 | - | 4.14E-05 |
| Mancozeb | 8018-01-7 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1.22E+00 | 6.08E+02 | 6.21E-10 | 1 | - | 7.59E-02 |
| Maneb | 12427-38-2 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1.22E+00 | 6.08E+02 | 1.99E-07 | 1 | - | 1.38E-02 |
| Manganese (Non-diet) | 7439-96-5 | No | No | - | - | - | - | 2.40E-02 | U | 5.00E-05 | U | 6.50E+01 | - | 0.00E+00 | 1 | - | 2.83E+00 |
| Mechlorethamine | 51-75-2 | No | No | - | - | - | - | - | - | - | - | 1.77E-01 | 8.85E+01 | 1.19E-04 | 1 | - | - |
| Mephosfolan | 950-10-7 | No | No | - | - | - | - | 9.00E-05 | U | - | - | 1.27E+00 | 6.36E+02 | 4.87E-09 | 1 | - | 2.64E-04 |
| Mepiquat Chloride | 24307-26-4 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1.32E-01 | 6.62E+01 | 1.76E-10 | 1 | - | 2.00E-02 |
| Mercaptobenzothiazole, 2- | 149-30-4 | No | No | 1.10E-02 | U | - | - | 4.00E-03 | U | - | - | 2.72E+00 | 1.36E+03 | 1.48E-06 | 1 | - | 1.84E-02 |
| Mercuric Chloride | 7487-94-7 | No | No | - | - | - | - | 3.00E-04 | U | 3.00E-04 | U | - | - | 0.00E+00 | 1 | - | - |
| Mercury (elemental) | 7439-97-6 | No | Yes | - | - | - | - | - | - | 3.00E-04 | U | 5.20E+01 | - | 3.52E-01 | 1 | 1.04E-01 | 3.27E-03 |
| Merphos | 150-50-5 | No | Yes | - | - | - | - | 3.00E-05 | U | - | - | 9.80E+01 | 4.90E+04 | 9.28E-04 | 1 | - | 5.91E-03 |
| Merphos Oxide | 78-48-8 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 4.70E+00 | 2.35E+03 | 1.20E-05 | 1 | - | 1.39E-04 |
| Metalaxyl | 57837-19-1 | No | No | - | - | - | - | 6.00E-02 | U | - | - | 7.72E-02 | 3.86E+01 | 1.21E-07 | 1 | - | 3.27E-02 |
| Methacrylonitrile | 126-98-7 | No | Yes | - | - | - | - | 1.00E-04 | U | 3.00E-02 | U | 2.62E-02 | 1.31E+01 | 1.01E-02 | 1 | - | 4.35E-05 |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H [*] | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------------|--|----------------------|-----------------------|
| Methamidophos | 10265-92-6 | No | No | - | - | - | - | 5.00E-05 | U | - | - | 1.08E-02 | 5.41E+00 | 3.55E-08 | 1 | - | 2.11E-05 |
| Methanol | 67-56-1 | No | Yes | - | - | - | - | 2.00E+00 | U | 2.00E+01 | U | 2.00E-03 | 1.00E+00 | 1.86E-04 | 1 | - | 4.13E-01 |
| Methapyrilene | 91-80-5 | No | No | - | - | - | - | - | - | - | - | 3.72E+00 | 1.86E+03 | 1.32E-10 | 1 | - | - |
| Methidathion | 950-37-8 | No | No | - | - | - | - | 1.50E-03 | U | - | - | 4.24E-02 | 2.12E+01 | 2.93E-07 | 1 | - | 7.05E-04 |
| Methomyl | 16752-77-5 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 2.00E-02 | 1.00E+01 | 8.05E-10 | 1 | - | 1.09E-02 |
| Methoxy-5-nitroaniline, 2- | 99-59-2 | No | No | 4.90E-02 | U | 1.40E-05 | U | - | - | - | - | 1.43E-01 | 7.13E+01 | 5.11E-07 | 1 | - | 5.29E-04 |
| Methoxychlor | 72-43-5 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 5.38E+01 | 2.69E+04 | 8.30E-06 | 1 | 2.16E+00 | 2.00E-01 |
| Methoxyethanol Acetate, 2- | 110-49-6 | No | Yes | - | - | - | - | 8.00E-03 | U | 1.00E-03 | U | 4.98E-03 | 2.49E+00 | 1.27E-05 | 1 | - | 4.22E-05 |
| Methoxyethanol, 2- | 109-86-4 | No | Yes | - | - | - | - | 5.00E-03 | U | 2.00E-02 | U | 2.00E-03 | 1.00E+00 | 1.35E-05 | 1 | - | 5.95E-04 |
| Methyl Acetate | 79-20-9 | No | Yes | - | - | - | - | 1.00E+00 | U | - | - | 6.12E-03 | 3.06E+00 | 4.70E-03 | 1 | - | 4.11E-01 |
| Methyl Acrylate | 96-33-3 | No | Yes | - | - | - | - | - | - | 2.00E-02 | U | 1.17E-02 | 5.84E+00 | 8.14E-03 | 1 | - | 8.86E-04 |
| Methyl Ethyl Ketone (2-Butanone) | 78-93-3 | No | Yes | - | - | - | - | 6.00E-01 | U | 5.00E+00 | U | 9.02E-03 | 4.51E+00 | 2.33E-03 | 1 | - | 1.16E-01 |
| Methyl Hydrazine | 60-34-4 | No | Yes | - | - | 1.00E-03 | U | 1.00E-03 | U | 2.00E-05 | U | 2.66E-02 | 1.33E+01 | 1.24E-04 | 1 | - | 9.43E-07 |
| Methyl Isobutyl Ketone (4-methyl-2-pentanone) | 108-10-1 | No | Yes | - | - | - | - | - | - | 3.00E+00 | U | 2.52E-02 | 1.26E+01 | 5.64E-03 | 1 | - | 1.41E-01 |
| Methyl Isocyanate | 624-83-9 | No | Yes | - | - | - | - | - | - | 1.00E-03 | U | 7.92E-02 | 3.96E+01 | 3.79E-02 | 1 | - | 5.89E-05 |
| Methyl Mercaptan | 74-93-1 | No | Yes | - | - | - | - | - | - | - | - | 2.64E-02 | 1.32E+01 | 1.28E-01 | 1 | - | - |
| Methyl Mercury | 22967-92-6 | No | No | - | - | - | - | 1.00E-04 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Methyl Methacrylate | 80-62-6 | No | Yes | - | - | - | - | 1.40E+00 | U | 7.00E-01 | U | 1.83E-02 | 9.14E+00 | 1.30E-02 | 1 | - | 3.04E-02 |
| Methyl Parathion | 298-00-0 | No | No | - | - | - | - | 2.50E-04 | U | - | - | 1.46E+00 | 7.29E+02 | 4.09E-06 | 1 | - | 7.41E-04 |
| Methyl Phosphonic Acid | 993-13-5 | No | No | - | - | - | - | 6.00E-02 | U | - | - | 2.82E-03 | 1.41E+00 | 4.99E-10 | 1 | - | 2.44E-02 |
| Methyl Styrene (Mixed Isomers) | 25013-15-4 | No | Yes | - | - | - | - | 6.00E-03 | U | 4.00E-02 | U | 1.43E+00 | 7.16E+02 | 1.07E-01 | 1 | - | 3.77E-03 |
| Methyl dicyclohexylamine, n- | 7560-83-0 | No | Yes | - | - | - | - | - | - | - | - | 3.54E-01 | 1.77E+02 | 4.95E-03 | 1 | - | - |
| Methyl methanesulfonate | 66-27-3 | No | No | 9.90E-02 | U | 2.80E-05 | U | - | - | - | - | 8.66E-03 | 4.33E+00 | 1.65E-04 | 1 | - | 1.64E-04 |
| Methyl tert-Butyl Ether (MTBE) | 1634-04-4 | No | Yes | 1.80E-03 | U | 2.60E-07 | U | - | - | 3.00E+00 | U | 2.32E-02 | 1.16E+01 | 2.40E-02 | 1 | - | 3.22E-03 |
| Methyl-1,4-benzenediamine dihydrochloride, 2- | 615-45-2 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 4.04E-01 | 2.02E+02 | 2.61E-16 | 1 | - | 3.63E-04 |
| Methyl-2-Pentanol, 4- | 108-11-2 | No | Yes | - | - | - | - | - | - | - | - | 1.63E-02 | 8.16E+00 | 1.82E-03 | 1 | - | - |
| Methyl-5-Nitroaniline, 2- | 99-55-8 | No | No | 9.00E-03 | U | - | - | 2.00E-02 | U | - | - | 3.58E-01 | 1.79E+02 | 3.39E-07 | 1 | - | 4.56E-03 |
| Methyl-N-nitro-N-nitrosoguanidine, N- | 70-25-7 | No | No | 8.30E+00 | U | 2.40E-03 | U | - | - | - | - | 1.44E-01 | 7.20E+01 | 4.99E-11 | 1 | - | 3.23E-06 |
| Methylaniline Hydrochloride, 2- | 636-21-5 | No | No | 1.30E-01 | U | 3.70E-05 | U | - | - | - | - | 2.30E-01 | 1.15E+02 | 8.59E-05 | 1 | - | 2.58E-04 |
| Methylarsonic acid | 124-58-3 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 8.78E-02 | 4.39E+01 | - | 1 | - | 5.77E-03 |
| Methylaziridine, 2- | 75-55-8 | No | Yes | - | - | - | - | - | - | - | - | 2.90E-02 | 1.45E+01 | 4.09E-04 | 1 | - | - |
| Methylbenzene, 1-4-diamine monohydrochloride, 2- | 74612-12-7 | No | No | - | - | - | - | 2.00E-04 | U | - | - | - | - | - | 1 | - | - |
| Methylbenzene-1,4-diamine sulfate, 2- | 615-50-9 | No | No | 1.00E-01 | U | - | - | 3.00E-04 | U | - | - | - | - | - | 1 | - | - |
| Methylcholanthrene, 3- | 56-49-5 | Yes | No | 2.20E+01 | U | 6.30E-03 | U | - | - | - | - | 1.92E+03 | 9.62E+05 | 2.14E-04 | 1 | - | 2.19E-03 |
| Methylcyclohexane | 108-87-2 | No | Yes | - | - | - | - | - | - | - | - | 4.68E-01 | 2.34E+02 | 1.76E+01 | 1 | - | - |
| Methylcyclohexylamine, n- | 100-60-7 | No | Yes | - | - | - | - | - | - | - | - | 7.52E-02 | 3.76E+01 | 1.23E-03 | 1 | - | - |
| Methylcyclopentane | 96-37-7 | No | Yes | - | - | - | - | - | - | - | - | 2.56E-01 | 1.28E+02 | 1.48E+01 | 1 | - | - |
| Methylene Chloride | 75-09-2 | Yes | Yes | 2.00E-03 | U | 1.00E-08 | U | 6.00E-03 | U | 6.00E-01 | U | 4.34E-02 | 2.17E+01 | 1.33E-01 | 1 | 1.28E-03 | 2.72E-03 |
| Methylene-bis(2-chloroaniline), 4,4'- | 101-14-4 | Yes | No | 1.00E-01 | U | 4.30E-04 | U | 2.00E-03 | U | - | - | 1.14E+01 | 5.70E+03 | 1.66E-09 | 1 | - | 1.83E-03 |
| Methylene-bis(N,N-dimethyl) Aniline, 4,4'- | 101-61-1 | No | No | 4.60E-02 | U | 1.30E-05 | U | - | - | - | - | 5.34E+00 | 2.67E+03 | 4.37E-08 | 1 | - | 2.65E-03 |
| Methylenbisbenzenamine, 4,4'- | 101-77-9 | No | No | 1.60E+00 | U | 4.60E-04 | U | - | - | 2.00E-02 | U | 4.26E+00 | 2.13E+03 | 2.17E-09 | 1 | - | 2.11E-04 |
| Methylenediphenyl Diisocyanate | 101-68-8 | No | No | - | - | - | - | - | - | 6.00E-04 | U | 5.70E+02 | 2.85E+05 | 3.66E-05 | 1 | - | - |
| Methylisothiocyanate | 556-61-6 | No | Yes | - | - | - | - | - | - | - | - | 2.14E-02 | 1.07E+01 | 1.83E-03 | 1 | - | - |
| Methylnaphthalene | 1321-94-4 | No | Yes | - | - | - | - | - | - | - | - | 5.06E+00 | 2.53E+03 | 2.10E-02 | 1 | - | - |
| Methylnaphthalene, 1- | 90-12-0 | No | Yes | 2.90E-02 | U | - | - | 7.00E-02 | U | - | - | 5.06E+00 | 2.53E+03 | 2.10E-02 | 1 | - | 5.99E-03 |
| Methylnaphthalene, 2- | 91-57-6 | No | Yes | - | - | - | - | 4.00E-03 | U | - | - | 4.96E+00 | 2.48E+03 | 2.12E-02 | 1 | - | 1.86E-02 |
| Methylstyrene, Alpha- | 98-83-9 | No | Yes | - | - | - | - | 7.00E-02 | U | - | - | 1.40E+00 | 6.98E+02 | 1.04E-01 | 1 | - | 1.25E-01 |

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Myrtle Beach, South Carolina
**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|---|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Methyltriethyl Lead | 1762-28-3 | No | Yes | - | - | - | - | - | - | - | - | 6.62E-01 | 3.31E+02 | 2.54E+01 | 1 | - | - |
| Metolachlor | 51218-45-2 | No | No | - | - | - | - | 1.50E-01 | U | - | - | 9.78E-01 | 4.89E+02 | 3.68E-07 | 1 | - | 3.18E-01 |
| Metribuzin | 21087-64-9 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 1.06E-01 | 5.31E+01 | 4.78E-09 | 1 | - | 1.49E-02 |
| Metsulfuron-methyl | 74223-64-6 | No | No | - | - | - | - | 2.50E-01 | U | - | - | 1.85E-01 | 9.25E+01 | 5.40E-15 | 1 | - | 1.89E-01 |
| Mineral oils | 8012-95-1 | No | Yes | - | - | - | - | 3.00E+00 | U | - | - | 9.64E+00 | 4.82E+03 | 3.34E+02 | 1 | - | 2.39E+02 |
| Mirex | 2385-85-5 | No | Yes | 1.80E+01 | U | 5.10E-03 | U | 2.00E-04 | U | - | - | 7.14E+02 | 3.57E+05 | 3.32E-02 | 1 | - | 6.27E-04 |
| Molinate | 2212-67-1 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 3.64E-01 | 1.82E+02 | 1.68E-04 | 1 | - | 1.69E-03 |
| Molybdenum | 7439-98-7 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 2.00E+01 | - | 0.00E+00 | 1 | - | 2.02E-01 |
| Monoaluminum phosphate | 13530-50-2 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Monoammonium phosphate | 7722-76-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Monobutyltin Compounds | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Monocalcium phosphate | 7758-23-8 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Monochloramine | 10599-90-3 | No | No | - | - | - | - | 1.00E-01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Monochlorobutanes | 25154-42-1 | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Monochlorophenols (total) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Monocyclic aromatic hydrocarbons (total) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Monomagnesium phosphate | 7757-86-0 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Monomethylaniline | 100-61-8 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 1.64E-01 | 8.21E+01 | 3.63E-04 | 1 | - | 1.39E-03 |
| Monopotassium phosphate | 7778-77-0 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Monosodium phosphate | 7558-80-7 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Myclobutanil | 88671-89-0 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 1.22E+01 | 6.08E+03 | 1.75E-07 | 1 | - | 5.60E-01 |
| N,N'-Diphenyl-1,4-benzenediamine | 74-31-7 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1.04E+02 | 5.19E+04 | 8.38E-09 | 1 | - | 3.73E-02 |
| N-Methyl dithiocarbamate | 137-42-8 | No | No | - | - | - | - | - | - | - | - | 1.17E-01 | 5.87E+01 | - | 1 | - | - |
| Naled | 300-76-5 | No | Yes | - | - | - | - | 2.00E-03 | U | - | - | 2.54E-01 | 1.27E+02 | 2.66E-03 | 1 | - | 1.81E-03 |
| Naphtha, High Flash Aromatic (HFAN) | 64742-95-6 | No | Yes | - | - | - | - | 3.00E-02 | U | 1.00E-01 | U | - | - | 1.80E-02 | 1 | - | - |
| Naphthalene | 91-20-3 | No | Yes | - | - | 3.40E-05 | U | 2.00E-02 | U | 3.00E-03 | U | 3.08E+00 | 1.54E+03 | 1.80E-02 | 1 | - | 5.42E-04 |
| Naphthol, 2- | 135-19-3 | No | No | - | - | - | - | - | - | - | - | 3.96E+00 | 1.98E+03 | 1.12E-06 | 1 | - | - |
| Naphthoquinone, 1,4- | 130-15-4 | No | No | - | - | - | - | - | - | - | - | 9.08E-01 | 4.54E+02 | 8.05E-08 | 1 | - | - |
| Naphthylamine, 1- | 134-32-7 | No | No | - | - | - | - | - | - | - | - | 5.06E+00 | 2.53E+03 | 4.54E-06 | 1 | - | - |
| Naphthylamine, 2- | 91-59-8 | No | No | 1.80E+00 | U | 0.00E+00 | U | - | - | - | - | 4.96E+00 | 2.48E+03 | 3.31E-06 | 1 | - | 2.00E-04 |
| Napropamide | 15299-99-7 | No | No | - | - | - | - | 1.20E-01 | U | - | - | 6.44E+00 | 3.22E+03 | 3.44E-08 | 1 | - | 1.31E+00 |
| Neodymium Chloride (Stable, Nonradioactive) | 10024-93-8 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Niagara Blue 4B | 2429-74-5 | No | No | - | - | - | - | - | - | - | - | 5.64E+05 | 2.82E+08 | 3.50E-42 | 1 | - | - |
| Nickel Acetate | 373-02-4 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 2.00E-03 | 1.00E+00 | - | 1 | - | 4.45E-03 |
| Nickel Carbonate | 3333-67-3 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | - | - | - | 1 | - | - |
| Nickel Carbonyl | 13463-39-3 | No | Yes | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | - | - | 2.04E+01 | 1 | - | - |
| Nickel Hydroxide | 12054-48-7 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | - | - | 0.00E+00 | 1 | - | - |
| Nickel Oxide | 1313-99-1 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 2.00E-05 | U | - | - | 0.00E+00 | 1 | - | - |
| Nickel Refinery Dust | NA | No | No | - | - | 2.40E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 1.50E+02 | - | 0.00E+00 | 1 | - | 3.24E+00 |
| Nickel Soluble Salts | 7440-02-0 | No | No | - | - | 2.60E-04 | U | 2.00E-02 | U | 9.00E-05 | U | 6.50E+01 | - | 0.00E+00 | 1 | - | 2.56E+00 |
| Nickel Subulfide | 12035-72-2 | No | No | 1.70E+00 | U | 4.80E-04 | U | 1.10E-02 | U | 1.40E-05 | U | - | - | 0.00E+00 | 1 | - | - |
| Nickelocene | 1271-28-9 | No | No | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | - | - | - | 1 | - | - |
| Nicotinonitrile | 100-54-9 | No | No | - | - | - | - | - | - | - | - | 9.44E-02 | 4.72E+01 | 1.12E-05 | 1 | - | - |
| Niobium | 7440-03-1 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Nitrate | 14797-55-8 | No | No | - | - | - | - | 1.60E+00 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Nitrate + Nitrite (as N) | NA | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Nitric Acid | 7697-37-2 | No | Yes | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|------------------------------|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Nitric Oxide | 10102-43-9 | No | Yes | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Nitrite | 14797-65-0 | No | No | - | - | - | - | 1.00E-01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Nitroaniline, 2- | 88-74-4 | No | No | - | - | - | - | 1.00E-02 | U | 5.00E-05 | U | 2.22E-01 | 1.11E+02 | 2.41E-06 | 1 | - | 8.00E-03 |
| Nitroaniline, 3- | 99-09-2 | No | No | - | - | - | - | - | - | - | - | 2.18E-01 | 1.09E+02 | 3.23E-07 | 1 | - | - |
| Nitroaniline, 4- | 100-01-6 | No | No | 2.00E-02 | U | - | - | 4.00E-03 | U | 6.00E-03 | U | 2.18E-01 | 1.09E+02 | 5.15E-08 | 1 | - | 1.58E-03 |
| Nitrobenzene | 98-95-3 | No | Yes | - | - | 4.00E-05 | U | 2.00E-03 | U | 9.00E-03 | U | 4.52E-01 | 2.26E+02 | 9.81E-04 | 1 | - | 9.15E-05 |
| Nitrobiphenyl, 4- | 92-93-3 | No | No | - | - | - | - | - | - | - | - | 1.59E+01 | 7.97E+03 | 1.45E-04 | 1 | - | - |
| Nitrocellulose | 9004-70-0 | No | No | - | - | - | - | 3.00E+03 | U | - | - | 2.00E-02 | 1.00E+01 | 1.35E-21 | 1 | - | 1.32E+03 |
| Nitrodiphenylamine, 2- | 119-75-5 | No | No | - | - | - | - | - | - | - | - | 2.62E+00 | 1.31E+03 | 3.71E-06 | 1 | - | - |
| Nitrofurantoin | 67-20-9 | No | No | - | - | - | - | 7.00E-02 | U | - | - | 2.34E-01 | 1.17E+02 | 5.44E-11 | 1 | - | 6.09E-02 |
| Nitrofurazone | 59-87-0 | No | No | 1.30E+00 | U | 3.70E-04 | U | - | - | - | - | 7.00E-01 | 3.50E+02 | 1.27E-11 | 1 | - | 5.37E-05 |
| Nitrogen Dioxide | 10102-44-0 | No | Yes | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Nitroglycerin | 55-63-0 | No | No | 1.70E-02 | U | - | - | 1.00E-04 | U | - | - | 2.32E-01 | 1.16E+02 | 3.54E-06 | 1 | - | 8.47E-05 |
| Nitroguanidine | 556-88-7 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 4.14E-02 | 2.07E+01 | 1.82E-14 | 1 | - | 4.84E-02 |
| Nitromethane | 75-52-5 | No | Yes | - | - | 8.80E-06 | U | - | - | 5.00E-03 | U | 2.06E-02 | 1.03E+01 | 1.17E-03 | 1 | - | 1.41E-04 |
| Nitrophenol, 2- | 88-75-5 | No | Yes | - | - | - | - | - | - | - | - | 5.94E-01 | 2.97E+02 | 5.23E-04 | 1 | - | - |
| Nitrophenol, 2-amino-4- | 99-57-0 | No | No | - | - | - | - | - | - | - | - | 2.86E-01 | 1.43E+02 | 9.12E-11 | 1 | - | - |
| Nitrophenol, 3- | 554-84-7 | No | No | - | - | - | - | - | - | - | - | 5.82E-01 | 2.91E+02 | 8.18E-08 | 1 | - | - |
| Nitrophenol, 4- | 100-02-7 | No | No | - | - | - | - | - | - | - | - | 5.82E-01 | 2.91E+02 | 1.70E-08 | 1 | - | - |
| Nitrophenol, 4-amino-2- | 119-34-6 | No | No | - | - | - | - | - | - | - | - | 2.86E-01 | 1.43E+02 | 9.12E-11 | 1 | - | - |
| Nitropropane, 2- | 79-46-9 | No | Yes | - | - | 2.70E-03 | U | - | - | 2.00E-02 | U | 6.16E-02 | 3.08E+01 | 4.87E-03 | 1 | - | 5.45E-07 |
| Nitropyrene, 4- | 57835-92-4 | No | No | 1.20E+00 | U | 1.10E-04 | U | - | - | - | - | 1.72E+02 | 8.61E+04 | 1.00E-06 | 1 | - | 3.28E-03 |
| Nitroquinoline-1-oxide, 4- | 56-57-5 | No | No | - | - | - | - | - | - | - | - | 8.02E+00 | 4.01E+03 | 1.11E-12 | 1 | - | - |
| Nitroso-N-ethylurea, N- | 759-73-9 | Yes | No | 2.70E+01 | U | 7.70E-03 | U | - | - | - | - | 4.20E-02 | 2.10E+01 | 5.40E-09 | 1 | - | 2.23E-07 |
| Nitroso-N-methylurea, N- | 684-93-5 | Yes | No | 1.20E+02 | U | 3.40E-02 | U | - | - | - | - | 2.20E-02 | 1.10E+01 | 4.05E-09 | 1 | - | 4.61E-08 |
| Nitroso-di-N-butylamine, N- | 924-16-3 | No | Yes | 5.40E+00 | U | 1.60E-03 | U | - | - | - | - | 1.83E+00 | 9.15E+02 | 5.40E-04 | 1 | - | 5.53E-06 |
| Nitroso-di-N-propylamine, N- | 621-64-7 | No | No | 7.00E+00 | U | 2.00E-03 | U | - | - | - | - | 5.50E-01 | 2.75E+02 | 2.20E-04 | 1 | - | 8.09E-06 |
| Nitrosodiethanolamine, N- | 1116-54-7 | No | No | 2.80E+00 | U | 8.00E-04 | U | - | - | - | - | 2.00E-03 | 1.00E+00 | 1.98E-10 | 1 | - | 5.62E-06 |
| Nitrosodiethylamine, N- | 55-18-5 | Yes | No | 1.50E+02 | U | 4.30E-02 | U | - | - | - | - | 1.66E-01 | 8.29E+01 | 1.48E-04 | 1 | - | 6.05E-08 |
| Nitrosodimethylamine, N- | 62-75-9 | Yes | Yes | 5.10E+01 | U | 1.40E-02 | U | 8.00E-06 | U | 4.00E-05 | U | 4.56E-02 | 2.28E+01 | 7.44E-05 | 1 | - | 2.75E-08 |
| Nitrosodiphenylamine, N- | 86-30-6 | No | No | 4.90E-03 | U | 2.60E-06 | U | - | - | - | - | 5.26E+00 | 2.63E+03 | 4.95E-05 | 1 | - | 6.66E-02 |
| Nitrosomethylethylamine, N- | 10595-95-6 | No | Yes | 2.20E+01 | U | 6.30E-03 | U | - | - | - | - | 8.70E-02 | 4.35E+01 | 5.89E-05 | 1 | - | 2.04E-07 |
| Nitrosomethylvinylamine, N- | 4549-40-0 | No | Yes | - | - | - | - | - | - | - | - | 8.70E-02 | 4.35E+01 | 1.47E-04 | 1 | - | - |
| Nitrosomorpholine [N-] | 59-89-2 | No | No | 6.70E+00 | U | 1.90E-03 | U | - | - | - | - | 4.50E-02 | 2.25E+01 | 1.00E-06 | 1 | - | 2.84E-06 |
| Nitrosopiperidine [N-] | 100-75-4 | No | No | 9.40E+00 | U | 2.70E-03 | U | - | - | - | - | 3.36E-01 | 1.68E+02 | 3.45E-05 | 1 | - | 4.41E-06 |
| Nitrosopyrrolidine, N- | 930-55-2 | No | No | 2.10E+00 | U | 6.10E-04 | U | - | - | - | - | 1.84E-01 | 9.19E+01 | 2.00E-06 | 1 | - | 1.42E-05 |
| Nitrotoluene, 4-Amino-2- | 119-32-4 | No | No | - | - | - | - | - | - | - | - | 3.58E-01 | 1.79E+02 | 3.39E-07 | 1 | - | - |
| Nitrotoluene, m- | 99-08-1 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 7.26E-01 | 3.63E+02 | 3.80E-04 | 1 | - | 1.62E-04 |
| Nitrotoluene, o- | 88-72-2 | No | Yes | 2.20E-01 | U | - | - | 9.00E-04 | U | - | - | 7.42E-01 | 3.71E+02 | 5.11E-04 | 1 | - | 2.96E-04 |
| Nitrotoluene, p- | 99-99-0 | No | No | 1.60E-02 | U | - | - | 4.00E-03 | U | - | - | 7.26E-01 | 3.63E+02 | 2.30E-04 | 1 | - | 3.95E-03 |
| Nonachlor, trans- | 39765-80-5 | No | Yes | - | - | - | - | - | - | - | - | 2.26E+02 | 1.13E+05 | 1.01E-03 | 1 | - | - |
| Nonane, n- | 111-84-2 | No | Yes | - | - | - | - | 3.00E-04 | U | 2.00E-02 | U | 1.59E+00 | 7.96E+02 | 1.39E+02 | 1 | - | 7.47E-03 |
| Nonanol, n- | 143-08-8 | No | Yes | - | - | - | - | - | - | - | - | 1.40E-01 | 6.98E+01 | 1.26E-03 | 1 | - | - |
| Norflurazon | 27314-13-2 | No | No | - | - | - | - | 1.50E-02 | U | - | - | 6.24E+00 | 3.12E+03 | 1.40E-08 | 1 | - | 1.86E-01 |
| OCDD | 3268-87-9 | No | No | 3.90E+01 | U | 1.14E-02 | U | 2.33E-06 | U | 1.33E-04 | U | 3.88E+03 | 1.94E+06 | 2.76E-04 | 1 | - | 7.75E-03 |
| OCDF | 39001-02-0 | No | No | 3.90E+01 | U | 1.14E-02 | U | 2.33E-06 | U | 1.33E-04 | U | 2.18E+03 | 1.09E+06 | 7.73E-05 | 1 | - | 4.36E-03 |
| Octabromodiphenyl Ether | 32536-52-0 | No | No | - | - | - | - | 3.00E-03 | U | - | - | 1.98E+02 | 9.90E+04 | 3.06E-06 | 1 | - | 1.19E+00 |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H [*] | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------------|--|----------------------|-----------------------|
| Octachlorostyrene | 29082-74-4 | No | Yes | - | - | - | - | - | - | - | - | 1.10E+02 | 5.51E+04 | 9.40E-03 | 1 | - | - |
| Octadecanoic Acid | 57-11-4 | No | No | - | - | - | - | - | - | - | - | 2.34E+01 | 1.17E+04 | 1.95E-05 | 1 | - | - |
| Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) | 2691-41-0 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 1.06E+00 | 5.32E+02 | 3.54E-08 | 1 | - | 1.27E-01 |
| Octahydrotrimethylmethylethylphenanthrenol | 511-15-9 | No | No | - | - | - | - | - | - | - | - | 7.90E+02 | 3.95E+05 | 2.40E-05 | 1 | - | - |
| Octamethylpyrophosphoramidate | 152-16-9 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 4.02E-02 | 2.01E+01 | 1.54E-08 | 1 | - | 9.63E-04 |
| Octanol, n- | 111-87-5 | No | Yes | - | - | - | - | - | - | - | - | 7.66E-02 | 3.83E+01 | 1.00E-03 | 1 | - | - |
| Octanone, 2- | 111-13-7 | No | Yes | - | - | - | - | - | - | - | - | 9.96E-02 | 4.98E+01 | 7.69E-03 | 1 | - | - |
| Octanone, 3- | 106-68-3 | No | Yes | - | - | - | - | - | - | - | - | 1.04E-01 | 5.21E+01 | 5.31E-03 | 1 | - | - |
| Octyl Phthalate, di-N- | 117-84-0 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 2.82E+02 | 1.41E+05 | 1.05E-04 | 1 | - | 5.66E+00 |
| Oleic acid | 112-80-1 | No | Yes | - | - | - | - | - | - | - | - | 2.34E+01 | 1.17E+04 | 1.83E-03 | 1 | - | - |
| Oleum | 8014-95-7 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Oryzalin | 19044-88-3 | No | No | 7.79E-03 | U | - | - | 1.40E-01 | U | - | - | 1.65E+00 | 8.25E+02 | 7.81E-08 | 1 | - | 1.47E-02 |
| Oxadiazon | 19666-30-9 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 1.00E+01 | 5.00E+03 | 2.97E-06 | 1 | - | 4.84E-02 |
| Oxamyl | 23135-22-0 | No | No | - | - | - | - | 2.50E-02 | U | - | - | 2.00E-02 | 1.00E+01 | 9.69E-09 | 1 | 4.40E-02 | 1.10E-02 |
| Oxychlorane | 27304-13-8 | No | No | - | - | - | - | - | - | - | - | 3.10E+01 | 1.55E+04 | 3.52E-06 | 1 | - | - |
| Oxyfluorfen | 42874-03-3 | No | No | 7.32E-02 | U | - | - | 3.00E-02 | U | - | - | 7.98E+01 | 3.99E+04 | 3.35E-05 | 1 | - | 4.29E-02 |
| Ozone | 10028-15-6 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Paclitaxel | 76738-62-0 | No | No | - | - | - | - | 1.30E-02 | U | - | - | 1.85E+00 | 9.23E+02 | 3.39E-09 | 1 | - | 4.63E-02 |
| Paraquat Dichloride | 1910-42-5 | No | No | - | - | - | - | 4.50E-03 | U | - | - | 1.36E+01 | 6.78E+03 | 1.32E-11 | 1 | - | 1.24E-01 |
| Parathion | 56-38-2 | No | No | - | - | - | - | 6.00E-03 | U | - | - | 4.84E+00 | 2.42E+03 | 1.22E-05 | 1 | - | 4.32E-02 |
| PeCDD, 2,3,7,8- | 36088-22-9 | No | No | 1.30E+05 | U | 3.80E+01 | U | 7.00E-10 | U | 4.00E-08 | U | 8.66E+02 | 4.33E+05 | 8.99E-05 | 1 | - | 5.19E-07 |
| PeCDF, 1,2,3,7,8- | 57117-41-6 | No | No | 3.90E+03 | U | 1.14E+00 | U | 2.33E-08 | U | 1.33E-06 | U | 4.66E+02 | 2.33E+05 | 2.05E-04 | 1 | - | 9.31E-06 |
| PeCDF, 2,3,4,7,8- | 57117-31-4 | No | No | 3.90E+04 | U | 1.14E+01 | U | 2.33E-09 | U | 1.33E-07 | U | 4.66E+02 | 2.33E+05 | 2.05E-04 | 1 | - | 9.31E-07 |
| Pebulate | 1114-71-2 | No | Yes | - | - | - | - | 5.00E-02 | U | - | - | 5.98E-01 | 2.99E+02 | 9.69E-03 | 1 | - | 4.48E-02 |
| Pendimethalin | 40487-42-1 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 1.12E+01 | 5.62E+03 | 3.50E-05 | 1 | - | 1.56E-01 |
| Pentabromodiphenyl Ether | 32534-81-9 | No | Yes | - | - | - | - | 2.00E-03 | U | - | - | 4.34E+01 | 2.17E+04 | 4.42E-03 | 1 | - | 1.75E-01 |
| Pentabromodiphenyl ether, 2,2',4,4',5'- (BDE-99) | 60348-60-9 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 4.34E+01 | 2.17E+04 | 4.82E-05 | 1 | - | 8.74E-03 |
| Pentachloroaniline | 527-20-8 | No | No | - | - | - | - | - | - | - | - | 2.48E+01 | 1.24E+04 | 1.74E-05 | 1 | - | - |
| Pentachlorobenzene | 608-93-5 | No | Yes | - | - | - | - | 8.00E-04 | U | - | - | 7.42E+00 | 3.71E+03 | 2.87E-02 | 1 | - | 2.41E-03 |
| Pentachlorobiphenyl, 2',3,4,4',5'- (PCB 123) | 65510-44-3 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 2.62E+02 | 1.31E+05 | 7.77E-03 | 1 | - | 1.04E-03 |
| Pentachlorobiphenyl, 2,3',4,4',5'- (PCB 118) | 31508-00-6 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 2.56E+02 | 1.28E+05 | 1.18E-02 | 1 | - | 1.01E-03 |
| Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105) | 32598-14-4 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 2.62E+02 | 1.31E+05 | 1.16E-02 | 1 | - | 1.04E-03 |
| Pentachlorobiphenyl, 2,3,4,4',5'- (PCB 114) | 74472-37-0 | No | Yes | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 2.62E+02 | 1.31E+05 | 3.78E-03 | 1 | - | 1.04E-03 |
| Pentachlorobiphenyl, 3,3',4,4',5'- (PCB 126) | 57465-28-8 | No | Yes | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 2.56E+02 | 1.28E+05 | 7.77E-03 | 1 | - | 3.04E-07 |
| Pentachlorocyclopentadiene | 25329-35-5 | No | Yes | - | - | - | - | - | - | - | - | 1.88E+00 | 9.41E+02 | 2.45E-01 | 1 | - | - |
| Pentachlorodibenzo-p-dioxin, 1,2,3,7,8- | 40321-76-4 | No | No | 1.30E+05 | U | 3.80E+01 | U | 7.00E-10 | U | 4.00E-08 | U | 8.32E+02 | 4.16E+05 | 1.07E-04 | 1 | - | 4.99E-07 |
| Pentachloroethane | 76-01-7 | No | Yes | 9.00E-02 | U | - | - | - | - | - | - | 2.72E-01 | 1.36E+02 | 7.93E-02 | 1 | - | 3.10E-04 |
| Pentachloronitrobenzene | 82-68-8 | No | Yes | 2.60E-01 | U | - | - | 3.00E-03 | U | - | - | 1.20E+01 | 6.00E+03 | 1.81E-03 | 1 | - | 1.48E-03 |
| Pentachlorophenol | 87-86-5 | No | No | 4.00E-01 | U | 5.10E-06 | U | 5.00E-03 | U | - | - | 1.18E+00 | 5.92E+02 | 1.00E-06 | 1 | 1.38E-03 | 5.72E-05 |
| Pentaerythritol tetranitrate (PETN) | 78-11-5 | No | No | 4.00E-03 | U | - | - | 2.00E-03 | U | - | - | 1.30E+00 | 6.48E+02 | 5.40E-08 | 1 | - | 5.76E-03 |
| Pentamethyl dipropylentriamine | 3855-32-1 | No | No | - | - | - | - | - | - | - | - | 2.42E-01 | 1.21E+02 | 2.00E-09 | 1 | - | - |
| Pentane, n- | 109-66-0 | No | Yes | - | - | - | - | - | - | 1.00E+00 | U | 1.44E-01 | 7.22E+01 | 5.11E+01 | 1 | - | 1.02E+00 |
| Pentyl Alcohol, N- | 71-41-0 | No | Yes | - | - | - | - | - | - | - | - | 1.27E-02 | 6.33E+00 | 5.31E-04 | 1 | - | - |
| Perchlorate and Perchlorate Salts | 14797-73-0 | No | No | - | - | - | - | 7.00E-04 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Perfluorobutane Sulfonate (PFBS) | 375-73-5 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1.23E-01 | 6.17E+01 | - | 1 | - | 1.30E-02 |
| Perfluorooctane Sulfonate (PFOS) | 1763-23-1 | No | No | - | - | - | - | 2.00E-05 | U | - | - | 7.44E-01 | 3.72E+02 | - | 1 | - | 3.79E-05 |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Screening Levels (RSL) for Soil to Groundwater

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H [*] | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|---|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------------|--|----------------------|-----------------------|
| Perfluorooctanoic acid (PFOA) | 335-67-1 | No | No | 7.00E-02 | U | - | - | 2.00E-05 | U | - | - | 2.30E-01 | 1.15E+02 | - | 1 | - | 1.72E-05 |
| Permethrin | 52645-53-1 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 2.38E+02 | 1.19E+05 | 7.65E-05 | 1 | - | 2.39E+01 |
| Perylene | 198-55-0 | No | No | - | - | - | - | - | - | - | - | 1.20E+03 | 5.99E+05 | 1.49E-04 | 1 | - | - |
| Pesticides (total) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Pesticides, organochlorinated (each) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Pesticides, organochlorinated (total) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Phenacetin | 62-44-2 | No | No | 2.20E-03 | U | 6.30E-07 | U | - | - | - | - | 8.20E-02 | 4.10E+01 | 8.71E-09 | 1 | - | 9.68E-03 |
| Phenanthrene | 85-01-8 | No | Yes | - | - | - | - | - | - | - | - | 3.34E+01 | 1.67E+04 | 1.73E-03 | 1 | - | - |
| Phenmedipham | 13684-63-4 | No | No | - | - | - | - | 2.40E-01 | U | - | - | 5.18E+00 | 2.59E+03 | 3.44E-11 | 1 | - | 2.05E+00 |
| Phenol | 108-95-2 | No | No | - | - | - | - | 3.00E-01 | U | 2.00E-01 | U | 3.74E-01 | 1.87E+02 | 1.36E-05 | 1 | - | 3.31E-01 |
| Phenol, 2-(1-methylethoxy)-, methylcarbamate | 114-26-1 | No | No | - | - | - | - | 4.00E-03 | U | - | - | 1.20E-01 | 6.00E+01 | 5.85E-08 | 1 | - | 2.51E-03 |
| Phenothiazine | 92-84-2 | No | No | - | - | - | - | 5.00E-04 | U | - | - | 2.96E+00 | 1.48E+03 | 1.14E-06 | 1 | - | 1.36E-03 |
| Phenyl Isothiocyanate | 103-72-0 | No | Yes | - | - | - | - | 2.00E-04 | U | - | - | 4.38E-01 | 2.19E+02 | 1.21E-01 | 1 | - | 1.70E-04 |
| Phenylenediamine, m- | 108-45-2 | No | No | - | - | - | - | 6.00E-03 | U | - | - | 6.76E-02 | 3.38E+01 | 5.11E-08 | 1 | - | 3.21E-03 |
| Phenylenediamine, o- | 95-54-5 | No | No | 1.20E-01 | U | - | - | 4.00E-03 | U | - | - | 6.90E-02 | 3.45E+01 | 2.94E-07 | 1 | - | 1.74E-04 |
| Phenylenediamine, p- | 106-50-3 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 6.76E-02 | 3.38E+01 | 2.75E-08 | 1 | - | 5.35E-04 |
| Phenylmercuric Acetate | 62-38-4 | No | No | - | - | - | - | 8.00E-05 | U | - | - | 1.13E-01 | 5.64E+01 | 2.31E-08 | 1 | - | 5.00E-05 |
| Phenylphenol, 2- | 90-43-7 | No | No | 1.94E-03 | U | - | - | - | - | - | - | 1.34E+01 | 6.72E+03 | 4.29E-05 | 1 | - | 4.08E-01 |
| Phorate | 298-02-2 | No | No | - | - | - | - | 2.00E-04 | U | - | - | 9.20E-01 | 4.60E+02 | 1.79E-04 | 1 | - | 3.39E-04 |
| Phosmet | 732-11-6 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 2.00E-02 | 1.00E+01 | 3.43E-07 | 1 | - | 8.20E-03 |
| Phosphine | 7803-51-2 | No | Yes | - | - | - | - | 3.00E-04 | U | 3.00E-04 | U | - | - | 0.00E+00 | 1 | - | - |
| Phosphoric Acid | 7664-38-2 | No | No | - | - | - | - | 4.86E+01 | U | 1.00E-02 | U | - | - | 0.00E+00 | 1 | - | - |
| Phosphorus (total) | NA | No | No | - | - | - | - | - | - | - | - | 3.50E+00 | - | 0.00E+00 | 1 | - | - |
| Phosphorus pentoxide | 1314-56-3 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Phosphorus, White | 7723-14-0 | No | Yes | - | - | - | - | 2.00E-05 | U | - | - | 3.50E+00 | 1.12E+03 | 0.00E+00 | 1 | - | 1.48E-04 |
| Phthalates (total) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Phthalic Acid, P- | 100-21-0 | No | No | - | - | - | - | 1.00E+00 | U | - | - | 1.58E-01 | 7.92E+01 | 1.59E-11 | 1 | - | 6.77E-01 |
| Phthalic Acid, m- | 121-91-5 | No | No | - | - | - | - | - | - | - | - | 1.58E-01 | 7.92E+01 | 1.59E-11 | 1 | - | - |
| Phthalic Acid, o- | 88-99-3 | No | No | - | - | - | - | - | - | - | - | 1.62E-01 | 8.09E+01 | 8.18E-10 | 1 | - | - |
| Phthalic Anhydride | 85-44-9 | No | No | - | - | - | - | 2.00E+00 | U | 2.00E-02 | U | 2.00E-02 | 1.00E+01 | 6.66E-07 | 1 | - | 8.51E-01 |
| Picloram | 1918-02-1 | No | No | - | - | - | - | 7.00E-02 | U | - | - | 7.76E-02 | 3.88E+01 | 2.18E-12 | 1 | 1.39E-01 | 3.78E-02 |
| Picoline, 2- | 109-06-8 | No | Yes | - | - | - | - | - | - | - | - | 2.30E-01 | 1.15E+02 | 4.07E-04 | 1 | - | - |
| Picramic Acid (2-Amino-4,6-dinitrophenol) | 96-91-3 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 4.54E-01 | 2.27E+02 | 3.99E-10 | 1 | - | 1.30E-04 |
| Picric Acid (2,4,6-Trinitrophenol) | 88-89-1 | No | No | - | - | - | - | 9.00E-04 | U | - | - | 4.50E+00 | 2.25E+03 | 6.95E-10 | 1 | - | 8.36E-03 |
| Piperidine | 110-89-4 | No | Yes | - | - | - | - | - | - | - | - | 1.09E-01 | 5.47E+01 | 1.82E-04 | 1 | - | - |
| Pirimiphos, Methyl | 29232-93-7 | No | No | - | - | - | - | 6.67E-05 | U | - | - | 7.50E-01 | 3.75E+02 | 2.87E-05 | 1 | - | 7.72E-05 |
| Polybrominated Biphenyls | 59536-65-1 | No | No | 3.00E+01 | U | 8.60E-03 | U | 7.00E-06 | U | - | - | - | - | - | 1 | - | - |
| Polychlorinated Biphenyls (low risk) | 1336-36-3 | No | Yes | 4.00E-01 | U | 1.00E-04 | U | - | - | - | - | 1.56E+02 | 7.81E+04 | 1.70E-02 | 1 | 7.82E-02 | 6.82E-03 |
| Polycyclic aromatic hydrocarbons (PAH), Total | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Polycyclic aromatic hydrocarbons (PAH), Total (high molecular weight) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Polycyclic aromatic hydrocarbons (PAH), Total (low molecular weight) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Polycyclic chlorinated hydrocarbons (total) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Polymeric Methylene Diphenyl Diisocyanate (PMDI) | 9016-87-9 | No | No | - | - | - | - | - | - | 6.00E-04 | U | 2.00E+07 | 1.00E+10 | 5.40E-10 | 1 | - | - |
| Polyphosphoric acid | 8017-16-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |

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Myrtle Beach, South Carolina
**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

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| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Potassium | 7440-09-7 | No | No | - | - | - | - | - | - | - | - | 5.50E+00 | - | 0.00E+00 | 1 | - | - |
| Potassium Cyanide | 151-50-8 | No | No | - | - | - | - | 2.00E-03 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Potassium Perchlorate | 7778-74-7 | No | No | - | - | - | - | 7.00E-04 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Potassium Perfluorobutane Sulfonate | 29420-49-3 | No | No | - | - | - | - | 2.00E-02 | U | - | - | - | - | 3.59E-11 | 1 | - | - |
| Potassium Perfluorooctane Sulfonate | 2795-39-3 | No | No | - | - | - | - | 2.00E-05 | U | - | - | - | - | 8.18E-05 | 1 | - | - |
| Potassium Silver Cyanide | 506-61-6 | No | No | - | - | - | - | 5.00E-03 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Potassium tripolyphosphate | 13845-36-8 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Praseodymium | 7440-10-0 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Praseodymium Chloride (Stable, Nonradioactive) | 10361-79-2 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Prochloraz | 67747-09-5 | No | No | 1.50E-01 | U | - | - | 9.00E-03 | U | - | - | 4.86E+00 | 2.43E+03 | 6.70E-07 | 1 | - | 1.90E-03 |
| Profluralin | 26399-36-0 | No | Yes | - | - | - | - | 6.00E-03 | U | - | - | 6.10E+01 | 3.05E+04 | 1.19E-02 | 1 | - | 1.59E-01 |
| Promethium | 7440-12-2 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Prometon | 1610-18-0 | No | No | - | - | - | - | 1.50E-02 | U | - | - | 2.74E-01 | 1.37E+02 | 3.72E-08 | 1 | - | 1.20E-02 |
| Prometryn | 7287-19-6 | No | No | - | - | - | - | 4.00E-02 | U | - | - | 1.31E+00 | 6.56E+02 | 4.87E-07 | 1 | - | 9.05E-02 |
| Propachlor | 1918-16-7 | No | No | - | - | - | - | 1.30E-02 | U | - | - | 4.10E-01 | 2.05E+02 | 1.47E-05 | 1 | - | 1.50E-02 |
| Propanil | 709-98-8 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 3.52E-01 | 1.76E+02 | 6.99E-08 | 1 | - | 4.52E-03 |
| Propanoic acid, 2-(2,4-dichlorophenoxy)- | 120-36-5 | No | No | - | - | - | - | - | - | - | - | 9.70E-02 | 4.85E+01 | 3.55E-09 | 1 | - | - |
| Propargite | 2312-35-8 | No | No | 3.27E-02 | U | - | - | 4.00E-02 | U | - | - | 7.34E+01 | 3.67E+04 | 2.62E-05 | 1 | - | 6.77E-02 |
| Propargyl Alcohol | 107-19-7 | No | Yes | - | - | - | - | 2.00E-03 | U | - | - | 3.80E-03 | 1.90E+00 | 4.70E-05 | 1 | - | 8.15E-04 |
| Propazine | 139-40-2 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 6.88E-01 | 3.44E+02 | 1.88E-07 | 1 | - | 3.05E-02 |
| Propham | 122-42-9 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 4.38E-01 | 2.19E+02 | 7.52E-06 | 1 | - | 2.24E-02 |
| Propiconazole | 60207-90-1 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 3.12E+00 | 1.56E+03 | 7.03E-08 | 1 | - | 5.35E-01 |
| Propionaldehyde | 123-38-6 | No | Yes | - | - | - | - | - | - | 8.00E-03 | U | 2.00E-03 | 1.00E+00 | 3.00E-03 | 1 | - | 3.37E-04 |
| Propionitrile | 107-12-0 | No | Yes | - | - | - | - | - | - | - | - | 1.70E-02 | 8.51E+00 | 1.51E-03 | 1 | - | - |
| Propionitrile, 3-(NN-dimethylamino) | 1738-25-6 | No | Yes | - | - | - | - | - | - | - | - | 1.99E-02 | 9.97E+00 | 8.22E-07 | 1 | - | - |
| Propyl Alcohol, n- | 71-23-8 | No | Yes | - | - | - | - | - | - | - | - | 3.80E-03 | 1.90E+00 | 3.03E-04 | 1 | - | - |
| Propyl benzene | 103-65-1 | No | Yes | - | - | - | - | 1.00E-01 | U | 1.00E+00 | U | 1.63E+00 | 8.13E+02 | 4.29E-01 | 1 | - | 1.22E-01 |
| Propylene | 115-07-1 | No | Yes | - | - | - | - | - | - | 3.00E+00 | U | 4.34E-02 | 2.17E+01 | 8.01E+00 | 1 | - | 6.00E-01 |
| Propylene Glycol | 57-55-6 | No | No | - | - | - | - | 2.00E+01 | U | - | - | 2.00E-03 | 1.00E+00 | 5.27E-07 | 1 | - | 8.09E+00 |
| Propylene Glycol Dinitrate | 6423-43-4 | No | No | - | - | - | - | - | - | 2.72E-04 | U | 1.21E-01 | 6.07E+01 | 3.85E-05 | 1 | - | - |
| Propylene Glycol Monoethyl Ether | 1569-02-4 | No | Yes | - | - | - | - | - | - | - | - | 2.60E-03 | 1.30E+00 | 3.02E-06 | 1 | - | - |
| Propylene Glycol Monomethyl Ether | 107-98-2 | No | Yes | - | - | - | - | 7.00E-01 | U | 2.00E+00 | U | 2.00E-03 | 1.00E+00 | 3.76E-05 | 1 | - | 6.49E-02 |
| Propylene Oxide | 75-56-9 | No | Yes | 2.40E-01 | U | 3.70E-06 | U | - | - | 3.00E-02 | U | 1.04E-02 | 5.19E+00 | 2.85E-03 | 1 | - | 5.60E-05 |
| Propyzamide | 23950-58-5 | No | No | - | - | - | - | 7.50E-02 | U | - | - | 8.10E-01 | 4.05E+02 | 3.99E-07 | 1 | - | 1.19E-01 |
| Prussian Blue (Ferric Ferrocyanide) | 14038-43-8 | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Pyrazinyl phosphorothioate, O,O-diethyl O-2- | 297-97-2 | No | No | - | - | - | - | - | - | - | - | 7.90E-01 | 3.95E+02 | 3.52E-05 | 1 | - | - |
| Pyrene | 129-00-0 | No | Yes | - | - | - | - | 3.00E-02 | U | - | - | 1.09E+02 | 5.43E+04 | 4.87E-04 | 1 | - | 1.32E+00 |
| Pyridine | 110-86-1 | No | Yes | - | - | - | - | 1.00E-03 | U | - | - | 1.43E-01 | 7.17E+01 | 4.50E-04 | 1 | - | 6.80E-04 |
| Quinalphos | 13593-03-8 | No | No | - | - | - | - | 5.00E-04 | U | - | - | 8.38E+00 | 4.19E+03 | 1.90E-06 | 1 | - | 4.35E-03 |
| Quinoline | 91-22-5 | No | No | 3.00E+00 | U | - | - | - | - | - | - | 3.08E+00 | 1.54E+03 | 6.83E-05 | 1 | - | 7.83E-05 |
| Quizalofop-ethyl | 76578-14-8 | No | No | - | - | - | - | 9.00E-03 | U | - | - | 1.55E+01 | 7.74E+03 | 4.33E-07 | 1 | - | 1.92E-01 |
| Refractory Ceramic Fibers | NA | No | No | - | - | - | - | - | - | 3.00E-02 | U | - | - | 0.00E+00 | 1 | - | - |
| Resmethrin | 10453-86-8 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 6.22E+02 | 3.11E+05 | 5.44E-06 | 1 | - | 4.20E+00 |
| Resorcinol | 108-46-3 | No | No | - | - | - | - | - | - | - | - | 4.82E-01 | 2.41E+02 | 4.04E-09 | 1 | - | - |
| Ronnel | 299-84-3 | No | Yes | - | - | - | - | 5.00E-02 | U | - | - | 8.92E+00 | 4.46E+03 | 1.31E-03 | 1 | - | 3.70E-01 |
| Rotenone | 83-79-4 | No | No | - | - | - | - | 4.00E-03 | U | - | - | 5.22E+02 | 2.61E+05 | 4.58E-12 | 1 | - | 3.19E+00 |
| Rubidium | 7440-17-7 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |

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| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Rubidium Chloride | 7791-11-9 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Rubidium Hydroxide | 1310-82-3 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Rubidium Iodide | 7790-29-6 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Safrole | 94-59-7 | Yes | No | 2.20E-01 | U | 6.30E-05 | U | - | - | - | - | 4.14E-01 | 2.07E+02 | 3.71E-04 | 1 | - | 5.88E-05 |
| Samarium Chloride (Stable, Nonradioactive) | 10361-82-7 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Samarium Nitrate (Stable, Nonradioactive) | 10361-83-8 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Scandium | 7440-20-2 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Selenious Acid | 7783-00-8 | No | No | - | - | - | - | 5.00E-03 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Selenite | 14124-67-5 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Selenium | 7782-49-2 | No | No | - | - | - | - | 5.00E-03 | U | 2.00E-02 | U | 5.00E+00 | - | 0.00E+00 | 1 | 2.60E-01 | 5.19E-02 |
| Selenium Sulfide | 7446-34-6 | No | No | - | - | - | - | 5.00E-03 | U | 2.00E-02 | U | - | - | 0.00E+00 | 1 | - | - |
| Selenourea | 630-10-4 | No | Yes | - | - | - | - | - | - | - | - | 2.40E-02 | 1.20E+01 | - | 1 | - | - |
| Sethoxydim | 74051-80-2 | No | No | - | - | - | - | 1.40E-01 | U | - | - | 8.74E+00 | 4.37E+03 | 8.83E-10 | 1 | - | 1.45E+00 |
| Silica (crystalline, respirable) | 7631-86-9 | No | No | - | - | - | - | - | - | 3.00E-03 | U | - | - | 0.00E+00 | 1 | - | - |
| Silicon | 7440-21-3 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Silver | 7440-22-4 | No | No | - | - | - | - | 5.00E-03 | U | - | - | 8.30E+00 | - | 0.00E+00 | 1 | - | 7.99E-02 |
| Silver Cyanide | 506-64-9 | No | No | - | - | - | - | 1.00E-01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Simazine | 122-34-9 | No | No | 1.20E-01 | U | - | - | 5.00E-03 | U | - | - | 2.94E-01 | 1.47E+02 | 3.85E-08 | 1 | 1.98E-03 | 3.00E-04 |
| Sodium | 7440-23-5 | No | No | - | - | - | - | - | - | - | - | 1.00E+02 | - | 0.00E+00 | 1 | - | - |
| Sodium Acifluorfen | 62476-59-9 | No | No | - | - | - | - | 1.30E-02 | U | - | - | 7.76E+00 | 3.88E+03 | 2.47E-09 | 1 | - | 2.07E-01 |
| Sodium Azide | 26628-22-8 | No | No | - | - | - | - | 4.00E-03 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sodium Cyanide | 143-33-9 | No | No | - | - | - | - | 1.00E-03 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sodium Dichromate | 10588-01-9 | Yes | No | 5.00E-01 | U | 1.50E-01 | U | 2.00E-02 | U | 2.00E-04 | U | - | - | 0.00E+00 | 1 | - | - |
| Sodium Diethyldithiocarbamate | 148-18-5 | No | No | 2.70E-01 | U | - | - | 3.00E-02 | U | - | - | 4.10E-01 | 2.05E+02 | - | 1 | - | 1.76E-04 |
| Sodium Fluoride | 7681-49-4 | No | No | - | - | - | - | 5.00E-02 | U | 1.30E-02 | U | - | - | 0.00E+00 | 1 | - | - |
| Sodium Fluoroacetate | 62-74-8 | No | No | - | - | - | - | 2.00E-05 | U | - | - | 2.88E-03 | 1.44E+00 | 4.46E-05 | 1 | - | 8.14E-06 |
| Sodium Hydroxide | 1310-73-2 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sodium Metavanadate | 13718-26-8 | No | No | - | - | - | - | 1.00E-03 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sodium Perchlorate | 7601-89-0 | No | No | - | - | - | - | 7.00E-04 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sodium Tungstate | 13472-45-2 | No | No | - | - | - | - | 8.00E-04 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sodium Tungstate Dihydrate | 10213-10-2 | No | No | - | - | - | - | 8.00E-04 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sodium acid pyrophosphate | 7758-16-9 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sodium aluminum phosphate (acidic) | 7785-88-8 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sodium aluminum phosphate (anhydrous) | 10279-59-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sodium aluminum phosphate (tetrahydrate) | 10305-76-7 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sodium hexametaphosphate | 10124-56-8 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sodium polyphosphate | 68915-31-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sodium trimetaphosphate | 7785-84-4 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sodium tripolyphosphate | 7758-29-4 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Stearyl Acetate | 822-23-1 | No | Yes | - | - | - | - | - | - | - | - | 1.65E+02 | 8.27E+04 | 8.87E-01 | 1 | - | - |
| Stirofos (Tetrachlorovinphos) | 961-11-5 | No | No | 2.40E-02 | U | - | - | 3.00E-02 | U | - | - | 2.76E+00 | 1.38E+03 | 7.52E-08 | 1 | - | 8.21E-03 |
| Strontium Chromate | 7789-06-2 | Yes | No | 5.00E-01 | U | 1.50E-01 | U | 2.00E-02 | U | 2.00E-04 | U | - | - | 0.00E+00 | 1 | - | - |
| Strontium, Stable | 7440-24-6 | No | No | - | - | - | - | 6.00E-01 | U | - | - | 3.50E+01 | - | 0.00E+00 | 1 | - | 4.22E+01 |
| Strychnine | 57-24-9 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1.08E+01 | 5.40E+03 | 3.09E-12 | 1 | - | 6.50E-03 |
| Styrene | 100-42-5 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E+00 | U | 8.92E-01 | 4.46E+02 | 1.12E-01 | 1 | 1.10E-01 | 1.33E-01 |
| Styrene-Acrylonitrile (SAN) Trimer | NA | No | No | - | - | - | - | 3.00E-03 | U | - | - | - | - | - | 1 | - | - |
| Sulfate | 14808-79-8 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Sulfide | 18496-25-8 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sulfite | 14265-45-3 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sulfolane | 126-33-0 | No | No | - | - | - | - | 1.00E-03 | U | 2.00E-03 | U | 1.82E-02 | 9.08E+00 | 1.98E-04 | 1 | - | 4.37E-04 |
| Sulfonylbis(4-chlorobenzene), 1,1'- | 80-07-9 | No | No | - | - | - | - | 8.00E-04 | U | - | - | 5.72E+00 | 2.86E+03 | 5.60E-06 | 1 | - | 6.51E-03 |
| Sulfur | 7704-34-9 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sulfur Dioxide | 7446-09-5 | No | Yes | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Sulfur Mustard | 505-60-2 | No | Yes | - | - | - | - | - | - | - | - | 4.80E-01 | 2.40E+02 | 1.00E-03 | 1 | - | - |
| Sulfur Trioxide | 7446-11-9 | No | Yes | - | - | - | - | - | - | 1.00E-03 | U | - | - | 0.00E+00 | 1 | - | - |
| Sulfuric Acid | 7664-93-9 | No | No | - | - | - | - | - | - | 1.00E-03 | U | - | - | 0.00E+00 | 1 | - | - |
| Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester | 140-57-8 | No | No | 2.50E-02 | U | 7.10E-06 | U | 5.00E-02 | U | - | - | 1.11E+01 | 5.55E+03 | 7.77E-06 | 1 | - | 1.51E-02 |
| TCDD, 2,3,7,8- | 1746-01-6 | No | Yes | 1.30E+05 | U | 3.80E+01 | U | 7.00E-10 | U | 4.00E-08 | U | 4.98E+02 | 2.49E+05 | 2.04E-03 | 1 | 1.49E-05 | 5.91E-08 |
| TCDF, 2,3,7,8- | 51207-31-9 | No | Yes | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 2.80E+02 | 1.40E+05 | 6.83E-04 | 1 | - | 3.32E-07 |
| TCMTB | 21564-17-0 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 6.74E+00 | 3.37E+03 | 2.65E-10 | 1 | - | 3.34E-01 |
| Tebuthiuron | 34014-18-1 | No | No | - | - | - | - | 7.00E-02 | U | - | - | 8.48E-02 | 4.24E+01 | 4.91E-09 | 1 | - | 3.88E-02 |
| Technetium | 7440-26-8 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Tellurium | 13494-80-9 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Temephos | 3383-96-8 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 1.90E+02 | 9.51E+04 | 8.01E-08 | 1 | - | 7.64E+00 |
| Terbacil | 5902-51-2 | No | No | - | - | - | - | 1.30E-02 | U | - | - | 1.00E-01 | 5.01E+01 | 4.91E-09 | 1 | - | 7.54E-03 |
| Terbufos | 13071-79-9 | No | Yes | - | - | - | - | 2.50E-05 | U | - | - | 2.00E+00 | 9.99E+02 | 9.81E-04 | 1 | - | 5.23E-05 |
| Terbutryn | 886-50-0 | No | No | - | - | - | - | 1.00E-03 | U | - | - | 1.21E+00 | 6.07E+02 | 8.79E-07 | 1 | - | 1.91E-03 |
| Test Chemical | NA | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Tetrabromodiphenyl ether, 2,2',4,4'- (BDE-47) | 5436-43-1 | No | No | - | - | - | - | 1.00E-04 | U | - | - | 2.64E+01 | 1.32E+04 | 1.21E-04 | 1 | - | 5.33E-03 |
| Tetrabutyl Lead | 1920-90-7 | No | Yes | - | - | - | - | - | - | - | - | 1.58E+02 | 7.88E+04 | 3.25E+02 | 1 | - | - |
| Tetrachloroaniline, 2,3,5,6- | 3481-20-7 | No | No | - | - | - | - | - | - | - | - | 1.48E+01 | 7.42E+03 | 2.35E-05 | 1 | - | - |
| Tetrachlorobenzene, 1,2,3,4- | 634-66-2 | No | Yes | - | - | - | - | - | - | - | - | 4.54E+00 | 2.27E+03 | 3.11E-02 | 1 | - | - |
| Tetrachlorobenzene, 1,2,4,5- | 95-94-3 | No | Yes | - | - | - | - | 3.00E-04 | U | - | - | 4.44E+00 | 2.22E+03 | 4.09E-02 | 1 | - | 7.91E-04 |
| Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77) | 32598-13-3 | No | No | 1.30E+01 | U | 3.80E-03 | U | 7.00E-06 | U | 4.00E-04 | U | 1.56E+02 | 7.81E+04 | 3.84E-04 | 1 | - | 9.37E-04 |
| Tetrachlorobiphenyl, 3,4,4',5- (PCB 81) | 70362-50-4 | No | Yes | 3.90E+01 | U | 1.14E-02 | U | 2.33E-06 | U | 1.33E-04 | U | 1.56E+02 | 7.81E+04 | 9.12E-03 | 1 | - | 6.18E-05 |
| Tetrachloroethane, 1,1,1,2- | 630-20-6 | No | Yes | 2.60E-02 | U | 7.40E-06 | U | 3.00E-02 | U | - | - | 1.72E-01 | 8.60E+01 | 1.02E-01 | 1 | - | 2.19E-04 |
| Tetrachloroethane, 1,1,2,2- | 79-34-5 | No | Yes | 2.00E-01 | U | 5.80E-05 | U | 2.00E-02 | U | - | - | 1.90E-01 | 9.49E+01 | 1.50E-02 | 1 | - | 2.96E-05 |
| Tetrachloroethylene | 127-18-4 | No | Yes | 2.10E-03 | U | 2.60E-07 | U | 6.00E-03 | U | 4.00E-02 | U | 1.90E-01 | 9.49E+01 | 7.24E-01 | 1 | 2.27E-03 | 1.84E-03 |
| Tetrachlorophenol, 2,3,4,5- | 4901-51-3 | No | No | - | - | - | - | - | - | - | - | 9.48E+00 | 4.74E+03 | 6.91E-06 | 1 | - | - |
| Tetrachlorophenol, 2,3,4,6- | 58-90-2 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 5.60E-01 | 2.80E+02 | 3.61E-04 | 1 | - | 1.81E-02 |
| Tetrachlorophenols (total) | 25167-83-3 | No | No | - | - | - | - | - | - | - | - | 5.94E+00 | 2.97E+03 | 3.61E-04 | 1 | - | - |
| Tetrachloroterephthalate, 2,3,5,6- | 2136-79-0 | No | No | - | - | - | - | - | - | - | - | 2.62E+00 | 1.31E+03 | 2.69E-11 | 1 | - | - |
| Tetrachlorotoluene, p- alpha, alpha, alpha- | 5216-25-1 | No | Yes | 2.00E+01 | U | - | - | - | - | - | - | 3.22E+00 | 1.61E+03 | 7.89E-03 | 1 | - | 4.54E-06 |
| Tetraethyl Dithiopyrophosphate | 3689-24-5 | No | No | - | - | - | - | 5.00E-04 | U | - | - | 5.32E-01 | 2.66E+02 | 1.82E-04 | 1 | - | 5.17E-04 |
| Tetraethyl Lead | 78-00-2 | No | Yes | - | - | - | - | 1.00E-07 | U | - | - | 1.30E+00 | 6.48E+02 | 2.32E+01 | 1 | - | 4.67E-07 |
| Tetrafluoroethane, 1,1,1,2- | 811-97-2 | No | Yes | - | - | - | - | - | - | 8.00E+01 | U | 1.72E-01 | 8.60E+01 | 2.04E+00 | 1 | - | 9.25E+00 |
| Tetrahydrofuran | 109-99-9 | No | Yes | - | - | - | - | 9.00E-01 | U | 2.00E+00 | U | 2.16E-02 | 1.08E+01 | 2.88E-03 | 1 | - | 7.50E-02 |
| Tetrahydrothiophene | 110-01-0 | No | Yes | - | - | - | - | - | - | - | - | 1.60E-01 | 8.00E+01 | 2.50E-02 | 1 | - | - |
| Tetramethyl Lead | 75-74-1 | No | Yes | - | - | - | - | - | - | - | - | 8.78E-02 | 4.39E+01 | 2.49E+01 | 1 | - | - |
| Tetramethylcyclohexane | 30501-43-0 | No | Yes | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Tetrapotassium phosphate | 7320-34-5 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Tetrapropyl Lead | 3440-75-3 | No | Yes | - | - | - | - | - | - | - | - | 1.43E+01 | 7.15E+03 | 1.05E+02 | 1 | - | - |
| Tetrasodium pyrophosphate | 7722-88-5 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |

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Screening Levels (RSL) for Soil to Groundwater**

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| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|---|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Tetryl (Trinitrophenylmethyl nitramine) | 479-45-8 | No | No | - | - | - | - | 2.00E-03 | U | - | - | 9.22E+00 | 4.61E+03 | 1.11E-07 | 1 | - | 3.72E-02 |
| Thallic Oxide | 1314-32-5 | No | No | - | - | - | - | 2.00E-05 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Thallium (I) Nitrate | 10102-45-1 | No | No | - | - | - | - | 1.00E-05 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Thallium (Soluble Salts) | 7440-28-0 | No | No | - | - | - | - | 1.00E-05 | U | - | - | 7.10E+01 | - | 0.00E+00 | 1 | 1.42E-01 | 1.42E-03 |
| Thallium Acetate | 563-68-8 | No | Yes | - | - | - | - | 1.00E-05 | U | - | - | 3.02E-03 | 1.51E+00 | - | 1 | - | 4.07E-06 |
| Thallium Carbonate | 6533-73-9 | No | Yes | - | - | - | - | 2.00E-05 | U | - | - | 5.76E-03 | 2.88E+00 | - | 1 | - | 8.25E-06 |
| Thallium Chloride | 7791-12-0 | No | No | - | - | - | - | 1.00E-05 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Thallium Selenite | 12039-52-0 | No | No | - | - | - | - | 1.00E-05 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Thallium Sulfate | 7446-18-6 | No | No | - | - | - | - | 2.00E-05 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Thifensulfuron-methyl | 79277-27-3 | No | No | - | - | - | - | 4.30E-02 | U | - | - | 1.02E-01 | 5.08E+01 | 1.67E-12 | 1 | - | 2.58E-02 |
| Thiobencarb | 28249-77-6 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 3.26E+00 | 1.63E+03 | 1.09E-05 | 1 | - | 5.51E-02 |
| Thiocyanates | NA | No | No | - | - | - | - | 2.00E-04 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Thiocyanic Acid | 463-56-9 | No | Yes | - | - | - | - | 2.00E-04 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Thiodiglycol | 111-48-8 | No | No | - | - | - | - | 7.00E-02 | U | - | - | 2.00E-03 | 1.00E+00 | 7.56E-08 | 1 | - | 2.83E-02 |
| Thiofanox | 39196-18-4 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 1.45E-01 | 7.24E+01 | 3.84E-07 | 1 | - | 1.82E-04 |
| Thiophanate, Methyl | 23564-05-8 | No | No | 1.16E-02 | U | - | - | 2.67E-02 | U | - | - | 6.54E-01 | 3.27E+02 | 4.95E-08 | 1 | - | 5.69E-03 |
| Thiophene | 110-02-1 | No | Yes | - | - | - | - | - | - | - | - | 1.60E-01 | 8.00E+01 | 9.28E-02 | 1 | - | - |
| Thiram | 137-26-8 | No | No | - | - | - | - | 1.50E-02 | U | - | - | 1.22E+00 | 6.11E+02 | 7.44E-06 | 1 | - | 4.17E-02 |
| Thorium | 7440-29-1 | No | No | - | - | - | - | - | - | - | - | 1.50E+05 | - | 0.00E+00 | 1 | - | - |
| Thymol | 89-83-8 | No | No | - | - | - | - | - | - | - | - | 2.94E+00 | 1.47E+03 | 1.97E-05 | 1 | - | - |
| Tin | 7440-31-5 | No | No | - | - | - | - | 6.00E-01 | U | - | - | 2.50E+02 | - | 0.00E+00 | 1 | - | 3.00E+02 |
| Titanium | 7440-32-6 | No | No | - | - | - | - | - | - | - | - | 1.00E+03 | - | 0.00E+00 | 1 | - | - |
| Titanium Tetrachloride | 7550-45-0 | No | Yes | - | - | - | - | - | - | 1.00E-04 | U | - | - | 0.00E+00 | 1 | - | - |
| Toluene | 108-88-3 | No | Yes | - | - | - | - | 8.00E-02 | U | 5.00E+00 | U | 4.68E-01 | 2.34E+02 | 2.71E-01 | 1 | 6.92E-01 | 7.62E-02 |
| Toluene-2,4-diisocyanate | 584-84-9 | No | Yes | - | - | 1.10E-05 | U | - | - | 8.00E-06 | U | 1.48E+01 | 7.42E+03 | 4.54E-04 | 1 | - | 2.51E-05 |
| Toluene-2,5-diamine | 95-70-5 | No | No | 1.80E-01 | U | - | - | 2.00E-04 | U | - | - | 1.11E-01 | 5.54E+01 | 3.04E-07 | 1 | - | 1.24E-04 |
| Toluene-2,6-diisocyanate | 91-08-7 | No | Yes | - | - | 1.10E-05 | U | - | - | 8.00E-06 | U | 1.52E+01 | 7.58E+03 | 4.54E-04 | 1 | - | 2.56E-05 |
| Toluenediamine, 2,3- | 2687-25-4 | No | No | - | - | - | - | - | - | - | - | 1.13E-01 | 5.65E+01 | 3.04E-07 | 1 | - | - |
| Toluenediamine, 3,4- | 496-72-0 | No | No | - | - | - | - | - | - | - | - | 1.11E-01 | 5.54E+01 | 3.06E-07 | 1 | - | - |
| Toluidine, o- (Methylaniline, 2-) | 95-53-4 | No | No | 1.60E-02 | U | 5.10E-05 | U | - | - | - | - | 2.30E-01 | 1.15E+02 | 8.09E-05 | 1 | - | 2.02E-03 |
| Toluidine, p- | 106-49-0 | No | No | 3.00E-02 | U | - | - | 4.00E-03 | U | - | - | 2.26E-01 | 1.13E+02 | 8.26E-05 | 1 | - | 1.07E-03 |
| Total Petroleum Hydrocarbons (Aliphatic High) | NA | No | Yes | - | - | - | - | 3.00E+00 | U | - | - | 9.64E+00 | 4.82E+03 | 3.34E+02 | 1 | - | 2.39E+02 |
| Total Petroleum Hydrocarbons (Aliphatic Low) | NA | No | Yes | - | - | - | - | - | - | 6.00E-01 | U | 2.64E-01 | 1.32E+02 | 7.36E+01 | 1 | - | 8.81E-01 |
| Total Petroleum Hydrocarbons (Aliphatic Medium) | NA | No | Yes | - | - | - | - | 1.00E-02 | U | 1.00E-01 | U | 1.59E+00 | 7.96E+02 | 1.39E+02 | 1 | - | 1.45E-01 |
| Total Petroleum Hydrocarbons (Aromatic High) | NA | No | No | - | - | - | - | 4.00E-02 | U | - | - | 1.11E+02 | 5.55E+04 | 3.62E-04 | 1 | - | 8.92E+00 |
| Total Petroleum Hydrocarbons (Aromatic Low) | NA | No | Yes | - | - | - | - | 4.00E-03 | U | 3.00E-02 | U | 2.92E-01 | 1.46E+02 | 2.27E-01 | 1 | - | 1.70E-03 |
| Total Petroleum Hydrocarbons (Aromatic Medium) | NA | No | Yes | - | - | - | - | 4.00E-03 | U | 3.00E-03 | U | 4.02E+00 | 2.01E+03 | 1.96E-02 | 1 | - | 2.30E-03 |
| Toxaphene | 8001-35-2 | No | No | 1.10E+00 | U | 3.20E-04 | U | - | - | - | - | 1.54E+02 | 7.72E+04 | 2.45E-04 | 1 | 4.64E-01 | 1.09E-02 |
| Tralomehrin | 66841-25-6 | No | No | - | - | - | - | 7.50E-03 | U | - | - | 3.82E+02 | 1.91E+05 | 1.61E-08 | 1 | - | 5.75E+00 |
| Tri-n-butyltin | 688-73-3 | No | Yes | - | - | - | - | 3.00E-04 | U | - | - | 1.62E+01 | 8.09E+03 | 6.21E+01 | 1 | - | 8.20E-03 |
| Triacetin | 102-76-1 | No | No | - | - | - | - | 8.00E+01 | U | - | - | 8.14E-02 | 4.07E+01 | 5.03E-07 | 1 | - | 4.50E+01 |
| Triadimefon | 43121-43-3 | No | No | - | - | - | - | 3.40E-02 | U | - | - | 5.98E-01 | 2.99E+02 | 3.32E-09 | 1 | - | 5.00E-02 |
| Triallate | 2303-17-5 | No | Yes | 7.17E-02 | U | - | - | 2.50E-02 | U | - | - | 2.02E+00 | 1.01E+03 | 4.91E-04 | 1 | - | 1.04E-03 |
| Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate) | 15136-87-5 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Triasulfuron | 82097-50-5 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 8.54E-01 | 4.27E+02 | 1.32E-11 | 1 | - | 2.11E-02 |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Screening Levels (RSL) for Soil to Groundwater

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|---|-------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Triaziquone | 68-76-8 | No | No | - | - | - | - | - | - | - | - | 2.14E-01 | 1.07E+02 | 3.78E-14 | 1 | - | - |
| Tribenuron-methyl | 101200-48-0 | No | No | - | - | - | - | 8.00E-03 | U | - | - | 1.89E-01 | 9.47E+01 | 4.17E-12 | 1 | - | 6.05E-03 |
| Tribromobenzene, 1,2,4- | 615-54-3 | No | Yes | - | - | - | - | 5.00E-03 | U | - | - | 1.23E+00 | 6.14E+02 | 1.39E-02 | 1 | - | 6.39E-03 |
| Tribromochloromethane | 594-15-0 | No | Yes | - | - | - | - | - | - | - | - | 8.78E-02 | 4.39E+01 | 1.62E-03 | 1 | - | - |
| Tribromodiphenyl Ether | 49690-94-0 | No | Yes | - | - | - | - | - | - | - | - | 1.65E+01 | 8.25E+03 | 8.30E-04 | 1 | - | - |
| Tribromophenol, 2,4,6- | 118-79-6 | No | No | - | - | - | - | 9.00E-03 | U | - | - | 1.61E+00 | 8.05E+02 | 1.45E-06 | 1 | - | 2.19E-02 |
| Tributyl Phosphate | 126-73-8 | No | No | 9.00E-03 | U | - | - | 1.00E-02 | U | - | - | 4.70E+00 | 2.35E+03 | 5.76E-05 | 1 | - | 2.55E-02 |
| Tributyltin | 56573-85-4 | No | Yes | - | - | - | - | - | - | - | - | 2.42E+01 | 1.21E+04 | 5.27E+01 | 1 | - | - |
| Tributyltin Compounds | NA | No | No | - | - | - | - | 3.00E-04 | U | - | - | - | - | - | 1 | - | - |
| Tributyltin Oxide | 56-35-9 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 5.18E+04 | 2.59E+07 | 1.23E-05 | 1 | - | 2.93E+01 |
| Tributyltin chloride | 1461-22-9 | No | Yes | - | - | - | - | - | - | - | - | 2.42E+01 | 1.21E+04 | 3.12E+00 | 1 | - | - |
| Tributyltin fluoride | 1983-10-4 | No | Yes | - | - | - | - | - | - | - | - | 2.42E+01 | 1.21E+04 | 3.39E+01 | 1 | - | - |
| Tributyltin linoleate | 24124-25-2 | No | Yes | - | - | - | - | - | - | - | - | 5.10E+04 | 2.55E+07 | 1.71E+02 | 1 | - | - |
| Tributyltin methacrylate | 2155-70-6 | No | Yes | - | - | - | - | - | - | - | - | 9.84E+00 | 4.92E+03 | 1.96E+00 | 1 | - | - |
| Tributyltin naphthenate | 85409-17-2 | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Tricaine Methanesulfonate | 886-86-2 | No | No | - | - | - | - | - | - | - | - | 1.18E-01 | 5.90E+01 | 6.66E-07 | 1 | - | - |
| Tricalcium phosphate | 7758-87-4 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Trichloro-1,2,2-trifluoroethane, 1,1,2- | 76-13-1 | No | Yes | - | - | - | - | 3.00E+01 | U | 5.00E+00 | U | 3.94E-01 | 1.97E+02 | 2.15E+01 | 1 | - | 2.56E+00 |
| Trichloro-2'-hydroxydiphenylether | 3380-34-5 | No | No | - | - | - | - | - | - | - | - | 4.68E+01 | 2.34E+04 | 2.04E-07 | 1 | - | - |
| Trichloroacetic Acid | 76-03-9 | No | No | 7.00E-02 | U | - | - | 2.00E-02 | U | - | - | 6.46E-03 | 3.23E+00 | 5.52E-07 | 1 | 1.24E-02 | 2.24E-04 |
| Trichloroaniline HCl, 2,4,6- | 33663-50-2 | No | No | 2.90E-02 | U | - | - | - | - | - | - | 2.54E+00 | 1.27E+03 | 2.94E-12 | 1 | - | 7.36E-03 |
| Trichloroaniline, 2,4,5- | 636-30-6 | No | No | - | - | - | - | - | - | - | - | 1.33E+00 | 6.67E+02 | 3.17E-05 | 1 | - | - |
| Trichloroaniline, 2,4,6- | 634-93-5 | No | No | 7.00E-03 | U | - | - | 3.00E-05 | U | - | - | 8.88E+00 | 4.44E+03 | 5.48E-05 | 1 | - | 3.61E-04 |
| Trichlorobenzene | 12002-48-1 | No | Yes | - | - | - | - | - | - | - | - | 2.66E+00 | 1.33E+03 | 7.73E-02 | 1 | - | - |
| Trichlorobenzene, 1,2,3- | 87-61-6 | No | Yes | - | - | - | - | 8.00E-04 | U | - | - | 2.76E+00 | 1.38E+03 | 5.11E-02 | 1 | - | 2.09E-03 |
| Trichlorobenzene, 1,2,4- | 120-82-1 | No | Yes | 2.90E-02 | U | - | - | 1.00E-02 | U | 2.00E-03 | U | 2.72E+00 | 1.36E+03 | 5.81E-02 | 1 | 2.05E-01 | 1.17E-03 |
| Trichloroethane, 1,1,1- | 71-55-6 | No | Yes | - | - | - | - | 2.00E+00 | U | 5.00E+00 | U | 8.78E-02 | 4.39E+01 | 7.03E-01 | 1 | 7.01E-02 | 2.81E-01 |
| Trichloroethane, 1,1,2- | 79-00-5 | No | Yes | 5.70E-02 | U | 1.60E-05 | U | 4.00E-03 | U | 2.00E-04 | U | 1.21E-01 | 6.07E+01 | 3.37E-02 | 1 | 1.62E-03 | 1.35E-05 |
| Trichloroethylene | 79-01-6 | Yes | Yes | 4.60E-02 | U | 4.10E-06 | U | 5.00E-04 | U | 2.00E-03 | U | 1.21E-01 | 6.07E+01 | 4.03E-01 | 1 | 1.79E-03 | 1.01E-04 |
| Trichlorofluoromethane | 75-69-4 | No | Yes | - | - | - | - | 3.00E-01 | U | - | - | 8.78E-02 | 4.39E+01 | 3.97E+00 | 1 | - | 3.32E-01 |
| Trichlorophenol, 2,4,5- | 95-95-4 | No | No | - | - | - | - | 1.00E-01 | U | - | - | 3.20E+00 | 1.60E+03 | 6.62E-05 | 1 | - | 4.03E-01 |
| Trichlorophenol, 2,4,6- | 88-06-2 | No | No | 1.10E-02 | U | 3.10E-06 | U | 1.00E-03 | U | - | - | 7.62E-01 | 3.81E+02 | 1.06E-04 | 1 | - | 1.16E-03 |
| Trichlorophenoxyacetic Acid, 2,4,5- | 93-76-5 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 2.14E-01 | 1.07E+02 | 3.55E-07 | 1 | - | 6.76E-03 |
| Trichlorophenoxypropionic acid, -2,4,5 | 93-72-1 | No | No | - | - | - | - | 8.00E-03 | U | - | - | 3.50E-01 | 1.75E+02 | 3.70E-07 | 1 | 2.75E-02 | 6.11E-03 |
| Trichloropropane, 1,1,2- | 598-77-6 | No | Yes | - | - | - | - | 5.00E-03 | U | - | - | 1.90E-01 | 9.49E+01 | 1.30E-02 | 1 | - | 3.46E-03 |
| Trichloropropane, 1,2,3- | 96-18-4 | Yes | Yes | 3.00E+01 | U | - | - | 4.00E-03 | U | 3.00E-04 | U | 2.32E-01 | 1.16E+02 | 1.40E-02 | 1 | - | 3.25E-07 |
| Trichloropropene, 1,2,3- | 96-19-5 | No | Yes | - | - | - | - | 3.00E-03 | U | 3.00E-04 | U | 2.32E-01 | 1.16E+02 | 7.20E-01 | 1 | - | 3.07E-05 |
| Trichlorotoluene, 2,3,6- | 2077-46-5 | No | Yes | - | - | - | - | - | - | - | - | 4.54E+00 | 2.27E+03 | 6.13E-02 | 1 | - | - |
| Trichlorotoluene, alpha 2,6- | 2014-83-7 | No | Yes | - | - | - | - | - | - | - | - | 2.40E+00 | 1.20E+03 | 1.17E-02 | 1 | - | - |
| Triclorophenols (total) | NA | No | No | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - |
| Tricresyl Phosphate (TCP) | 1330-78-5 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 9.42E+01 | 4.71E+04 | 3.30E-05 | 1 | - | 1.49E+00 |
| Tridiphane | 58138-08-2 | No | No | - | - | - | - | 3.00E-03 | U | - | - | 6.90E+00 | 3.45E+03 | 1.68E-05 | 1 | - | 1.28E-02 |
| Tridymite | 15468-32-3 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Triethyl Lead | 5224-23-7 | No | Yes | - | - | - | - | - | - | - | - | 4.42E-01 | 2.21E+02 | 1.40E+01 | 1 | - | - |
| Triethyl phosphorothioate [O,O,O-] | 126-68-1 | No | Yes | - | - | - | - | - | - | - | - | 2.76E-01 | 1.38E+02 | 1.10E-02 | 1 | - | - |
| Triethylamine | 121-44-8 | No | Yes | - | - | - | - | - | - | 7.00E-03 | U | 1.02E-01 | 5.08E+01 | 6.09E-03 | 1 | - | 4.41E-04 |
| Triethylene Glycol | 112-27-6 | No | No | - | - | - | - | 2.00E+00 | U | - | - | 2.00E-02 | 1.00E+01 | 1.29E-09 | 1 | - | 8.82E-01 |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|--|------------|----------|------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|----------------|-----------------|----------|--|----------------------|-----------------------|
| Trifluoroethane, 1,1,1- | 420-46-2 | No | Yes | - | - | - | - | - | - | 2.00E+01 | U | 8.78E-02 | 4.39E+01 | 3.15E+01 | 1 | - | 1.29E+01 |
| Trifluralin | 1582-09-8 | No | Yes | 7.70E-03 | U | - | - | 7.50E-03 | U | - | - | 3.28E+01 | 1.64E+04 | 4.21E-03 | 1 | - | 8.45E-02 |
| Trimagnesium phosphate | 7757-87-1 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Trimethyl Lead | 7442-13-9 | No | Yes | - | - | - | - | - | - | - | - | 6.36E-02 | 3.18E+01 | 5.97E+00 | 1 | - | - |
| Trimethyl Phosphate | 512-56-1 | No | No | 2.00E-02 | U | - | - | 1.00E-02 | U | - | - | 2.12E-02 | 1.06E+01 | 2.94E-07 | 1 | - | 8.60E-04 |
| Trimethyl-4-Propenyl-naphthalene, 1,2,3- | 26137-53-1 | No | Yes | - | - | - | - | - | - | - | - | 7.88E+01 | 3.94E+04 | 9.55E-03 | 1 | - | - |
| Trimethylbenzene, 1,2,3- | 526-73-8 | No | Yes | - | - | - | - | 1.00E-02 | U | 6.00E-02 | U | 1.25E+00 | 6.27E+02 | 1.78E-01 | 1 | - | 8.08E-03 |
| Trimethylbenzene, 1,2,4- | 95-63-6 | No | Yes | - | - | - | - | 1.00E-02 | U | 6.00E-02 | U | 1.23E+00 | 6.14E+02 | 2.52E-01 | 1 | - | 8.08E-03 |
| Trimethylbenzene, 1,3,5- | 108-67-8 | No | Yes | - | - | - | - | 1.00E-02 | U | 6.00E-02 | U | 1.20E+00 | 6.02E+02 | 3.59E-01 | 1 | - | 8.66E-03 |
| Trimethylethyl Lead | 1762-26-1 | No | Yes | - | - | - | - | - | - | - | - | 1.72E-01 | 8.60E+01 | 1.44E+01 | 1 | - | - |
| Trimethylpentane, 2,2,4- | 540-84-1 | No | Yes | - | - | - | - | - | - | - | - | 4.80E-01 | 2.40E+02 | 1.24E+02 | 1 | - | - |
| Trimethylpentene, 2,4,4- | 25167-70-8 | No | Yes | - | - | - | - | 1.00E-02 | U | - | - | 4.80E-01 | 2.40E+02 | 3.05E+01 | 1 | - | 2.21E-02 |
| Trinitrobenzene, 1,3,5- | 99-35-4 | No | No | - | - | - | - | 3.00E-02 | U | - | - | 3.36E+00 | 1.68E+03 | 2.66E-07 | 1 | - | 2.11E-01 |
| Trinitrotoluene, 2,4,6- | 118-96-7 | No | No | 3.00E-02 | U | - | - | 5.00E-04 | U | - | - | 5.62E+00 | 2.81E+03 | 8.50E-07 | 1 | - | 5.71E-03 |
| Triphenylphosphine Oxide | 791-28-6 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 3.90E+00 | 1.95E+03 | 2.15E-08 | 1 | - | 1.49E-01 |
| Triphenyltin | 668-34-8 | No | Yes | - | - | - | - | - | - | - | - | 6.72E+02 | 3.36E+05 | 3.21E-03 | 1 | - | - |
| Tripotassium phosphate | 7778-53-2 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Tripopyl Lead | 6618-03-7 | No | Yes | - | - | - | - | - | - | - | - | 2.68E+00 | 1.34E+03 | 3.27E+01 | 1 | - | - |
| Tris(1,3-Dichloro-2-propyl) Phosphate | 13674-87-8 | No | No | - | - | - | - | 2.00E-02 | U | - | - | 2.22E+01 | 1.11E+04 | 1.07E-07 | 1 | - | 7.99E-01 |
| Tris(1-chloro-2-propyl)phosphate | 13674-84-5 | No | No | - | - | - | - | 1.00E-02 | U | - | - | 3.20E+00 | 1.60E+03 | 2.44E-06 | 1 | - | 6.47E-02 |
| Tris(2,3-dibromopropyl)phosphate | 126-72-7 | No | Yes | 2.30E+00 | U | 6.60E-04 | U | - | - | - | - | 1.94E+01 | 9.71E+03 | 8.91E-04 | 1 | - | 1.33E-04 |
| Tris(2-chloroethyl)phosphate | 115-96-8 | No | No | 2.00E-02 | U | - | - | 7.00E-03 | U | - | - | 7.76E-01 | 3.88E+02 | 1.35E-04 | 1 | - | 3.75E-03 |
| Tris(2-ethylhexyl)phosphate | 78-42-2 | No | No | 3.20E-03 | U | - | - | 1.00E-01 | U | - | - | 4.94E+03 | 2.47E+06 | 3.21E-06 | 1 | - | 1.20E+02 |
| Trisbutoxyethyl Phosphate | 78-51-3 | No | No | - | - | - | - | - | - | - | - | 2.54E+00 | 1.27E+03 | 4.91E-10 | 1 | - | - |
| Trisodium phosphate | 7601-54-9 | No | No | - | - | - | - | 4.86E+01 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Trithion | 786-19-6 | No | No | - | - | - | - | - | - | - | - | 1.66E+01 | 8.31E+03 | 8.79E-06 | 1 | - | - |
| Tungsten | 7440-33-7 | No | No | - | - | - | - | 8.00E-04 | U | - | - | 1.50E+02 | - | 0.00E+00 | 1 | - | 2.40E-01 |
| Uranium (Soluble Salts) | NA | No | No | - | - | - | - | 2.00E-04 | U | 4.00E-05 | U | 4.50E+02 | - | 0.00E+00 | 1 | 1.35E+01 | 1.80E-01 |
| Urea | 57-13-6 | No | No | - | - | - | - | - | - | - | - | 6.30E-03 | 3.15E+00 | 1.38E-05 | 1 | - | - |
| Urethane | 51-79-6 | Yes | No | 1.00E+00 | U | 2.90E-04 | U | - | - | - | - | 2.42E-02 | 1.21E+01 | 2.63E-06 | 1 | - | 5.59E-06 |
| Vanadium Pentoxide | 1314-62-1 | No | No | - | - | 8.30E-03 | U | 9.00E-03 | U | 7.00E-06 | U | - | - | 0.00E+00 | 1 | - | - |
| Vanadium Sulfate | 36907-42-3 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Vanadium and Compounds | 7440-62-2 | No | No | - | - | - | - | 5.04E-03 | U | 1.00E-04 | U | 1.00E+03 | - | 0.00E+00 | 1 | - | 8.64E+00 |
| Vanadyl Sulfate | 27774-13-6 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Vernolate | 1929-77-7 | No | Yes | - | - | - | - | 1.00E-03 | U | - | - | 5.98E-01 | 2.99E+02 | 1.26E-03 | 1 | - | 8.88E-04 |
| Vinclozolin | 50471-44-8 | No | No | - | - | - | - | 1.20E-03 | U | - | - | 5.68E-01 | 2.84E+02 | 7.11E-07 | 1 | - | 1.63E-03 |
| Vinyl Acetate | 108-05-4 | No | Yes | - | - | - | - | 1.00E+00 | U | 2.00E-01 | U | 1.12E-02 | 5.58E+00 | 2.09E-02 | 1 | - | 8.70E-03 |
| Vinyl Bromide | 593-60-2 | No | Yes | - | - | 3.20E-05 | U | - | - | 3.00E-03 | U | 4.34E-02 | 2.17E+01 | 5.03E-01 | 1 | - | 5.06E-05 |
| Vinyl Chloride | 75-01-4 | Yes | Yes | 7.20E-01 | U | 4.40E-06 | U | 3.00E-03 | U | 1.00E-01 | U | 4.34E-02 | 2.17E+01 | 1.14E+00 | 1 | 6.90E-04 | 6.48E-06 |
| Warfarin | 81-81-2 | No | No | - | - | - | - | 3.00E-04 | U | - | - | 8.52E-01 | 4.26E+02 | 1.13E-07 | 1 | - | 5.91E-04 |
| Xylene, P- | 106-42-3 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 7.50E-01 | 3.75E+02 | 2.82E-01 | 1 | - | 1.88E-02 |
| Xylene, m- | 108-38-3 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 7.50E-01 | 3.75E+02 | 2.94E-01 | 1 | - | 1.88E-02 |
| Xylene, o- | 95-47-6 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 7.66E-01 | 3.83E+02 | 2.12E-01 | 1 | - | 1.91E-02 |
| Xylenes | 1330-20-7 | No | Yes | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 7.66E-01 | 3.83E+02 | 2.71E-01 | 1 | 9.90E+00 | 1.91E-02 |
| Ytterbium | 7440-64-4 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Yttrium | 7440-65-5 | No | No | - | - | - | - | - | - | - | - | - | - | 0.00E+00 | 1 | - | - |
| Zinc Cyanide | 557-21-1 | No | No | - | - | - | - | 5.00E-02 | U | - | - | - | - | 0.00E+00 | 1 | - | - |

**Site-specific
Screening Levels (RSL) for Soil to Groundwater**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | K _d | K _{oc} | H* | Dilution Attenuation Factor (DAF) (unitless) | MCL-based SL (mg/kg) | Risk-Based SL (mg/kg) |
|--------------------|------------|----------|------|---|---------|--|---------|----------------------------|-----------------|-------------------------------------|-----------------|----------------|-----------------|----------|---|-------------------------|--------------------------|
| Zinc Phosphide | 1314-84-7 | No | No | - | - | - | - | 3.00E-04 | U | - | - | - | - | 0.00E+00 | 1 | - | - |
| Zinc and Compounds | 7440-66-6 | No | No | - | - | - | - | 3.00E-01 | U | - | - | 6.20E+01 | - | 0.00E+00 | 1 | - | 3.73E+01 |
| Zineb | 12122-67-7 | No | No | - | - | - | - | 5.00E-02 | U | - | - | 2.70E+00 | 1.35E+03 | 1.11E-07 | 1 | - | 2.88E-01 |
| Zirconium | 7440-67-7 | No | No | - | - | - | - | 8.00E-05 | U | - | - | 3.00E+03 | - | 0.00E+00 | 1 | - | 4.79E-01 |

**Site-specific
 Resident Equation Inputs for Tap Water**

| Variable | Value |
|--|----------|
| THQ (target hazard quotient) unitless | 0.1 |
| TR (target risk) unitless | 0.000001 |
| LT (lifetime) year | 70 |
| K (volatilization factor of Andelman) L/m ³ | 0.5 |
| I _{sc} (apparent thickness of stratum corneum) cm | 0.001 |
| ED _{res} (exposure duration - resident) year | 26 |
| ED _{res-c} (exposure duration - child) year | 6 |
| ED _{res-a} (exposure duration - adult) year | 20 |
| ED ₀₋₂ (mutagenic exposure duration first phase) year | 2 |
| ED ₂₋₆ (mutagenic exposure duration second phase) year | 4 |
| ED ₆₋₁₆ (mutagenic exposure duration third phase) year | 10 |
| ED ₁₆₋₂₆ (mutagenic exposure duration fourth phase) year | 10 |
| EF _{res} (exposure frequency) day/year | 350 |
| EF _{res-c} (exposure frequency - child) day/year | 350 |
| EF _{res-a} (exposure frequency - adult) day/year | 350 |
| EF ₀₋₂ (mutagenic exposure frequency first phase) day/year | 350 |
| EF ₂₋₆ (mutagenic exposure frequency second phase) day/year | 350 |
| EF ₆₋₁₆ (mutagenic exposure frequency third phase) day/year | 350 |
| EF ₁₆₋₂₆ (mutagenic exposure frequency fourth phase) day/year | 350 |
| ET _{res-adj} (age-adjusted exposure time) hour/event | 0.67077 |
| ET _{res-madj} (mutagenic age-adjusted exposure time) hour/event | 0.67077 |
| ET _{res} (exposure time) hour/day | 24 |
| ET _{res-c} (dermal exposure time - child) hour/event | 0.54 |
| ET _{res-a} (dermal exposure time - adult) hour/event | 0.71 |
| ET _{res-c} (inhalation exposure time - child) hour/day | 24 |
| ET _{res-a} (inhalation exposure time - adult) hour/day | 24 |
| ET ₀₋₂ (mutagenic inhalation exposure time first phase) hour/day | 24 |
| ET ₂₋₆ (mutagenic inhalation exposure time second phase) hour/day | 24 |
| ET ₆₋₁₆ (mutagenic inhalation exposure time third phase) hour/day | 24 |
| ET ₁₆₋₂₆ (mutagenic inhalation exposure time fourth phase) hour/day | 24 |
| ET ₀₋₂ (mutagenic dermal exposure time first phase) hour/event | 0.54 |
| ET ₂₋₆ (mutagenic dermal exposure time second phase) hour/event | 0.54 |
| ET ₆₋₁₆ (mutagenic dermal exposure time third phase) hour/event | 0.71 |
| ET ₁₆₋₂₆ (mutagenic dermal exposure time fourth phase) hour/event | 0.71 |
| BW _{res-a} (body weight - adult) kg | 80 |
| BW _{res-c} (body weight - child) kg | 15 |
| BW ₀₋₂ (mutagenic body weight) kg | 15 |
| BW ₂₋₆ (mutagenic body weight) kg | 15 |
| BW ₆₋₁₆ (mutagenic body weight) kg | 80 |
| BW ₁₆₋₂₆ (mutagenic body weight) kg | 80 |

**Site-specific
 Resident Equation Inputs for Tap Water**

| Variable | Value |
|--|---------|
| IFW _{res-adj} (adjusted intake factor) L/kg | 327.95 |
| IFW _{res-adj} (adjusted intake factor) L/kg | 327.95 |
| IFWM _{res-adj} (mutagenic adjusted intake factor) L/kg | 1019.9 |
| IFWM _{res-adj} (mutagenic adjusted intake factor) L/kg | 1019.9 |
| IRW _{res-c} (water intake rate - child) L/day | 0.78 |
| IRW _{res-a} (water intake rate - adult) L/day | 2.5 |
| IRW ₀₋₂ (mutagenic water intake rate) L/day | 0.78 |
| IRW ₂₋₆ (mutagenic water intake rate) L/day | 0.78 |
| IRW ₆₋₁₆ (mutagenic water intake rate) L/day | 2.5 |
| IRW ₁₆₋₂₆ (mutagenic water intake rate) L/day | 2.5 |
| EV _{res-a} (events - adult) per day | 1 |
| EV _{res-c} (events - child) per day | 1 |
| EV ₀₋₂ (mutagenic events) per day | 1 |
| EV ₂₋₆ (mutagenic events) per day | 1 |
| EV ₆₋₁₆ (mutagenic events) per day | 1 |
| EV ₁₆₋₂₆ (mutagenic events) per day | 1 |
| DFW _{res-adj} (age-adjusted dermal factor) cm ² -event/kg | 2610650 |
| DFWM _{res-adj} (mutagenic age-adjusted dermal factor) cm ² -event/kg | 8191633 |
| DFW _{res-adj} (age-adjusted dermal factor) cm ² -event/kg | 2610650 |
| DFWM _{res-adj} (mutagenic age-adjusted dermal factor) cm ² -event/kg | 8191633 |
| SA _{res-c} (skin surface area - child) cm ² | 6365 |
| SA _{res-a} (skin surface area - adult) cm ² | 19652 |
| SA ₀₋₂ (mutagenic skin surface area) cm ² | 6365 |
| SA ₂₋₆ (mutagenic skin surface area) cm ² | 6365 |
| SA ₆₋₁₆ (mutagenic skin surface area) cm ² | 19652 |
| SA ₁₆₋₂₆ (mutagenic skin surface area) cm ² | 19652 |

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Site-specific Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|-------------------------|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|--------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Acephate | 30560-19-1 | No | No | Organics | - | | - | | 1.20E-03 | OP | - | | 1 | 0.00004 | 183.17 | 0.0002082 | 2.6780087 | 1.115837 | 1 | Yes | - | 2.40E+01 | nc |
| Acetaldehyde | 75-07-0 | No | Yes | Organics | - | | 2.20E-06 | I | - | | 9.00E-03 | IR | 1 | 0.000527 | 44.054 | 0.0013453 | 0.4454125 | 0.1855885 | 1 | Yes | - | 2.55E+00 | ca** |
| Acetochlor | 34256-82-1 | No | No | Organics | - | | - | | 2.00E-02 | IR | - | | 1 | 0.00495 | 269.77 | 0.0312701 | 8.180352 | 3.40848 | 0.9 | Yes | - | 3.53E+02 | nc |
| Acetone | 67-64-1 | No | Yes | Organics | - | | - | | 9.00E-01 | IR | 3.09E+01 | AT | 1 | 0.000512 | 58.081 | 0.0015008 | 0.5337201 | 0.2223834 | 1 | Yes | - | 1.41E+04 | nc |
| Acetone Cyanohydrin | 75-86-5 | No | No | Organics | - | | - | | - | | 2.00E-03 | SC | 1 | 0.000495 | 85.106 | 0.0017564 | 0.7562295 | 0.3150956 | 1 | Yes | - | - | - |
| Acetonitrile | 75-05-8 | No | Yes | Organics | - | | - | | - | | 6.00E-02 | IR | 1 | 0.000548 | 41.053 | 0.0013505 | 0.4285059 | 0.1785441 | 1 | Yes | - | 1.25E+02 | nc |
| Acetophenone | 98-86-2 | No | Yes | Organics | - | | - | | 1.00E-01 | IR | - | | 1 | 0.00372 | 120.15 | 0.0156831 | 1.1882286 | 0.4950952 | 1 | Yes | - | 1.92E+03 | nc |
| Acetylaminofluorene, 2- | 53-96-3 | No | No | Organics | 3.80E+00 | C | 1.30E-03 | C | - | | - | | 1 | 0.0124959 | 223.28 | 0.0718154 | 4.4918784 | 1.871616 | 1 | Yes | - | 1.57E-02 | ca |
| Acifluorfen | 50594-66-6 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00421 | 361.66 | 0.0307935 | 26.751984 | 11.14666 | 0.9 | Yes | - | - | - |
| Acridine | 260-94-6 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0281 | 179.22 | 0.1446859 | 2.5450246 | 1.0604269 | 1 | Yes | - | - | - |
| Acrolein | 107-02-8 | No | Yes | Organics | - | | - | | 5.00E-04 | IR | 2.00E-05 | IR | 1 | 0.000748 | 56.065 | 0.0021541 | 0.5200247 | 0.216677 | 1 | Yes | - | 4.15E-02 | nc |
| Acrylamide | 79-06-1 | Yes | No | Organics | 5.00E-01 | I | 1.00E-04 | I | 2.00E-03 | IR | 6.00E-03 | IR | 1 | 0.000224 | 71.079 | 0.0007263 | 0.6311061 | 0.2629609 | 1 | Yes | - | 5.00E-02 | ca |
| Acrylic Acid | 79-10-7 | No | Yes | Organics | - | | - | | 5.00E-01 | IR | 1.00E-03 | IR | 1 | 0.00105 | 72.064 | 0.0034283 | 0.639173 | 0.2663221 | 1 | Yes | - | 2.09E+00 | nc |
| Acrylonitrile | 107-13-1 | No | Yes | Organics | 5.40E-01 | I | 6.80E-05 | I | 4.00E-02 | AT | 2.00E-03 | IR | 1 | 0.00116 | 53.064 | 0.00325 | 0.500286 | 0.2084525 | 1 | Yes | - | 5.23E-02 | ca* |
| Adiponitrile | 111-69-3 | No | No | Organics | - | | - | | - | | 6.00E-03 | PP | 1 | 0.000237 | 108.14 | 0.0009479 | 1.0177567 | 0.4240653 | 1 | Yes | - | - | - |
| Alachlor | 15972-60-8 | No | No | Organics | 5.60E-02 | C | - | | 1.00E-02 | IR | - | | 1 | 0.0105 | 269.77 | 0.0663304 | 8.180352 | 3.40848 | 0.9 | Yes | 2.00E+00 | 1.06E+00 | ca |
| Daminozide | 1596-84-5 | No | No | Organics | 1.80E-02 | C | 5.10E-06 | C | 1.50E-01 | IR | - | | 1 | 0.0000199 | 160.17 | 0.0000969 | 1.9907283 | 0.8294701 | 1 | Yes | - | 4.33E+00 | ca |
| Aldicarb | 116-06-3 | No | No | Organics | - | | - | | 1.00E-03 | IR | - | | 1 | 0.000755 | 190.27 | 0.0040055 | 2.9347559 | 1.222815 | 1 | Yes | 3.00E+00 | 1.98E+01 | nc |
| Aldicarb Sulfone | 1646-88-4 | No | No | Organics | - | | - | | 1.00E-03 | IR | - | | 1 | 0.0000371 | 222.26 | 0.0002127 | 4.4331864 | 1.847161 | 1 | Yes | 2.00E+00 | 2.00E+01 | nc |
| Aldicarb sulfoxide | 1646-87-3 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0000329 | 206.27 | 0.0001817 | 3.6072147 | 1.5030061 | 1 | Yes | 4.00E+00 | - | - |
| Aldrin (each) | 309-00-2 | No | Yes | Organics | 1.70E+01 | I | 4.90E-03 | I | 3.00E-05 | IR | - | | 1 | 0.293 | 364.92 | 2.1527476 | 47.726506 | 11.625208 | 1 | No | - | 9.17E-04 | ca |
| (total) | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Alizarin Red Compounds | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Allyl Alcohol | 107-18-6 | No | Yes | Organics | - | | - | | 5.00E-03 | IR | 1.00E-04 | SC | 1 | 0.000959 | 58.081 | 0.002811 | 0.5337201 | 0.2223834 | 1 | Yes | - | 2.08E-01 | nc |
| Allyl Chloride | 107-05-1 | No | Yes | Organics | 2.10E-02 | C | 6.00E-06 | C | - | | 1.00E-03 | IR | 1 | 0.0112 | 76.526 | 0.0376833 | 0.6770264 | 0.2820943 | 1 | Yes | - | 7.32E-01 | ca** |
| Aluminum | 7429-90-5 | No | No | Inorganics | - | | - | | 1.00E+00 | PP | 5.00E-03 | PP | 1 | 0.001 | 26.982 | 0.0019979 | 0.3574038 | 0.1489183 | 1 | Yes | - | 2.00E+04 | nc |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|------------------------------------|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|---------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Aluminum Phosphide | 20859-73-8 | No | No | Inorganics | - | | - | | 4.00E-04 | IR | - | | 1 | 0.001 | 57.955 | 0.002928 | 0.5328537 | 0.2220224 | 1 | Yes | - | 7.99E+00 | nc |
| Hydramethylnon | 67485-29-4 | No | No | Organics | - | | - | | 1.70E-02 | OP | - | | 1 | 0.0000902 | 494.49 | 0.0007715 | 148.32146 | 61.800608 | 1 | Yes | - | 3.37E+02 | nc |
| Ametryn | 834-12-8 | No | No | Organics | - | | - | | 9.00E-03 | IR | - | | 1 | 0.00794 | 227.33 | 0.0460443 | 4.7326893 | 1.9719539 | 1 | Yes | - | 1.52E+02 | nc |
| Amino-4-chlorobenzotrifluoride, 3- | 121-50-6 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0135 | 195.57 | 0.0726125 | 3.1423314 | 1.3093048 | 1 | Yes | - | | |
| Aminoazobenzene, p- | 60-09-3 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0067706 | 197.24 | 0.0365724 | 3.2107315 | 1.3378048 | 1 | Yes | - | | |
| Aminobiphenyl, 4- | 92-67-1 | No | No | Organics | 2.10E+01 | C | 6.00E-03 | C | - | | - | | 1 | 0.014 | 169.23 | 0.0700476 | 2.2374224 | 0.9322594 | 1 | Yes | - | 2.98E-03 | ca |
| Aminophenol, m- | 591-27-5 | No | No | Organics | - | | - | | 8.00E-02 | PP | - | | 1 | 0.000527 | 109.13 | 0.0021174 | 1.0308322 | 0.4295134 | 1 | Yes | - | 1.60E+03 | nc |
| Aminophenol, o- | 95-55-6 | No | No | Organics | - | | - | | 4.00E-03 | SC | - | | 1 | 0.000988 | 109.13 | 0.0039697 | 1.0308322 | 0.4295134 | 1 | Yes | - | 7.94E+01 | nc |
| Aminophenol, p- | 123-30-8 | No | No | Organics | - | | - | | 2.00E-02 | PP | - | | 1 | 0.000407 | 109.13 | 0.0016353 | 1.0308322 | 0.4295134 | 1 | Yes | - | 3.99E+02 | nc |
| Aminopyridine, 4- | 504-24-5 | No | No | Organics | - | | - | | - | | - | | 1 | 0.000758 | 94.117 | 0.0028283 | 0.8494057 | 0.3539191 | 1 | Yes | - | | |
| Amitraz | 33089-61-1 | No | No | Organics | - | | - | | 2.50E-03 | IR | - | | 1 | 0.16 | 293.42 | 1.0541235 | 17.888257 | 4.6238182 | 0.9 | Yes | - | 8.18E+00 | nc |
| Ammonium Sulfamate | 7773-06-0 | No | No | Inorganics | - | | - | | 2.00E-01 | IR | - | | 1 | 0.001 | 114.124 | 0.0041088 | 1.0993966 | 0.4580819 | 1 | Yes | - | 3.99E+03 | nc |
| Amyl Alcohol, tert- | 75-85-4 | No | Yes | Organics | - | | - | | - | | 3.00E-03 | SC | 1 | 0.00196 | 88.151 | 0.0070778 | 0.7865124 | 0.3277135 | 1 | Yes | - | 6.26E+00 | nc |
| Aniline | 62-53-3 | No | No | Organics | 5.70E-03 | I | 1.60E-06 | C | 7.00E-03 | PP | 1.00E-03 | IR | 1 | 0.00186 | 93.129 | 0.0069037 | 0.8386532 | 0.3494388 | 1 | Yes | - | 1.34E+01 | ca* |
| Anilinobenzothiazole | 1843-21-6 | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | | |
| Anthraquinone, 9,10- | 84-65-1 | No | No | Organics | 4.00E-02 | P | - | | 2.00E-03 | SC | - | | 1 | 0.019 | 208.22 | 0.1054488 | 3.6990652 | 1.5412772 | 0.9 | Yes | - | 1.41E+00 | ca* |
| Antimony (metallic) | 7440-36-0 | No | No | Inorganics | - | | - | | 4.00E-04 | IR | - | | 0.15 | 0.001 | 121.76 | 0.004244 | 1.2131542 | 0.5054809 | 1 | Yes | 6.00E+00 | 7.79E+00 | nc |
| Antimony Pentoxide | 1314-60-9 | No | No | Inorganics | - | | - | | 5.00E-04 | HE | - | | 0.15 | 0.001 | 323.517 | 0.0069179 | 16.358941 | 6.8162255 | 1 | Yes | - | 9.74E+00 | nc |
| Antimony Potassium Tartrate | 11071-15-1 | No | No | Organics | - | | - | | - | | - | | 1 | 8.07E-12 | 613.82 | 7.69E-11 | 690.95854 | 287.89939 | 1 | No | - | | |
| Antimony Tetroxide | 1332-81-6 | No | No | Inorganics | - | | - | | 4.00E-04 | HE | - | | 0.15 | 0.001 | 307.52 | 0.0067447 | 13.309814 | 5.5457559 | 1 | Yes | - | 7.79E+00 | nc |
| Antimony Trioxide | 1309-64-4 | No | No | Inorganics | - | | - | | - | | 2.00E-04 | IR | 0.15 | 0.001 | 291.52 | 0.0065669 | 10.828592 | 4.5119133 | 1 | Yes | - | | |
| Antimony Trichloride | 10025-91-9 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 228.11 | 0.005809 | 4.7805294 | 1.9918872 | 1 | Yes | - | | |
| Clofentazine | 74115-24-5 | No | No | Organics | - | | - | | 1.30E-02 | IR | - | | 1 | 0.00358 | 303.15 | 0.0239739 | 12.580561 | 5.2419002 | 0.9 | Yes | - | 2.32E+02 | nc |
| Arsenic Salts | NA | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | - | - | - | - | 0 | Yes | - | | |
| Arsenic, Inorganic | 7440-38-2 | No | No | Inorganics | 1.50E+00 | I | 4.30E-03 | I | 3.00E-04 | IR | 1.50E-05 | CA | 1 | 0.001 | 74.922 | 0.0033291 | 0.6631674 | 0.2763198 | 1 | Yes | 1.00E+01 | 5.17E-02 | ca |
| Arsine | 7784-42-1 | No | No | Inorganics | - | | - | | 3.50E-06 | CA | 5.00E-05 | IR | 1 | 0.001 | 77.946 | 0.0033957 | 0.689537 | 0.2873071 | 1 | Yes | - | 6.99E-02 | nc |
| Asulam | 3337-71-1 | No | No | Organics | - | | - | | 3.60E-02 | OP | - | | 1 | 0.0000529 | 230.24 | 0.0003087 | 4.9136474 | 2.0473531 | 1 | Yes | - | 7.21E+02 | nc |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|--|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|---------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Atrazine | 1912-24-9 | No | No | Organics | 2.30E-01 | C | - | - | 3.50E-02 | IR | - | - | 1 | 0.00524 | 215.69 | 0.0295987 | 4.0730899 | 1.6971208 | 1 | Yes | 3.00E+00 | 3.02E-01 | ca |
| Auramine | 492-80-8 | No | No | Organics | 8.80E-01 | C | 2.50E-04 | C | - | - | - | - | 1 | 0.0111424 | 267.38 | 0.070076 | 7.9320965 | 3.3050402 | 0.9 | Yes | - | 6.66E-02 | ca |
| Avermectin B1 | 65195-55-3 | No | No | Organics | - | - | - | - | 4.00E-04 | IR | - | - | 1 | 0.0000181 | 875.12 | 0.0002059 | 20078.534 | 8366.0557 | 1 | No | - | 8.02E+00 | nc |
| Azobenzene | 103-33-3 | No | Yes | Organics | 1.10E-01 | I | 3.10E-05 | I | - | - | - | - | 1 | 0.0514 | 182.23 | 0.26687 | 2.645745 | 1.1023938 | 1 | Yes | - | 1.20E-01 | ca |
| Azodicarbonamide | 123-77-3 | No | No | Organics | - | - | - | - | 1.00E+00 | PP | 7.00E-06 | PP | 1 | 0.0000259 | 116.08 | 0.0001073 | 1.1274778 | 0.4697824 | 1 | Yes | - | 2.00E+04 | nc |
| Barium | 7440-39-3 | No | No | Inorganics | - | - | - | - | 2.00E-01 | IR | 5.00E-04 | HE | 0.07 | 0.001 | 137.33 | 0.0045072 | 1.4828868 | 0.6178695 | 1 | Yes | 2.00E+03 | 3.77E+03 | nc |
| Barium Chromate | 10294-40-3 | Yes | No | Inorganics | 5.00E-01 | C | 1.50E-01 | C | 2.00E-02 | CA | 2.00E-04 | CA | 0.025 | 0.001 | 253.321 | 0.0061216 | 6.616946 | 2.7570608 | 1 | Yes | - | 4.12E-02 | ca |
| Cyfluthrin | 68359-37-5 | No | No | Organics | - | - | - | - | 2.50E-02 | IR | - | - | 1 | 0.0515 | 434.3 | 0.4127896 | 68.255868 | 28.439945 | 0.7 | Yes | - | 1.20E+02 | nc |
| Benfluralin | 1861-40-1 | No | Yes | Organics | - | - | - | - | 5.00E-03 | OP | - | - | 1 | 0.0675 | 335.29 | 0.4753798 | 19.040747 | 7.9336447 | 0.8 | Yes | - | 2.85E+01 | nc |
| Benomyl | 17804-35-2 | No | No | Organics | - | - | - | - | 5.00E-02 | IR | - | - | 1 | 0.000943 | 290.32 | 0.0061798 | 10.662327 | 4.4426362 | 1 | Yes | - | 9.71E+02 | nc |
| Bentazon | 25057-89-0 | No | No | Organics | - | - | - | - | 3.00E-02 | IR | - | - | 1 | 0.00252 | 240.28 | 0.015024 | 5.5927833 | 2.3303264 | 1 | Yes | - | 5.66E+02 | nc |
| Benzaldehyde | 100-52-7 | No | Yes | Organics | 4.00E-03 | P | - | - | 1.00E-01 | IR | - | - | 1 | 0.00383 | 106.13 | 0.0151756 | 0.9917175 | 0.4132156 | 1 | Yes | - | 1.86E+01 | ca |
| Benzamide, N,N-diethyl-3-methyl (DEET) | 134-62-3 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.00372 | 191.28 | 0.0197881 | 2.9732265 | 1.2388444 | 1 | Yes | - | - | - |
| Benzene | 71-43-2 | No | Yes | Organics | 5.50E-02 | I | 7.80E-06 | I | 4.00E-03 | IR | 3.00E-02 | IR | 1 | 0.0149 | 78.115 | 0.0506501 | 0.6910413 | 0.2879339 | 1 | Yes | 5.00E+00 | 4.55E-01 | ca* |
| Benzene, Ethyldimethyl | 29224-55-3 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.212 | 134.22 | 0.9446504 | 2.2852989 | 0.593582 | 1 | Yes | - | - | - |
| Benzene, Ethylmethyl | 25550-14-5 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0857 | 360.59 | 0.6259135 | 43.76967 | 10.993924 | 0.8 | Yes | - | - | - |
| Benzene, Methylpropenyl | 768-00-3 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.103 | 132.21 | 0.455508 | 1.3881487 | 0.5783953 | 1 | Yes | - | - | - |
| Benzene, Methylpropyl | 28729-54-6 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Benzene, Trimethyl | 25551-13-7 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0621 | 360.59 | 0.4535499 | 26.385419 | 10.993924 | 0.8 | Yes | - | - | - |
| Benzenediamine-2-methyl sulfate, 1,4- | 6369-59-1 | No | No | Organics | 1.00E-01 | X | - | - | 3.00E-04 | SC | - | - | 1 | 3.04E-7 | 220.24 | 1.7352E-6 | 4.3192067 | 1.7996695 | 1 | No | - | 7.79E-01 | ca** |
| Benzenethiol | 108-98-5 | No | Yes | Organics | - | - | - | - | 1.00E-03 | PP | - | - | 1 | 0.0178 | 110.18 | 0.0718618 | 1.0448838 | 0.4353682 | 1 | Yes | - | 1.68E+01 | nc |
| Benzdine | 92-87-5 | Yes | No | Organics | 2.30E+02 | I | 6.70E-02 | I | 3.00E-03 | IR | - | - | 1 | 0.00113 | 184.24 | 0.0058993 | 2.7152135 | 1.131339 | 1 | Yes | - | 1.07E-04 | ca |
| Benzofluoranthenes, total | NA | No | No | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Benzofluorene, 2,3- | 243-17-4 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.654 | 216.29 | 3.6993261 | 7.3443321 | 1.7103018 | 1 | No | - | - | - |
| Benzoic Acid | 65-85-0 | No | No | Organics | - | - | - | - | 4.00E+00 | IR | - | - | 1 | 0.00565 | 122.12 | 0.0240142 | 1.2187987 | 0.5078328 | 1 | Yes | - | 7.52E+04 | nc |
| Benzoic acid, 3,5-dichloro- | 51-36-5 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.0131 | 191.01 | 0.0696347 | 2.9628932 | 1.2345388 | 1 | Yes | - | - | - |
| Benzoic acid, 4-hydroxy-, methyl ester | 99-76-3 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.004403 | 152.15 | 0.0208886 | 1.7951469 | 0.7479779 | 1 | Yes | - | - | - |

**Site-specific
 Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|-----------------------------------|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|--------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Benzothiazole | 95-16-9 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00592 | 135.19 | 0.0264741 | 1.4425271 | 0.601053 | 1 | Yes | - | | |
| Benzotrchloride | 98-07-7 | No | Yes | Organics | 1.30E+01 | I | - | | - | | - | | 1 | 0.0487 | 195.48 | 0.2618827 | 3.1386869 | 1.3077862 | 1 | Yes | - | 2.99E-03 | ca |
| Benzyl Alcohol | 100-51-6 | No | No | Organics | - | | - | | 1.00E-01 | PP | - | | 1 | 0.00209 | 108.14 | 0.0083592 | 1.0177567 | 0.4240653 | 1 | Yes | - | 1.96E+03 | nc |
| Benzyl Chloride | 100-44-7 | No | Yes | Organics | 1.70E-01 | I | 4.90E-05 | C | 2.00E-03 | PP | 1.00E-03 | PP | 1 | 0.0103 | 126.59 | 0.0445721 | 1.2911122 | 0.5379634 | 1 | Yes | - | 8.92E-02 | ca* |
| Beryllium and compounds | 7440-41-7 | No | No | Inorganics | - | | 2.40E-03 | I | 2.00E-03 | IR | 2.00E-05 | IR | 0.007 | 0.001 | 9.01 | 0.0011545 | 0.2834758 | 0.1181149 | 1 | Yes | 4.00E+00 | 2.46E+01 | nc |
| Dicrotophos | 141-66-2 | No | No | Organics | - | | - | | 7.00E-05 | OP | - | | 1 | 0.0000731 | 237.19 | 0.000433 | 5.3743258 | 2.2393024 | 1 | Yes | - | 1.40E+00 | nc |
| Bifenox | 42576-02-3 | No | No | Organics | - | | - | | 9.00E-03 | PP | - | | 1 | 0.0179 | 342.14 | 0.1273449 | 20.799074 | 8.6662807 | 0.9 | Yes | - | 1.01E+02 | nc |
| Biphenthrin | 82657-04-3 | No | No | Organics | - | | - | | 1.50E-02 | IR | - | | 1 | 1.74 | 422.88 | 13.762093 | 112.3291 | 24.545775 | 0 | Yes | - | 3.01E+02 | nc |
| Biphenyl, 1,1'- | 92-52-4 | No | Yes | Organics | 8.00E-03 | I | - | | 5.00E-01 | IR | 4.00E-04 | SC | 1 | 0.0943 | 154.21 | 0.4503961 | 1.8434696 | 0.7681124 | 1 | Yes | - | 8.34E-01 | nc |
| Bis(2-chloroethoxy)methane | 111-91-1 | No | No | Organics | - | | - | | 3.00E-03 | PP | - | | 1 | 0.00122 | 173.04 | 0.0061725 | 2.3500873 | 0.979203 | 1 | Yes | - | 5.90E+01 | nc |
| Bis(2-chloroethyl)ether | 111-44-4 | No | Yes | Organics | 1.10E+00 | I | 3.30E-04 | I | - | | - | | 1 | 0.00178 | 143.01 | 0.0081871 | 1.5955705 | 0.664821 | 1 | Yes | - | 1.37E-02 | ca |
| Bis(2-chloro-1-methylethyl) ether | 108-60-1 | No | Yes | Organics | - | | - | | 4.00E-02 | IR | - | | 1 | 0.00764 | 171.07 | 0.0384332 | 2.2911419 | 0.9546425 | 1 | Yes | - | 7.14E+02 | nc |
| Bis(chloromethyl)ether | 542-88-1 | No | Yes | Organics | 2.20E+02 | I | 6.20E-02 | I | - | | - | | 1 | 0.000855 | 114.96 | 0.0035259 | 1.111312 | 0.4630467 | 1 | Yes | - | 7.20E-05 | ca |
| Bisphenol A | 80-05-7 | No | No | Organics | - | | - | | 5.00E-02 | IR | - | | 1 | 0.0132 | 228.29 | 0.0767086 | 4.7916379 | 1.9965158 | 1 | Yes | - | 7.66E+02 | nc |
| Boron And Borates Only | 7440-42-8 | No | No | Inorganics | - | | - | | 2.00E-01 | IR | 2.00E-02 | HE | 1 | 0.001 | 13.84 | 0.0014309 | 0.3016921 | 0.1257051 | 1 | Yes | - | 3.99E+03 | nc |
| Boron Trifluoride | 7637-07-2 | No | Yes | Inorganics | - | | - | | 4.00E-02 | CA | 1.30E-02 | CA | 1 | 0.001 | 67.806 | 0.0031671 | 0.6050254 | 0.2520939 | 1 | Yes | - | 2.62E+01 | nc |
| Boron Trichloride | 10294-34-5 | No | Yes | Inorganics | - | | - | | 2.00E+00 | PP | 2.00E-02 | PP | 1 | 0.001 | 117.17 | 0.0041633 | 1.1434363 | 0.4764318 | 1 | Yes | - | 4.17E+01 | nc |
| Bromacil | 314-40-9 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00135 | 261.12 | 0.0083904 | 7.3169821 | 3.0487425 | 1 | Yes | - | | |
| Bromate | 15541-45-4 | No | No | Inorganics | 7.00E-01 | I | - | | 4.00E-03 | IR | - | | 1 | 0.001 | 79.9 | 0.003438 | 0.7071312 | 0.294638 | 1 | Yes | 1.00E+01 | 1.11E-01 | ca |
| Bromine | 7726-95-6 | No | Yes | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 159.82 | 0.0048623 | 1.9817643 | 0.8257351 | 1 | Yes | - | | |
| Bromo-2-chloroethane, 1- | 107-04-0 | No | Yes | Organics | 2.00E+00 | X | 6.00E-04 | X | - | | - | | 1 | 0.00464 | 143.41 | 0.0213715 | 1.6038214 | 0.6682589 | 1 | Yes | - | 7.45E-03 | ca |
| Bromo-3-fluorobenzene, 1- | 1073-06-9 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0142 | 175 | 0.0722494 | 2.4102383 | 1.004266 | 1 | Yes | - | | |
| Bromo-4-Ethylbenzene, 1- | 1585-07-5 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0579 | 185.06 | 0.3029434 | 2.7440751 | 1.1433646 | 1 | Yes | - | | |
| Bromoacetic acid | 79-08-3 | No | No | Organics | - | | - | | - | | - | | 1 | 0.000487 | 138.95 | 0.0022079 | 1.5141887 | 0.6309119 | 1 | Yes | - | | |
| Bromoacetophenone, 3- | 2142-63-4 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00524 | 199.05 | 0.0284341 | 3.2865481 | 1.369395 | 1 | Yes | - | | |
| Bromobenzene | 108-86-1 | No | Yes | Organics | - | | - | | 8.00E-03 | IR | 6.00E-02 | IR | 1 | 0.02 | 157.01 | 0.0963874 | 1.9112434 | 0.7963514 | 1 | Yes | - | 6.22E+01 | nc |
| Bromochloromethane | 74-97-5 | No | Yes | Organics | - | | - | | - | | 4.00E-02 | SC | 1 | 0.00255 | 129.38 | 0.0111558 | 1.3384064 | 0.5576693 | 1 | Yes | - | 8.34E+01 | nc |
| Bromodichloromethane | 75-27-4 | No | Yes | Organics | 6.20E-02 | I | 3.70E-05 | C | 2.00E-02 | IR | - | | 1 | 0.00402 | 163.83 | 0.0197902 | 2.0869305 | 0.8695544 | 1 | Yes | 8.00E+01 | 1.34E-01 | ca |

**Site-specific
 Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|-----------------------------------|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|-------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Bromodiphenyl Ether, p- | 101-55-3 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.12 | 249.1 | 0.7284563 | 10.101557 | 2.611348 | 0.9 | Yes | - | | |
| Bromofluorobenzene, p- | 460-00-4 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0182 | 175 | 0.0926013 | 2.4102383 | 1.004266 | 1 | Yes | - | | |
| Bromoform | 75-25-2 | No | Yes | Organics | 7.90E-03 | I | 1.10E-06 | I | 2.00E-02 | IR | - | | 1 | 0.00235 | 252.7 | 0.0143689 | 6.5667123 | 2.7361301 | 1 | Yes | 8.00E+01 | 3.29E+00 | ca |
| Bromomethane | 74-83-9 | No | Yes | Organics | - | | - | | 1.40E-03 | IR | 5.00E-03 | IR | 1 | 0.00284 | 94.93 | 0.0106431 | 0.8584567 | 0.3576903 | 1 | Yes | - | 7.55E+00 | nc |
| Bromophenol, p- | 106-41-2 | No | No | Organics | - | | - | | - | | - | | 1 | 0.008817 | 173.0 | 0.0446047 | 2.3491784 | 0.9788243 | 1 | Yes | - | | |
| Bromophos | 2104-96-3 | No | Yes | Organics | - | | - | | 5.00E-03 | HE | - | | 1 | 0.0401 | 366 | 0.2950608 | 28.291762 | 11.788234 | 0.8 | Yes | - | 3.55E+01 | nc |
| Bromopropane, 1- | 106-94-5 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00795 | 122.9 | 0.0339101 | 1.2325484 | 0.5135618 | 1 | Yes | - | | |
| Bromopyridine, 2- | 109-04-6 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00179 | 158 | 0.0086538 | 1.9357978 | 0.8065824 | 1 | Yes | - | | |
| Bromotrichloromethane | 75-62-7 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00582 | 198.2 | 0.0315194 | 3.2536587 | 1.3556911 | 1 | Yes | - | | |
| Bromoxynil | 1689-84-5 | No | No | Organics | 1.03E-01 | O | - | | 1.50E-02 | OP | - | | 1 | 0.00783 | 276.9 | 0.0501148 | 8.9704038 | 3.7376682 | 0.9 | Yes | - | 6.07E-01 | ca |
| Bromoxynil Octanoate | 1689-99-2 | No | Yes | Organics | - | | - | | 1.50E-02 | OP | - | | 1 | 0.0332 | 403.1 | 0.2563787 | 45.659588 | 19.024828 | 0.8 | Yes | - | 1.03E+02 | nc |
| Butadiene, 1,3- | 106-99-0 | No | Yes | Organics | 3.40E+00 | C | 3.00E-05 | I | - | | 2.00E-03 | IR | 1 | 0.0164 | 54.09 | 0.0463914 | 0.5069617 | 0.2112341 | 1 | Yes | - | 1.81E-02 | ca |
| Butanediol, 2,3- | 513-85-9 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0001196 | 90.12 | 0.0004367 | 0.8067682 | 0.3361534 | 1 | Yes | - | | |
| Butanol | 35296-72-1 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00153 | 148.2 | 0.007165 | 1.707104 | 0.7112934 | 1 | Yes | - | | |
| Butanol, N- | 71-36-3 | No | Yes | Organics | - | | - | | 1.00E-01 | IR | - | | 1 | 0.00231 | 74.12 | 0.0076492 | 0.6563786 | 0.2734911 | 1 | Yes | - | 1.97E+03 | nc |
| Butanone-2, 4-chloro-4,4-difluoro | 1515-16-8 | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | | |
| Butyl alcohol, sec- | 78-92-2 | No | Yes | Organics | - | | - | | 2.00E+00 | PP | 3.00E+01 | PP | 1 | 0.00153 | 74.12 | 0.0050664 | 0.6563786 | 0.2734911 | 1 | Yes | - | 2.42E+04 | nc |
| Butyl Alcohol, t- | 75-65-0 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00103 | 74.12 | 0.0034107 | 0.6563786 | 0.2734911 | 1 | Yes | - | | |
| Butyl Formate, tert- | 762-75-4 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00258 | 102.1 | 0.0100282 | 0.9418636 | 0.3924431 | 1 | Yes | - | | |
| Butylacetate | 123-86-4 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00532 | 116.1 | 0.0220529 | 1.1286414 | 0.4702673 | 1 | Yes | - | | |
| Butylate | 2008-41-5 | No | Yes | Organics | - | | - | | 5.00E-02 | IR | - | | 1 | 0.0541 | 217.3 | 0.3067847 | 4.1628234 | 1.7345098 | 1 | Yes | - | 4.60E+02 | nc |
| Butylated hydroxyanisole | 25013-16-5 | No | No | Organics | 2.00E-04 | C | 5.70E-08 | C | - | | - | | 1 | 0.0325 | 360.5 | 0.2373355 | 26.354816 | 10.981173 | 0.8 | Yes | - | 1.53E+02 | ca |
| Butylated hydroxytoluene | 128-37-0 | No | No | Organics | 3.60E-03 | P | - | | 3.00E-01 | PP | - | | 1 | 0.223 | 220.3 | 1.2732037 | 7.0634042 | 1.8024563 | 1 | Yes | - | 3.38E+00 | ca |
| Butylbenzene, n- | 104-51-8 | No | Yes | Organics | - | | - | | 5.00E-02 | PP | - | | 1 | 0.225 | 134.2 | 1.0025771 | 2.2905999 | 0.593582 | 1 | No | - | 1.00E+03 | nc |
| Butylbenzene, sec- | 135-98-8 | No | Yes | Organics | - | | - | | 1.00E-01 | SC | - | | 1 | 0.301 | 134.2 | 1.3412254 | 2.3358545 | 0.593582 | 1 | No | - | 2.01E+03 | nc |
| Butylbenzene, tert- | 98-06-6 | No | Yes | Organics | - | | - | | 1.00E-01 | SC | - | | 1 | 0.149 | 134.2 | 0.6639288 | 2.3266564 | 0.593582 | 1 | Yes | - | 6.91E+02 | nc |
| Butylchloride, t- | 507-20-0 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0201 | 92.56 | 0.0743799 | 0.8326191 | 0.3469246 | 1 | Yes | - | | |
| Butyltin | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | | |
| Cacodylic Acid | 75-60-5 | No | No | Organics | - | | - | | 2.00E-02 | AT | - | | 1 | 0.00046 | 138 | 0.0020784 | 1.4957534 | 0.6232306 | 1 | Yes | - | 3.99E+02 | nc |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|----------------------|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|---------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Cadmium (Water) | 7440-43-9 | No | No | Inorganics | - | | 1.80E-03 | I | 5.00E-04 | IR | 1.00E-05 | AT | 0.05 | 0.001 | 112.4 | 0.0040776 | 1.0752266 | 0.4480111 | 1 | Yes | 5.00E+00 | 9.22E+00 | nc |
| Calcium | 7440-70-2 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 40.078 | 0.0024349 | 0.4231524 | 0.1763135 | 1 | Yes | - | - | - |
| Calcium Chromate | 13765-19-0 | Yes | No | Inorganics | 5.00E-01 | C | 1.50E-01 | C | 2.00E-02 | CA | 2.00E-04 | CA | 0.025 | 0.001 | 156.072 | 0.004805 | 1.8882661 | 0.7867775 | 1 | Yes | - | 4.12E-02 | ca |
| Caprolactam | 105-60-2 | No | No | Organics | - | | - | | 5.00E-01 | IR | 2.20E-03 | CA | 1 | 0.001 | 113.16 | 0.0040914 | 1.0858154 | 0.4524231 | 1 | Yes | - | 9.92E+03 | nc |
| Captafol | 2425-06-1 | No | No | Organics | 1.50E-01 | C | 4.30E-05 | C | 2.00E-03 | IR | - | | 1 | 0.00577 | 349.06 | 0.0414622 | 22.74029 | 9.4751207 | 0.9 | Yes | - | 4.03E-01 | ca* |
| Captan | 133-06-2 | No | No | Organics | 2.30E-03 | C | 6.60E-07 | C | 1.30E-01 | IR | - | | 1 | 0.00234 | 300.59 | 0.0156038 | 12.172057 | 5.0716906 | 1 | Yes | - | 3.09E+01 | ca* |
| Carbaryl | 63-25-2 | No | No | Organics | - | | - | | 1.00E-01 | IR | - | | 1 | 0.00431 | 201.23 | 0.0235153 | 3.3802435 | 1.4084348 | 1 | Yes | - | 1.85E+03 | nc |
| Carbazole | 86-74-8 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0536 | 167.21 | 0.2665769 | 2.1798971 | 0.9082905 | 1 | Yes | - | - | - |
| Carbofuran | 1563-66-2 | No | No | Organics | - | | - | | 5.00E-03 | IR | - | | 1 | 0.00313 | 221.26 | 0.017907 | 4.3763897 | 1.8234957 | 1 | Yes | 4.00E+01 | 9.37E+01 | nc |
| Carbon Disulfide | 75-15-0 | No | Yes | Organics | - | | - | | 1.00E-01 | IR | 7.00E-01 | IR | 1 | 0.0114 | 76.139 | 0.0382591 | 0.6736563 | 0.2806901 | 1 | Yes | - | 8.11E+02 | nc |
| Carbon Tetrachloride | 56-23-5 | No | Yes | Organics | 7.00E-02 | I | 6.00E-06 | I | 4.00E-03 | IR | 1.00E-01 | IR | 1 | 0.0163 | 153.82 | 0.0777536 | 1.8342224 | 0.7642593 | 1 | Yes | 5.00E+00 | 4.55E-01 | ca |
| Carbonyl Sulfide | 463-58-1 | No | Yes | Organics | - | | - | | - | | 1.00E-01 | PP | 1 | 0.0000942 | 60.075 | 0.0002808 | 0.5476209 | 0.2281754 | 1 | Yes | - | 2.09E+02 | nc |
| Carbosulfan | 55285-14-8 | No | No | Organics | - | | - | | 1.00E-02 | IR | - | | 1 | 0.0579 | 380.55 | 0.4344213 | 34.130291 | 14.220955 | 0.8 | Yes | - | 5.15E+01 | nc |
| Carboxin | 5234-68-4 | No | No | Organics | - | | - | | 1.00E-01 | IR | - | | 1 | 0.00198 | 235.31 | 0.0116819 | 5.2456099 | 2.1856708 | 1 | Yes | - | 1.91E+03 | nc |
| Catechol | 120-80-9 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00145 | 110.11 | 0.0058521 | 1.0439411 | 0.4349755 | 1 | Yes | - | - | - |
| Ceric oxide | 1306-38-3 | No | No | Inorganics | - | | - | | - | | 9.00E-04 | IR | 1 | 0.001 | 172.115 | 0.0050459 | 2.3222234 | 0.9675931 | 1 | Yes | - | - | - |
| Cerium, Stable | 7440-45-1 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 140.12 | 0.0045528 | 1.5372057 | 0.6405024 | 1 | Yes | - | - | - |
| Chloral | 75-87-6 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00106 | 147.39 | 0.0049496 | 1.6882781 | 0.7034492 | 1 | Yes | - | - | - |
| Chloral Hydrate | 302-17-0 | No | Yes | Organics | - | | - | | 1.00E-01 | IR | - | | 1 | 0.000841 | 165.4 | 0.00416 | 2.1296096 | 0.8873373 | 1 | Yes | - | 1.98E+03 | nc |
| Chloramben | 133-90-4 | No | No | Organics | - | | - | | 1.50E-02 | IR | - | | 1 | 0.00201 | 206.03 | 0.0110965 | 3.5960688 | 1.498362 | 1 | Yes | - | 2.89E+02 | nc |
| Chloramine | 127-65-1 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.0000344 | 227.65 | 0.0001996 | 4.7522578 | 1.9801074 | 1 | Yes | - | - | - |
| Chloranil | 118-75-2 | No | No | Organics | 4.03E-01 | H | - | | - | | - | | 1 | 0.00194 | 245.88 | 0.0117001 | 6.0115711 | 2.5048213 | 1 | Yes | - | 1.83E-01 | ca |
| Chlorate (ClO3) as | 14866-68-3 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | - | - | - | - | 0 | Yes | - | - | - |
| Chlordane | 12789-03-6 | No | Yes | Organics | 3.50E-01 | I | 1.00E-04 | I | 5.00E-04 | IR | 7.00E-04 | IR | 1 | 0.107 | 409.78 | 0.8330783 | 79.689722 | 20.730833 | 0.7 | Yes | 2.00E+00 | 2.00E-02 | ca* |
| Chlordane (alpha) | 5103-71-9 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0338366 | 409.78 | 0.2634445 | 49.753999 | 20.730833 | 0.7 | Yes | - | - | - |
| Chlordane (gamma) | 5103-74-2 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0338366 | 409.78 | 0.2634445 | 49.753999 | 20.730833 | 0.7 | No | - | - | - |
| Chlordecone (Kepone) | 143-50-0 | No | No | Organics | 1.00E+01 | I | 4.60E-03 | C | 3.00E-04 | IR | - | | 1 | 0.0109 | 490.64 | 0.0928613 | 141.13801 | 58.807504 | 0.8 | Yes | - | 3.53E-03 | ca |

**Site-specific
 Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|------------------------------------|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|--------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Chlorfenvinphos | 470-90-6 | No | No | Organics | - | | - | | 7.00E-04 | AT | - | | 1 | 0.00512 | 359.58 | 0.0373417 | 26.044018 | 10.851674 | 0.9 | Yes | - | 1.12E+01 | nc |
| Chloride | 16887-00-6 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 35.453 | 0.0022901 | 0.3986546 | 0.1661061 | 1 | Yes | - | | |
| Chlorimuron, Ethyl- | 90982-32-4 | No | No | Organics | - | | - | | 9.00E-02 | OP | - | | 1 | 0.000338 | 414.83 | 0.0026478 | 53.101647 | 22.125686 | 1 | Yes | - | 1.76E+03 | nc |
| Chlorinated Hydrocarbons (total) | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | | |
| Chlorine | 7782-50-5 | No | Yes | Inorganics | - | | - | | 1.00E-01 | IR | 1.45E-04 | AT | 1 | 0.001 | 70.906 | 0.0032387 | 0.6296999 | 0.2623749 | 1 | Yes | - | 3.02E-01 | nc |
| Chlorine Dioxide | 10049-04-4 | No | Yes | Inorganics | - | | - | | 3.00E-02 | IR | 2.00E-04 | IR | 1 | 0.001 | 67.45 | 0.0031588 | 0.6022544 | 0.2509393 | 1 | Yes | - | 4.17E-01 | nc |
| Chlorite | 14998-27-7 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | - | - | - | - | 0 | Yes | - | | |
| Chlorite (Sodium Salt) | 7758-19-2 | No | No | Inorganics | - | | - | | 3.00E-02 | IR | - | | 1 | 0.001 | 90.44 | 0.0036577 | 0.8100727 | 0.3375303 | 1 | Yes | 1.00E+03 | 5.99E+02 | nc |
| Chloro-2-methylphenol, 4- | 1570-64-5 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0175 | 142.59 | 0.0803728 | 1.5869527 | 0.6612303 | 1 | Yes | - | | |
| Chloro-4-methylphenol | 35421-08-0 | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | | |
| Chloro-1,1-difluoroethane, 1- | 75-68-3 | No | Yes | Organics | - | | - | | - | | 5.00E+01 | IR | 1 | 0.00989 | 100.5 | 0.0381334 | 0.9222741 | 0.3842809 | 1 | Yes | - | 1.04E+05 | nc |
| Chloro-1,3-butadiene, 2- | 126-99-8 | No | Yes | Organics | - | | 3.00E-04 | I | 2.00E-02 | HE | 2.00E-02 | IR | 1 | 0.0238 | 88.537 | 0.0861323 | 0.7904369 | 0.3293487 | 1 | Yes | - | 1.87E-02 | ca |
| Chloro-2-methylaniline HCl, 4- | 3165-93-3 | No | No | Organics | 4.60E-01 | H | - | | - | | - | | 1 | 0.000018 | 178.06 | 0.0000924 | 2.5072405 | 1.0446835 | 1 | Yes | - | 1.69E-01 | ca |
| Chloro-2-methylaniline, 4- | 95-69-2 | No | No | Organics | 1.00E-01 | P | 7.70E-05 | C | 3.00E-03 | SC | - | | 1 | 0.00808 | 141.6 | 0.0369802 | 1.5668232 | 0.652843 | 1 | Yes | - | 6.97E-01 | ca* |
| Chloro-6-fluorophenol, 2- | 2040-90-6 | No | No | Organics | - | | - | | - | | - | | 1 | - | 146.55 | - | 1.6700904 | 0.695871 | 0 | No | - | | |
| Chloroacetaldehyde, 2- | 107-20-0 | No | Yes | Organics | 2.70E-01 | X | - | | - | | - | | 1 | 0.00065 | 78.499 | 0.002215 | 0.6944714 | 0.2893631 | 1 | Yes | - | 2.87E-01 | ca |
| Chloroacetamide | 79-07-2 | No | No | Organics | - | | - | | - | | - | | 1 | 0.000208 | 93.513 | 0.0007736 | 0.842816 | 0.3511733 | 1 | Yes | - | | |
| Chloroacetic Acid | 79-11-8 | No | No | Organics | - | | - | | - | | - | | 1 | 0.000647 | 94.498 | 0.002419 | 0.853589 | 0.3556621 | 1 | Yes | 6.00E+01 | | |
| Chloroacetophenone, 2- | 532-27-4 | No | No | Organics | - | | - | | - | | 3.00E-05 | IR | 1 | 0.00406 | 154.6 | 0.0194159 | 1.8527635 | 0.7719848 | 1 | Yes | - | | |
| Chloroaniline | 27134-26-5 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00552 | 127.57 | 0.0239795 | 1.307531 | 0.5448046 | 1 | Yes | - | | |
| Chloroaniline, 3- | 108-42-9 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00535 | 127.57 | 0.023241 | 1.307531 | 0.5448046 | 1 | Yes | - | | |
| Chloroaniline, p- | 106-47-8 | No | No | Organics | 2.00E-01 | P | - | | 4.00E-03 | IR | - | | 1 | 0.00496 | 127.57 | 0.0215468 | 1.307531 | 0.5448046 | 1 | Yes | - | 3.65E-01 | ca |
| Chlorobenzene | 108-90-7 | No | Yes | Organics | - | | - | | 2.00E-02 | IR | 5.00E-02 | PP | 1 | 0.0282 | 112.56 | 0.1150715 | 1.0774472 | 0.4489363 | 1 | Yes | 1.00E+02 | 7.77E+01 | nc |
| Chlorobenzene sulfonic acid, p- | 98-66-8 | No | No | Organics | - | | - | | 1.00E-01 | SC | - | | 1 | 0.0000586 | 192.62 | 0.0003128 | 3.0250461 | 1.2604359 | 1 | Yes | - | 2.00E+03 | nc |
| Chlorobenzenes (total) | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | | |
| Chlorobenzilate | 510-15-6 | No | No | Organics | 1.10E-01 | C | 3.10E-05 | C | 2.00E-02 | IR | - | | 1 | 0.0331 | 325.19 | 0.2295743 | 16.715678 | 6.9648657 | 0.8 | Yes | - | 3.13E-01 | ca |
| Chlorobenzoic Acid, 2- | 118-91-2 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00477 | 156.57 | 0.0229562 | 1.9004305 | 0.791846 | 1 | Yes | - | | |
| Chlorobenzoic Acid, p- | 74-11-3 | No | No | Organics | - | | - | | 3.00E-02 | SC | - | | 1 | 0.012 | 156.57 | 0.0577514 | 1.9004305 | 0.791846 | 1 | Yes | - | 5.11E+02 | nc |
| Chlorobenzotrifluoride, 3-nitro-4- | 121-17-5 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0159 | 225.56 | 0.0918449 | 4.6258973 | 1.9274572 | 0.9 | Yes | - | | |
| Chlorobenzotrifluoride, 4- | 98-56-6 | No | Yes | Organics | - | | - | | 3.00E-03 | PP | 3.00E-01 | PP | 1 | 0.0375 | 180.56 | 0.1938067 | 2.5893812 | 1.0789088 | 1 | Yes | - | 3.45E+01 | nc |

**Site-specific
 Resident Screening Levels (RSL) for Tap Water**

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| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---------------------------------|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|--------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Chlorobiphenyl, p- | 2051-62-9 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.7518023 | 188.66 | 3.9716431 | 5.1694548 | 1.1976909 | 0.6 | Yes | - | - | - |
| Chlorobutane, 1- | 109-69-3 | No | Yes | Organics | - | | - | | 4.00E-02 | PP | - | | 1 | 0.0269 | 92.569 | 0.0995432 | 0.8326191 | 0.3469246 | 1 | Yes | - | 6.35E+02 | nc |
| Chlorobutane, 2- | 78-86-4 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0167 | 92.569 | 0.0617982 | 0.8326191 | 0.3469246 | 1 | Yes | - | - | - |
| Chlorocyclopentadiene | 41851-50-7 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0177 | 100.55 | 0.0682639 | 0.9228689 | 0.3845287 | 1 | Yes | - | - | - |
| Chlorodibromoethane | 73506-94-2 | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Chlorodifluoromethane | 75-45-6 | No | Yes | Organics | - | | - | | - | | 5.00E+01 | IR | 1 | 0.00268 | 86.469 | 0.009585 | 0.7696378 | 0.3206824 | 1 | Yes | - | 1.04E+05 | nc |
| Chloroethanol, 2- | 107-07-3 | No | Yes | Organics | - | | - | | 2.00E-02 | PP | - | | 1 | 0.000579 | 80.515 | 0.0019982 | 0.7127611 | 0.2969838 | 1 | Yes | - | 3.99E+02 | nc |
| Chloroethylvinyl ether, 2- | 110-75-8 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00236 | 106.55 | 0.0093695 | 0.9971029 | 0.4154596 | 1 | Yes | - | - | - |
| Chloroform | 67-66-3 | No | Yes | Organics | 3.10E-02 | C | 2.30E-05 | I | 1.00E-02 | IR | 9.77E-02 | AT | 1 | 0.00683 | 119.38 | 0.0287021 | 1.1764893 | 0.4902039 | 1 | Yes | 8.00E+01 | 2.21E-01 | ca |
| Chloromethane | 74-87-3 | No | Yes | Organics | - | | - | | - | | 9.00E-02 | IR | 1 | 0.00328 | 50.488 | 0.0089638 | 0.4839414 | 0.2016423 | 1 | Yes | - | 1.88E+02 | nc |
| Chloromethyl Methyl Ether | 107-30-2 | No | Yes | Organics | 2.40E+00 | C | 6.90E-04 | C | - | | - | | 1 | 0.000905 | 80.515 | 0.0031233 | 0.7127611 | 0.2969838 | 1 | Yes | - | 6.50E-03 | ca |
| Chloronaphthalene, alpha- | 90-13-1 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0872 | 162.62 | 0.427691 | 2.0546223 | 0.8560926 | 1 | Yes | - | - | - |
| Chloronitrobenzene, o- | 88-73-3 | No | No | Organics | 3.00E-01 | P | - | | 3.00E-03 | PP | 1.00E-05 | SC | 1 | 0.0063 | 157.56 | 0.0304152 | 1.924846 | 0.8020192 | 1 | Yes | - | 2.36E-01 | ca |
| Chloronitrobenzene, p- | 100-00-5 | No | No | Organics | 6.00E-02 | P | - | | 7.00E-04 | PP | 2.00E-03 | PP | 1 | 0.00793 | 157.56 | 0.0382845 | 1.924846 | 0.8020192 | 1 | Yes | - | 1.15E+00 | ca* |
| Chlorooctadecane, 1- | 3386-33-2 | No | Yes | Organics | - | | - | | - | | - | | 1 | 69.8 | 288.95 | 456.34513 | 20.549544 | 4.3648442 | 0 | No | - | - | - |
| Chlorophenol, 2- | 95-57-8 | No | Yes | Organics | - | | - | | 5.00E-03 | IR | - | | 1 | 0.00799 | 128.56 | 0.0348439 | 1.3243293 | 0.5518039 | 1 | Yes | - | 9.13E+01 | nc |
| Chlorophenol, 3- | 108-43-0 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0136 | 128.56 | 0.0593087 | 1.3243293 | 0.5518039 | 1 | Yes | - | - | - |
| Chlorophenol, 4- | 106-48-9 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0115 | 128.56 | 0.0501507 | 1.3243293 | 0.5518039 | 1 | Yes | - | - | - |
| Chlorophenols (total) | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Chlorophenyl phenyl ether, 4- | 7005-72-3 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.148 | 204.66 | 0.8143383 | 5.6608975 | 1.4721252 | 1 | Yes | - | - | - |
| Chlorophenyl Methyl Sulfide, p- | 123-09-1 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0286 | 158.65 | 0.138552 | 1.9520907 | 0.8133711 | 1 | Yes | - | - | - |
| Chlorophenyl Methyl Sulfoxide | 934-73-6 | No | No | Organics | - | | - | | - | | - | | 1 | 0.000849 | 174.65 | 0.0043154 | 2.3993853 | 0.9997439 | 1 | Yes | - | - | - |
| Chloropicrin | 76-06-2 | No | Yes | Organics | - | | - | | - | | 4.00E-04 | CA | 1 | 0.00459 | 164.38 | 0.0226341 | 2.1017836 | 0.8757432 | 1 | Yes | - | 8.34E-01 | nc |
| Chloropropane, 2- | 75-29-6 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0104 | 78.542 | 0.0354496 | 0.6948566 | 0.2895236 | 1 | Yes | - | - | - |
| Chlorothalonil | 1897-45-6 | No | No | Organics | 3.10E-03 | C | 8.90E-07 | C | 1.50E-02 | IR | - | | 1 | 0.00537 | 265.91 | 0.0336797 | 7.7831606 | 3.2429836 | 0.9 | Yes | - | 2.17E+01 | ca* |
| Chlorotoluene, o- | 95-49-8 | No | Yes | Organics | - | | - | | 2.00E-02 | IR | - | | 1 | 0.0572 | 126.59 | 0.2475269 | 1.2911122 | 0.5379634 | 1 | Yes | - | 2.37E+02 | nc |
| Chlorotoluene, p- | 106-43-4 | No | Yes | Organics | - | | - | | 2.00E-02 | SC | - | | 1 | 0.0498 | 126.59 | 0.2155042 | 1.2911122 | 0.5379634 | 1 | Yes | - | 2.50E+02 | nc |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|-------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Chlorozotocin | 54749-90-5 | No | No | Organics | 2.40E+02 | C | 6.90E-02 | C | - | - | - | - | 1 | 9.91E-6 | 265.7 | 0.0000621 | 7.7621135 | 3.234214 | 1 | Yes | - | 3.25E-04 | ca |
| Chlorpropham | 101-21-3 | No | No | Organics | - | - | - | - | 5.00E-02 | OP | - | - | 1 | 0.0213 | 213.6 | 0.1197507 | 3.9683685 | 1.6534869 | 0.9 | Yes | - | 7.12E+02 | nc |
| Chlorpyrifos | 2921-88-2 | No | No | Organics | - | - | - | - | 1.00E-03 | AT | - | - | 1 | 0.0334 | 350.5 | 0.240532 | 23.193377 | 9.6639072 | 0.8 | Yes | - | 8.44E+00 | nc |
| Chlorpyrifos Methyl | 5598-13-0 | No | No | Organics | - | - | - | - | 1.00E-02 | HE | - | - | 1 | 0.0178 | 322.5 | 0.1229528 | 16.154146 | 6.730894 | 0.9 | Yes | - | 1.19E+02 | nc |
| Chlorsulfuron | 64902-72-3 | No | No | Organics | - | - | - | - | 2.00E-02 | OP | - | - | 1 | 0.000328 | 357.7 | 0.0023862 | 25.446496 | 10.602707 | 1 | Yes | - | 3.94E+02 | nc |
| Chlorthiophos | 60238-56-4 | No | No | Organics | - | - | - | - | 8.00E-04 | HE | - | - | 1 | 0.106 | 361.2 | 0.7748836 | 42.709079 | 11.087886 | 0.8 | Yes | - | 2.82E+00 | nc |
| Chromium(III), Insoluble Salts | 16065-83-1 | No | No | Inorganics | - | - | - | - | 1.50E+00 | IR | - | - | 0.013 | 0.001 | 52 | 0.0027735 | 0.4934691 | 0.2056121 | 1 | Yes | - | 2.25E+04 | nc |
| Chromium(VI) | 18540-29-9 | Yes | No | Inorganics | 5.00E-01 | J | 8.40E-02 | S | 3.00E-03 | IR | 1.00E-04 | IR | 0.025 | 0.002 | 52 | 0.005547 | 0.4934691 | 0.2056121 | 1 | Yes | - | 3.50E-02 | ca |
| Chromium, Total | 7440-47-3 | No | No | Inorganics | - | - | - | - | - | - | - | - | 0.013 | 0.001 | 51.99 | 0.0027734 | 0.4934437 | 0.2056015 | 1 | Yes | 1.00E+02 | - | - |
| Cobalt | 7440-48-4 | No | No | Inorganics | - | - | 9.00E-03 | P | 3.00E-04 | PP | 6.00E-06 | PP | 1 | 0.0004 | 58.93 | 0.001181 | 0.5395951 | 0.2248313 | 1 | Yes | - | 6.01E+00 | nc |
| Complex Mixtures of Aliphatic and Aromatic Hydrocarbons | NA | No | No | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Copper | 7440-50-8 | No | No | Inorganics | - | - | - | - | 4.00E-02 | HE | - | - | 1 | 0.001 | 63.54 | 0.003066 | 0.5726874 | 0.2386197 | 1 | Yes | 1.30E+03 | 7.99E+02 | nc |
| Creosote | 8001-58-9 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Cresol, m- | 108-39-4 | No | No | Organics | - | - | - | - | 5.00E-02 | IR | 6.00E-01 | CA | 1 | 0.00777 | 108.1 | 0.0310771 | 1.0177567 | 0.4240653 | 1 | Yes | - | 9.25E+02 | nc |
| Cresol, o- | 95-48-7 | No | No | Organics | - | - | - | - | 5.00E-02 | IR | 6.00E-01 | CA | 1 | 0.00766 | 108.1 | 0.0306372 | 1.0177567 | 0.4240653 | 1 | Yes | - | 9.26E+02 | nc |
| Cresol, p- | 106-44-5 | No | No | Organics | - | - | - | - | 1.00E-01 | AT | 6.00E-01 | CA | 1 | 0.00754 | 108.1 | 0.0301572 | 1.0177567 | 0.4240653 | 1 | Yes | - | 1.85E+03 | nc |
| Cresol, p-chloro-m- | 59-50-7 | No | No | Organics | - | - | - | - | 1.00E-01 | AT | - | - | 1 | 0.0285 | 142.5 | 0.1308929 | 1.5869527 | 0.6612303 | 1 | Yes | - | 1.45E+03 | nc |
| Cresols | 1319-77-3 | No | No | Organics | - | - | - | - | 1.00E-01 | AT | 6.00E-01 | CA | 1 | 0.00766 | 324.4 | 0.0530651 | 16.550533 | 6.8960555 | 0.9 | Yes | - | 1.54E+03 | nc |
| Crotonaldehyde | 4170-30-3 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00159 | 70.09 | 0.0051199 | 0.623125 | 0.2596354 | 1 | Yes | - | - | - |
| Crotonaldehyde, trans- | 123-73-9 | No | Yes | Organics | 1.90E+00 | H | - | - | 1.00E-03 | PP | - | - | 1 | 0.00159 | 70.09 | 0.0051199 | 0.623125 | 0.2596354 | 1 | Yes | - | 4.04E-02 | ca |
| Cumene | 98-82-8 | No | Yes | Organics | - | - | - | - | 1.00E-01 | IR | 4.00E-01 | IR | 1 | 0.0897 | 120.2 | 0.3782434 | 1.1889949 | 0.4954145 | 1 | Yes | - | 4.51E+02 | nc |
| Cupferron | 135-20-6 | No | No | Organics | 2.20E-01 | C | 6.30E-05 | C | - | - | - | - | 1 | 1.67E-6 | 155.1 | 8.0008E-6 | 1.8661906 | 0.7775794 | 1 | Yes | - | 3.54E-01 | ca |
| Cyanazine | 21725-46-2 | No | No | Organics | 8.40E-01 | H | - | - | 2.00E-03 | HE | - | - | 1 | 0.00209 | 240.7 | 0.0124713 | 5.6231542 | 2.3429809 | 1 | Yes | - | 8.77E-02 | ca |
| Cyclohexane | 110-82-7 | No | Yes | Organics | - | - | - | - | - | - | 6.00E+00 | IR | 1 | 0.102 | 84.16 | 0.3599046 | 0.7470898 | 0.3112874 | 1 | Yes | - | 1.25E+04 | nc |
| Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro- | 87-84-3 | No | No | Organics | 2.00E-02 | X | - | - | 2.00E-02 | SC | - | - | 1 | 0.00283 | 513.0 | 0.0246553 | 188.52285 | 78.551187 | 0.9 | Yes | - | 2.77E+00 | ca |
| Cyclohexanone | 108-94-1 | No | Yes | Organics | - | - | - | - | 5.00E+00 | IR | 7.00E-01 | PP | 1 | 0.00152 | 98.14 | 0.0057917 | 0.8947003 | 0.3727918 | 1 | Yes | - | 1.44E+03 | nc |
| Cyclohexene | 110-83-8 | No | Yes | Organics | - | - | - | - | 5.00E-03 | PP | 1.00E+00 | SC | 1 | 0.0431 | 82.14 | 0.1502449 | 0.7279192 | 0.3032997 | 1 | Yes | - | 6.96E+01 | nc |
| Cyclohexylamine | 108-91-8 | No | Yes | Organics | - | - | - | - | 2.00E-01 | IR | - | - | 1 | 0.00425 | 99.17 | 0.0162788 | 0.9066741 | 0.3777809 | 1 | Yes | - | 3.84E+03 | nc |
| Cyclopentadiene | 542-92-7 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.021 | 66.10 | 0.0656689 | 0.5918919 | 0.2466216 | 1 | Yes | - | - | - |

**Site-specific
 Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|--|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|--------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Cyhalothrin | 68085-85-8 | No | No | Organics | - | | - | | 1.00E-03 | OP | - | | 1 | 0.21 | 449.86 | 1.7131076 | 139.75254 | 34.758798 | 0.5 | No | - | 2.01E+01 | nc |
| Cypermethrin | 52315-07-8 | No | No | Organics | - | | - | | 6.00E-02 | OP | - | | 1 | 0.0769 | 416.31 | 0.603478 | 91.125711 | 22.551984 | 0.7 | No | - | 1.20E+03 | nc |
| Cyromazine | 66215-27-8 | No | No | Organics | - | | - | | 1.50E-02 | OP | - | | 1 | 0.000797 | 166.19 | 0.0039517 | 2.151414 | 0.8964225 | 1 | Yes | - | 2.97E+02 | nc |
| Barium Cyanide | 542-62-1 | No | No | Inorganics | - | | - | | - | | - | | 0.07 | 0.001 | 189.37 | 0.0052928 | 2.9008949 | 1.2087062 | 1 | Yes | - | - | - |
| Calcium Cyanide | 592-01-8 | No | No | Inorganics | - | | - | | 1.00E-03 | IR | - | | 1 | 0.001 | 92.116 | 0.0036914 | 0.8277698 | 0.3449041 | 1 | Yes | - | 2.00E+01 | nc |
| Copper Cyanide | 544-92-3 | No | No | Inorganics | - | | - | | 5.00E-03 | IR | - | | 1 | 0.001 | 89.564 | 0.0036399 | 0.8009739 | 0.3337391 | 1 | Yes | - | 9.98E+01 | nc |
| Cyanide (CN-) | 57-12-5 | No | Yes | Inorganics | - | | - | | 6.00E-04 | IR | 8.00E-04 | SU | 1 | 0.001 | 26.018 | 0.0019618 | 0.3529887 | 0.1470786 | 1 | Yes | 2.00E+02 | 1.46E+00 | nc |
| Cyanide (total complex) | NA | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | - | - | - | - | 0 | Yes | - | - | - |
| Cyanogen | 460-19-5 | No | Yes | Inorganics | - | | - | | 1.00E-03 | IR | - | | 1 | 0.00089 | 52.036 | 0.0024693 | 0.4936983 | 0.2057076 | 1 | Yes | - | 2.00E+01 | nc |
| Cyanogen Bromide | 506-68-3 | No | Yes | Inorganics | - | | - | | 9.00E-02 | IR | - | | 1 | 0.000255 | 105.93 | 0.0010094 | 0.9891633 | 0.4121514 | 1 | Yes | - | 1.80E+03 | nc |
| Cyanogen Chloride | 506-77-4 | No | Yes | Inorganics | - | | - | | 5.00E-02 | IR | - | | 1 | 0.000394 | 61.471 | 0.0011881 | 0.5575677 | 0.2323199 | 1 | Yes | - | 1.00E+03 | nc |
| Hydrogen Cyanide | 74-90-8 | No | Yes | Inorganics | - | | - | | 6.00E-04 | IR | 8.00E-04 | IR | 1 | 0.001 | 27.026 | 0.0019995 | 0.3576067 | 0.1490028 | 1 | Yes | - | 1.46E+00 | nc |
| Chlorthal-dimethyl | 1861-32-1 | No | No | Organics | - | | - | | 1.00E-02 | IR | - | | 1 | 0.015 | 331.97 | 0.1051156 | 18.242821 | 7.6011753 | 0.9 | Yes | - | 1.24E+02 | nc |
| Dalapon | 75-99-0 | No | No | Organics | - | | - | | 3.00E-02 | IR | - | | 1 | 0.000815 | 142.97 | 0.0037481 | 1.5947477 | 0.6644782 | 1 | Yes | 2.00E+02 | 5.95E+02 | nc |
| DDD | 72-54-8 | No | No | Organics | 2.40E-01 | I | 6.90E-05 | C | - | | - | | 1 | 0.251 | 320.05 | 1.7270674 | 26.226797 | 6.518216 | 0.8 | Yes | - | 3.17E-02 | ca |
| DDD, o,p'- | 53-19-0 | No | No | Organics | - | | - | | - | | - | | 1 | 0.201 | 320.05 | 1.3830301 | 25.715946 | 6.518216 | 0.8 | Yes | - | - | - |
| DDT/DDE/DDD (total) | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | - | - |
| DDE, p,p'- | 72-55-9 | No | Yes | Organics | 3.40E-01 | I | 9.70E-05 | C | - | | - | | 1 | 0.545 | 318.03 | 3.7381541 | 27.291554 | 6.3506291 | 0.8 | No | - | 4.62E-02 | ca |
| DDT | 50-29-3 | No | No | Organics | 3.40E-01 | I | 9.70E-05 | I | 5.00E-04 | IR | - | | 1 | 0.628 | 354.49 | 4.5476632 | 44.266797 | 10.162317 | 0.7 | No | - | 2.29E-01 | ca* |
| DDT, o,p'-Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209) | 789-02-6 | No | No | Organics | - | | - | | - | | - | | 1 | 0.526 | 354.49 | 3.80903 | 43.731727 | 10.162317 | 0.4 | No | - | - | - |
| | 1163-19-5 | No | No | Organics | 7.00E-04 | I | - | | 7.00E-03 | IR | - | | 1 | 0.725 | 959.17 | 8.6359964 | 111398.39 | 24728.669 | 0 | No | - | 1.11E+02 | ca** |
| Decane | 124-18-5 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.532 | 142.29 | 2.4407622 | 2.7346378 | 0.6586774 | 1 | No | - | - | - |
| Decanol, n- | 112-30-1 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.2207301 | 158.29 | 1.0681076 | 3.1344514 | 0.8096042 | 1 | No | - | - | - |
| Deltamethrin | 52918-63-5 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0302 | 505.21 | 0.2610776 | 170.30837 | 70.961821 | 0.7 | No | - | - | - |
| Demeton | 8065-48-3 | No | No | Organics | - | | - | | 4.00E-05 | IR | - | | 1 | 0.0075598 | 516.68 | 0.0660922 | 197.45493 | 82.272889 | 0.8 | Yes | - | 4.20E-01 | nc |
| Di(2-ethylhexyl)adipate | 103-23-1 | No | No | Organics | 1.20E-03 | I | - | | 6.00E-01 | IR | - | | 1 | 3.23 | 370.58 | 23.914988 | 57.918929 | 12.505376 | 0 | Yes | 4.00E+02 | 6.49E+01 | ca |
| Diallate | 2303-16-4 | No | No | Organics | 6.10E-02 | H | - | | - | | - | | 1 | 0.046 | 270.22 | 0.2908327 | 8.2279566 | 3.4283152 | 0.9 | Yes | - | 5.36E-01 | ca |

**Site-specific
Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|--------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Diazinon | 333-41-5 | No | No | Organics | - | | - | | 7.00E-04 | AT | - | | 1 | 0.0104 | 304.35 | 0.0697825 | 12.776738 | 5.3236409 | 0.9 | Yes | - | 1.03E+01 | nc |
| Dibenzothiophene | 132-65-0 | No | Yes | Organics | - | | - | | 1.00E-02 | SC | - | | 1 | 0.118 | 184.26 | 0.6160617 | 4.5314718 | 1.1316308 | 1 | Yes | - | 6.51E+01 | nc |
| Dibromo-3-chloropropane, 1,2- | 96-12-8 | Yes | Yes | Organics | 8.00E-01 | P | 6.00E-03 | P | 2.00E-04 | PP | 2.00E-04 | IR | 1 | 0.00685 | 236.33 | 0.040502 | 5.3150578 | 2.2146074 | 1 | Yes | 2.00E-01 | 3.34E-04 | ca |
| Dibromoacetic acid | 631-64-1 | No | No | Organics | - | | - | | - | | - | | 1 | 0.000274 | 217.85 | 0.0015554 | 4.1881284 | 1.7450535 | 1 | Yes | - | | |
| Dibromobenzene, 1,3- | 108-36-1 | No | Yes | Organics | - | | - | | 4.00E-04 | SC | - | | 1 | 0.0231 | 235.91 | 0.136462 | 5.2863509 | 2.2026462 | 0.9 | Yes | - | 5.31E+00 | nc |
| Dibromobenzene, 1,4- | 106-37-6 | No | Yes | Organics | - | | - | | 1.00E-02 | IR | - | | 1 | 0.0245 | 235.91 | 0.1447324 | 5.2863509 | 2.2026462 | 0.9 | Yes | - | 1.30E+02 | nc |
| Dibromochloromethane | 124-48-1 | No | Yes | Organics | 8.40E-02 | I | - | | 2.00E-02 | IR | - | | 1 | 0.00289 | 208.28 | 0.0160416 | 3.7019282 | 1.5424701 | 1 | Yes | 8.00E+01 | 8.71E-01 | ca |
| Dibromodichloromethane | 594-18-3 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00376 | 242.73 | 0.0225308 | 5.772288 | 2.40512 | 1 | Yes | - | | |
| Dibromodiphenyl Ether, p,p'- | 2050-47-7 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.169 | 328 | 1.1772001 | 28.135566 | 7.2218548 | 0.8 | Yes | - | | |
| Dibromoethane, 1,2- | 106-93-4 | No | Yes | Organics | 2.00E+00 | I | 6.00E-04 | I | 9.00E-03 | IR | 9.00E-03 | IR | 1 | 0.00278 | 187.86 | 0.0146551 | 2.8449589 | 1.1853995 | 1 | Yes | 5.00E-02 | 7.47E-03 | ca |
| Dibromomethane (Methylene Bromide) | 74-95-3 | No | Yes | Organics | - | | - | | - | | 4.00E-03 | SC | 1 | 0.00223 | 173.84 | 0.0113085 | 2.3744553 | 0.9893564 | 1 | Yes | - | 8.34E+00 | nc |
| Bis(Octanoyloxy)Di-N-Butyl Stannane | 4731-77-5 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0547 | 519.34 | 0.4794462 | 204.34499 | 85.143745 | 0.6 | No | - | | |
| Bis(oleoyloxy)dibutyl tin | 13323-62-1 | No | Yes | Organics | - | | - | | - | | - | | 1 | 2680 | 795.85 | 29078.839 | 14185.461 | 3010.2929 | 0 | No | - | | |
| Di-n-butyltin bis(2-ethylhexanoate) | 2781-10-4 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0772 | 533.36 | 0.6857316 | 397.55912 | 102.01517 | 0.5 | No | - | | |
| Di-n-butyltin bis(methyl maleate) | 15546-11-9 | No | No | Organics | - | | - | | - | | - | | 1 | 0.000125 | 491.11 | 0.0010654 | 141.99596 | 59.164984 | 1 | Yes | - | | |
| Di-n-butyltin bis(n-butyl maleate) | 15546-16-4 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00382 | 575.27 | 0.0352392 | 420.3122 | 175.13008 | 0.8 | No | - | | |
| Di-n-butyltin dilaurate | 77-58-7 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.000053 | 631.55 | 0.0005123 | 868.44035 | 361.85014 | 1 | Yes | - | | |
| Di-n-butyltin distearate | 5847-55-2 | No | Yes | Organics | - | | - | | - | | - | | 1 | 4910 | 799.88 | 53409.752 | 14942.198 | 3170.8577 | 0 | No | - | | |
| Dibutoxy di-n-butyltin | 3349-36-8 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00144 | 379.17 | 0.0107847 | 33.528335 | 13.97014 | 0.9 | Yes | - | | |
| Dibutylbis((1-oxoisooctyl)oxy)stannane | 85702-74-5 | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | | |
| Dibutylbis(octadeca-9(Z),12(Z),15(Z)-trienoyloxy)stannane | 95873-60-2 | No | Yes | Organics | - | | - | | - | | - | | 1 | 797 | 787.8 | 8603.8526 | 12786.398 | 2713.4933 | 0 | No | - | | |
| Dibutylbis(octadeca-9(Z),12(Z)-dienoyloxy)stannane | 85391-79-3 | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | | |
| Dibutylbis(palmitoyloxy)stannane | 13323-63-2 | No | Yes | Organics | - | | - | | - | | - | | 1 | 502 | 743.79 | 5265.693 | 7249.0065 | 1538.4123 | 0 | No | - | | |
| Dibutyltin Compounds | NA | No | No | Organics | - | | - | | 3.00E-04 | PP | - | | 1 | - | - | - | - | - | 0 | No | - | 6.02E+00 | nc |
| Dibutyltin diacetate | 1067-33-0 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0000583 | 351.01 | 0.0004201 | 23.319326 | 9.7163858 | 1 | Yes | - | | |
| Dibutyltin oxide | 818-08-6 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.219 | 248.92 | 1.3289256 | 10.243259 | 2.6049581 | 0.9 | Yes | - | | |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Dibutyltin dichloride | 683-18-1 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.000336 | 303.8 3 | 0.0022526 | 12.691355 | 5.2880646 | 1 | Yes | - | | |
| Dicamba | 1918-00-9 | No | No | Organics | - | | - | | 3.00E-02 | IR | - | | 1 | 0.00265 | 221.0 4 | 0.0151533 | 4.3639925 | 1.8183302 | 1 | Yes | - | 5.68E+02 | nc |
| Dichloro-2-butene, cis-1,4- | 1476-11-5 | No | Yes | Organics | - | | 4.20E-03 | P | - | | - | | 1 | 0.0166 | 125 | 0.0713822 | 1.2649111 | 0.5270463 | 1 | Yes | - | 1.34E-03 | ca |
| Dichloro-2-butene, trans-1,4- | 110-57-6 | No | Yes | Organics | - | | 4.20E-03 | P | - | | - | | 1 | 0.0166 | 125 | 0.0713822 | 1.2649111 | 0.5270463 | 1 | Yes | - | 1.34E-03 | ca |
| Dichloro-2-butene, 1,4- | 764-41-0 | No | Yes | Organics | - | | 4.20E-03 | P | - | | - | | 1 | 0.0166 | 125 | 0.0713822 | 1.2649111 | 0.5270463 | 1 | Yes | - | 1.34E-03 | ca |
| Dichloroacetic Acid | 79-43-6 | No | No | Organics | 5.00E-02 | I | - | | 4.00E-03 | IR | - | | 1 | 0.00121 | 128.9 4 | 0.0052845 | 1.3308343 | 0.5545143 | 1 | Yes | 6.00E+01 | 1.53E+00 | ca* |
| Dichloroaniline, 2,4- | 554-00-7 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0136 | 162.0 2 | 0.0665809 | 2.0387876 | 0.8494948 | 1 | Yes | - | | |
| Dichloroaniline, 3,4- | 95-76-1 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0118 | 162.0 2 | 0.0577688 | 2.0387876 | 0.8494948 | 1 | Yes | - | | |
| Dichlorobenzene | 25321-22-6 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0446 | 441.0 1 | 0.3602349 | 74.424511 | 31.010213 | 0.7 | Yes | - | | |
| Dichlorobenzene, 1,2- | 95-50-1 | No | Yes | Organics | - | | - | | 9.00E-02 | IR | 2.00E-01 | HE | 1 | 0.0446 | 147 | 0.2079793 | 1.6798093 | 0.6999206 | 1 | Yes | 6.00E+02 | 3.04E+02 | nc |
| Dichlorobenzene, 1,3- | 541-73-1 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.052 | 147 | 0.2424871 | 1.6798093 | 0.6999206 | 1 | Yes | - | | |
| Dichlorobenzene, 1,4- | 106-46-7 | No | Yes | Organics | 5.40E-03 | C | 1.10E-05 | C | 7.00E-02 | AT | 8.00E-01 | IR | 1 | 0.0453 | 147 | 0.2112436 | 1.6798093 | 0.6999206 | 1 | Yes | 7.50E+01 | 4.82E-01 | ca |
| Dichlorobenzidine, 3,3'- | 91-94-1 | No | No | Organics | 4.50E-01 | I | 3.40E-04 | C | - | | - | | 1 | 0.0128 | 253.1 3 | 0.0783264 | 6.6006696 | 2.750279 | 1 | Yes | - | 1.25E-01 | ca |
| Dichlorobenzoic acid, -3,5 | 51-36-5 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0131 | 191.0 1 | 0.0696347 | 2.9628932 | 1.2345388 | 1 | Yes | - | | |
| Dichlorobenzophenone, 4,4'- | 90-98-2 | No | No | Organics | - | | - | | 9.00E-03 | SC | - | | 1 | 0.0542 | 251.1 1 | 0.3303375 | 6.4309627 | 2.6795678 | 0.9 | Yes | - | 7.77E+01 | nc |
| Dichlorobenzotrifluoride, 3,4- | 328-84-7 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0645 | 215 | 0.3637522 | 4.0370115 | 1.6820881 | 1 | Yes | - | | |
| Dichlorodifluoromethane | 75-71-8 | No | Yes | Organics | - | | - | | 2.00E-01 | IR | 1.00E-01 | SC | 1 | 0.00895 | 120.9 1 | 0.0378513 | 1.1999302 | 0.4999709 | 1 | Yes | - | 1.97E+02 | nc |
| Dichlorodisopropyl ether, 2,2'- | 39638-32-9 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0515 | 171.0 7 | 0.2590722 | 2.2911419 | 0.9546425 | 1 | Yes | - | | |
| Dichloroethane, 1,1- | 75-34-3 | No | Yes | Organics | 5.70E-03 | C | 1.60E-06 | C | 2.00E-01 | PP | - | | 1 | 0.00675 | 98.96 | 0.0258262 | 0.9041406 | 0.3767253 | 1 | Yes | - | 2.75E+00 | ca |
| Dichloroethane, 1,2- | 107-06-2 | No | Yes | Organics | 9.10E-02 | I | 2.60E-05 | I | 6.00E-03 | SC | 7.00E-03 | PP | 1 | 0.0042 | 98.96 | 0.0160696 | 0.9041406 | 0.3767253 | 1 | Yes | 5.00E+00 | 1.71E-01 | ca* |
| Dichloroethylene, 1,1- | 75-35-4 | No | Yes | Organics | - | | - | | 5.00E-02 | IR | 2.00E-01 | IR | 1 | 0.0117 | 96.94 4 | 0.0443071 | 0.8809401 | 0.3670584 | 1 | Yes | 7.00E+00 | 2.85E+02 | nc |
| Dichloroethylene, 1,2-cis- | 156-59-2 | No | Yes | Organics | - | | - | | 2.00E-03 | IR | - | | 1 | 0.011 | 96.94 4 | 0.0416562 | 0.8809401 | 0.3670584 | 1 | Yes | 7.00E+01 | 3.61E+01 | nc |
| Dichloroethylene, 1,2-trans- | 156-60-5 | No | Yes | Organics | - | | - | | 2.00E-02 | IR | - | | 1 | 0.011 | 96.94 4 | 0.0416562 | 0.8809401 | 0.3670584 | 1 | Yes | 1.00E+02 | 3.61E+02 | nc |
| Dichlorophenol, 2,6- | 87-65-0 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0128 | 163 | 0.0628536 | 2.0647144 | 0.8602977 | 1 | Yes | - | | |
| Dichlorophenol, 3,4- | 95-77-2 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0311 | 163 | 0.1527147 | 2.0647144 | 0.8602977 | 1 | Yes | - | | |
| Dichlorophenol, 2,3- | 576-24-9 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0147 | 163 | 0.0721835 | 2.0647144 | 0.8602977 | 1 | Yes | - | | |
| Dichlorophenol, 2,4- | 120-83-2 | No | No | Organics | - | | - | | 3.00E-03 | IR | - | | 1 | 0.0206 | 163 | 0.1011551 | 2.0647144 | 0.8602977 | 1 | Yes | - | 4.57E+01 | nc |
| Dichlorophenol, 2,5- | 583-78-8 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0206 | 163 | 0.1011551 | 2.0647144 | 0.8602977 | 1 | Yes | - | | |
| Dichlorophenols (total) | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | | |
| Dichlorophenoxy Acetic Acid, 2,4- | 94-75-7 | No | No | Organics | - | | - | | 1.00E-02 | IR | - | | 1 | 0.00664 | 221.0 4 | 0.0379691 | 4.3639925 | 1.8183302 | 1 | Yes | 7.00E+01 | 1.75E+02 | nc |
| Butanoic acid, 4-(2,4-dichlorophenoxy)- | 94-82-6 | No | No | Organics | - | | - | | 3.00E-02 | OP | - | | 1 | 0.0139 | 249.1 | 0.0843778 | 6.2664271 | 2.6110113 | 0.9 | Yes | - | 4.51E+02 | nc |
| Dichloropropane, 1,2- | 78-87-5 | No | Yes | Organics | 3.70E-02 | P | 3.70E-05 | P | 4.00E-02 | PP | 4.00E-03 | IR | 1 | 0.00753 | 112.9 9 | 0.0307852 | 1.0834378 | 0.4514324 | 1 | Yes | 5.00E+00 | 1.41E-01 | ca* |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|-------------------------------------|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|--------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Dichloropropane, 1,3- | 142-28-9 | No | Yes | Organics | - | - | - | - | 2.00E-02 | PP | - | - | 1 | 0.00776 | 112.99 | 0.0317255 | 1.0834378 | 0.4514324 | 1 | Yes | - | 3.69E+02 | nc |
| Dichloropropane, 2,2- | 594-20-7 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0316 | 112.99 | 0.1291914 | 1.0834378 | 0.4514324 | 1 | Yes | - | - | - |
| Dichloropropanol, 2,3- | 616-23-9 | No | No | Organics | - | - | - | - | 3.00E-03 | IR | - | - | 1 | 0.000983 | 128.99 | 0.004294 | 1.3316926 | 0.5548719 | 1 | Yes | - | 5.94E+01 | nc |
| Dichloropropene, 1,3- | 542-75-6 | No | Yes | Organics | 1.00E-01 | I | 4.00E-06 | I | 3.00E-02 | IR | 2.00E-02 | IR | 1 | 0.00834 | 110.97 | 0.0337906 | 1.055582 | 0.4398258 | 1 | Yes | - | 4.71E-01 | ca* |
| Dichloropropene, 2,3- | 78-88-6 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0153 | 110.97 | 0.0619899 | 1.055582 | 0.4398258 | 1 | Yes | - | - | - |
| Dichloropropene, cis-1,3- | 10061-01-5 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00834 | 110.97 | 0.0337906 | 1.055582 | 0.4398258 | 1 | Yes | - | - | - |
| Dichloropropene, trans-1,3- | 10061-02-6 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00834 | 110.97 | 0.0337906 | 1.055582 | 0.4398258 | 1 | Yes | - | - | - |
| Dichloropropene, 1,1- | 563-58-6 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0179 | 110.97 | 0.0725241 | 1.055582 | 0.4398258 | 1 | Yes | - | - | - |
| Dichlorvos | 62-73-7 | No | No | Organics | 2.90E-01 | I | 8.30E-05 | C | 5.00E-04 | IR | 5.00E-04 | IR | 1 | 0.000804 | 220.98 | 0.0045968 | 4.3606175 | 1.8169239 | 1 | Yes | - | 2.64E-01 | ca* |
| Dicyclohexylamine | 101-83-7 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.12 | 181.32 | 0.6214851 | 4.3485039 | 1.0895339 | 1 | Yes | - | - | - |
| Dicyclopentadiene | 77-73-6 | No | Yes | Organics | - | - | - | - | 8.00E-02 | PP | 3.00E-04 | SC | 1 | 0.036 | 132.21 | 0.1592067 | 1.3881487 | 0.5783953 | 1 | Yes | - | 6.25E-01 | nc |
| Dieldrin | 60-57-1 | No | No | Organics | 1.60E+01 | I | 4.60E-03 | I | 5.00E-05 | IR | - | - | 1 | 0.0326 | 380.91 | 0.2447121 | 34.289093 | 14.287122 | 0.8 | Yes | - | 1.75E-03 | ca |
| Diepoxybutane | 1464-53-5 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0000308 | 86.091 | 0.00011 | 0.7658956 | 0.3191232 | 1 | Yes | - | - | - |
| Diethanolamine | 111-42-2 | No | No | Organics | - | - | - | - | 2.00E-03 | PP | 2.00E-04 | PP | 1 | 0.0000451 | 105.14 | 0.0001779 | 0.9791382 | 0.4079742 | 1 | Yes | - | 4.01E+01 | nc |
| Diethyl sulfate | 64-67-5 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.0012256 | 154.19 | 0.0058533 | 1.8429943 | 0.7679143 | 1 | Yes | - | - | - |
| Diethyl-p-nitrophenylphosphate | 311-45-5 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.000926 | 275.2 | 0.0059083 | 8.7736437 | 3.6556849 | 1 | Yes | - | - | - |
| Diethylene-glycol | 111-46-6 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.0000417 | 106.12 | 0.0001652 | 0.9915897 | 0.4131624 | 1 | Yes | - | - | - |
| Diethylene Glycol Dinitrate (DEGDN) | 693-21-0 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.000557 | 196.12 | 0.0030001 | 3.164696 | 1.3186233 | 1 | Yes | - | - | - |
| Diethylene Glycol Monobutyl Ether | 112-34-5 | No | No | Organics | - | - | - | - | 3.00E-02 | PP | 1.00E-04 | PP | 1 | 0.000454 | 162.23 | 0.0022241 | 2.0443158 | 0.8517983 | 1 | Yes | - | 5.97E+02 | nc |
| Diethylene Glycol Monoethyl Ether | 111-90-0 | No | No | Organics | - | - | - | - | 6.00E-02 | PP | 3.00E-04 | PP | 1 | 0.000121 | 134.18 | 0.0005391 | 1.4238623 | 0.593276 | 1 | Yes | - | 1.20E+03 | nc |
| Diethylformamide | 617-84-5 | No | Yes | Organics | - | - | - | - | 1.00E-03 | PP | - | - | 1 | 0.000457 | 101.15 | 0.0017678 | 0.9300365 | 0.3875152 | 1 | Yes | - | 2.00E+01 | nc |
| Diethylphosphorodithioate | 298-06-6 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00436 | 186.23 | 0.0228843 | 2.7857875 | 1.1607448 | 1 | Yes | - | - | - |
| Diethylstilbestrol | 56-53-1 | No | No | Organics | 3.50E+02 | C | 1.00E-01 | C | - | - | - | - | 1 | 0.114 | 268.36 | 0.7182744 | 12.965617 | 3.3470696 | 0.9 | Yes | - | 5.08E-05 | ca |
| Difenzoquat | 43222-48-6 | No | No | Organics | - | - | - | - | 8.30E-02 | OP | - | - | 1 | 0.0000402 | 360.44 | 0.0002935 | 26.334434 | 10.972681 | 1 | Yes | - | 1.66E+03 | nc |
| Diflubenzuron | 35367-38-5 | No | No | Organics | - | - | - | - | 2.00E-02 | IR | - | - | 1 | 0.0107 | 310.69 | 0.0725394 | 13.865131 | 5.7771381 | 0.9 | Yes | - | 2.90E+02 | nc |
| Difluoroethane, 1,1- | 75-37-6 | No | Yes | Organics | - | - | - | - | - | - | 4.00E+01 | IR | 1 | 0.0021 | 66.051 | 0.0065643 | 0.5914875 | 0.2464531 | 1 | Yes | - | 8.34E+04 | nc |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|-----------------------------------|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|--------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Difluoropropane, 2,2- | 420-45-1 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0185 | 80.078 | 0.063673 | 0.7087561 | 0.295315 | 1 | Yes | - | - | - |
| Dihydrosafrole | 94-58-6 | No | Yes | Organics | 4.40E-02 | C | 1.30E-05 | C | - | - | - | - | 1 | 0.0452 | 164.21 | 0.2227742 | 2.0971814 | 0.8738256 | 1 | Yes | - | 3.02E-01 | ca |
| Diisopropyl Ether | 108-20-3 | No | Yes | Organics | - | - | - | - | - | - | 7.00E-01 | PP | 1 | 0.00428 | 102.18 | 0.01664 | 0.942471 | 0.3926962 | 1 | Yes | - | 1.46E+03 | nc |
| Diisopropyl Methylphosphonate | 1445-75-6 | No | Yes | Organics | - | - | - | - | 8.00E-02 | IR | - | - | 1 | 0.000738 | 180.19 | 0.0038102 | 2.5770568 | 1.0737737 | 1 | Yes | - | 1.58E+03 | nc |
| Dimethipin | 55290-64-7 | No | No | Organics | - | - | - | - | 2.18E-02 | OP | - | - | 1 | 0.0000798 | 210.27 | 0.0004451 | 3.7981489 | 1.5825621 | 1 | Yes | - | 4.36E+02 | nc |
| Dimethoate | 60-51-5 | No | No | Organics | - | - | - | - | 2.20E-03 | OP | - | - | 1 | 0.000267 | 229.26 | 0.0015549 | 4.8519464 | 2.0216443 | 1 | Yes | - | 4.38E+01 | nc |
| Dimethoxybenzidine, 3,3'- | 119-90-4 | No | No | Organics | 1.60E+00 | P | - | - | - | - | - | - | 1 | 0.00106 | 244.3 | 0.0063723 | 5.8903349 | 2.4543062 | 1 | Yes | - | 4.73E-02 | ca |
| Dimethyl methylphosphonate | 756-79-6 | No | No | Organics | 1.70E-03 | P | - | - | 6.00E-02 | PP | - | - | 1 | 0.000124 | 124.08 | 0.0005313 | 1.2499942 | 0.5208309 | 1 | Yes | - | 4.58E+01 | ca* |
| Dimethyl Sulfate | 77-78-1 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.000392 | 126.13 | 0.0016933 | 1.2834767 | 0.534782 | 1 | Yes | - | - | - |
| Dimethyl Sulfide | 75-18-3 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00286 | 62.14 | 0.0086708 | 0.5623548 | 0.2343145 | 1 | Yes | - | - | - |
| Dimethylamino azobenzene [p-] | 60-11-7 | No | No | Organics | 4.60E+00 | C | 1.30E-03 | C | - | - | - | - | 1 | 0.0943 | 225.3 | 0.544401 | 4.6104147 | 1.9210061 | 1 | Yes | - | 5.05E-03 | ca |
| Dimethylaniline HCl, 2,4- | 21436-96-4 | No | No | Organics | 5.80E-01 | H | - | - | - | - | - | - | 1 | 0.0000202 | 121.18 | 0.0000855 | 1.2041151 | 0.5017146 | 1 | Yes | - | 1.34E-01 | ca |
| Dimethylaniline, 2,4- | 95-68-1 | No | No | Organics | 2.00E-01 | P | - | - | 2.00E-03 | SC | - | - | 1 | 0.00428 | 8 | 0.0181212 | 1.2041151 | 0.5017146 | 1 | Yes | - | 3.69E-01 | ca |
| Dimethylaniline, N,N- | 121-69-7 | No | Yes | Organics | 2.70E-02 | P | - | - | 2.00E-03 | IR | - | - | 1 | 0.0112 | 8 | 0.0474198 | 1.2041151 | 0.5017146 | 1 | Yes | - | 2.52E+00 | ca* |
| Dimethylbenzidine, 3,3'- | 119-93-7 | No | No | Organics | 1.10E+01 | P | - | - | - | - | - | - | 1 | 0.00362 | 212.3 | 0.0202866 | 3.8988811 | 1.6245338 | 1 | Yes | - | 6.54E-03 | ca |
| Dimethylcyclohexylamine, n,n- | 98-94-2 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0103 | 127.23 | 0.0446847 | 1.3018112 | 0.5424213 | 1 | Yes | - | - | - |
| Dimethylformamide | 68-12-2 | No | Yes | Organics | - | - | - | - | 1.00E-01 | PP | 3.00E-02 | IR | 1 | 0.00013 | 73.095 | 0.0004275 | 0.647727 | 0.2698862 | 1 | Yes | - | 6.07E+01 | nc |
| Dimethylhydrazine, 1,1- | 57-14-7 | No | Yes | Organics | - | - | - | - | 1.00E-04 | SC | 2.00E-06 | SC | 1 | 0.0000727 | 60.099 | 0.0002167 | 0.5477904 | 0.228246 | 1 | Yes | - | 4.16E-03 | nc |
| Dimethylhydrazine, 1,2- | 540-73-8 | No | Yes | Organics | 5.50E+02 | C | 1.60E-01 | C | - | - | - | - | 1 | 0.000317 | 60.099 | 0.0009452 | 0.5477904 | 0.228246 | 1 | Yes | - | 2.81E-05 | ca |
| Dimethylphenethylamine | 122-09-8 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.00417 | 149.24 | 0.0195932 | 1.7290358 | 0.7204316 | 1 | Yes | - | - | - |
| Dimethylphenol, 2,4- | 105-67-9 | No | No | Organics | - | - | - | - | 2.00E-02 | IR | - | - | 1 | 0.0109 | 122.17 | 0.0463378 | 1.2195848 | 0.5081603 | 1 | Yes | - | 3.55E+02 | nc |
| Dimethylphenol, 2,6- | 576-26-1 | No | No | Organics | - | - | - | - | 6.00E-04 | IR | - | - | 1 | 0.012 | 122.17 | 0.0510141 | 1.2195848 | 0.5081603 | 1 | Yes | - | 1.05E+01 | nc |
| Dimethylphenol, 3,4- | 95-65-8 | No | No | Organics | - | - | - | - | 1.00E-03 | IR | - | - | 1 | 0.0098 | 122.17 | 0.0416615 | 1.2195848 | 0.5081603 | 1 | Yes | - | 1.80E+01 | nc |
| Dimethylvinylchloride | 513-37-1 | No | Yes | Organics | 4.50E-02 | C | 1.30E-05 | C | - | - | - | - | 1 | 0.0253 | 90.553 | 0.0925974 | 0.8112539 | 0.3380225 | 1 | Yes | - | 3.28E-01 | ca |
| Dinitro-o-cresol, 4,6- | 534-52-1 | No | No | Organics | - | - | - | - | 8.00E-05 | SC | - | - | 1 | 0.00315 | 198.14 | 0.0170539 | 3.2482092 | 1.3534205 | 1 | Yes | - | 1.51E+00 | nc |
| Dinitro-o-cyclohexyl Phenol, 4,6- | 131-89-5 | No | No | Organics | - | - | - | - | 2.00E-03 | IR | - | - | 1 | 0.0275 | 266.26 | 0.1725887 | 7.8183659 | 3.2576525 | 0.9 | Yes | - | 2.30E+01 | nc |
| Dinitroaniline, 3,5- | 618-87-1 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.00265 | 183.12 | 0.0137924 | 2.6762827 | 1.1151178 | 1 | Yes | - | - | - |
| Dinitrobenzene, 1,2- | 528-29-0 | No | No | Organics | - | - | - | - | 1.00E-04 | PP | - | - | 1 | 0.00237 | 168.11 | 0.0118188 | 2.2053422 | 0.9188926 | 1 | Yes | - | 1.93E+00 | nc |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

**Site-specific
Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|--|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|-------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Dinitrobenzene, 1,3- | 99-65-0 | No | No | Organics | - | | - | | 1.00E-04 | IR | - | | 1 | 0.00174 | 168.1 | 0.0086771 | 2.2053422 | 0.9188926 | 1 | Yes | - | 1.95E+00 | nc |
| Dinitrobenzene, 1,4- | 100-25-4 | No | No | Organics | - | | - | | 1.00E-04 | PP | - | | 1 | 0.00167 | 168.1 | 0.008328 | 2.2053422 | 0.9188926 | 1 | Yes | - | 1.95E+00 | nc |
| Dinitrophenol, 2,4- | 51-28-5 | No | No | Organics | - | | - | | 2.00E-03 | IR | - | | 1 | 0.00187 | 184.1 | 0.009759 | 2.7106659 | 1.1294441 | 1 | Yes | - | 3.88E+01 | nc |
| Dinitrophenols | 25550-58-7 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00118 | 920.5 | 0.0137699 | 36069.489 | 15028.954 | 0.8 | No | - | | |
| Dinitrosopentamethylenetetramine, N,N- | 101-25-7 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0000104 | 186.1 | 0.0000546 | 2.7836331 | 1.1598471 | 1 | Yes | - | | |
| Dinitrotoluene Mixture, 2,4/2,6- | NA | No | No | Organics | 6.80E-01 | I | - | | - | | - | | 1 | 0.00416 | 182.1 | 0.0215935 | 2.6426764 | 1.1011152 | 1 | Yes | - | 1.06E-01 | ca |
| Dinitrotoluene, 2,4- | 121-14-2 | No | No | Organics | 3.10E-01 | C | 8.90E-05 | C | 2.00E-03 | IR | - | | 1 | 0.00308 | 182.1 | 0.0159875 | 2.6426764 | 1.1011152 | 1 | Yes | - | 2.37E-01 | ca |
| Dinitrotoluene, 2,6- | 606-20-2 | No | No | Organics | 1.50E+00 | P | - | | 3.00E-04 | SC | - | | 1 | 0.0037 | 182.1 | 0.0192057 | 2.6426764 | 1.1011152 | 1 | Yes | - | 4.85E-02 | ca |
| Dinitrotoluene, 2-Amino-4,6- | 35572-78-2 | No | No | Organics | - | | - | | 2.00E-03 | SU | - | | 1 | 0.00204 | 197.1 | 0.0110168 | 3.2070076 | 1.3362532 | 1 | Yes | - | 3.86E+01 | nc |
| Dinitrotoluene, 4-Amino-2,6- | 19406-51-0 | No | No | Organics | - | | - | | 2.00E-03 | SU | - | | 1 | 0.00204 | 197.1 | 0.0110168 | 3.2070076 | 1.3362532 | 1 | Yes | - | 3.86E+01 | nc |
| Dinitrotoluene, 2,3- | 602-01-7 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00416 | 182.1 | 0.0215935 | 2.6426764 | 1.1011152 | 1 | Yes | - | | |
| Dinitrotoluene, 2,5- | 619-15-8 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00416 | 182.1 | 0.0215935 | 2.6426764 | 1.1011152 | 1 | Yes | - | | |
| Dinitrotoluene, 3,4- | 610-39-9 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00359 | 182.1 | 0.0186348 | 2.6426764 | 1.1011152 | 1 | Yes | - | | |
| Dinitrotoluene, 3,5- | 618-85-9 | No | No | Organics | - | | - | | - | | - | | - | 0.00416 | 182.1 | 0.0215935 | 2.6426764 | 1.1011152 | 1 | Yes | - | | |
| Dinitrotoluene, Technical grade | 25321-14-6 | No | No | Organics | 4.50E-01 | X | - | | 9.00E-04 | SC | - | | 1 | 0.00416 | 546.4 | 0.0374007 | 289.705 | 120.71042 | 0.8 | Yes | - | 1.04E-01 | ca |
| Dinoseb | 88-85-7 | No | No | Organics | - | | - | | 1.00E-03 | IR | - | | 1 | 0.0163 | 240.2 | 0.097167 | 5.588458 | 2.3285242 | 0.9 | Yes | 7.00E+00 | 1.46E+01 | nc |
| Dioxane, 1,4- | 123-91-1 | No | Yes | Organics | 1.00E-01 | I | 5.00E-06 | I | 3.00E-02 | IR | 3.00E-02 | IR | 1 | 0.000332 | 88.10 | 0.0011986 | 0.7860663 | 0.3275276 | 1 | Yes | - | 4.59E-01 | ca |
| Diphenamid | 957-51-7 | No | No | Organics | - | | - | | 3.00E-02 | IR | - | | 1 | 0.00563 | 239.3 | 0.0334984 | 5.5239786 | 2.3016578 | 1 | Yes | - | 5.27E+02 | nc |
| Diphenyl Sulfone | 127-63-9 | No | No | Organics | - | | - | | 8.00E-04 | SC | - | | 1 | 0.00367 | 218.2 | 0.0208545 | 4.2114145 | 1.7547561 | 1 | Yes | - | 1.48E+01 | nc |
| Diphenylamine | 122-39-4 | No | No | Organics | - | | - | | 1.00E-01 | OP | - | | 1 | 0.0373 | 169.2 | 0.1866269 | 2.2374224 | 0.9322594 | 1 | Yes | - | 1.26E+03 | nc |
| Diphenylhydrazine, 1,2- | 122-66-7 | No | No | Organics | 8.00E-01 | I | 2.20E-04 | I | - | | - | | 1 | 0.013 | 184.2 | 0.0678675 | 2.7152135 | 1.131339 | 1 | Yes | - | 7.80E-02 | ca |
| Diquat | 85-00-7 | No | No | Organics | - | | - | | 2.20E-03 | IR | - | | 1 | 2.44E-7 | 344.0 | 1.7407E-6 | 21.317683 | 8.8823677 | 1 | No | 2.00E+01 | 4.41E+01 | nc |
| Direct Black 38 | 1937-37-7 | No | No | Organics | 7.10E+00 | C | 1.40E-01 | C | - | | - | | 1 | 0.000205 | 779.7 | 0.0022017 | 5871.81 | 2446.5875 | 1 | No | - | 1.10E-02 | ca |
| Direct Blue 6 | 2602-46-2 | No | No | Organics | 7.40E+00 | C | 1.40E-01 | C | - | | - | | 1 | 1.73E-9 | 932.7 | 2.0322E-8 | 42219.782 | 17591.576 | 1 | No | - | 1.05E-02 | ca |
| Direct Brown 95 | 16071-86-6 | No | No | Organics | 6.70E+00 | C | 1.40E-01 | C | - | | - | | 1 | 3.87E-12 | 761.1 | 4.106E-11 | 4616.7036 | 1923.6265 | 1 | No | - | 1.16E-02 | ca |
| Direct Sky Blue | 2610-05-1 | No | No | Organics | - | | - | | - | | - | | 1 | 3.69E-7 | 992.8 | 4.4719E-6 | 91590.829 | 38162.846 | 1 | No | - | | |

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 Resident Screening Levels (RSL) for Tap Water**

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| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|--|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|-------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Disulfoton | 298-04-4 | No | No | Organics | - | | - | | 4.00E-05 | IR | - | | 1 | 0.0212 | 274.4 | 0.1350711 | 8.6847234 | 3.6186348 | 0.9 | Yes | - | 5.01E-01 | nc |
| Dithiane, 1,4- | 505-29-3 | No | Yes | Organics | - | | - | | 1.00E-02 | IR | - | | 1 | 0.00108 | 120.2 | 0.0045549 | 1.1896083 | 0.4956701 | 1 | Yes | - | 1.98E+02 | nc |
| Diundecyl Phthalate | 3648-20-2 | No | Yes | Organics | - | | - | | - | | - | | 1 | 146 | 474.7 | 1223.4968 | 225.64496 | 47.900136 | 0 | No | - | | |
| Diuron | 330-54-1 | No | No | Organics | - | | - | | 2.00E-03 | IR | - | | 1 | 0.00466 | 233.1 | 0.0273643 | 5.0982367 | 2.1242653 | 1 | Yes | - | 3.61E+01 | nc |
| Dodine | 2439-10-3 | No | No | Organics | - | | - | | 2.00E-02 | OP | - | | 1 | 0.000222 | 287.4 | 0.0014476 | 10.274956 | 4.2812319 | 1 | Yes | - | 3.98E+02 | nc |
| Hexachlorodibenzo-p-dioxin | 34465-46-8 | No | No | Organics | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 2.86 | 390.8 | 21.747476 | 75.114656 | 16.245039 | 0 | No | - | 5.99E-06 | ca* |
| Hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8- | 39227-28-6 | No | No | Organics | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 1.53 | 390.8 | 11.634139 | 73.973426 | 16.245039 | 0 | No | - | 5.99E-06 | ca* |
| Hexachlorodibenzo-p-dioxin, Mixture | NA | No | No | Organics | 6.20E+03 | I | 1.30E+00 | I | - | | - | | 1 | 2.86 | 390.8 | 21.747476 | 75.114656 | 16.245039 | 0 | No | - | 1.26E-05 | ca |
| HpCDD, 2,3,7,8- | 37871-00-4 | No | Yes | Organics | 1.30E+03 | W | 3.80E-01 | W | 7.00E-08 | WH | 4.00E-06 | WH | 1 | 1.33 | 425.3 | 10.549481 | 114.95554 | 25.327058 | 0 | No | - | 1.19E-05 | ca |
| HxCDD, 1,2,3,6,7,8- | 57653-85-7 | No | No | Organics | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 2.86 | 390.8 | 21.747476 | 75.114656 | 16.245039 | 0 | No | - | 5.99E-06 | ca* |
| HxCDD, 1,2,3,7,8,9- | 19408-74-3 | No | No | Organics | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 2.86 | 390.8 | 21.747476 | 75.114656 | 16.245039 | 0 | No | - | 5.99E-06 | ca* |
| Endosulfan | 115-29-7 | No | Yes | Organics | - | | - | | 6.00E-03 | IR | - | | 1 | 0.00286 | 406.9 | 0.0221898 | 47.958765 | 19.982819 | 0.9 | Yes | - | 1.01E+02 | nc |
| Endosulfan I | 959-98-8 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00286 | 406.9 | 0.0221898 | 47.958765 | 19.982819 | 0.9 | Yes | - | | |
| Endosulfan II | 33213-65-9 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00286 | 406.9 | 0.0221898 | 47.958765 | 19.982819 | 0.9 | Yes | - | | |
| Endosulfan Sulfate | 1031-07-8 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00179 | 422.9 | 0.0141584 | 58.947853 | 24.561605 | 0.9 | Yes | - | | |
| Endothall | 145-73-3 | No | No | Organics | - | | - | | 2.00E-02 | IR | - | | 1 | 0.00263 | 186.1 | 0.0138018 | 2.7836331 | 1.1598471 | 1 | Yes | 1.00E+02 | 3.83E+02 | nc |
| Endrin | 72-20-8 | No | No | Organics | - | | - | | 3.00E-04 | IR | - | | 1 | 0.0326 | 380.9 | 0.2447121 | 34.289093 | 14.287122 | 0.8 | Yes | 2.00E+00 | 2.28E+00 | nc |
| Endrin ketone | 53494-70-5 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0235 | 380.9 | 0.1764029 | 34.289093 | 14.287122 | 0.8 | Yes | - | | |
| Endrin aldehyde | 7421-93-4 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0178 | 380.9 | 0.1336158 | 34.289093 | 14.287122 | 0.8 | Yes | - | | |
| Epichlorohydrin | 106-89-8 | No | Yes | Organics | 9.90E-03 | I | 1.20E-06 | I | 6.00E-03 | PP | 1.00E-03 | IR | 1 | 0.000944 | 92.52 | 0.0034925 | 0.8321576 | 0.3467323 | 1 | Yes | - | 2.05E+00 | nc |
| Epoxybutane, 1,2- | 106-88-7 | No | Yes | Organics | - | | - | | - | | 2.00E-02 | IR | 1 | 0.00231 | 72.10 | 0.0075445 | 0.6395357 | 0.2664732 | 1 | Yes | - | 4.17E+01 | nc |
| EPTC | 759-94-4 | No | Yes | Organics | - | | - | | 5.00E-02 | OP | - | | 1 | 0.0184 | 189.3 | 0.0973739 | 2.8990252 | 1.2079272 | 1 | Yes | - | 7.51E+02 | nc |
| Ethanol | 64-17-5 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.000538 | 46.07 | 0.0014045 | 0.4571429 | 0.1904762 | 1 | Yes | - | | |
| Ethanol, 2-(2-methoxyethoxy)- | 111-77-3 | No | No | Organics | - | | - | | 4.00E-02 | PP | - | | 1 | 0.0001747 | 120.1 | 0.0007367 | 1.1882286 | 0.4950952 | 1 | Yes | - | 8.01E+02 | nc |
| Ethephon | 16672-87-0 | No | No | Organics | - | | - | | 5.00E-03 | IR | - | | 1 | 0.000173 | 144.5 | 0.0007998 | 1.6265222 | 0.6777176 | 1 | Yes | - | 1.00E+02 | nc |
| Ethion | 563-12-2 | No | No | Organics | - | | - | | 5.00E-04 | IR | - | | 1 | 0.0255 | 384.4 | 0.1923108 | 35.904426 | 14.960178 | 0.8 | Yes | - | 4.35E+00 | nc |
| Ethoxy Propanol | 52125-53-8 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.000409 | 104.1 | 0.0016054 | 0.9667184 | 0.4027993 | 1 | Yes | - | | |

**Site-specific
 Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---------------------------------|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|--------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Ethoxyethanol Acetate, 2- | 111-15-9 | No | Yes | Organics | - | | - | | 1.00E-01 | PP | 6.00E-02 | PP | 1 | 0.0007 | 132.16 | 0.0030951 | 1.387254 | 0.5780225 | 1 | Yes | - | 1.18E+02 | nc |
| Ethoxyethanol, 2- | 110-80-5 | No | Yes | Organics | - | | - | | 9.00E-02 | PP | 2.00E-01 | IR | 1 | 0.0003 | 90.123 | 0.0010954 | 0.8067682 | 0.3361534 | 1 | Yes | - | 3.39E+02 | nc |
| Ethyl methane sulfonate | 62-50-0 | No | No | Organics | - | | - | | - | | - | | 1 | 0.000244 | 124.16 | 0.0010457 | 1.2512843 | 0.5213685 | 1 | Yes | - | - | - |
| Ethyl Acetate | 141-78-6 | No | Yes | Organics | - | | - | | 9.00E-01 | IR | 7.00E-02 | PP | 1 | 0.00153 | 88.107 | 0.0055236 | 0.7860663 | 0.3275276 | 1 | Yes | - | 1.45E+02 | nc |
| Ethyl Acrylate | 140-88-5 | No | Yes | Organics | - | | - | | 5.00E-03 | PP | 8.00E-03 | PP | 1 | 0.00324 | 100.12 | 0.012469 | 0.9177661 | 0.3824025 | 1 | Yes | - | 1.42E+01 | nc |
| Ethyl Chloride | 75-00-3 | No | Yes | Organics | - | | - | | - | | 1.00E+01 | IR | 1 | 0.00607 | 64.515 | 0.0187519 | 0.5798878 | 0.2416199 | 1 | Yes | - | 2.09E+04 | nc |
| Ethyl Ether | 60-29-7 | No | Yes | Organics | - | | - | | 2.00E-01 | IR | - | | 1 | 0.00235 | 74.124 | 0.0077817 | 0.6563786 | 0.2734911 | 1 | Yes | - | 3.93E+03 | nc |
| Ethyl Methacrylate | 97-63-2 | No | Yes | Organics | - | | - | | - | | 3.00E-01 | PP | 1 | 0.00698 | 114.15 | 0.0286827 | 1.0997652 | 0.4582355 | 1 | Yes | - | 6.26E+02 | nc |
| Ethyl-p-nitrophenyl Phosphonate | 2104-64-5 | No | No | Organics | - | | - | | 1.00E-05 | IR | - | | 1 | 0.0361 | 323.31 | 0.2496568 | 16.315335 | 6.7980562 | 0.8 | Yes | - | 8.92E-02 | nc |
| Ethylbenzene | 100-41-4 | No | Yes | Organics | 1.10E-02 | C | 2.50E-06 | C | 1.00E-01 | IR | 1.00E+00 | IR | 1 | 0.0493 | 106.17 | 0.1953775 | 0.9922292 | 0.4134288 | 1 | Yes | 7.00E+02 | 1.50E+00 | ca |
| Ethylene Cyanohydrin | 109-78-4 | No | No | Organics | - | | - | | 7.00E-02 | PP | - | | 1 | 0.000148 | 71.079 | 0.0004799 | 0.6311061 | 0.2629609 | 1 | Yes | - | 1.40E+03 | nc |
| Ethylene Diamine | 107-15-3 | No | Yes | Organics | - | | - | | 9.00E-02 | PP | - | | 1 | 0.0000318 | 60.099 | 0.0000948 | 0.5477904 | 0.228246 | 1 | No | - | 1.80E+03 | nc |
| Ethylene Glycol | 107-21-1 | No | No | Organics | - | | - | | 2.00E+00 | IR | 4.00E-01 | CA | 1 | 0.0000877 | 62.069 | 0.0002657 | 0.5618836 | 0.2341182 | 1 | Yes | - | 4.01E+04 | nc |
| Ethylene Glycol Monobutyl Ether | 111-76-2 | No | No | Organics | - | | - | | 1.00E-01 | IR | 1.60E+00 | IR | 1 | 0.00121 | 118.18 | 0.0050592 | 1.1584252 | 0.4826772 | 1 | Yes | - | 1.98E+03 | nc |
| Ethylene Oxide | 75-21-8 | Yes | Yes | Organics | 3.10E-01 | C | 3.00E-03 | I | - | | 3.00E-02 | CA | 1 | 0.00056 | 44.054 | 0.0014296 | 0.4454125 | 0.1855885 | 1 | Yes | - | 6.70E-04 | ca |
| Ethylene Thiourea | 96-45-7 | No | No | Organics | 4.50E-02 | C | 1.30E-05 | C | 8.00E-05 | IR | - | | 1 | 0.000152 | 102.16 | 0.0005909 | 0.942228 | 0.392595 | 1 | Yes | - | 1.60E+00 | nc |
| Ethyleneimine | 151-56-4 | No | Yes | Organics | 6.50E+01 | C | 1.90E-02 | C | - | | - | | 1 | 0.000581 | 43.069 | 0.0014665 | 0.4397911 | 0.1832463 | 1 | Yes | - | 2.37E-04 | ca |
| Ethylphenol, 4- | 123-07-9 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0167485 | 122.17 | 0.0712009 | 1.2195848 | 0.5081603 | 1 | Yes | - | - | - |
| Ethylphthalyl Ethyl Glycolate | 84-72-0 | No | No | Organics | - | | - | | 3.00E+00 | IR | - | | 1 | 0.00119 | 280.28 | 0.0076625 | 9.3675925 | 3.9031636 | 1 | Yes | - | 5.79E+04 | nc |
| Famphur | 52-85-7 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00071 | 325.34 | 0.0049255 | 16.74804 | 6.97835 | 1 | Yes | - | - | - |
| Fenamiphos | 22224-92-6 | No | No | Organics | - | | - | | 2.50E-04 | IR | - | | 1 | 0.00436 | 303.36 | 0.0292074 | 12.614673 | 5.2561137 | 0.9 | Yes | - | 4.36E+00 | nc |
| Fenpropathrin | 39515-41-8 | No | No | Organics | - | | - | | 2.50E-02 | IR | - | | 1 | 0.167 | 349.43 | 1.2006688 | 37.143138 | 9.5204341 | 0.8 | Yes | - | 6.40E+01 | nc |
| Fluometuron | 2164-17-2 | No | No | Organics | - | | - | | 1.30E-02 | IR | - | | 1 | 0.00316 | 232.21 | 0.0185206 | 5.0400633 | 2.1000264 | 1 | Yes | - | 2.42E+02 | nc |
| Fluoride | 16984-48-8 | No | No | Inorganics | - | | - | | 4.00E-02 | CA | 1.30E-02 | CA | 1 | 0.001 | 37.993 | 0.0023709 | 0.4119647 | 0.171652 | 1 | Yes | - | 7.99E+02 | nc |
| Fluorine (Soluble Fluoride) | 7782-41-4 | No | No | Inorganics | - | | - | | 6.00E-02 | IR | 1.30E-02 | CA | 1 | 0.001 | 96.107 | 0.0023708 | 0.4119488 | 0.1716453 | 1 | Yes | 4.00E+03 | 1.20E+03 | nc |
| Fluorobenzene | 462-06-6 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0146 | 96.105 | 0.0550494 | 0.8714611 | 0.3631088 | 1 | Yes | - | - | - |
| Fluorobiphenyl, 2- | 321-60-8 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0722 | 172.2 | 0.3644017 | 2.32477 | 0.9686542 | 1 | Yes | - | - | - |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

**Site-specific
Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|-------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Fluorophenol, 2- | 367-12-4 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00504 | 112.1 | 0.0205239 | 1.0710753 | 0.4462814 | 1 | Yes | - | - | |
| Fluridone | 59756-60-4 | No | No | Organics | - | | - | | 8.00E-02 | IR | - | | 1 | 0.0028 | 329.3 | 0.0195431 | 17.629987 | 7.3458279 | 0.9 | Yes | - | 1.44E+03 | nc |
| Flurprimidol | 56425-91-3 | No | No | Organics | - | | - | | 1.50E-02 | OP | - | | 1 | 0.00459 | 312.2 | 0.0311974 | 14.154156 | 5.8975652 | 0.9 | Yes | - | 2.58E+02 | nc |
| Flutolanil | 66332-96-5 | No | No | Organics | - | | - | | 5.00E-01 | OP | - | | 1 | 0.00691 | 323.3 | 0.0477882 | 16.317439 | 6.7989328 | 0.9 | Yes | - | 7.90E+03 | nc |
| Fluvalinate | 69409-94-5 | No | No | Organics | - | | - | | 1.00E-02 | IR | - | | 1 | 0.0792 | 502.9 | 0.6831335 | 268.69259 | 68.905954 | 0.6 | No | - | 2.01E+02 | nc |
| Folpet | 133-07-3 | No | No | Organics | - | | - | | 9.00E-02 | OP | - | | 1 | 0.00266 | 296.5 | 0.0176183 | 11.555693 | 4.814872 | 1 | Yes | - | 1.65E+03 | nc |
| Fomesafen | 72178-02-0 | No | No | Organics | - | | - | | 2.50E-03 | OP | - | | 1 | 0.000457 | 438.7 | 0.0036818 | 72.305609 | 30.127337 | 1 | Yes | - | 4.81E+01 | nc |
| Fonofos | 944-22-9 | No | No | Organics | - | | - | | 2.00E-03 | IR | - | | 1 | 0.027 | 246.3 | 0.1629855 | 6.0465548 | 2.5193978 | 0.9 | Yes | - | 2.45E+01 | nc |
| Formaldehyde | 50-00-0 | No | Yes | Organics | - | | 1.30E-05 | I | 2.00E-01 | IR | 9.83E-03 | AT | 1 | 0.00182 | 30.02 | 0.0038357 | 0.3717112 | 0.1548796 | 1 | Yes | - | 4.32E-01 | ca* |
| Formic Acid | 64-18-6 | No | Yes | Organics | - | | - | | 9.00E-01 | PP | 3.00E-04 | SC | 1 | 0.000378 | 46.02 | 0.0009863 | 0.4568836 | 0.1903682 | 1 | Yes | - | 6.26E-01 | nc |
| Fosetyl-AL | 39148-24-8 | No | No | Organics | - | | - | | 2.50E+00 | OP | - | | 1 | 4.1E-7 | 354.1 | 2.9674E-6 | 24.270347 | 10.112645 | 1 | No | - | 5.01E+04 | nc |
| Fuel Oil Number 2 | 68476-30-2 | No | No | Organics | - | | - | | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Furazolidone | 67-45-8 | No | No | Organics | 3.80E+00 | H | - | | - | - | - | | 1 | 0.0000803 | 225.1 | 0.0004634 | 4.6020994 | 1.9175414 | 1 | Yes | - | 2.05E-02 | ca |
| Furfural | 98-01-1 | No | Yes | Organics | - | | - | | 3.00E-03 | IR | 5.00E-02 | HE | 1 | 0.000848 | 96.08 | 0.0031971 | 0.8712476 | 0.3630198 | 1 | Yes | - | 3.79E+01 | nc |
| Furium | 531-82-8 | No | No | Organics | 1.50E+00 | C | 4.30E-04 | C | - | - | - | | 1 | 0.000935 | 253.2 | 0.0057226 | 6.6091863 | 2.7538276 | 1 | Yes | - | 5.05E-02 | ca |
| Furmecycloz | 60568-05-0 | No | No | Organics | 3.00E-02 | I | 8.60E-06 | C | - | - | - | | 1 | 0.0499 | 251.3 | 0.3042632 | 6.4492319 | 2.6871799 | 0.9 | Yes | - | 1.12E+00 | ca |
| Dibenzofuran | 132-64-9 | No | Yes | Organics | - | | - | | 1.00E-03 | SC | - | | 1 | 0.0975 | 168.2 | 0.4863448 | 2.207903 | 0.9199596 | 1 | Yes | - | 7.86E+00 | nc |
| Furan | 110-00-9 | No | Yes | Organics | - | | - | | 1.00E-03 | IR | - | | 1 | 0.00505 | 68.07 | 0.0160256 | 0.6071354 | 0.2529731 | 1 | Yes | - | 1.92E+01 | nc |
| Heptachlorodibenzofuran, 1,2,3,4,6,7,8- | 67562-39-4 | No | Yes | Organics | 1.30E+03 | W | 3.80E-01 | W | 7.00E-08 | WH | 4.00E-06 | WH | 1 | 1.45 | 409.3 | 11.282902 | 93.736911 | 20.605576 | 0 | No | - | 1.19E-05 | ca |
| Hexachlorodibenzofuran, 1,2,3,4,7,8- | 70648-26-9 | No | Yes | Organics | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 2.25 | 374.8 | 16.755196 | 60.784699 | 13.216631 | 0 | No | - | 1.19E-06 | ca |
| HpCDF, 1,2,3,4,7,8,9- | 55673-89-7 | No | Yes | Organics | 1.30E+03 | W | 3.80E-01 | W | 7.00E-08 | WH | 4.00E-06 | WH | 1 | 1.45 | 409.3 | 11.282902 | 93.736911 | 20.605576 | 0 | No | - | 1.19E-05 | ca |
| HpCDF, 2,3,7,8- | 38998-75-3 | No | Yes | Organics | 1.30E+03 | W | 3.80E-01 | W | 7.00E-08 | WH | 4.00E-06 | WH | 1 | 1.45 | 409.3 | 11.282902 | 93.736911 | 20.605576 | 0 | No | - | 1.19E-05 | ca |
| HxCDF, 1,2,3,6,7,8- | 57117-44-9 | No | Yes | Organics | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 2.25 | 374.8 | 16.755196 | 60.784699 | 13.216631 | 0 | No | - | 1.19E-06 | ca |
| HxCDF, 1,2,3,7,8,9- | 72918-21-9 | No | No | Organics | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 1.35 | 374.8 | 10.053118 | 59.886344 | 13.216631 | 0 | No | - | 5.99E-06 | ca* |
| HxCDF, 2,3,4,6,7,8- | 60851-34-5 | No | No | Organics | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 2.25 | 374.8 | 16.755196 | 60.784699 | 13.216631 | 0 | No | - | 5.99E-06 | ca* |
| HxCDF, 2,3,7,8- | 55684-94-1 | No | No | Organics | 1.30E+04 | W | 3.80E+00 | W | 7.00E-09 | WH | 4.00E-07 | WH | 1 | 1.35 | 374.8 | 10.053118 | 59.886344 | 13.216631 | 0 | No | - | 5.99E-06 | ca* |
| Gadolinium | 7440-54-2 | No | No | Inorganics | - | | - | | - | - | - | | 1 | 0.001 | 157.2 | 0.0048231 | 1.9171672 | 0.7988197 | 1 | Yes | - | - | |
| Gallium | 7440-55-3 | No | No | Inorganics | - | | - | | - | - | - | | 1 | 0.001 | 69.72 | 0.0032115 | 0.6201432 | 0.258393 | 1 | Yes | - | - | |

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AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Resident Screening Levels (RSL) for Tap Water**

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| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|-------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Germanium | 7440-56-4 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 72.64 | 0.003278 | 0.6439379 | 0.2683075 | 1 | Yes | - | - | |
| Glufosinate, Ammonium | 77182-82-2 | No | No | Organics | - | | - | | 6.00E-03 | OP | - | | 1 | 3.42E-8 | 198.1 | 1.8517E-7 | 3.249047 | 1.3537696 | 1 | No | - | 1.20E+02 | nc |
| Glutaraldehyde | 111-30-8 | No | No | Organics | - | | - | | - | | 8.00E-05 | CA | 1 | 0.000325 | 100.1 | 0.0012507 | 0.9177661 | 0.3824025 | 1 | Yes | - | - | |
| Glycerol | 56-81-5 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0000322 | 92.09 | 0.000119 | 0.8275457 | 0.3448107 | 1 | Yes | - | - | |
| Glycidyl | 765-34-4 | No | Yes | Organics | - | | - | | 4.00E-04 | IR | 1.00E-03 | HE | 1 | 0.000516 | 72.06 | 0.0016848 | 0.639173 | 0.2663221 | 1 | Yes | - | 1.65E+00 | nc |
| Glyphosate | 1071-83-6 | No | No | Organics | - | | - | | 1.00E-01 | IR | - | | 1 | 4.54E-8 | 169.0 | 2.2705E-7 | 2.2328111 | 0.930338 | 1 | No | 7.00E+02 | 2.01E+03 | nc |
| Guanidine Chloride | 50-01-1 | No | No | Organics | - | | - | | 2.00E-02 | PP | - | | 1 | 3.86E-8 | 95.53 | 1.4511E-7 | 0.865046 | 0.3604358 | 1 | No | - | 4.01E+02 | nc |
| Guanidine | 113-00-8 | No | Yes | Organics | - | | - | | 1.00E-02 | SC | - | | 1 | 0.0000603 | 59.07 | 0.0001783 | 0.540577 | 0.2252404 | 1 | Yes | - | 2.00E+02 | nc |
| Guanidine Nitrate | 506-93-4 | No | No | Organics | - | | - | | 3.00E-02 | SC | - | | 1 | 2.65E-8 | 122.1 | 1.1263E-7 | 1.2186416 | 0.5077673 | 1 | No | - | 6.02E+02 | nc |
| Azinphos-methyl | 86-50-0 | No | No | Organics | - | | - | | 3.00E-03 | AT | 1.00E-02 | AT | 1 | 0.00175 | 317.3 | 0.01199 | 15.104557 | 6.2935654 | 1 | Yes | - | 5.61E+01 | nc |
| Haloacetic acids | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | - | |
| Haloxyfop, Methyl | 69806-40-2 | No | No | Organics | - | | - | | 5.00E-05 | IR | - | | 1 | 0.006 | 375.7 | 0.0447317 | 32.073621 | 13.364009 | 0.9 | Yes | - | 7.56E-01 | nc |
| HCDD, 1,2,3,4,6,7,8,- | 35822-46-9 | No | Yes | Organics | 1.30E+03 | C | 3.80E-01 | C | 1.00E-06 | CA | 4.00E-06 | CA | 1 | 1.33 | 425.3 | 10.549481 | 114.95554 | 25.327058 | 0 | No | - | 1.19E-05 | ca |
| Heptachlor | 76-44-8 | No | Yes | Organics | 4.50E+00 | I | 1.30E-03 | I | 5.00E-04 | IR | - | | 1 | 0.143 | 373.3 | 1.062682 | 50.142248 | 12.955099 | 0.8 | Yes | 4.00E-01 | 1.39E-03 | ca |
| Heptachlor Epoxide | 1024-57-3 | No | Yes | Organics | 9.10E+00 | I | 2.60E-03 | I | 1.30E-05 | IR | - | | 1 | 0.0209 | 389.3 | 0.1586084 | 38.216595 | 15.923581 | 0.8 | Yes | 2.00E-01 | 1.39E-03 | ca* |
| Heptanal, n- | 111-71-7 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0119 | 114.1 | 0.0489089 | 1.1003326 | 0.4584719 | 1 | Yes | - | - | |
| Heptane, N- | 142-82-5 | No | Yes | Organics | - | | - | | 3.00E-04 | SC | 4.00E-01 | PP | 1 | 0.537 | 100.2 | 2.0675521 | 1.5659999 | 0.3828466 | 1 | No | - | 5.97E+00 | nc |
| Heptanol, n- | 111-70-6 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0192337 | 116.2 | 0.0797429 | 1.1292237 | 0.4705099 | 1 | Yes | - | - | |
| Hexabromobenzene | 87-82-1 | No | Yes | Organics | - | | - | | 2.00E-03 | IR | - | | 1 | 0.0136 | 551.4 | 0.1228385 | 309.31714 | 128.88214 | 0.7 | No | - | 4.01E+01 | nc |
| Hexabromodiphenyl ether, 2,2',4,4',5,5'-(BDE-153) | 68631-49-2 | No | No | Organics | - | | - | | 2.00E-04 | IR | - | | 1 | - | 643.5 | - | 1014.2101 | 422.58754 | 0 | No | - | 4.01E+00 | nc |
| Hexachlorobenzene | 118-74-1 | No | Yes | Organics | 1.60E+00 | I | 4.60E-04 | I | 8.00E-04 | IR | - | | 1 | 0.254 | 284.7 | 1.6485993 | 16.572824 | 4.136345 | 0.9 | No | 1.00E+00 | 9.76E-03 | ca |
| Hexachlorobutadiene | 87-68-3 | No | Yes | Organics | 7.80E-02 | I | 2.20E-05 | I | 1.00E-03 | PP | - | | 1 | 0.081 | 260.7 | 0.5030743 | 7.2830953 | 3.034623 | 0.9 | Yes | - | 1.39E-01 | ca* |
| Hexachlorocyclohexane, Alpha- | 319-84-6 | No | No | Organics | 6.30E+00 | I | 1.80E-03 | I | 8.00E-03 | AT | - | | 1 | 0.0206 | 290.8 | 0.1351181 | 10.732675 | 4.471948 | 0.9 | Yes | - | 7.25E-03 | ca |
| Hexachlorocyclohexane, Beta- | 319-85-7 | No | No | Organics | 1.80E+00 | I | 5.30E-04 | I | - | | - | | 1 | 0.0206 | 290.8 | 0.1351181 | 10.732675 | 4.471948 | 0.9 | Yes | - | 2.54E-02 | ca |
| Hexachlorocyclohexane, Delta- | 319-86-8 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0206 | 290.8 | 0.1351181 | 10.732675 | 4.471948 | 0.9 | Yes | - | - | |
| Hexachlorocyclohexane, Epsilon- | 6108-10-7 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0206 | 290.8 | 0.1351181 | 10.732675 | 4.471948 | 0.9 | Yes | - | - | |
| Hexachlorocyclohexane, Gamma-(Lindane) | 58-89-9 | No | No | Organics | 1.10E+00 | C | 3.10E-04 | C | 3.00E-04 | IR | - | | 1 | 0.0206 | 290.8 | 0.1351181 | 10.732675 | 4.471948 | 0.9 | Yes | 2.00E-01 | 4.15E-02 | ca* |

**Site-specific
 Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|--------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Hexachlorocyclohexane, Technical | 608-73-1 | No | No | Organics | 1.80E+00 | I | 5.10E-04 | I | - | - | - | - | 1 | 0.0206 | 290.83 | 0.1351181 | 10.732675 | 4.471948 | 0.9 | Yes | - | 2.54E-02 | ca |
| Hexachlorocyclopentadiene | 77-47-4 | No | Yes | Organics | - | - | - | - | 6.00E-03 | IR | 2.00E-04 | IR | 1 | 0.103 | 272.77 | 0.6542778 | 13.931295 | 3.5429151 | 0.9 | Yes | 5.00E+01 | 4.12E-01 | nc |
| Hexachloroethane | 67-72-1 | No | Yes | Organics | 4.00E-02 | I | 1.10E-05 | C | 7.00E-04 | IR | 3.00E-02 | IR | 1 | 0.0415 | 236.74 | 0.2455899 | 5.3432315 | 2.2263465 | 1 | Yes | - | 3.28E-01 | ca* |
| Hexachlorophene | 70-30-4 | No | No | Organics | - | - | - | - | 3.00E-04 | IR | - | - | 1 | 0.836 | 406.91 | 6.4860772 | 88.826752 | 19.977666 | 0 | No | - | 6.02E+00 | nc |
| Hexachloropropene | 1888-71-7 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.051 | 248.75 | 0.3093701 | 6.23821 | 2.5992542 | 0.9 | Yes | - | - | - |
| Hexadecanoic Acid | 57-10-3 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 3.32 | 256.43 | 20.447921 | 13.254367 | 2.8698338 | 0.8 | No | - | - | - |
| Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) | 121-82-4 | No | No | Organics | 1.10E-01 | I | - | - | 3.00E-03 | IR | - | - | 1 | 0.000336 | 222.12 | 0.001926 | 4.4251907 | 1.8438295 | 1 | Yes | - | 7.02E-01 | ca* |
| Hexamethylene Diisocyanate, 1,6- | 822-06-0 | No | Yes | Organics | - | - | - | - | - | - | 1.00E-05 | IR | 1 | 0.0237 | 168.2 | 0.1182192 | 2.207903 | 0.9199596 | 1 | Yes | - | 2.09E-02 | nc |
| Hexamethylphosphoramide | 680-31-9 | No | No | Organics | - | - | - | - | 4.00E-04 | PP | - | - | 1 | 0.000237 | 179.2 | 0.0012202 | 2.5443684 | 1.0601535 | 1 | Yes | - | 7.99E+00 | nc |
| Hexane, N- | 110-54-3 | No | Yes | Organics | - | - | - | - | - | - | 7.00E-01 | IR | 1 | 0.201 | 86.178 | 0.7176636 | 1.2376934 | 0.3194814 | 1 | Yes | - | 1.46E+03 | nc |
| Hexanedioic Acid | 124-04-9 | No | No | Organics | - | - | - | - | 2.00E+00 | PP | - | - | 1 | 0.000268 | 146.14 | 0.0012461 | 1.6612844 | 0.6922018 | 1 | Yes | - | 4.00E+04 | nc |
| Hexanol, n- | 111-27-3 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0093462 | 102.18 | 0.0363365 | 0.942471 | 0.3926962 | 1 | Yes | - | - | - |
| Hexanone, 2- | 591-78-6 | No | Yes | Organics | - | - | - | - | 5.00E-03 | IR | 3.00E-02 | IR | 1 | 0.00355 | 100.16 | 0.0136648 | 0.9182395 | 0.3825998 | 1 | Yes | - | 3.80E+01 | nc |
| Hexazinone | 51235-04-2 | No | No | Organics | - | - | - | - | 3.30E-02 | IR | - | - | 1 | 0.00102 | 252.32 | 0.0062316 | 6.5320875 | 2.7217031 | 1 | Yes | - | 6.44E+02 | nc |
| Hydrazine | 302-01-2 | No | Yes | Inorganics | 3.00E+00 | I | 4.90E-03 | I | - | - | 3.00E-05 | PP | 1 | 0.0000436 | 32.045 | 0.000095 | 0.3815153 | 0.1589647 | 1 | Yes | - | 1.10E-03 | ca* |
| Hydrazine Sulfate | 10034-93-2 | No | No | Inorganics | 3.00E+00 | I | 4.90E-03 | I | - | - | - | - | 1 | 0.001 | 128.1 | 0.0043531 | 1.3164974 | 0.5485406 | 1 | Yes | - | 2.58E-02 | ca |
| Hydrogen Chloride | 7647-01-0 | No | Yes | Inorganics | - | - | - | - | - | - | 2.00E-02 | IR | 1 | 0.001 | 35.45 | 0.00229 | 0.3986392 | 0.1660997 | 1 | Yes | - | 4.17E+01 | nc |
| Hydrogen Fluoride | 7664-39-3 | No | Yes | Inorganics | - | - | - | - | 4.00E-02 | CA | 1.40E-02 | CA | 1 | 0.001 | 20.006 | 0.0017203 | 0.3266582 | 0.1361076 | 1 | Yes | - | 2.82E+01 | nc |
| Hydrogen Selenide | 7783-07-5 | No | Yes | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 80.976 | 0.003461 | 0.7170106 | 0.2987544 | 1 | Yes | - | - | - |
| Hydrogen Sulfate | 12143-45-2 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 128.1 | 0.0043531 | 1.3164974 | 0.5485406 | 1 | Yes | - | - | - |
| Hydrogen Sulfide | 7783-06-4 | No | Yes | Inorganics | - | - | - | - | - | - | 2.00E-03 | IR | 1 | 0.001 | 34.08 | 0.0022453 | 0.3916589 | 0.1631912 | 1 | Yes | - | 4.17E+00 | nc |
| Hydroquinone | 123-31-9 | No | No | Organics | 6.00E-02 | P | - | - | 4.00E-02 | PP | - | - | 1 | 0.000931 | 110.11 | 0.0037574 | 1.0439411 | 0.4349755 | 1 | Yes | - | 1.28E+00 | ca |
| Imazalil | 35554-44-0 | No | No | Organics | 6.11E-02 | O | - | - | 2.50E-03 | OP | - | - | 1 | 0.0116 | 297.19 | 0.0769134 | 11.649948 | 4.854145 | 0.9 | Yes | - | 9.01E-01 | ca* |
| Imazaquin | 81335-37-7 | No | No | Organics | - | - | - | - | 2.50E-01 | IR | - | - | 1 | 0.000483 | 311.34 | 0.0032779 | 13.981829 | 5.8257622 | 1 | Yes | - | 4.92E+03 | nc |
| Indium | 7440-74-6 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 114.82 | 0.0041213 | 1.1093076 | 0.4622115 | 1 | Yes | - | - | - |
| Iodide | 20461-54-5 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 126.9 | 0.0043327 | 1.2962835 | 0.5401181 | 1 | Yes | - | - | - |
| Iodine | 7553-56-2 | No | No | Inorganics | - | - | - | - | 1.00E-02 | AT | - | - | 1 | 0.001 | 253.81 | 0.0061275 | 6.6588003 | 2.7745001 | 1 | Yes | - | 2.00E+02 | nc |
| Iodomethane | 74-88-4 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00252 | 141.94 | 0.0115473 | 1.5737074 | 0.6557114 | 1 | Yes | - | - | - |
| Iodopropynyl Butylcarbamate (IPBC) | 55406-53-6 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.00177 | 281.09 | 0.0114136 | 9.4659453 | 3.9441439 | 1 | Yes | - | - | - |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|----------------------------------|-------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|--------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Iprodione | 36734-19-7 | No | No | Organics | - | - | - | - | 4.00E-02 | IR | - | - | 1 | 0.00217 | 330.17 | 0.0151654 | 17.82428 | 7.4267833 | 0.9 | Yes | - | 7.37E+02 | nc |
| Iron | 7439-89-6 | No | No | Inorganics | - | - | - | - | 7.00E-01 | PP | - | - | 1 | 0.001 | 55.847 | 0.0028743 | 0.518565 | 0.2160687 | 1 | Yes | - | 1.40E+04 | nc |
| Iron Sulfide | 11126-12-8 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | - | - | - | - | 0 | Yes | - | - | - |
| Isobutyl Alcohol | 78-83-1 | No | Yes | Organics | - | - | - | - | 3.00E-01 | IR | - | - | 1 | 0.00192 | 74.124 | 0.0063578 | 0.6563786 | 0.2734911 | 1 | Yes | - | 5.92E+03 | nc |
| Isodrin | 465-73-6 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.293 | 364.92 | 2.1527476 | 47.726506 | 11.625208 | 0.6 | No | - | - | - |
| Isophorone | 78-59-1 | No | No | Organics | 9.50E-04 | I | - | - | 2.00E-01 | IR | 2.00E+00 | CA | 1 | 0.00354 | 138.21 | 0.0160066 | 1.4998091 | 0.6249205 | 1 | Yes | - | 7.81E+01 | ca* |
| Isopropalin | 33820-53-0 | No | Yes | Organics | - | - | - | - | 1.50E-02 | IR | - | - | 1 | 0.207 | 309.37 | 1.4003484 | 22.43112 | 5.6796392 | 0.8 | Yes | - | 3.99E+01 | nc |
| Isopropanol | 67-63-0 | No | Yes | Organics | - | - | - | - | 2.00E+00 | PP | 2.00E-01 | PP | 1 | 0.000778 | 60.097 | 0.0023197 | 0.5477762 | 0.2282401 | 1 | Yes | - | 4.13E+02 | nc |
| Isopropyl Methyl Phosphonic Acid | 1832-54-8 | No | No | Organics | - | - | - | - | 1.00E-01 | IR | - | - | 1 | 0.000396 | 138.1 | 0.0017899 | 1.4976833 | 0.6240347 | 1 | Yes | - | 2.00E+03 | nc |
| Isopropyltoluene, p- | 99-87-6 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.147 | 134.22 | 0.655017 | 2.333453 | 0.593582 | 1 | Yes | - | - | - |
| Isosafrole | 120-58-1 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0334 | 162.19 | 0.1636007 | 2.0432617 | 0.851359 | 1 | Yes | - | - | - |
| Isoxaben | 82558-50-7 | No | No | Organics | - | - | - | - | 5.00E-02 | IR | - | - | 1 | 0.00887 | 332.4 | 0.0621986 | 18.344251 | 7.643438 | 0.9 | Yes | - | 7.34E+02 | nc |
| JP-4 | 50815-00-4 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| JP-5 | NA | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| JP-7 | NA | No | Yes | Organics | - | - | - | - | - | - | 3.00E-01 | AT | 1 | - | - | - | - | - | 0 | No | - | 6.26E+02 | nc |
| JP-8 | NA | No | Yes | Organics | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0 | - | - | - | - |
| Kerosene | 8008-20-6 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Lactofen | 77501-63-4 | No | No | Organics | - | - | - | - | 8.00E-03 | OP | - | - | 1 | 0.00631 | 461.78 | 0.0521523 | 97.280992 | 40.533747 | 0.9 | Yes | - | 1.00E+02 | nc |
| Lactonitrile | 78-97-7 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.000148 | 71.079 | 0.0004799 | 0.6311061 | 0.2629609 | 1 | Yes | - | - | - |
| Lanthanum | 7439-91-0 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 138.91 | 0.0045331 | 1.5134079 | 0.6305866 | 1 | Yes | - | - | - |
| Bensulfuron-methyl | 83055-99-6 | No | No | Organics | - | - | - | - | 2.00E-01 | IR | - | - | 1 | 0.000219 | 410.41 | 0.0017064 | 50.159823 | 20.899926 | 1 | Yes | - | 3.95E+03 | nc |
| Dimethylethyl Lead | 107584-40-7 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Lead Alkyls | NA | No | No | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Lead Chromate | 7758-97-6 | Yes | No | Inorganics | 5.00E-01 | C | 1.50E-01 | C | 2.00E-02 | CA | 2.00E-04 | CA | 0.025 | 0.001 | 323.2 | 0.0069145 | 16.29221 | 6.7884207 | 1 | Yes | - | 4.12E-02 | ca |
| Lead Phosphate | 7446-27-7 | No | No | Inorganics | 8.50E-03 | C | 1.20E-05 | C | - | - | - | - | 1 | 0.001 | 811.51 | 0.0109565 | 8841.2972 | 3683.8738 | 0.8 | Yes | - | 9.12E+00 | ca |
| Lead acetate | 301-04-2 | No | No | Organics | 8.50E-03 | C | 1.20E-05 | C | - | - | - | - | 1 | 0.0000208 | 327.3 | 0.0001447 | 17.17671 | 7.1569626 | 1 | Yes | - | 9.16E+00 | ca |
| Dimethylmercury | 593-74-8 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00419 | 230.66 | 0.0244752 | 4.9403304 | 2.058471 | 1 | Yes | - | - | - |
| Flusilazole | 85509-19-9 | No | No | Organics | - | - | - | - | 2.00E-03 | OP | - | - | 1 | 0.00766 | 315.4 | 0.0523222 | 14.733299 | 6.1388744 | 0.9 | Yes | - | 3.13E+01 | nc |
| Coronene | 191-07-1 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 3.86 | 300.36 | 25.729717 | 23.447744 | 5.0566716 | 0.3 | No | - | - | - |
| Imazethapyr | 81335-77-5 | No | No | Organics | - | - | - | - | 2.50E+00 | OP | - | - | 1 | 0.002 | 289.34 | 0.0130846 | 10.528439 | 4.3868496 | 1 | Yes | - | 4.69E+04 | nc |
| Fenvalerate | 51630-58-1 | No | No | Organics | - | - | - | - | 2.50E-02 | IR | - | - | 1 | 0.0938 | 419.91 | 0.7392777 | 91.267057 | 23.623528 | 0.7 | No | - | 5.01E+02 | nc |

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Myrtle Beach, South Carolina

Site-specific
Resident Screening Levels (RSL) for Tap Water

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| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|--------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Ammonium Perchlorate | 7790-98-9 | No | No | Inorganics | - | | - | | 7.00E-04 | IR | - | | 1 | 0.001 | 117.49 | 0.004169 | 1.1481642 | 0.4784017 | 1 | Yes | - | 1.40E+01 | nc |
| Aluminum metaphosphate | 13776-88-0 | No | No | Inorganics | - | | - | | 4.86E+01 | PP | - | | 1 | 0.001 | 263.9 | 0.0062481 | 7.5840291 | 3.1600121 | 1 | Yes | - | 9.70E+05 | nc |
| Ammonium polyphosphate | 68333-79-9 | No | No | Inorganics | - | | - | | 4.86E+01 | PP | - | | 1 | 0.001 | - | - | - | - | 0 | Yes | - | 9.70E+05 | nc |
| Calcium pyrophosphate | 7790-76-3 | No | No | Inorganics | - | | - | | 4.86E+01 | PP | - | | 1 | 0.001 | 254.1 | 0.006131 | 6.6837468 | 2.7848945 | 1 | Yes | - | 9.70E+05 | nc |
| Diammonium phosphate | 7783-28-0 | No | No | Inorganics | - | | - | | 4.86E+01 | PP | - | | 1 | 0.001 | 132.06 | 0.0044199 | 1.3854664 | 0.5772777 | 1 | Yes | - | 9.70E+05 | nc |
| Dicalcium phosphate | 7757-93-9 | No | No | Inorganics | - | | - | | 4.86E+01 | PP | - | | 1 | 0.001 | 136.06 | 0.0044863 | 1.4588008 | 0.6078337 | 1 | Yes | - | 9.70E+05 | nc |
| Dimagnesium phosphate | 7782-75-4 | No | No | Inorganics | - | | - | | 4.86E+01 | PP | - | | 1 | 0.001 | 174.33 | 0.0050782 | 2.3895053 | 0.9956272 | 1 | Yes | - | 9.70E+05 | nc |
| Dipotassium phosphate | 7758-11-4 | No | No | Inorganics | - | | - | | 4.86E+01 | PP | - | | 1 | 0.001 | 174.18 | 0.005076 | 2.384888 | 0.9937033 | 1 | Yes | - | 9.70E+05 | nc |
| Disodium phosphate | 7558-79-4 | No | No | Inorganics | - | | - | | 4.86E+01 | PP | - | | 1 | 0.001 | 141.96 | 0.0045826 | 1.5741133 | 0.6558805 | 1 | Yes | - | 9.70E+05 | nc |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | No | No | Organics | 1.40E-02 | I | 2.40E-06 | C | 2.00E-02 | IR | - | | 1 | 1.13 | 390.57 | 8.589236 | 72.882395 | 16.182319 | 0.8 | No | 6.00E+00 | 5.56E+00 | ca* |
| Bromophenyl-phenyl phthalate, 4- | NA | No | No | Organics | - | | - | | - | - | - | | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Butyl Benzyl Phthalate | 85-68-7 | No | No | Organics | 1.90E-03 | P | - | | 2.00E-01 | IR | - | | 1 | 0.0385 | 312.37 | 0.261711 | 14.168765 | 5.903652 | 0.9 | Yes | - | 1.63E+01 | ca |
| Butylphthalyl Butylglycolate | 85-70-1 | No | No | Organics | - | | - | | 1.00E+00 | IR | - | | 1 | 0.0116 | 336.39 | 0.0818288 | 19.312744 | 8.0469768 | 0.9 | Yes | - | 1.35E+04 | nc |
| Di-n-hexylphthalate | 84-75-3 | No | Yes | Organics | - | | - | | - | - | - | | 1 | 0.709 | 334.46 | 4.9870644 | 34.390378 | 7.8491883 | 0.4 | No | - | - | - |
| Dibutyl Phthalate | 84-74-2 | No | No | Organics | - | | - | | 1.00E-01 | IR | - | | 1 | 0.042 | 278.35 | 0.2695079 | 9.1373443 | 3.8072268 | 0.9 | Yes | - | 9.02E+02 | nc |
| Diethyl Phthalate | 84-66-2 | No | No | Organics | - | | - | | 8.00E-01 | IR | - | | 1 | 0.0036 | 222.24 | 0.0206415 | 4.4320433 | 1.8466847 | 1 | Yes | - | 1.48E+04 | nc |
| Dimethylphthalate | 131-11-3 | No | No | Organics | - | | - | | - | - | - | | 1 | 0.00147 | 194.19 | 0.0078788 | 3.0869102 | 1.2862126 | 1 | Yes | - | - | - |
| Dimethylterephthalate | 120-61-6 | No | Yes | Organics | - | | - | | 1.00E-01 | IR | - | | 1 | 0.00399 | 194.19 | 0.0213852 | 3.0869102 | 1.2862126 | 1 | Yes | - | 1.87E+03 | nc |
| Aroclor 1016 | 12674-11-2 | No | Yes | Organics | 7.00E-02 | S | 2.00E-05 | S | 7.00E-05 | IR | - | | 1 | 0.305 | 549.54 | 2.7499585 | 527.18659 | 125.6819 | 0 | No | - | 2.24E-01 | ca** |
| Aroclor 1221 | 11104-28-2 | No | Yes | Organics | 2.00E+00 | S | 5.71E-04 | S | - | - | - | | 1 | 0.168 | 188.66 | 0.8875153 | 4.6045203 | 1.1976909 | 1 | Yes | - | 4.71E-03 | ca |
| Aroclor 1232 | 11141-16-5 | No | Yes | Organics | 2.00E+00 | S | 5.71E-04 | S | - | - | - | | 1 | 0.168 | 188.66 | 0.8875153 | 4.6045203 | 1.1976909 | 1 | Yes | - | 4.71E-03 | ca |
| Aroclor 1242 | 53469-21-9 | No | Yes | Organics | 2.00E+00 | S | 5.71E-04 | S | - | - | - | | 1 | 0.545 | 291.99 | 3.5818479 | 19.446178 | 4.5393404 | 0.7 | No | - | 7.85E-03 | ca |
| Aroclor 1248 | 12672-29-6 | No | Yes | Organics | 2.00E+00 | S | 5.71E-04 | S | - | - | - | | 1 | 0.475 | 618.43 | 4.5432385 | 1330.8056 | 305.53203 | 0 | No | - | 7.85E-03 | ca |
| Aroclor 1254 | 11097-69-1 | No | Yes | Organics | 2.00E+00 | S | 5.71E-04 | S | 2.00E-05 | IR | - | | 1 | 0.751 | 326.44 | 5.2187714 | 31.096663 | 7.0780357 | 0.5 | No | - | 7.85E-03 | ca* |
| Aroclor 1260 | 11096-82-5 | No | Yes | Organics | 2.00E+00 | S | 5.71E-04 | S | - | - | - | | 1 | 0.986 | 395.33 | 7.5402102 | 77.061908 | 17.206667 | 0 | No | - | 7.85E-03 | ca |
| Aroclor 5460 | 11126-42-4 | No | Yes | Organics | - | | - | | 6.00E-04 | SC | - | | 1 | 0.584 | 291.99 | 3.8381637 | 19.544977 | 4.5393404 | 0.7 | No | - | 1.20E+01 | nc |
| Heptachlorobiphenyl, 2,3,3',4,4',5,5'-(PCB 189) | 39635-31-9 | No | Yes | Organics | 3.90E+00 | W | 1.14E-03 | W | 2.33E-05 | WH | 1.33E-03 | WH | 1 | 2.96 | 395.33 | 22.635925 | 79.618094 | 17.206667 | 0 | No | - | 3.95E-03 | ca |
| Hexachlorobiphenyl, 2,3',4,4',5,5'-(PCB 167) | 52663-72-6 | No | Yes | Organics | 3.90E+00 | W | 1.14E-03 | W | 2.33E-05 | WH | 1.33E-03 | WH | 1 | 1.43 | 360.88 | 10.448263 | 50.069888 | 11.035112 | 0 | No | - | 3.95E-03 | ca |

**Site-specific
 Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|-------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157) | 69782-90-7 | No | Yes | Organics | 3.90E+00 | W | 1.14E-03 | W | 2.33E-05 | WH | 1.33E-03 | WH | 1 | 1.66 | 360.8 | 12.128753 | 50.314922 | 11.035112 | 0 | No | - | 3.95E-03 | ca |
| Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 156) | 38380-08-4 | No | Yes | Organics | 3.90E+00 | W | 1.14E-03 | W | 2.33E-05 | WH | 1.33E-03 | WH | 1 | 1.66 | 360.8 | 12.128753 | 50.314922 | 11.035112 | 0 | No | - | 3.95E-03 | ca |
| Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169) | 32774-16-6 | No | Yes | Organics | 3.90E+03 | W | 1.14E+00 | W | 2.33E-08 | WH | 1.33E-06 | WH | 1 | 1.24 | 360.8 | 9.0600323 | 49.806591 | 11.035112 | 0.1 | No | - | 3.95E-06 | ca |
| Acenaphthene | 83-32-9 | No | Yes | Organics | - | - | - | - | 6.00E-02 | IR | - | - | 1 | 0.086 | 154.2 | 0.4107536 | 1.8434696 | 0.7681124 | 1 | Yes | - | 5.35E+02 | nc |
| Acenaphthylene | 208-96-8 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0911 | 152.2 | 0.4322673 | 1.7963046 | 0.7484603 | 1 | Yes | - | - | - |
| Anthracene | 120-12-7 | No | Yes | Organics | - | - | - | - | 3.00E-01 | IR | - | - | 1 | 0.142 | 178.2 | 0.7291512 | 4.0502151 | 1.0471111 | 1 | Yes | - | 1.77E+03 | nc |
| Benz[a]anthracene | 56-55-3 | Yes | Yes | Organics | 1.00E-01 | W | 6.00E-05 | W | - | - | - | - | 1 | 0.552 | 228.3 | 3.2078842 | 8.4818238 | 1.9967732 | 1 | No | - | 2.98E-02 | ca |
| Benzo(j)fluoranthene | 205-82-3 | No | No | Organics | 1.20E+00 | C | 1.10E-04 | C | - | - | - | - | 1 | 0.69 | 252.3 | 4.2155241 | 11.795999 | 2.7217031 | 0.9 | No | - | 6.49E-02 | ca |
| Benzo[a]pyrene | 50-32-8 | Yes | No | Organics | 1.00E+00 | I | 6.00E-04 | I | 3.00E-04 | IR | 2.00E-06 | IR | 1 | 0.713 | 252.3 | 4.3560416 | 11.822105 | 2.7217031 | 1 | No | 2.00E-01 | 2.51E-02 | ca |
| Benzo[b]fluoranthene | 205-99-2 | Yes | No | Organics | 1.00E-01 | W | 6.00E-05 | W | - | - | - | - | 1 | 0.417 | 252.3 | 2.5476429 | 11.342074 | 2.7217031 | 1 | No | - | 2.51E-01 | ca |
| Benzo[g,h,i]perylene | 191-24-2 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 1.12 | 276.3 | 7.1608826 | 16.575188 | 3.7098192 | 0.7 | No | - | - | - |
| Benzo[k]fluoranthene | 207-08-9 | Yes | No | Organics | 1.00E-02 | W | 6.00E-06 | W | - | - | - | - | 1 | 0.691 | 252.3 | 4.2216336 | 11.797162 | 2.7217031 | 0.9 | No | - | 2.51E+00 | ca |
| Chloronaphthalene, Beta- | 91-58-7 | No | Yes | Organics | - | - | - | - | 8.00E-02 | IR | - | - | 1 | 0.0749 | 162.6 | 0.367363 | 2.0546223 | 0.8560926 | 1 | Yes | - | 7.47E+02 | nc |
| Chrysene | 218-01-9 | Yes | No | Organics | 1.00E-03 | W | 6.00E-07 | W | - | - | - | - | 1 | 0.596 | 228.3 | 3.4635851 | 8.5324003 | 1.9967732 | 1 | No | - | 2.51E+01 | ca |
| Dibenz[a,h]anthracene | 53-70-3 | Yes | No | Organics | 1.00E+00 | W | 6.00E-04 | W | - | - | - | - | 1 | 0.953 | 278.3 | 6.1153732 | 16.878565 | 3.8077178 | 0.6 | No | - | 2.51E-02 | ca |
| Dibenzo(a,e)pyrene | 192-65-4 | No | No | Organics | 1.20E+01 | C | 1.10E-03 | C | - | - | - | - | 1 | 4.19 | 302.3 | 28.023166 | 24.097322 | 5.1901122 | 0.3 | No | - | 6.49E-03 | ca |
| Dimethylbenz(a)anthracene, 7,12- | 57-97-6 | Yes | No | Organics | 2.50E+02 | C | 7.10E-02 | C | - | - | - | - | 1 | 0.408 | 256.3 | 2.512485 | 11.932627 | 2.8668749 | 0.9 | No | - | 1.00E-04 | ca |
| Fluoranthene | 206-44-0 | No | No | Organics | - | - | - | - | 4.00E-02 | IR | - | - | 1 | 0.308 | 202.2 | 1.684738 | 5.7297979 | 1.4272654 | 1 | No | - | 8.02E+02 | nc |
| Fluorene | 86-73-7 | No | Yes | Organics | - | - | - | - | 4.00E-02 | IR | - | - | 1 | 0.11 | 166.2 | 0.5454576 | 2.1522464 | 0.8967693 | 1 | Yes | - | 2.94E+02 | nc |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | Yes | No | Organics | 1.00E-01 | W | 6.00E-05 | W | - | - | - | - | 1 | 1.24 | 276.3 | 7.92812 | 16.651939 | 3.7098192 | 0.6 | No | - | 2.51E-01 | ca |
| Hexythiazox | 78587-05-0 | No | No | Organics | - | - | - | - | 2.50E-02 | IR | - | - | 1 | 0.0828 | 352.8 | 0.5982417 | 23.891532 | 9.9548048 | 0.8 | Yes | - | 1.12E+02 | nc |
| HpCDD, 2,3,7,8- | 37871-00-4 | No | Yes | Organics | 1.30E+03 | U | 3.80E-01 | U | 7.00E-08 | U | 4.00E-06 | U | 1 | 1.33 | 425 | 10.545636 | 114.4955 | 25.226021 | 0 | No | - | 1.19E-05 | ca* |
| HpCDF, 1,2,3,4,7,8,9- | 55673-89-7 | No | Yes | Organics | 1.30E+03 | U | 3.80E-01 | U | 7.00E-08 | U | 4.00E-06 | U | 1 | 1.45 | 409 | 11.278629 | 93.36181 | 20.523374 | 0 | No | - | 1.19E-05 | ca* |
| HxCDF, 2,3,7,8- | 38998-75-3 | No | Yes | Organics | 1.30E+03 | U | 3.80E-01 | U | 7.00E-08 | U | 4.00E-06 | U | 1 | 1.45 | 409 | 11.278629 | 93.36181 | 20.523374 | 0 | No | - | 1.19E-05 | ca* |
| HxCDD, 1,2,3,6,7,8- | 57653-85-7 | No | No | Organics | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 2.86 | 391 | 21.751092 | 75.240903 | 16.272293 | 0 | No | - | 5.99E-06 | ca** |
| HxCDD, 1,2,3,7,8,9- | 19408-74-3 | No | No | Organics | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 2.86 | 391 | 21.751092 | 75.240903 | 16.272293 | 0 | No | - | 5.99E-06 | ca** |
| HxCDF, 1,2,3,6,7,8- | 57117-44-9 | No | Yes | Organics | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 2.25 | 375 | 16.758101 | 60.88692 | 13.238804 | 0 | No | - | 1.19E-06 | ca* |
| HxCDF, 1,2,3,7,8,9- | 72918-21-9 | No | No | Organics | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 1.35 | 375 | 10.054861 | 59.987189 | 13.238804 | 0 | No | - | 5.99E-06 | ca** |
| HxCDF, 2,3,4,6,7,8- | 60851-34-5 | No | No | Organics | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 2.25 | 375 | 16.758101 | 60.88692 | 13.238804 | 0 | No | - | 5.99E-06 | ca** |
| HxCDF, 2,3,7,8- | 55684-94-1 | No | No | Organics | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 1.35 | 375 | 10.054861 | 59.987189 | 13.238804 | 0 | No | - | 5.99E-06 | ca** |
| Hydramethylnon | 67485-29-4 | No | No | Organics | - | - | - | - | 1.70E-02 | U | - | - | 1 | 0.0000902 | 494 | 0.0007711 | 147.38728 | 61.411365 | 1 | Yes | - | 3.37E+01 | nc |
| Hydrazine | 302-01-2 | No | Yes | Inorganics | 3.00E+00 | U | 4.90E-03 | U | - | - | 3.00E-05 | U | 1 | 0.0000436 | 32 | 0.0000949 | 0.381294 | 0.1588725 | 1 | Yes | - | 1.10E-03 | ca** |

**Site-specific
Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|------------------------------------|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Hydrazine Sulfate | 10034-93-2 | No | No | Inorganics | 3.00E+00 | U | 4.90E-03 | U | - | - | - | - | 1 | 0.001 | 128 | 0.0043514 | 1.3148009 | 0.5478337 | 1 | Yes | - | 2.58E-02 | ca |
| Hydrogen Chloride | 7647-01-0 | No | Yes | Inorganics | - | - | - | - | - | - | 2.00E-02 | U | 1 | 0.001 | 35.5 | 0.0022916 | 0.3988963 | 0.1662068 | 1 | Yes | - | 4.17E+00 | nc |
| Hydrogen Cyanide | 74-90-8 | No | Yes | Inorganics | - | - | - | - | 6.00E-04 | U | 8.00E-04 | U | 1 | 0.001 | 27 | 0.0019985 | 0.3574868 | 0.1489528 | 1 | Yes | - | 1.46E-01 | nc |
| Hydrogen Fluoride | 7664-39-3 | No | Yes | Inorganics | - | - | - | - | 4.00E-02 | U | 1.40E-02 | U | 1 | 0.001 | 20 | 0.0017201 | 0.3266329 | 0.1360971 | 1 | Yes | - | 2.82E+00 | nc |
| Hydrogen Selenide | 7783-07-5 | No | Yes | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 81 | 0.0034615 | 0.7172326 | 0.2988469 | 1 | Yes | - | - | - |
| Hydrogen Sulfate | 12143-45-2 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 128 | 0.0043514 | 1.3148009 | 0.5478337 | 1 | Yes | - | - | - |
| Hydrogen Sulfide | 7783-06-4 | No | Yes | Inorganics | - | - | - | - | - | - | 2.00E-03 | U | 1 | 0.001 | 34.1 | 0.002246 | 0.3917599 | 0.1632333 | 1 | Yes | - | 4.17E-01 | nc |
| Hydroquinone | 123-31-9 | No | No | Organics | 6.00E-02 | U | - | - | 4.00E-02 | U | - | - | 1 | 0.000931 | 110 | 0.0037555 | 1.0424614 | 0.4343589 | 1 | Yes | - | 1.28E+00 | ca* |
| Imazalil | 35554-44-0 | No | No | Organics | 6.11E-02 | U | - | - | 2.50E-03 | U | - | - | 1 | 0.0116 | 297 | 0.0768888 | 11.621441 | 4.8422672 | 0.9 | Yes | - | 9.02E-01 | ca** |
| Imazaquin | 81335-37-7 | No | No | Organics | - | - | - | - | 2.50E-01 | U | - | - | 1 | 0.000483 | 311 | 0.0032761 | 13.920665 | 5.8002772 | 1 | Yes | - | 4.92E+02 | nc |
| Imazethapyr | 81335-77-5 | No | No | Organics | - | - | - | - | 2.50E+00 | U | - | - | 1 | 0.002 | 289 | 0.0130769 | 10.482382 | 4.3676593 | 1 | Yes | - | 4.69E+03 | nc |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | Yes | No | Organics | 1.00E-01 | U | 6.00E-05 | U | - | - | - | - | 1 | 1.24 | 276 | 7.9232412 | 16.57865 | 3.6935905 | 0.6 | No | - | 2.51E-01 | ca |
| Indium | 7440-74-6 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 115 | 0.0041245 | 1.1118853 | 0.4632855 | 1 | Yes | - | - | - |
| Iodide | 20461-54-5 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 127 | 0.0043344 | 1.2979561 | 0.540815 | 1 | Yes | - | - | - |
| Iodine | 7553-56-2 | No | No | Inorganics | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.001 | 254 | 0.0061298 | 6.675134 | 2.7813059 | 1 | Yes | - | 2.00E+01 | nc |
| Iodomethane | 74-88-4 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00252 | 142 | 0.0115497 | 1.5749254 | 0.6562189 | 1 | Yes | - | - | - |
| Iodopropynyl Butylcarbamate (IPBC) | 55406-53-6 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.00177 | 281 | 0.0114118 | 9.4549664 | 3.9395693 | 1 | Yes | - | - | - |
| Iprodione | 36734-19-7 | No | No | Organics | - | - | - | - | 4.00E-02 | U | - | - | 1 | 0.00217 | 330 | 0.0151615 | 17.785251 | 7.4105211 | 0.9 | Yes | - | 7.37E+01 | nc |
| Iron | 7439-89-6 | No | No | Inorganics | - | - | - | - | 7.00E-01 | U | - | - | 1 | 0.001 | 55.8 | 0.0028731 | 0.5182508 | 0.2159378 | 1 | Yes | - | 1.40E+03 | nc |
| Iron Sulfide | 11126-12-8 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | - | - | - | - | 0 | Yes | - | - | - |
| Isobutyl Alcohol | 78-83-1 | No | Yes | Organics | - | - | - | - | 3.00E-01 | U | - | - | 1 | 0.00192 | 74.1 | 0.0063568 | 0.6561755 | 0.2734064 | 1 | Yes | - | 5.92E+02 | nc |
| Isodrin | 465-73-6 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.293 | 365 | 2.1529835 | 47.776238 | 11.637207 | 0.6 | No | - | - | - |
| Isophorone | 78-59-1 | No | No | Organics | 9.50E-04 | U | - | - | 2.00E-01 | U | 2.00E+00 | U | 1 | 0.00354 | 138 | 0.0159945 | 1.4957534 | 0.6232306 | 1 | Yes | - | 7.81E+01 | ca** |
| Isopropalin | 33820-53-0 | No | Yes | Organics | - | - | - | - | 1.50E-02 | U | - | - | 1 | 0.207 | 309 | 1.3995107 | 22.323224 | 5.6526064 | 0.8 | Yes | - | 4.00E+00 | nc |
| Isopropanol | 67-63-0 | No | Yes | Organics | - | - | - | - | 2.00E+00 | U | 2.00E-01 | U | 1 | 0.000778 | 60.1 | 0.0023198 | 0.5477974 | 0.2282489 | 1 | Yes | - | 4.13E+01 | nc |
| Isopropyl Methyl Phosphonic Acid | 1832-54-8 | No | No | Organics | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.000396 | 138 | 0.0017892 | 1.4957534 | 0.6232306 | 1 | Yes | - | 2.00E+02 | nc |
| Isopropyltoluene, p- | 99-87-6 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.147 | 134 | 0.65448 | 2.3272799 | 0.5919006 | 1 | Yes | - | - | - |
| Isosafrole | 120-58-1 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0334 | 162 | 0.1635048 | 2.0382619 | 0.8492758 | 1 | Yes | - | - | - |
| Isoxaben | 82558-50-7 | No | No | Organics | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.00887 | 332 | 0.0621612 | 18.249879 | 7.6041163 | 0.9 | Yes | - | 7.35E+01 | nc |
| JP-4 | 50815-00-4 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| JP-5 | NA | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| JP-7 | NA | No | Yes | Organics | - | - | - | - | - | - | 3.00E-01 | U | 1 | - | - | - | - | - | 0 | No | - | 6.26E+02 | nc |
| JP-8 | NA | No | Yes | Organics | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0 | Yes | - | - | - |
| Kerosene | 8008-20-6 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Lactofen | 77501-63-4 | No | No | Organics | - | - | - | - | 8.00E-03 | U | - | - | 1 | 0.00631 | 462 | 0.0521647 | 97.557349 | 40.648896 | 0.9 | Yes | - | 1.00E+02 | nc |
| Lactonitrile | 78-97-7 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.000148 | 71.1 | 0.00048 | 0.631277 | 0.2630321 | 1 | Yes | - | - | - |
| Lanthanum | 7439-91-0 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 139 | 0.0045345 | 1.5151652 | 0.6313188 | 1 | Yes | - | - | - |
| Lead Alkyls | NA | No | No | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Lead Chromate | 7758-97-6 | Yes | No | Inorganics | 5.00E-01 | U | 1.50E-01 | U | 2.00E-02 | U | 2.00E-04 | U | 0.025 | 0.001 | 323 | 0.0069124 | 16.250248 | 6.7709366 | 1 | Yes | - | 4.12E-02 | ca |
| Lead Phosphate | 7446-27-7 | No | No | Inorganics | 8.50E-03 | U | 1.20E-05 | U | - | - | - | - | 1 | 0.001 | 812 | 0.0109599 | 8897.336 | 3707.2233 | 0.8 | Yes | - | 9.12E+00 | ca |
| Lead acetate | 301-04-2 | No | No | Organics | 8.50E-03 | U | 1.20E-05 | U | - | - | - | - | 1 | 0.0000208 | 327 | 0.0001447 | 17.110393 | 7.1293305 | 1 | Yes | - | 9.16E+00 | ca |
| Lead and Compounds | 7439-92-1 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.0001 | 207 | 0.0005534 | 3.6413296 | 1.5172207 | 1 | Yes | 1.50E+01 | - | - |
| Lead subacetate | 1335-32-6 | No | No | Organics | 8.50E-03 | U | 1.20E-05 | U | - | - | - | - | 1 | 1.03E-10 | 806 | 1.1247E-9 | 8234.9315 | 3431.2215 | 1 | No | - | 9.17E+00 | ca |
| Lewisite | 541-25-3 | No | Yes | Organics | - | - | - | - | 5.00E-06 | U | - | - | 1 | 0.0054 | 207 | 0.0298817 | 3.6413296 | 1.5172207 | 1 | Yes | - | 9.03E-02 | nc |
| Linuron | 330-55-2 | No | No | Organics | - | - | - | - | 7.70E-03 | U | - | - | 1 | 0.00839 | 249 | 0.05092 | 6.2583521 | 2.6076467 | 0.9 | Yes | - | 1.28E+02 | nc |

**Site-specific
 Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Lithium | 7439-93-2 | No | No | Inorganics | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.001 | 6.94 | 0.0010132 | 0.2760095 | 0.1150039 | 1 | Yes | - | 3.99E+01 | nc |
| Lithium Perchlorate | 7791-03-9 | No | No | Inorganics | - | - | - | - | 7.00E-04 | U | - | - | 1 | 0.001 | 106 | 0.0039599 | 0.9900565 | 0.4125236 | 1 | Yes | - | 1.40E+01 | nc |
| Lutetium | 7439-94-3 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.000237 | 175 | 0.0012059 | 2.4102383 | 1.004266 | 1 | Yes | - | - | - |
| MCPA | 94-74-6 | No | No | Organics | - | - | - | - | 5.00E-04 | U | - | - | 1 | 0.0169 | 201 | 0.0921534 | 3.3702335 | 1.404264 | 1 | Yes | - | 7.53E+00 | nc |
| MCPB | 94-81-5 | No | No | Organics | - | - | - | - | 4.40E-03 | U | - | - | 1 | 0.0173 | 229 | 0.100691 | 4.8357071 | 2.014878 | 0.9 | Yes | - | 6.46E+01 | nc |
| MCPD | 93-65-2 | No | No | Organics | - | - | - | - | 1.00E-03 | U | - | - | 1 | 0.0131 | 215 | 0.0738783 | 4.0370115 | 1.6820881 | 1 | Yes | - | 1.56E+01 | nc |
| Magnesium | 7439-95-4 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 24.3 | 0.001896 | 0.345255 | 0.1438563 | 1 | Yes | - | - | - |
| Malathion | 121-75-5 | No | No | Organics | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.000812 | 330 | 0.0056734 | 17.785251 | 7.4105211 | 1 | Yes | - | 3.87E+02 | nc |
| Maleic Anhydride | 108-31-6 | No | No | Organics | - | - | - | - | 1.00E-01 | U | 7.00E-04 | U | 1 | 0.00525 | 98.1 | 0.0199996 | 0.8941698 | 0.3725707 | 1 | Yes | - | 1.90E+03 | nc |
| Maleic Hydrazide | 123-33-1 | No | No | Organics | - | - | - | - | 5.00E-01 | U | - | - | 1 | 0.000102 | 112 | 0.0004152 | 1.0696951 | 0.4457063 | 1 | Yes | - | 1.00E+04 | nc |
| Malononitrile | 109-77-3 | No | No | Organics | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.000266 | 66.1 | 0.0008318 | 0.5918614 | 0.2466089 | 1 | Yes | - | 2.00E+00 | nc |
| Mancozeb | 8018-01-7 | No | No | Organics | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.000771 | 541 | 0.0068973 | 270.18423 | 112.57676 | 0.9 | Yes | - | 5.36E+02 | nc |
| Maneb | 12427-38-2 | No | No | Organics | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.000771 | 295 | 0.0050932 | 11.325568 | 4.7189867 | 1 | Yes | - | 9.76E+01 | nc |
| Manganese (Non-diet) | 7439-96-5 | No | No | Inorganics | - | - | - | - | 2.40E-02 | U | 5.00E-05 | U | 0.04 | 0.001 | 54.9 | 0.0028498 | 0.5122713 | 0.2134464 | 1 | Yes | - | 4.34E+02 | nc |
| Mechlorethamine | 51-75-2 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.00107 | 156 | 0.0051401 | 1.8865138 | 0.7860474 | 1 | Yes | - | - | - |
| Mephosfolan | 950-10-7 | No | No | Organics | - | - | - | - | 9.00E-05 | U | - | - | 1 | 0.000237 | 269 | 0.001495 | 8.0995332 | 3.3748055 | 1 | Yes | - | 1.79E+00 | nc |
| Mepiquat Chloride | 24307-26-4 | No | No | Organics | - | - | - | - | 3.00E-02 | U | - | - | 1 | 3.03E-6 | 150 | 0.0000143 | 1.7460633 | 0.7275264 | 1 | No | - | 6.02E+02 | nc |
| Mercaptobenzothiazole, 2- | 149-30-4 | No | No | Organics | 1.10E-02 | U | - | - | 4.00E-03 | U | - | - | 1 | 0.00732 | 167 | 0.0363828 | 2.1740023 | 0.9058343 | 1 | Yes | - | 6.29E+00 | ca* |
| Mercuric Chloride | 7487-94-7 | No | No | Inorganics | - | - | - | - | 3.00E-04 | U | 3.00E-04 | U | 0.07 | 0.001 | 272 | 0.0063432 | 8.41899 | 3.5079125 | 1 | Yes | 2.00E+00 | 5.66E+00 | nc |
| Mercury (elemental) | 7439-97-6 | No | Yes | Inorganics | - | - | - | - | - | - | 3.00E-04 | U | 1 | 0.001 | 201 | 0.0054529 | 3.3702335 | 1.404264 | 1 | Yes | 2.00E+00 | 6.26E-01 | nc |
| Merphos | 150-50-5 | No | Yes | Organics | - | - | - | - | 3.00E-05 | U | - | - | 1 | 4.15 | 299 | 27.60008 | 23.06455 | 4.9687683 | 0.3 | No | - | 6.02E-01 | nc |
| Merphos Oxide | 78-48-8 | No | No | Organics | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.165 | 315 | 1.1263306 | 23.722016 | 6.1072929 | 0.9 | Yes | - | 2.83E-01 | nc |
| Metalaxyl | 57837-19-1 | No | No | Organics | - | - | - | - | 6.00E-02 | U | - | - | 1 | 0.00058 | 279 | 0.0037261 | 9.21425 | 3.8392708 | 1 | Yes | - | 1.18E+03 | nc |
| Methacrylonitrile | 126-98-7 | No | Yes | Organics | - | - | - | - | 1.00E-04 | U | 3.00E-02 | U | 1 | 0.00186 | 67.1 | 0.00586 | 0.5995425 | 0.2498094 | 1 | Yes | - | 1.91E+00 | nc |
| Methamidophos | 10265-92-6 | No | No | Organics | - | - | - | - | 5.00E-05 | U | - | - | 1 | 0.0000744 | 141 | 0.0003398 | 1.5547479 | 0.6478116 | 1 | Yes | - | 1.00E+00 | nc |
| Methanol | 67-56-1 | No | Yes | Organics | - | - | - | - | 2.00E+00 | U | 2.00E+01 | U | 1 | 0.000319 | 32 | 0.0006941 | 0.381294 | 0.1588725 | 1 | Yes | - | 2.04E+04 | nc |
| Methapyrilene | 91-80-5 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.00432 | 261 | 0.026843 | 7.305669 | 3.0440287 | 1 | Yes | - | - | - |
| Methidathion | 950-37-8 | No | No | Organics | - | - | - | - | 1.50E-03 | U | - | - | 1 | 0.000913 | 302 | 0.0061024 | 12.395384 | 5.1647434 | 1 | Yes | - | 2.91E+01 | nc |
| Methomyl | 16752-77-5 | No | No | Organics | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.000482 | 162 | 0.0023596 | 2.0382619 | 0.8492758 | 1 | Yes | - | 4.98E+02 | nc |
| Methoxy-5-nitroaniline, 2- | 99-59-2 | No | No | Organics | 4.90E-02 | U | 1.40E-05 | U | - | - | - | - | 1 | 0.00169 | 168 | 0.008425 | 2.2022164 | 0.9175902 | 1 | Yes | - | 1.54E+00 | ca |
| Methoxychlor | 72-43-5 | No | No | Organics | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.0428 | 346 | 0.3062023 | 21.860495 | 9.1085396 | 0.8 | Yes | 4.00E+01 | 3.70E+01 | nc |
| Methoxyethanol Acetate, 2- | 110-49-6 | No | Yes | Organics | - | - | - | - | 8.00E-03 | U | 1.00E-03 | U | 1 | 0.000396 | 118 | 0.0016545 | 1.1557396 | 0.4815582 | 1 | Yes | - | 2.06E+00 | nc |
| Methoxyethanol, 2- | 109-86-4 | No | Yes | Organics | - | - | - | - | 5.00E-03 | U | 2.00E-02 | U | 1 | 0.00018 | 76.1 | 0.0006039 | 0.6733176 | 0.280549 | 1 | Yes | - | 2.94E+01 | nc |
| Methyl Acetate | 79-20-9 | No | Yes | Organics | - | - | - | - | 1.00E+00 | U | - | - | 1 | 0.000792 | 74.1 | 0.0026222 | 0.6561755 | 0.2734064 | 1 | Yes | - | 1.99E+04 | nc |
| Methyl Acrylate | 96-33-3 | No | Yes | Organics | - | - | - | - | - | - | 2.00E-02 | U | 1 | 0.00175 | 86.1 | 0.0062455 | 0.7659845 | 0.3191602 | 1 | Yes | - | 4.17E+01 | nc |
| Methyl Ethyl Ketone (2-Butanone) | 78-93-3 | No | Yes | Organics | - | - | - | - | 6.00E-01 | U | 5.00E+00 | U | 1 | 0.000962 | 72.1 | 0.0031417 | 0.6394697 | 0.2664457 | 1 | Yes | - | 5.57E+03 | nc |
| Methyl Hydrazine | 60-34-4 | No | Yes | Organics | - | - | 1.00E-03 | U | 1.00E-03 | U | 2.00E-05 | U | 1 | 0.000173 | 46.1 | 0.0004518 | 0.4573198 | 0.1905499 | 1 | Yes | - | 5.62E-03 | ca** |
| Methyl Isobutyl Ketone (4-methyl-2-pentanone) | 108-10-1 | No | Yes | Organics | - | - | - | - | - | - | 3.00E+00 | U | 1 | 0.00319 | 100 | 0.0122692 | 0.9163471 | 0.3818113 | 1 | Yes | - | 6.26E+03 | nc |
| Methyl Isocyanate | 624-83-9 | No | Yes | Organics | - | - | - | - | - | - | 1.00E-03 | U | 1 | 0.0025 | 57.1 | 0.0072658 | 0.5270114 | 0.2195881 | 1 | Yes | - | 2.09E+00 | nc |
| Methyl Mercaptan | 74-93-1 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00276 | 48.1 | 0.0073622 | 0.469267 | 0.1955279 | 1 | Yes | - | - | - |
| Methyl Mercury | 22967-92-6 | No | No | Inorganics | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.001 | 217 | 0.0056657 | 4.1424759 | 1.7260316 | 1 | Yes | - | 2.00E+00 | nc |
| Methyl Methacrylate | 80-62-6 | No | Yes | Organics | - | - | - | - | 1.40E+00 | U | 7.00E-01 | U | 1 | 0.00355 | 100 | 0.0136538 | 0.9163471 | 0.3818113 | 1 | Yes | - | 1.39E+03 | nc |
| Methyl Parathion | 298-00-0 | No | No | Organics | - | - | - | - | 2.50E-04 | U | - | - | 1 | 0.00416 | 263 | 0.0259476 | 7.496525 | 3.1235521 | 1 | Yes | - | 4.47E+00 | nc |
| Methyl Phosphonic Acid | 993-13-5 | No | No | Organics | - | - | - | - | 6.00E-02 | U | - | - | 1 | 0.0000984 | 96 | 0.0003708 | 0.870282 | 0.3626175 | 1 | Yes | - | 1.20E+03 | nc |
| Methyl Styrene (Mixed Isomers) | 25013-15-4 | No | Yes | Organics | - | - | - | - | 6.00E-03 | U | 4.00E-02 | U | 1 | 0.066 | 355 | 0.4782828 | 24.55048 | 10.229367 | 0.8 | Yes | - | 2.30E+01 | nc |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
Site-specific
Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|--|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Methyl dicyclohexylamine, n- | 7560-83-0 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0367 | 195 | 0.1971106 | 3.1193204 | 1.2997169 | 1 | Yes | - | - | - |
| Methyl methanesulfonate | 66-27-3 | No | No | Organics | 9.90E-02 | U | 2.80E-05 | U | - | - | - | - | 1 | 0.000138 | 110 | 0.0005567 | 1.0424614 | 0.4343589 | 1 | Yes | - | 7.86E-01 | ca |
| Methyl tert-Butyl Ether (MTBE) | 1634-04-4 | No | Yes | Organics | 1.80E-03 | U | 2.60E-07 | U | - | - | 3.00E+00 | U | 1 | 0.00211 | 88.2 | 0.0076216 | 0.7870095 | 0.3279206 | 1 | Yes | - | 1.43E+01 | ca |
| Methyl-1,4-benzenediamine dihydrochloride, 2- | 615-45-2 | No | No | Organics | - | - | - | - | 3.00E-04 | U | - | - | 1 | 5.39E-6 | 195 | 0.0000289 | 3.1193204 | 1.2997169 | 1 | Yes | - | 6.02E+00 | nc |
| Methyl-2-Pentanol, 4- | 108-11-2 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00544 | 102 | 0.0211313 | 0.940286 | 0.3917859 | 1 | Yes | - | - | - |
| Methyl-5-Nitroaniline, 2- | 99-55-8 | No | No | Organics | 9.00E-03 | U | - | - | 2.00E-02 | U | - | - | 1 | 0.00384 | 152 | 0.0182087 | 1.7916781 | 0.7465326 | 1 | Yes | - | 8.17E+00 | ca* |
| Methyl-N-nitro-N-nitrosoguanidine, N- | 70-25-7 | No | No | Organics | 8.30E+00 | U | 2.40E-03 | U | - | - | - | - | 1 | 0.0000572 | 147 | 0.0002667 | 1.6798093 | 0.6999206 | 1 | Yes | - | 9.38E-03 | ca |
| Methylaniline Hydrochloride, 2- | 636-21-5 | No | No | Organics | 1.30E-01 | U | 3.70E-05 | U | - | - | - | - | 1 | 0.0000105 | 144 | 0.0000485 | 1.6160693 | 0.6733622 | 1 | Yes | - | 5.99E-01 | ca |
| Methylarsonic acid | 124-58-3 | No | No | Organics | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.0000419 | 140 | 0.0001907 | 1.534829 | 0.6395121 | 1 | Yes | - | 2.00E+02 | nc |
| Methylaziridine, 2- | 75-55-8 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.000299 | 57.1 | 0.000869 | 0.5270114 | 0.2195881 | 1 | Yes | - | - | - |
| Methylbenzene, 1-4-diamine monohydrochloride, 2- | 74612-12-7 | No | No | Organics | - | - | - | - | 2.00E-04 | U | - | - | 1 | - | 159 | - | 1.9609205 | 0.8170502 | 0 | No | - | 4.01E+00 | nc |
| Methylbenzene-1,4-diamine sulfate, 2- | 615-50-9 | No | No | Organics | 1.00E-01 | U | - | - | 3.00E-04 | U | - | - | 1 | - | 220 | - | 4.3058609 | 1.7941087 | 0 | No | - | 7.79E-01 | ca** |
| Methylcholanthrene, 3- | 56-49-5 | Yes | No | Organics | 2.20E+01 | U | 6.30E-03 | U | - | - | - | - | 1 | 0.903 | 268 | 5.685672 | 14.709394 | 3.3315685 | 0.8 | No | - | 1.14E-03 | ca |
| Methylcyclohexane | 108-87-2 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.11 | 98.2 | 0.4192519 | 0.8953235 | 0.3730515 | 1 | Yes | - | - | - |
| Methylcyclohexylamine, n- | 100-60-7 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00898 | 113 | 0.0367149 | 1.0835775 | 0.4514906 | 1 | Yes | - | - | - |
| Methylcyclopentane | 96-37-7 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0917 | 84.2 | 0.3236324 | 0.7474463 | 0.311436 | 1 | Yes | - | - | - |
| Methylene Chloride | 75-09-2 | Yes | Yes | Organics | 2.00E-03 | U | 1.00E-08 | U | 6.00E-03 | U | 6.00E-01 | U | 1 | 0.00354 | 84.9 | 0.0125454 | 0.7542234 | 0.3142597 | 1 | Yes | 5.00E+00 | 1.14E+01 | ca** |
| Methylene-bis(2-chloroaniline), 4,4'- | 101-14-4 | Yes | No | Organics | 1.00E-01 | U | 4.30E-04 | U | 2.00E-03 | U | - | - | 1 | 0.0197 | 267 | 0.1238079 | 7.8933251 | 3.2888855 | 0.9 | Yes | - | 1.58E-01 | ca |
| Methylene-bis(N,N-dimethyl) Aniline, 4,4'- | 101-61-1 | No | No | Organics | 4.60E-02 | U | 1.30E-05 | U | - | - | - | - | 1 | 0.0844 | 254 | 0.5173518 | 6.675134 | 2.7813059 | 1 | Yes | - | 4.79E-01 | ca |
| Methylenebisbenzenamine, 4,4'- | 101-77-9 | No | No | Organics | 1.60E+00 | U | 4.60E-04 | U | - | - | 2.00E-02 | U | 1 | 0.00138 | 198 | 0.0074686 | 3.2423507 | 1.3509795 | 1 | Yes | - | 4.73E-02 | ca |
| Methylenediphenyl Diisocyanate | 101-68-8 | No | No | Organics | - | - | - | - | - | - | 6.00E-04 | U | 1 | 0.181 | 250 | 1.1007159 | 10.245107 | 2.6414887 | 0.9 | Yes | - | - | - |
| Methylisothiocyanate | 556-61-6 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00257 | 73.1 | 0.0084512 | 0.6477687 | 0.2699036 | 1 | Yes | - | - | - |
| Methylnaphthalene | 1321-94-4 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0931 | 142 | 0.4266979 | 1.5749254 | 0.6562189 | 1 | Yes | - | - | - |
| Methylnaphthalene, 1- | 90-12-0 | No | Yes | Organics | 2.90E-02 | U | - | - | 7.00E-02 | U | - | - | 1 | 0.0931 | 142 | 0.4266979 | 1.5749254 | 0.6562189 | 1 | Yes | - | 1.14E+00 | ca |
| Methylnaphthalene, 2- | 91-57-6 | No | Yes | Organics | - | - | - | - | 4.00E-03 | U | - | - | 1 | 0.0917 | 142 | 0.4202814 | 1.5749254 | 0.6562189 | 1 | Yes | - | 3.60E+01 | nc |
| Methylstyrene, Alpha- | 98-83-9 | No | Yes | Organics | - | - | - | - | 7.00E-02 | U | - | - | 1 | 0.0699 | 118 | 0.2920417 | 1.1557396 | 0.4815582 | 1 | Yes | - | 7.78E+02 | nc |
| Methyltriethyl Lead | 1762-28-3 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0238 | 309 | 0.1609099 | 13.566255 | 5.6526064 | 0.9 | Yes | - | - | - |
| Metolachlor | 51218-45-2 | No | No | Organics | - | - | - | - | 1.50E-01 | U | - | - | 1 | 0.00339 | 284 | 0.0219728 | 9.8278833 | 4.0949514 | 1 | Yes | - | 2.70E+03 | nc |
| Metribuzin | 21087-64-9 | No | No | Organics | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.00132 | 214 | 0.0074269 | 3.9852906 | 1.6605377 | 1 | Yes | - | 4.88E+02 | nc |
| Metsulfuron-methyl | 74223-64-6 | No | No | Organics | - | - | - | - | 2.50E-01 | U | - | - | 1 | 0.000329 | 381 | 0.0024699 | 34.328908 | 14.303712 | 1 | Yes | - | 4.91E+03 | nc |
| Mineral oils | 8012-95-1 | No | Yes | Organics | - | - | - | - | 3.00E+00 | U | - | - | 1 | 1.96 | 170 | 9.8289513 | 4.2628507 | 0.9415616 | 1 | No | - | 6.02E+04 | nc |
| Mirex | 2385-85-5 | No | Yes | Organics | 1.80E+01 | U | 5.10E-03 | U | 2.00E-04 | U | - | - | 1 | 0.0516 | 546 | 0.463738 | 288.17745 | 120.07394 | 0.5 | No | - | 8.78E-04 | ca |
| Molinate | 2212-67-1 | No | No | Organics | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.0189 | 187 | 0.0994052 | 2.8135847 | 1.172327 | 1 | Yes | - | 3.00E+01 | nc |
| Molybdenum | 7439-98-7 | No | No | Inorganics | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.001 | 95.9 | 0.0037665 | 0.8691605 | 0.3621502 | 1 | Yes | - | 9.98E+01 | nc |
| Monoaluminum phosphate | 13530-50-2 | No | No | Inorganics | - | - | - | - | 4.86E+01 | U | - | - | 1 | 0.001 | 318 | 0.0068587 | 15.235615 | 6.3481729 | 1 | Yes | - | 9.70E+05 | nc |
| Monoammonium phosphate | 7722-76-1 | No | No | Inorganics | - | - | - | - | 4.86E+01 | U | - | - | 1 | 0.001 | 115 | 0.0041245 | 1.1118853 | 0.4632855 | 1 | Yes | - | 9.70E+05 | nc |
| Monobutyltin Compounds | NA | No | No | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Monocalcium phosphate | 7758-23-8 | No | No | Inorganics | - | - | - | - | 4.86E+01 | U | - | - | 1 | 0.001 | 234 | 0.0058835 | 5.1577465 | 2.149061 | 1 | Yes | - | 9.70E+05 | nc |
| Monochloramine | 10599-90-3 | No | No | Inorganics | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.001 | 51.5 | 0.0027601 | 0.4902979 | 0.2042908 | 1 | Yes | 4.00E+03 | 2.00E+03 | nc |
| Monochlorobutanes | 25154-42-1 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Monochlorophenols (total) | NA | No | No | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |

**Site-specific
 Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Monocyclic aromatic hydrocarbons (total) | NA | No | No | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Monomagnesium phosphate | 7757-86-0 | No | No | Inorganics | - | - | - | - | 4.86E+01 | U | - | - | 1 | 0.001 | 120 | 0.0042133 | 1.1859326 | 0.4941386 | 1 | Yes | - | 9.70E+05 | nc |
| Monomethylaniline | 100-61-8 | No | No | Organics | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.00498 | 107 | 0.0198129 | 1.0029054 | 0.4178773 | 1 | Yes | - | 3.81E+01 | nc |
| Monopotassium phosphate | 7778-77-0 | No | No | Inorganics | - | - | - | - | 4.86E+01 | U | - | - | 1 | 0.001 | 136 | 0.0044853 | 1.4576726 | 0.6073636 | 1 | Yes | - | 9.70E+05 | nc |
| Monosodium phosphate | 7558-80-7 | No | No | Inorganics | - | - | - | - | 4.86E+01 | U | - | - | 1 | 0.001 | 120 | 0.0042133 | 1.1859326 | 0.4941386 | 1 | Yes | - | 9.70E+05 | nc |
| Myclobutanil | 88671-89-0 | No | No | Organics | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.00337 | 275 | 0.0214943 | 8.7510465 | 3.6462694 | 1 | Yes | - | 4.53E+02 | nc |
| N,N'-Diphenyl-1,4-benzenediamine | 74-31-7 | No | No | Organics | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.0262 | 260 | 0.1624855 | 7.212071 | 3.0050296 | 0.9 | Yes | - | 3.59E+00 | nc |
| N-Methyl dithiocarbamate | 137-42-8 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 5.32E-6 | 129 | 0.0000232 | 1.3318643 | 0.5549435 | 1 | No | - | - | - |
| Naled | 300-76-5 | No | Yes | Organics | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.0000944 | 381 | 0.0007087 | 34.328908 | 14.303712 | 1 | Yes | - | 3.99E+01 | nc |
| Naphtha, High Flash Aromatic (HFAN) | 64742-95-6 | No | Yes | Organics | - | - | - | - | 3.00E-02 | U | 1.00E-01 | U | 1 | - | - | - | - | - | 0 | No | - | 1.55E+02 | nc |
| Naphthalene | 91-20-3 | No | Yes | Organics | - | - | 3.40E-05 | U | 2.00E-02 | U | 3.00E-03 | U | 1 | 0.0466 | 128 | 0.2027765 | 1.3148009 | 0.5478337 | 1 | Yes | - | 1.65E-01 | ca* |
| Naphthol, 2- | 135-19-3 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.0188 | 144 | 0.0867692 | 1.6160693 | 0.6733622 | 1 | Yes | - | - | - |
| Naphthoquinone, 1,4- | 130-15-4 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.00278 | 158 | 0.01344 | 1.9357978 | 0.8065824 | 1 | Yes | - | - | - |
| Naphthylamine, 1- | 134-32-7 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.0077 | 143 | 0.0354148 | 1.5953647 | 0.6647353 | 1 | Yes | - | - | - |
| Naphthylamine, 2- | 91-59-8 | No | No | Organics | 1.80E+00 | U | 0.00E+00 | U | - | - | - | - | 1 | 0.00807 | 143 | 0.0371166 | 1.5953647 | 0.6647353 | 1 | Yes | - | 3.87E-02 | ca |
| Napropamide | 15299-99-7 | No | No | Organics | - | - | - | - | 1.20E-01 | U | - | - | 1 | 0.00804 | 271 | 0.0509058 | 8.3111284 | 3.4629702 | 0.9 | Yes | - | 1.97E+03 | nc |
| Neodymium Chloride (Stable, Nonradioactive) | 10024-93-8 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 251 | 0.0060935 | 6.4218475 | 2.6757698 | 1 | Yes | - | - | - |
| Niagara Blue 4B | 2429-74-5 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 3.69E-7 | 993 | 4.4723E-6 | 91803.659 | 38251.525 | 1 | No | - | - | - |
| Nickel Acetate | 373-02-4 | No | No | Organics | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 1 | 0.0000194 | 177 | 0.0000993 | 2.4732043 | 1.0305018 | 1 | Yes | - | 2.21E+02 | nc |
| Nickel Carbonate | 3333-67-3 | No | No | Organics | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 1 | 0.0000132 | 119 | 0.0000554 | 1.1707387 | 0.4878078 | 1 | Yes | - | 2.21E+02 | nc |
| Nickel Carbonyl | 13463-39-3 | No | Yes | Organics | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 1 | - | 171 | - | 2.2890748 | 0.9537812 | 0 | Yes | - | 2.16E-02 | ca** |
| Nickel Hydroxide | 12054-48-7 | No | No | Inorganics | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 0.04 | 0.001 | 92.7 | 0.0037031 | 0.8340268 | 0.3475112 | 1 | Yes | - | 1.99E+02 | nc |
| Nickel Oxide | 1313-99-1 | No | No | Inorganics | - | - | 2.60E-04 | U | 1.10E-02 | U | 2.00E-05 | U | 0.04 | 0.001 | 74.7 | 0.0033242 | 0.6612718 | 0.2755299 | 1 | Yes | - | 1.99E+02 | nc |
| Nickel Refinery Dust | NA | No | No | Inorganics | - | - | 2.40E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 0.04 | 0.0002 | - | - | - | - | 0 | Yes | - | 2.16E+02 | nc |
| Nickel Soluble Salts | 7440-02-0 | No | No | Inorganics | - | - | 2.60E-04 | U | 2.00E-02 | U | 9.00E-05 | U | 0.04 | 0.0002 | 58.7 | 0.0005894 | 0.5379972 | 0.2241655 | 1 | Yes | - | 3.92E+02 | nc |
| Nickel Subsulfide | 12035-72-2 | No | No | Inorganics | 1.70E+00 | U | 4.80E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 0.04 | 0.0002 | 240 | 0.0011917 | 5.5726272 | 2.321928 | 1 | Yes | - | 4.46E-02 | ca |
| Nickelocene | 1271-28-9 | No | No | Organics | - | - | 2.60E-04 | U | 1.10E-02 | U | 1.40E-05 | U | 1 | - | 189 | - | 2.8870878 | 1.2029532 | 0 | Yes | - | 2.21E+02 | nc |
| Nicotinonitrile | 100-54-9 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.000708 | 104 | 0.002777 | 0.9648504 | 0.402021 | 1 | Yes | - | - | - |
| Niobium | 7440-03-1 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 92.9 | 0.0037071 | 0.8361804 | 0.3484085 | 1 | Yes | - | - | - |
| Nitrate | 14797-55-8 | No | No | Inorganics | - | - | - | - | 1.60E+00 | U | - | - | 1 | 0.001 | 62 | 0.0030285 | 0.5613839 | 0.23391 | 1 | Yes | 1.00E+04 | 3.19E+04 | nc |
| Nitrate + Nitrite (as N) | NA | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | - | - | - | - | 0 | Yes | 1.00E+04 | - | - |
| Nitric Acid | 7697-37-2 | No | Yes | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 63 | 0.0030528 | 0.5686696 | 0.2369457 | 1 | Yes | - | - | - |
| Nitric Oxide | 10102-43-9 | No | Yes | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 31 | 0.0021414 | 0.376409 | 0.1568371 | 1 | Yes | - | - | - |
| Nitrite | 14797-65-0 | No | No | Inorganics | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.001 | 47 | 0.0026368 | 0.4626579 | 0.1927741 | 1 | Yes | 1.00E+03 | 2.00E+03 | nc |
| Nitroaniline, 2- | 88-74-4 | No | No | Organics | - | - | - | - | 1.00E-02 | U | 5.00E-05 | U | 1 | 0.00446 | 138 | 0.0201512 | 1.4957534 | 0.6232306 | 1 | Yes | - | 1.89E+02 | nc |
| Nitroaniline, 3- | 99-09-2 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.00214 | 138 | 0.009669 | 1.4957534 | 0.6232306 | 1 | Yes | - | - | - |
| Nitroaniline, 4- | 100-01-6 | No | No | Organics | 2.00E-02 | U | - | - | 4.00E-03 | U | 6.00E-03 | U | 1 | 0.00221 | 138 | 0.0099852 | 1.4957534 | 0.6232306 | 1 | Yes | - | 3.78E+00 | ca* |
| Nitrobenzene | 98-95-3 | No | Yes | Organics | - | - | 4.00E-05 | U | 2.00E-03 | U | 9.00E-03 | U | 1 | 0.00541 | 123 | 0.0230768 | 1.2327074 | 0.5136281 | 1 | Yes | - | 1.40E-01 | ca* |
| Nitrobiphenyl, 4- | 92-93-3 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.0382 | 199 | 0.2072605 | 3.2844299 | 1.3685124 | 1 | Yes | - | - | - |
| Nitrocellulose | 9004-70-0 | No | No | Organics | - | - | - | - | 3.00E+03 | U | - | - | 1 | 9.86E-9 | 387 | 7.4603E-8 | 37.09027 | 15.454279 | 1 | No | - | 6.02E+07 | nc |
| Nitrodiphenylamine, 2- | 119-75-5 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.0266 | 214 | 0.1496633 | 3.9852906 | 1.6605377 | 0.9 | Yes | - | - | - |
| Nitrofurantoin | 67-20-9 | No | No | Organics | - | - | - | - | 7.00E-02 | U | - | - | 1 | 0.0000352 | 238 | 0.0002089 | 5.4307523 | 2.2628134 | 1 | Yes | - | 1.40E+03 | nc |
| Nitrofurazone | 59-87-0 | No | No | Organics | 1.30E+00 | U | 3.70E-04 | U | - | - | - | - | 1 | 0.000172 | 198 | 0.0009309 | 3.2423507 | 1.3509795 | 1 | Yes | - | 5.97E-02 | ca |

**Site-specific
 Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|--|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Nitrogen Dioxide | 10102-44-0 | No | Yes | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 46 | 0.0026086 | 0.4567305 | 0.1903044 | 1 | Yes | - | - | - |
| Nitroglycerin | 55-63-0 | No | No | Organics | 1.70E-02 | U | - | - | 1.00E-04 | U | - | - | 1 | 0.000994 | 227 | 0.00576 | 4.7125936 | 1.9635807 | 1 | Yes | - | 1.96E+00 | nc |
| Nitroguanidine | 556-88-7 | No | No | Organics | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.000105 | 104 | 0.0004118 | 0.9648504 | 0.402021 | 1 | Yes | - | 2.00E+03 | nc |
| Nitromethane | 75-52-5 | No | Yes | Organics | - | - | 8.80E-06 | U | - | - | 5.00E-03 | U | 1 | 0.000417 | 61 | 0.0012526 | 0.5541917 | 0.2309132 | 1 | Yes | - | 6.38E-01 | ca* |
| Nitrophenol, 2- | 88-75-5 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00402 | 139 | 0.0182289 | 1.5151652 | 0.6313188 | 1 | Yes | - | - | - |
| Nitrophenol, 2-amino-4- | 99-57-0 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.00171 | 154 | 0.0081617 | 1.8384846 | 0.7660352 | 1 | Yes | - | - | - |
| Nitrophenol, 3- | 554-84-7 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.00554 | 139 | 0.0251214 | 1.5151652 | 0.6313188 | 1 | Yes | - | - | - |
| Nitrophenol, 4- | 100-02-7 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.00483 | 139 | 0.0219019 | 1.5151652 | 0.6313188 | 1 | Yes | - | - | - |
| Nitrophenol, 4-amino-2- | 119-34-6 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.000929 | 154 | 0.0044341 | 1.8384846 | 0.7660352 | 1 | Yes | - | - | - |
| Nitropropane, 2- | 79-46-9 | No | Yes | Organics | - | - | 2.70E-03 | U | - | - | 2.00E-02 | U | 1 | 0.00206 | 89.1 | 0.0074788 | 0.796196 | 0.3317483 | 1 | Yes | - | 2.08E-03 | ca |
| Nitropyrene, 4- | 57835-92-4 | No | No | Organics | 1.20E+00 | U | 1.10E-04 | U | - | - | - | - | 1 | 0.0922 | 249 | 0.5595736 | 6.2583521 | 2.6076467 | 0.9 | Yes | - | 1.90E-02 | ca |
| Nitroquinoline-1-oxide, 4- | 56-57-5 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.000712 | 190 | 0.0037747 | 2.9245563 | 1.2185651 | 1 | Yes | - | - | - |
| Nitroso-N-ethylurea, N- | 759-73-9 | Yes | No | Organics | 2.70E+01 | U | 7.70E-03 | U | - | - | - | - | 1 | 0.00049 | 117 | 0.0020385 | 1.1409326 | 0.4753886 | 1 | Yes | - | 9.22E-04 | ca |
| Nitroso-N-methylurea, N- | 684-93-5 | Yes | No | Organics | 1.20E+02 | U | 3.40E-02 | U | - | - | - | - | 1 | 0.000395 | 103 | 0.0015419 | 0.952489 | 0.3968704 | 1 | Yes | - | 2.08E-04 | ca |
| Nitroso-di-N-butylamine, N- | 924-16-3 | No | Yes | Organics | 5.40E+00 | U | 1.60E-03 | U | - | - | - | - | 1 | 0.0113 | 158 | 0.0546303 | 1.9357978 | 0.8065824 | 1 | Yes | - | 2.73E-03 | ca |
| Nitroso-di-N-propylamine, N- | 621-64-7 | No | No | Organics | 7.00E+00 | U | 2.00E-03 | U | - | - | - | - | 1 | 0.00233 | 130 | 0.0102177 | 1.3491492 | 0.5621455 | 1 | Yes | - | 1.08E-02 | ca |
| Nitrosodiethanolamine, N- | 1116-54-7 | No | No | Organics | 2.80E+00 | U | 8.00E-04 | U | - | - | - | - | 1 | 0.0000247 | 134 | 0.00011 | 1.4205613 | 0.5919006 | 1 | Yes | - | 2.78E-02 | ca |
| Nitrosodiethylamine, N- | 55-18-5 | Yes | No | Organics | 1.50E+02 | U | 4.30E-02 | U | - | - | - | - | 1 | 0.000872 | 102 | 0.0033872 | 0.940286 | 0.3917859 | 1 | Yes | - | 1.65E-04 | ca |
| Nitrosodimethylamine, N- | 62-75-9 | Yes | Yes | Organics | 5.10E+01 | U | 1.40E-02 | U | 8.00E-06 | U | 4.00E-05 | U | 1 | 0.000251 | 74.1 | 0.000831 | 0.6561755 | 0.2734064 | 1 | Yes | - | 1.12E-04 | ca |
| Nitrosodiphenylamine, N- | 86-30-6 | No | No | Organics | 4.90E-03 | U | 2.60E-06 | U | - | - | - | - | 1 | 0.0145 | 198 | 0.0784743 | 3.2423507 | 1.3509795 | 1 | Yes | - | 1.22E+01 | ca |
| Nitrosomethylethylamine, N- | 10595-95-6 | No | Yes | Organics | 2.20E+01 | U | 6.30E-03 | U | - | - | - | - | 1 | 0.000533 | 88.1 | 0.0019242 | 0.7859954 | 0.3274981 | 1 | Yes | - | 7.11E-04 | ca |
| Nitrosomethylvinylamine, N- | 4549-40-0 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.000515 | 86.1 | 0.001838 | 0.7659845 | 0.3191602 | 1 | Yes | - | - | - |
| Nitrosomorpholine [N-] | 59-89-2 | No | No | Organics | 6.70E+00 | U | 1.90E-03 | U | - | - | - | - | 1 | 0.000178 | 116 | 0.0007374 | 1.1263153 | 0.469298 | 1 | Yes | - | 1.16E-02 | ca |
| Nitrosopiperidine [N-] | 100-75-4 | No | No | Organics | 9.40E+00 | U | 2.70E-03 | U | - | - | - | - | 1 | 0.000622 | 114 | 0.0025543 | 1.0976402 | 0.4573501 | 1 | Yes | - | 8.23E-03 | ca |
| Nitrosopyrrolidine, N- | 930-55-2 | No | No | Organics | 2.10E+00 | U | 6.10E-04 | U | - | - | - | - | 1 | 0.000321 | 100 | 0.0012346 | 0.9163471 | 0.3818113 | 1 | Yes | - | 3.70E-02 | ca |
| Nitrotoluene, 4-Amino-2- | 119-32-4 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.00482 | 152 | 0.0228558 | 1.7916781 | 0.7465326 | 1 | Yes | - | - | - |
| Nitrotoluene, m- | 99-08-1 | No | No | Organics | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.0113 | 137 | 0.0508704 | 1.4765902 | 0.6152459 | 1 | Yes | - | 1.75E+00 | nc |
| Nitrotoluene, o- | 88-72-2 | No | Yes | Organics | 2.20E-01 | U | - | - | 9.00E-04 | U | - | - | 1 | 0.00899 | 137 | 0.0404713 | 1.4765902 | 0.6152459 | 1 | Yes | - | 3.14E-01 | ca* |
| Nitrotoluene, p- | 99-99-0 | No | No | Organics | 1.60E-02 | U | - | - | 4.00E-03 | U | - | - | 1 | 0.01 | 137 | 0.0450181 | 1.4765902 | 0.6152459 | 1 | Yes | - | 4.27E+00 | ca* |
| Nonachlor, trans- | 39765-80-5 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0836 | 444 | 0.6775236 | 125.84785 | 32.229142 | 0.6 | No | - | - | - |
| Nonane, n- | 111-84-2 | No | Yes | Organics | - | - | - | - | 3.00E-04 | U | 2.00E-02 | U | 1 | 1.7 | 128 | 7.3974248 | 2.4513898 | 0.5478337 | 1 | No | - | 5.26E+00 | nc |
| Nonanol, n- | 143-08-8 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0778 | 144 | 0.3590769 | 1.6160693 | 0.6733622 | 1 | Yes | - | - | - |
| Norflurazon | 27314-13-2 | No | No | Organics | - | - | - | - | 1.50E-02 | U | - | - | 1 | 0.00105 | 304 | 0.0070413 | 12.719206 | 5.299669 | 1 | Yes | - | 2.89E+02 | nc |
| OCDD | 3268-87-9 | No | No | Organics | 3.90E+01 | U | 1.14E-02 | U | 2.33E-06 | U | 1.33E-04 | U | 1 | 1.16 | 460 | 9.568934 | 179.17134 | 39.614005 | 0 | No | - | 2.00E-03 | ca* |
| OCDF | 39001-02-0 | No | No | Organics | 3.90E+01 | U | 1.14E-02 | U | 2.33E-06 | U | 1.33E-04 | U | 1 | 2.63 | 444 | 21.314438 | 148.96767 | 32.229142 | 0 | No | - | 2.00E-03 | ca* |
| Octabromodiphenyl Ether | 32536-52-0 | No | No | Organics | - | - | - | - | 3.00E-03 | U | - | - | 1 | 0.0306 | 801 | 0.3330921 | 7720.7589 | 3216.9829 | 0.3 | No | - | 6.02E+01 | nc |
| Octachlorostyrene | 29082-74-4 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 1.05 | 380 | 7.8724108 | 63.36171 | 14.120457 | 0 | No | - | - | - |
| Octadecanoic Acid | 57-11-4 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 11.7 | 284 | 75.835348 | 19.189339 | 4.0949514 | 0.3 | No | - | - | - |
| Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) | 2691-41-0 | No | No | Organics | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.0000436 | 296 | 0.0002885 | 11.472551 | 4.7802295 | 1 | Yes | - | 1.00E+03 | nc |
| Octahydrotrimethylmethylethylphenanthrene | 511-15-9 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 2.66 | 286 | 17.301801 | 19.339255 | 4.2019294 | 0.5 | No | - | - | - |
| Octamethylpyrophosphoramidate | 152-16-9 | No | No | Organics | - | - | - | - | 2.00E-03 | U | - | - | 1 | 8.3E-6 | 286 | 0.000054 | 10.084631 | 4.2019294 | 1 | Yes | - | 4.01E+01 | nc |
| Octanol, n- | 111-87-5 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0274 | 130 | 0.1201569 | 1.3491492 | 0.5621455 | 1 | Yes | - | - | - |
| Octanone, 2- | 111-13-7 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0112 | 128 | 0.048736 | 1.3148009 | 0.5478337 | 1 | Yes | - | - | - |
| Octanone, 3- | 106-68-3 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00894 | 128 | 0.0389018 | 1.3148009 | 0.5478337 | 1 | Yes | - | - | - |

Site-specific Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|--|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Octyl Phthalate, di-N- | 117-84-0 | No | No | Organics | - | - | - | - | 1.00E-02 | U | - | - | 1 | 2.43 | 391 | 18.480823 | 75.000398 | 16.272293 | 0 | No | - | 2.01E+02 | nc |
| Oleic acid | 112-80-1 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 4.87 | 282 | 31.45431 | 18.557737 | 3.990697 | 0.5 | No | - | - | - |
| Oleum | 8014-95-7 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | - | - | - | - | 0 | Yes | - | - | - |
| Oryzalin | 19044-88-3 | No | No | Organics | 7.79E-03 | U | - | - | 1.40E-01 | U | - | - | 1 | 0.00537 | 346 | 0.0384184 | 21.860495 | 9.1085396 | 0.9 | Yes | - | 7.92E+00 | ca |
| Oxadiazon | 19666-30-9 | No | No | Organics | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.028 | 345 | 0.2000296 | 21.580425 | 8.9918437 | 0.8 | Yes | - | 4.74E+01 | nc |
| Oxamyl | 23135-22-0 | No | No | Organics | - | - | - | - | 2.50E-02 | U | - | - | 1 | 0.0000449 | 219 | 0.0002556 | 4.2506955 | 1.7711231 | 1 | Yes | 2.00E+02 | 5.01E+02 | nc |
| Oxychlorane | 27304-13-8 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.029 | 424 | 0.2296717 | 59.766798 | 24.902833 | 0.8 | Yes | - | - | - |
| Oxyfluorfen | 42874-03-3 | No | No | Organics | 7.32E-02 | U | - | - | 3.00E-02 | U | - | - | 1 | 0.0204 | 362 | 0.1492833 | 26.869525 | 11.195635 | 0.8 | Yes | - | 5.36E-01 | ca |
| Ozone | 10028-15-6 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 48 | 0.0026647 | 0.4686623 | 0.1952759 | 1 | Yes | - | - | - |
| Paclobutrazol | 76738-62-0 | No | No | Organics | - | - | - | - | 1.30E-02 | U | - | - | 1 | 0.00471 | 294 | 0.0310614 | 11.180468 | 4.6585284 | 0.9 | Yes | - | 2.26E+02 | nc |
| Paraquat Dichloride | 1910-42-5 | No | No | Organics | - | - | - | - | 4.50E-03 | U | - | - | 1 | 5.77E-8 | 257 | 3.5577E-7 | 6.9384105 | 2.8910044 | 1 | No | - | 9.02E+01 | nc |
| Parathion | 56-38-2 | No | No | Organics | - | - | - | - | 6.00E-03 | U | - | - | 1 | 0.0128 | 291 | 0.0839814 | 10.756228 | 4.4817616 | 0.9 | Yes | - | 8.57E+01 | nc |
| PeCDD, 2,3,7,8- | 36088-22-9 | No | No | Organics | 1.30E+05 | U | 3.80E+01 | U | 7.00E-10 | U | 4.00E-08 | U | 1 | 0.241 | 356 | 1.748915 | 41.7411 | 10.362123 | 0.7 | No | - | 5.99E-07 | ca* |
| PeCDF, 1,2,3,7,8- | 57117-41-6 | No | No | Organics | 3.90E+03 | U | 1.14E+00 | U | 2.33E-08 | U | 1.33E-06 | U | 1 | 0.627 | 340 | 4.4466572 | 36.668725 | 8.430411 | 0.4 | No | - | 2.00E-05 | ca* |
| PeCDF, 2,3,4,7,8- | 57117-31-4 | No | No | Organics | 3.90E+04 | U | 1.14E+01 | U | 2.33E-09 | U | 1.33E-07 | U | 1 | 0.627 | 340 | 4.4466572 | 36.668725 | 8.430411 | 0.4 | No | - | 2.00E-06 | ca* |
| Peblate | 1114-71-2 | No | Yes | Organics | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.0397 | 203 | 0.2175531 | 3.4582787 | 1.4409495 | 1 | Yes | - | 5.60E+02 | nc |
| Pendimethalin | 40487-42-1 | No | No | Organics | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.115 | 281 | 0.7414428 | 15.216585 | 3.9395693 | 0.9 | Yes | - | 1.37E+02 | nc |
| Pentabromodiphenyl Ether | 32534-81-9 | No | Yes | Organics | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.0373 | 565 | 0.3410042 | 368.17983 | 153.40826 | 0.6 | No | - | 4.01E+01 | nc |
| Pentabromodiphenyl ether, 2,2',4,4',5-(BDE-99) | 60348-60-9 | No | No | Organics | - | - | - | - | 1.00E-04 | U | - | - | 1 | 0.0373 | 565 | 0.3410042 | 368.17983 | 153.40826 | 0.6 | No | - | 2.01E+00 | nc |
| Pentachloroaniline | 527-20-8 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.0811 | 265 | 0.507774 | 7.6923669 | 3.2051529 | 0.9 | Yes | - | - | - |
| Pentachlorobenzene | 608-93-5 | No | Yes | Organics | - | - | - | - | 8.00E-04 | U | - | - | 1 | 0.168 | 250 | 1.0216589 | 10.202487 | 2.6414887 | 0.9 | Yes | - | 3.16E+00 | nc |
| Pentachlorobiphenyl, 2',3,4,4',5-(PCB 123) | 65510-44-3 | No | Yes | Organics | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 1 | 326 | 6.9444116 | 31.399148 | 7.0379917 | 0.4 | No | - | 3.95E-03 | ca |
| Pentachlorobiphenyl, 2,3',4,4',5-(PCB 118) | 31508-00-6 | No | Yes | Organics | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 1.24 | 326 | 8.6110703 | 31.7012 | 7.0379917 | 0.3 | No | - | 3.95E-03 | ca |
| Pentachlorobiphenyl, 2,3,3',4,4'-(PCB 105) | 32598-14-4 | No | Yes | Organics | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 0.751 | 326 | 5.2152531 | 30.919495 | 7.0379917 | 0.5 | No | - | 3.95E-03 | ca |
| Pentachlorobiphenyl, 2,3,4,4',5-(PCB 114) | 74472-37-0 | No | Yes | Organics | 3.90E+00 | U | 1.14E-03 | U | 2.33E-05 | U | 1.33E-03 | U | 1 | 1 | 326 | 6.9444116 | 31.399148 | 7.0379917 | 0.4 | No | - | 3.95E-03 | ca |
| Pentachlorobiphenyl, 3,3',4,4',5-(PCB 126) | 57465-28-8 | No | Yes | Organics | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 1 | 326 | 6.9444116 | 31.399148 | 7.0379917 | 0.4 | No | - | 1.19E-06 | ca |
| Pentachlorocyclopentadiene | 25329-35-5 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0609 | 238 | 0.3613536 | 5.4307523 | 2.2628134 | 0.9 | Yes | - | - | - |
| Pentachlorodibenzo-p-dioxin, 1,2,3,7,8- | 40321-76-4 | No | No | Organics | 1.30E+05 | U | 3.80E+01 | U | 7.00E-10 | U | 4.00E-08 | U | 1 | 0.405 | 356 | 2.939048 | 43.706478 | 10.362123 | 0.5 | No | - | 5.99E-07 | ca* |
| Pentachloroethane | 76-01-7 | No | Yes | Organics | 9.00E-02 | U | - | - | - | - | - | - | 1 | 0.0158 | 202 | 0.0863693 | 3.4139723 | 1.4224885 | 1 | Yes | - | 6.46E-01 | ca |
| Pentachloronitrobenzene | 82-68-8 | No | Yes | Organics | 2.60E-01 | U | - | - | 3.00E-03 | U | - | - | 1 | 0.0418 | 295 | 0.2761302 | 11.325568 | 4.7189867 | 0.9 | Yes | - | 1.21E-01 | ca |
| Pentachlorophenol | 87-86-5 | No | No | Organics | 4.00E-01 | U | 5.10E-06 | U | 5.00E-03 | U | - | - | 1 | 0.127 | 266 | 0.7966567 | 12.492266 | 3.2467493 | 0.9 | Yes | 1.00E+00 | 4.13E-02 | ca |
| Pentaerythritol tetranitrate (PETN) | 78-11-5 | No | No | Organics | 4.00E-03 | U | - | - | 2.00E-03 | U | - | - | 1 | 0.00101 | 316 | 0.0069054 | 14.847728 | 6.1865532 | 1 | Yes | - | 1.86E+01 | ca** |
| Pentamethyl dipropylentriamine | 3855-32-1 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.000219 | 201 | 0.0011942 | 3.3702335 | 1.404264 | 1 | Yes | - | - | - |
| Pentane, n- | 109-66-0 | No | Yes | Organics | - | - | - | - | - | - | 1.00E+00 | U | 1 | 0.11 | 72.2 | 0.3594909 | 0.6402948 | 0.2667895 | 1 | Yes | - | 2.09E+03 | nc |
| Pentyl Alcohol, N- | 71-41-0 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00506 | 88.2 | 0.0182773 | 0.7870095 | 0.3279206 | 1 | Yes | - | - | - |
| Perchlorate and Perchlorate Salts | 14797-73-0 | No | No | Inorganics | - | - | - | - | 7.00E-04 | U | - | - | 1 | 0.001 | 117 | 0.0041603 | 1.1409326 | 0.4753886 | 1 | Yes | 1.50E+01 | 1.40E+01 | nc |
| Perfluorobutane Sulfonate (PFBS) | 375-73-5 | No | No | Organics | - | - | - | - | 2.00E-02 | U | - | - | 1 | - | 300 | - | 12.079807 | 5.0332529 | 0 | Yes | - | 4.01E+02 | nc |
| Perfluorooctane Sulfonate (PFOS) | 1763-23-1 | No | No | Organics | - | - | - | - | 2.00E-05 | U | - | - | 1 | - | 500 | - | 159.24287 | 66.351195 | 0 | No | - | 4.01E-01 | nc |
| Perfluorooctanoic acid (PFOA) | 335-67-1 | No | No | Organics | 7.00E-02 | U | - | - | 2.00E-05 | U | - | - | 1 | - | 414 | - | 52.536361 | 21.890151 | 0 | No | - | 4.01E-01 | nc |
| Permethrin | 52645-53-1 | No | No | Organics | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.208 | 391 | 1.5818976 | 64.954873 | 16.272293 | 0.6 | No | - | 1.00E+03 | nc |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] | |
|---|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|--|
| Perylene | 198-55-0 | No | No | Organics | - | | - | | - | | - | | 1 | 0.856 | 252 | 5.2263764 | 11.909329 | 2.7104959 | 0.9 | No | - | - | | |
| Pesticides (total) | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | - | - | |
| Pesticides, organochlorinated (each) | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | - | - | |
| Pesticides, organochlorinated (total) | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | - | - | |
| Phenacetin | 62-44-2 | No | No | Organics | 2.20E-03 | U | 6.30E-07 | U | - | | - | | 1 | 0.00173 | 179 | 0.0089022 | 2.5378152 | 1.057423 | 1 | Yes | - | 3.43E+01 | ca | |
| Phenanthrene | 85-01-8 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.144 | 178 | 0.7389229 | 4.0330618 | 1.0438756 | 1 | Yes | - | - | - | |
| Phenmedipham | 13684-63-4 | No | No | Organics | - | | - | | 2.40E-01 | U | - | | 1 | 0.00786 | 300 | 0.0523612 | 12.079807 | 5.0332529 | 0.9 | Yes | - | 3.81E+03 | nc | |
| Phenol | 108-95-2 | No | No | Organics | - | | - | | 3.00E-01 | U | 2.00E-01 | U | 1 | 0.00434 | 94.1 | 0.0161924 | 0.8492196 | 0.3538415 | 1 | Yes | - | 5.77E+03 | nc | |
| Phenol, 2-(1-methylethoxy)-, methylcarbamate | 114-26-1 | No | No | Organics | - | | - | | 4.00E-03 | U | - | | 1 | 0.00107 | 209 | 0.0059495 | 3.736457 | 1.5568571 | 1 | Yes | - | 7.85E+01 | nc | |
| Phenothiazine | 92-84-2 | No | No | Organics | - | | - | | 5.00E-04 | U | - | | 1 | 0.0683 | 199 | 0.3705731 | 3.2844299 | 1.3685124 | 1 | Yes | - | 4.31E+00 | nc | |
| Phenyl Isothiocyanate | 103-72-0 | No | Yes | Organics | - | | - | | 2.00E-04 | U | - | | 1 | 0.0413 | 135 | 0.1845626 | 1.4389973 | 0.5995822 | 1 | Yes | - | 2.62E+00 | nc | |
| Phenylenediamine, m- | 108-45-2 | No | No | Organics | - | | - | | 6.00E-03 | U | - | | 1 | 0.000234 | 108 | 0.0009353 | 1.0159211 | 0.4233005 | 1 | Yes | - | 1.20E+02 | nc | |
| Phenylenediamine, o- | 95-54-5 | No | No | Organics | 1.20E-01 | U | - | | 4.00E-03 | U | - | | 1 | 0.000487 | 108 | 0.0019466 | 1.0159211 | 0.4233005 | 1 | Yes | - | 6.46E-01 | ca | |
| Phenylenediamine, p- | 106-50-3 | No | No | Organics | - | | - | | 1.00E-03 | U | - | | 1 | 0.000245 | 108 | 0.0009793 | 1.0159211 | 0.4233005 | 1 | Yes | - | 2.00E+01 | nc | |
| Phenylmercuric Acetate | 62-38-4 | No | No | Organics | - | | - | | 8.00E-05 | U | - | | 1 | 0.0000599 | 337 | 0.0004229 | 19.46525 | 8.1105209 | 1 | Yes | - | 1.60E+00 | nc | |
| Phenylphenol, 2- | 90-43-7 | No | No | Organics | 1.94E-03 | U | - | | - | | - | | 1 | 0.0196 | 170 | 0.0982895 | 2.2597479 | 0.9415616 | 1 | Yes | - | 2.99E+01 | ca | |
| Phorate | 298-02-2 | No | No | Organics | - | | - | | 2.00E-04 | U | - | | 1 | 0.0126 | 260 | 0.0781419 | 7.212071 | 3.0050296 | 0.9 | Yes | - | 3.03E+00 | nc | |
| Phosmet | 732-11-6 | No | No | Organics | - | | - | | 2.00E-02 | U | - | | 1 | 0.00183 | 317 | 0.0125316 | 15.040421 | 6.2668421 | 1 | Yes | - | 3.73E+02 | nc | |
| Phosphine | 7803-51-2 | No | Yes | Inorganics | - | | - | | 3.00E-04 | U | 3.00E-04 | U | 1 | 0.001 | 34 | 0.0022427 | 0.3912551 | 0.163023 | 1 | Yes | - | 5.67E-01 | nc | |
| Phosphoric Acid | 7664-38-2 | No | No | Inorganics | - | | - | | 4.86E+01 | U | 1.00E-02 | U | 1 | 0.001 | 98 | 0.0038075 | 0.8930175 | 0.3720906 | 1 | Yes | - | 9.70E+05 | nc | |
| Phosphorus (total) | NA | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | - | - | - | - | 0 | Yes | - | - | - | |
| Phosphorus pentoxide | 1314-56-3 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 142 | 0.0045832 | 1.5749254 | 0.6562189 | 1 | Yes | - | - | - | |
| Phosphorus, White | 7723-14-0 | No | Yes | Inorganics | - | | - | | 2.00E-05 | U | - | | 1 | 0.001 | 31 | 0.0021414 | 0.376409 | 0.1568371 | 1 | Yes | - | 3.99E-01 | nc | |
| Phthalates (total) | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | - | - | |
| Phthalic Acid, P- | 100-21-0 | No | No | Organics | - | | - | | 1.00E+00 | U | - | | 1 | 0.00391 | 166 | 0.0193757 | 2.1461496 | 0.894229 | 1 | Yes | - | 1.89E+04 | nc | |
| Phthalic Acid, m- | 121-91-5 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00232 | 166 | 0.0114966 | 2.1461496 | 0.894229 | 1 | Yes | - | - | - | |
| Phthalic Acid, o- | 88-99-3 | No | No | Organics | - | | - | | - | | - | | 1 | 0.000559 | 166 | 0.0027701 | 2.1461496 | 0.894229 | 1 | Yes | - | - | - | |
| Phthalic Anhydride | 85-44-9 | No | No | Organics | - | | - | | 2.00E+00 | U | 2.00E-02 | U | 1 | 0.00267 | 148 | 0.0124931 | 1.7016099 | 0.7090041 | 1 | Yes | - | 3.87E+04 | nc | |
| Picloram | 1918-02-1 | No | No | Organics | - | | - | | 7.00E-02 | U | - | | 1 | 0.00127 | 241 | 0.007583 | 5.6449486 | 2.3520619 | 1 | Yes | 5.00E+02 | 1.36E+03 | nc | |
| Picoline, 2- | 109-06-8 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00257 | 93.1 | 0.0095375 | 0.8383396 | 0.3493082 | 1 | Yes | - | - | - | |
| Picramic Acid (2-Amino-4,6-dinitrophenol) | 96-91-3 | No | No | Organics | - | | - | | 1.00E-04 | U | - | | 1 | 0.000496 | 199 | 0.0026911 | 3.2844299 | 1.3685124 | 1 | Yes | - | 1.99E+00 | nc | |
| Picric Acid (2,4,6-Trinitrophenol) | 88-89-1 | No | No | Organics | - | | - | | 9.00E-04 | U | - | | 1 | 0.000621 | 229 | 0.0036144 | 4.8357071 | 2.014878 | 1 | Yes | - | 1.78E+01 | nc | |
| Piperidine | 110-89-4 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00189 | 85.2 | 0.0067098 | 0.7571466 | 0.3154778 | 1 | Yes | - | - | - | |
| Pirimiphos, Methyl | 29232-93-7 | No | No | Organics | - | | - | | 6.67E-05 | U | - | | 1 | 0.0187 | 305 | 0.1256083 | 12.884275 | 5.368448 | 0.9 | Yes | - | 8.13E-01 | nc | |
| Polybrominated Biphenyls | 59536-65-1 | No | No | Organics | 3.00E+01 | U | 8.60E-03 | U | 7.00E-06 | U | - | | 1 | - | - | - | - | - | 0 | No | - | 2.60E-03 | ca* | |
| Polychlorinated Biphenyls (low risk) | 1336-36-3 | No | Yes | Organics | 4.00E-01 | U | 1.00E-04 | U | - | | - | | 1 | 0.545 | 292 | 3.5819093 | 19.448711 | 4.5399257 | 0.7 | No | 5.00E-01 | 4.36E-02 | ca | |
| Polycyclic aromatic hydrocarbons (PAH), Total | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | - | - | |
| Polycyclic aromatic hydrocarbons (PAH), Total (high molecular weight) | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | - | - | |
| Polycyclic aromatic hydrocarbons (PAH), Total (low molecular weight) | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | - | - | |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|--|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Polycyclic chlorinated hydrocarbons (total) | NA | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | - | - | |
| Polymeric Methylene Diphenyl Diisocyanate (PMDI) | 9016-87-9 | No | No | Organics | - | | - | | - | | 6.00E-04 | U | 1 | 18.6 | 513 | 162.03106 | 368.76158 | 78.460081 | 0 | No | - | - | |
| Polyphosphoric acid | 8017-16-1 | No | No | Inorganics | - | | - | | 4.86E+01 | U | - | | 1 | 0.001 | 258 | 0.0061778 | 7.028457 | 2.9285237 | 1 | Yes | - | 9.70E+05 | nc |
| Potassium | 7440-09-7 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.002 | 39.1 | 0.00481 | 0.4178496 | 0.174104 | 1 | Yes | - | - | |
| Potassium Cyanide | 151-50-8 | No | No | Inorganics | - | | - | | 2.00E-03 | U | - | | 1 | 0.002 | 65.1 | 0.0062065 | 0.5842786 | 0.2434494 | 1 | Yes | - | 3.98E+01 | nc |
| Potassium Perchlorate | 7778-74-7 | No | No | Inorganics | - | | - | | 7.00E-04 | U | - | | 1 | 0.002 | 139 | 0.0090691 | 1.5151652 | 0.6313188 | 1 | Yes | - | 1.39E+01 | nc |
| Potassium Perfluorobutane Sulfonate | 29420-49-3 | No | No | Organics | - | | - | | 2.00E-02 | U | - | | 1 | - | 338 | - | 19.71787 | 8.215779 | 0 | Yes | - | 4.01E+02 | nc |
| Potassium Perfluorooctane Sulfonate | 2795-39-3 | No | No | Organics | - | | - | | 2.00E-05 | U | - | | 1 | - | 538 | - | 259.93215 | 108.30506 | 0 | No | - | 4.01E-01 | nc |
| Potassium Silver Cyanide | 506-61-6 | No | No | Inorganics | - | | - | | 5.00E-03 | U | - | | 0.04 | 0.002 | 199 | 0.0108513 | 3.2844299 | 1.3685124 | 1 | Yes | - | 8.22E+01 | nc |
| Potassium tripolyphosphate | 13845-36-8 | No | No | Inorganics | - | | - | | 4.86E+01 | U | - | | 1 | 0.001 | 448 | 0.0081408 | 81.444168 | 33.93507 | 0.9 | Yes | - | 9.70E+05 | nc |
| Praseodymium | 7440-10-0 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 141 | 0.0045671 | 1.5547479 | 0.6478116 | 1 | Yes | - | - | |
| Praseodymium Chloride (Stable, Nonradioactive) | 10361-79-2 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 247 | 0.0060447 | 6.0990191 | 2.5412579 | 1 | Yes | - | - | |
| Prochloraz | 67747-09-5 | No | No | Organics | 1.50E-01 | U | - | | 9.00E-03 | U | - | | 1 | 0.0064 | 377 | 0.0477944 | 32.603182 | 13.584659 | 0.9 | Yes | - | 3.76E-01 | ca |
| Profluralin | 26399-36-0 | No | Yes | Organics | - | | - | | 6.00E-03 | U | - | | 1 | 0.09 | 347 | 0.6448132 | 36.410765 | 9.2267499 | 0.8 | Yes | - | 2.60E+01 | nc |
| Promethium | 7440-12-2 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 145 | 0.0046314 | 1.6370426 | 0.6821011 | 1 | Yes | - | - | |
| Prometon | 1610-18-0 | No | No | Organics | - | | - | | 1.50E-02 | U | - | | 1 | 0.00827 | 225 | 0.0477115 | 4.5926145 | 1.9135894 | 1 | Yes | - | 2.53E+02 | nc |
| Prometryn | 7287-19-6 | No | No | Organics | - | | - | | 4.00E-02 | U | - | | 1 | 0.0149 | 241 | 0.0889655 | 5.6449486 | 2.3520619 | 0.9 | Yes | - | 5.98E+02 | nc |
| Propachlor | 1918-16-7 | No | No | Organics | - | | - | | 1.30E-02 | U | - | | 1 | 0.00286 | 212 | 0.0160162 | 3.883828 | 1.6182617 | 1 | Yes | - | 2.46E+02 | nc |
| Propanil | 709-98-8 | No | No | Organics | - | | - | | 5.00E-03 | U | - | | 1 | 0.0103 | 218 | 0.0584914 | 4.1962368 | 1.748432 | 1 | Yes | - | 8.18E+01 | nc |
| Propanoic acid, 2-(2,4-dichlorophenoxy)- | 120-36-5 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0000512 | 235 | 0.0003019 | 5.2246836 | 2.1769515 | 1 | Yes | - | - | |
| Propargite | 2312-35-8 | No | No | Organics | 3.27E-02 | U | - | | 4.00E-02 | U | - | | 1 | 0.0356 | 350 | 0.2561596 | 23.017597 | 9.5906656 | 0.8 | Yes | - | 9.20E-01 | ca |
| Propargyl Alcohol | 107-19-7 | No | Yes | Organics | - | | - | | 2.00E-03 | U | - | | 1 | 0.000424 | 56.1 | 0.0012214 | 0.5202595 | 0.2167748 | 1 | Yes | - | 4.00E+01 | nc |
| Propazine | 139-40-2 | No | No | Organics | - | | - | | 2.00E-02 | U | - | | 1 | 0.00713 | 230 | 0.0415892 | 4.8984648 | 2.041027 | 1 | Yes | - | 3.43E+02 | nc |
| Propham | 122-42-9 | No | No | Organics | - | | - | | 2.00E-02 | U | - | | 1 | 0.00826 | 179 | 0.0425043 | 2.5378152 | 1.057423 | 1 | Yes | - | 3.52E+02 | nc |
| Propiconazole | 60207-90-1 | No | No | Organics | - | | - | | 1.00E-01 | U | - | | 1 | 0.00558 | 342 | 0.0396893 | 20.76156 | 8.6506502 | 0.9 | Yes | - | 1.61E+03 | nc |
| Propionaldehyde | 123-38-6 | No | Yes | Organics | - | | - | | - | | 8.00E-03 | U | 1 | 0.00182 | 58.1 | 0.0053356 | 0.5338509 | 0.2224379 | 1 | Yes | - | 1.67E+01 | nc |
| Propionitrile | 107-12-0 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.000982 | 55.1 | 0.0028036 | 0.5135941 | 0.2139975 | 1 | Yes | - | - | |
| Propionitrile, 3-(NN-dimethylamino) | 1738-25-6 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.000222 | 98.1 | 0.0008457 | 0.8941698 | 0.3725707 | 1 | Yes | - | - | |
| Propyl Alcohol, n- | 71-23-8 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00106 | 60.1 | 0.0031606 | 0.5477974 | 0.2282489 | 1 | Yes | - | - | |
| Propyl benzene | 103-65-1 | No | Yes | Organics | - | | - | | 1.00E-01 | U | 1.00E+00 | U | 1 | 0.0939 | 120 | 0.3956242 | 1.1859326 | 0.4941386 | 1 | Yes | - | 6.56E+02 | nc |
| Propylene | 115-07-1 | No | Yes | Organics | - | | - | | - | | 3.00E+00 | U | 1 | 0.0136 | 42.1 | 0.0339396 | 0.4343302 | 0.1809709 | 1 | Yes | - | 6.26E+03 | nc |
| Propylene Glycol | 57-55-6 | No | No | Organics | - | | - | | 2.00E+01 | U | - | | 1 | 0.000143 | 76.1 | 0.0004798 | 0.6733176 | 0.280549 | 1 | Yes | - | 4.01E+05 | nc |
| Propylene Glycol Dinitrate | 6423-43-4 | No | No | Organics | - | | - | | - | | 2.72E-04 | U | 1 | 0.00208 | 166 | 0.0103073 | 2.1461496 | 0.894229 | 1 | Yes | - | - | |
| Propylene Glycol Monoethyl Ether | 1569-02-4 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.000409 | 104 | 0.0016042 | 0.9648504 | 0.402021 | 1 | Yes | - | - | |
| Propylene Glycol Monomethyl Ether | 107-98-2 | No | Yes | Organics | - | | - | | 7.00E-01 | U | 2.00E+00 | U | 1 | 0.000372 | 90.1 | 0.0013581 | 0.806529 | 0.3360538 | 1 | Yes | - | 3.21E+03 | nc |
| Propylene Oxide | 75-56-9 | No | Yes | Organics | 2.40E-01 | U | 3.70E-06 | U | - | | 3.00E-02 | U | 1 | 0.000774 | 58.1 | 0.0022691 | 0.5338509 | 0.2224379 | 1 | Yes | - | 2.66E-01 | ca |
| Propyzamide | 23950-58-5 | No | No | Organics | - | | - | | 7.50E-02 | U | - | | 1 | 0.0109 | 256 | 0.0670769 | 6.8495177 | 2.8539657 | 0.9 | Yes | - | 1.18E+03 | nc |
| Prussian Blue (Ferric Ferrocyanide) | 14038-43-8 | No | No | Organics | - | | - | | - | | - | | 1 | - | 859 | - | 16310.226 | 6795.9277 | 0 | No | - | - | |
| Pyrazinyl phosphorothioate, O,O-diethyl O-2- | 297-97-2 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00109 | 248 | 0.0066021 | 6.1781719 | 2.5742383 | 1 | Yes | - | - | |

**Site-specific
 Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|--|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Pyrene | 129-00-0 | No | Yes | Organics | - | | - | | 3.00E-02 | U | - | | 1 | 0.201 | 202 | 1.0987488 | 5.5165618 | 1.4224885 | 1 | Yes | - | 1.21E+02 | nc |
| Pyridine | 110-86-1 | No | Yes | Organics | - | | - | | 1.00E-03 | U | - | | 1 | 0.00152 | 79.1 | 0.0051995 | 0.6998742 | 0.2916143 | 1 | Yes | - | 1.98E+01 | nc |
| Quinalphos | 13593-03-8 | No | No | Organics | - | | - | | 5.00E-04 | U | - | | 1 | 0.0296 | 298 | 0.1965289 | 11.772264 | 4.90511 | 0.9 | Yes | - | 5.07E+00 | nc |
| Quinoline | 91-22-5 | No | No | Organics | 3.00E+00 | U | - | | - | | - | | 1 | 0.00659 | 129 | 0.0287877 | 1.3318643 | 0.5549435 | 1 | Yes | - | 2.39E-02 | ca |
| Quizalofop-ethyl | 76578-14-8 | No | No | Organics | - | | - | | 9.00E-03 | U | - | | 1 | 0.00886 | 373 | 0.0658135 | 30.964209 | 12.901754 | 0.9 | Yes | - | 1.22E+02 | nc |
| Refractory Ceramic Fibers | NA | No | No | Inorganics | - | | - | | - | | 3.00E-02 | U | 1 | 0.001 | - | - | - | - | 0 | Yes | - | - | - |
| Resmethrin | 10453-86-8 | No | No | Organics | - | | - | | 3.00E-02 | U | - | | 1 | 0.238 | 338 | 1.6829141 | 32.979231 | 8.215779 | 0.7 | Yes | - | 6.75E+01 | nc |
| Resorcinol | 108-46-3 | No | No | Organics | - | | - | | - | | - | | 1 | 0.00128 | 110 | 0.0051634 | 1.0424614 | 0.4343589 | 1 | Yes | - | - | - |
| Ronnel | 299-84-3 | No | Yes | Organics | - | | - | | 5.00E-02 | U | - | | 1 | 0.043 | 322 | 0.2967721 | 16.042055 | 6.6841894 | 0.8 | Yes | - | 4.05E+02 | nc |
| Rotenone | 83-79-4 | No | No | Organics | - | | - | | 4.00E-03 | U | - | | 1 | 0.00509 | 394 | 0.0388591 | 40.593827 | 16.914094 | 0.9 | Yes | - | 6.11E+01 | nc |
| Rubidium | 7440-17-7 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 85.5 | 0.0035564 | 0.7600812 | 0.3167005 | 1 | Yes | - | - | - |
| Rubidium Chloride | 7791-11-9 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 121 | 0.0042308 | 1.2013236 | 0.5005515 | 1 | Yes | - | - | - |
| Rubidium Hydroxide | 1310-82-3 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 102 | 0.0038844 | 0.940286 | 0.3917859 | 1 | Yes | - | - | - |
| Rubidium Iodide | 7790-29-6 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 212 | 0.0056001 | 3.883828 | 1.6182617 | 1 | Yes | - | - | - |
| Safrole | 94-59-7 | Yes | No | Organics | 2.20E-01 | U | 6.30E-05 | U | - | | - | | 1 | 0.0113 | 162 | 0.0553175 | 2.0382619 | 0.8492758 | 1 | Yes | - | 9.57E-02 | ca |
| Samarium Chloride (Stable, Nonradioactive) | 10361-82-7 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 257 | 0.0061659 | 6.9384105 | 2.8910044 | 1 | Yes | - | - | - |
| Samarium Nitrate (Stable, Nonradioactive) | 10361-83-8 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 336 | 0.0070501 | 19.215867 | 8.0066114 | 1 | Yes | - | - | - |
| Scandium | 7440-20-2 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 45 | 0.0025801 | 0.450879 | 0.1878662 | 1 | Yes | - | - | - |
| Selenious Acid | 7783-00-8 | No | No | Inorganics | - | | - | | 5.00E-03 | U | - | | 1 | 0.001 | 129 | 0.0043684 | 1.3318643 | 0.5549435 | 1 | Yes | - | 9.98E+01 | nc |
| Selenite | 14124-67-5 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 129 | 0.0043684 | 1.3318643 | 0.5549435 | 1 | Yes | - | - | - |
| Selenium | 7782-49-2 | No | No | Inorganics | - | | - | | 5.00E-03 | U | 2.00E-02 | U | 1 | 0.001 | 79 | 0.0034185 | 0.6989723 | 0.2912385 | 1 | Yes | 5.00E+01 | 9.98E+01 | nc |
| Selenium Sulfide | 7446-34-6 | No | No | Inorganics | - | | - | | 5.00E-03 | U | 2.00E-02 | U | 1 | 0.001 | 111 | 0.0040522 | 1.0559905 | 0.439996 | 1 | Yes | - | 9.98E+01 | nc |
| Selenourea | 630-10-4 | No | Yes | Organics | - | | - | | - | | - | | 1 | 5.71E-6 | 123 | 0.0000244 | 1.2327074 | 0.5136281 | 1 | No | - | - | - |
| Sethoxydim | 74051-80-2 | No | No | Organics | - | | - | | 1.40E-01 | U | - | | 1 | 0.0185 | 327 | 0.1286685 | 17.110393 | 7.1293305 | 0.9 | Yes | - | 1.62E+03 | nc |
| Silica (crystalline, respirable) | 7631-86-9 | No | No | Inorganics | - | | - | | - | | 3.00E-03 | U | 1 | 0.001 | 60.1 | 0.0029817 | 0.5477974 | 0.2282489 | 1 | Yes | - | - | - |
| Silicon | 7440-21-3 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 28.1 | 0.0020388 | 0.3625935 | 0.1510806 | 1 | Yes | - | - | - |
| Silver | 7440-22-4 | No | No | Inorganics | - | | - | | 5.00E-03 | U | - | | 0.04 | 0.0006 | 108 | 0.0023982 | 1.0159211 | 0.4233005 | 1 | Yes | - | 9.41E+01 | nc |
| Silver Cyanide | 506-64-9 | No | No | Inorganics | - | | - | | 1.00E-01 | U | - | | 0.04 | 0.001 | 134 | 0.0044522 | 1.4205613 | 0.5919006 | 1 | Yes | - | 1.81E+03 | nc |
| Simazine | 122-34-9 | No | No | Organics | 1.20E-01 | U | - | | 5.00E-03 | U | - | | 1 | 0.00325 | 202 | 0.0177658 | 3.4139723 | 1.4224885 | 1 | Yes | 4.00E+00 | 6.07E-01 | ca |
| Sodium | 7440-23-5 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 23 | 0.0018446 | 0.3395158 | 0.1414649 | 1 | Yes | - | - | - |
| Sodium Acifluorfen | 62476-59-9 | No | No | Organics | - | | - | | 1.30E-02 | U | - | | 1 | 0.0000195 | 384 | 0.000147 | 35.682888 | 14.86787 | 1 | Yes | - | 2.60E+02 | nc |
| Sodium Azide | 26628-22-8 | No | No | Inorganics | - | | - | | 4.00E-03 | U | - | | 1 | 0.001 | 65 | 0.0031009 | 0.5835257 | 0.2431357 | 1 | Yes | - | 7.99E+01 | nc |
| Sodium Cyanide | 143-33-9 | No | No | Inorganics | - | | - | | 1.00E-03 | U | - | | 1 | 0.001 | 49 | 0.0026923 | 0.4747446 | 0.1978102 | 1 | Yes | 2.00E+02 | 2.00E+01 | nc |
| Sodium Dichromate | 10588-01-9 | Yes | No | Inorganics | 5.00E-01 | U | 1.50E-01 | U | 2.00E-02 | U | 2.00E-04 | U | 0.025 | 0.001 | 262 | 0.0062255 | 7.4004817 | 3.0835341 | 1 | Yes | - | 4.12E-02 | ca |
| Sodium Diethyldithiocarbamate | 148-18-5 | No | No | Organics | 2.70E-01 | U | - | | 3.00E-02 | U | - | | 1 | 0.0000192 | 172 | 0.0000968 | 2.3187824 | 0.9661593 | 1 | Yes | - | 2.88E-01 | ca |
| Sodium Fluoride | 7681-49-4 | No | No | Inorganics | - | | - | | 5.00E-02 | U | 1.30E-02 | U | 1 | 0.001 | 42 | 0.0024926 | 0.4337705 | 0.1807377 | 1 | Yes | - | 9.98E+02 | nc |
| Sodium Fluoroacetate | 62-74-8 | No | No | Organics | - | | - | | 2.00E-05 | U | - | | 1 | 1.32E-6 | 100 | 5.0769E-6 | 0.9163471 | 0.3818113 | 1 | No | - | 4.01E-01 | nc |
| Sodium Hydroxide | 1310-73-2 | No | No | Inorganics | - | | - | | - | | - | | 1 | 0.001 | 40 | 0.0024325 | 0.422727 | 0.1761363 | 1 | Yes | - | - | - |
| Sodium Metavanadate | 13718-26-8 | No | No | Inorganics | - | | - | | 1.00E-03 | U | - | | 1 | 0.001 | 122 | 0.0042482 | 1.2169143 | 0.5070476 | 1 | Yes | - | 2.00E+01 | nc |
| Sodium Perchlorate | 7601-89-0 | No | No | Inorganics | - | | - | | 7.00E-04 | U | - | | 1 | 0.001 | 122 | 0.0042482 | 1.2169143 | 0.5070476 | 1 | Yes | - | 1.40E+01 | nc |
| Sodium Tungstate | 13472-45-2 | No | No | Inorganics | - | | - | | 8.00E-04 | U | - | | 1 | 0.001 | 294 | 0.0065948 | 11.180468 | 4.6585284 | 1 | Yes | - | 1.60E+01 | nc |
| Sodium Tungstate Dihydrate | 10213-10-2 | No | No | Inorganics | - | | - | | 8.00E-04 | U | - | | 1 | 0.001 | 330 | 0.0069869 | 17.785251 | 7.4105211 | 1 | Yes | - | 1.60E+01 | nc |
| Sodium acid pyrophosphate | 7758-16-9 | No | No | Inorganics | - | | - | | 4.86E+01 | U | - | | 1 | 0.001 | 222 | 0.0057306 | 4.4183487 | 1.8409786 | 1 | Yes | - | 9.70E+05 | nc |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

Site-specific
Resident Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|--|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Sodium aluminum phosphate (acidic) | 7785-88-8 | No | No | Inorganics | - | | - | | 4.86E+01 | U | - | | 1 | 0.001 | 145 | 0.0046314 | 1.6370426 | 0.6821011 | 1 | Yes | - | 9.70E+05 | nc |
| Sodium aluminum phosphate (anhydrous) | 10279-59-1 | No | No | Inorganics | - | | - | | 4.86E+01 | U | - | | 1 | 0.001 | - | - | - | - | 0 | Yes | - | 9.70E+05 | nc |
| Sodium aluminum phosphate (tetrahydrate) | 10305-76-7 | No | No | Inorganics | - | | - | | 4.86E+01 | U | - | | 1 | 0.001 | 950 | 0.0118546 | 52730.27 | 21970.946 | 0.8 | Yes | - | 9.70E+05 | nc |
| Sodium hexametaphosphate | 10124-56-8 | No | No | Inorganics | - | | - | | 4.86E+01 | U | - | | 1 | 0.001 | 611 | 0.0095071 | 666.28493 | 277.61872 | 0.9 | Yes | - | 9.70E+05 | nc |
| Sodium polyphosphate | 68915-31-1 | No | No | Inorganics | - | | - | | 4.86E+01 | U | - | | 1 | 0.001 | 360 | 0.0072976 | 26.185447 | 10.910603 | 1 | Yes | - | 9.70E+05 | nc |
| Sodium trimetaphosphate | 7785-84-4 | No | No | Inorganics | - | | - | | 4.86E+01 | U | - | | 1 | 0.001 | 306 | 0.006728 | 13.051487 | 5.4381195 | 1 | Yes | - | 9.70E+05 | nc |
| Sodium tripolyphosphate | 7758-29-4 | No | No | Inorganics | - | | - | | 4.86E+01 | U | - | | 1 | 0.001 | 368 | 0.0073782 | 29.030866 | 12.096194 | 1 | Yes | - | 9.70E+05 | nc |
| Stearyl Acetate | 822-23-1 | No | Yes | Organics | - | | - | | - | - | - | | 1 | 17.3 | 313 | 117.71856 | 27.945902 | 5.9518058 | 0 | No | - | - | - |
| Stirofos (Tetrachlorovinphos) | 961-11-5 | No | No | Organics | 2.40E-02 | U | - | | 3.00E-02 | U | - | | 1 | 0.00307 | 366 | 0.0225894 | 28.291762 | 11.788234 | 0.9 | Yes | - | 2.77E+00 | ca |
| Strontium Chromate | 7789-06-2 | Yes | No | Inorganics | 5.00E-01 | U | 1.50E-01 | U | 2.00E-02 | U | 2.00E-04 | U | 0.025 | 0.001 | 204 | 0.0054934 | 3.5031601 | 1.4596501 | 1 | Yes | - | 4.12E-02 | ca |
| Strontium, Stable | 7440-24-6 | No | No | Inorganics | - | | - | | 6.00E-01 | U | - | | 1 | 0.001 | 87.6 | 0.0035998 | 0.7809442 | 0.3253934 | 1 | Yes | - | 1.20E+04 | nc |
| Strychnine | 57-24-9 | No | No | Organics | - | | - | | 3.00E-04 | U | - | | 1 | 0.000399 | 334 | 0.0028046 | 18.726646 | 7.802769 | 1 | Yes | - | 5.91E+00 | nc |
| Styrene | 100-42-5 | No | Yes | Organics | - | | - | | 2.00E-01 | U | 1.00E+00 | U | 1 | 0.0372 | 104 | 0.1459104 | 0.9648504 | 0.402021 | 1 | Yes | 1.00E+02 | 1.21E+03 | nc |
| Styrene-Acrylonitrile (SAN) Trimer | NA | No | No | Organics | - | | - | | 3.00E-03 | U | - | | 1 | 0.0119 | 210 | 0.0663259 | 3.7849486 | 1.5770619 | 1 | Yes | - | 4.82E+01 | nc |
| Sulfate | 14808-79-8 | No | No | Inorganics | - | | - | | - | - | - | | 1 | 0.001 | 98.1 | 0.0038094 | 0.8941698 | 0.3725707 | 1 | Yes | - | - | - |
| Sulfide | 18496-25-8 | No | No | Inorganics | - | | - | | - | - | - | | 1 | 0.001 | 34.1 | 0.002246 | 0.3917599 | 0.1632333 | 1 | Yes | - | - | - |
| Sulfite | 14265-45-3 | No | No | Inorganics | - | | - | | - | - | - | | 1 | 0.001 | - | - | - | - | 0 | Yes | - | - | - |
| Sulfolane | 126-33-0 | No | No | Organics | - | | - | | 1.00E-03 | U | 2.00E-03 | U | 1 | 0.000102 | 120 | 0.0004298 | 1.1859326 | 0.4941386 | 1 | Yes | - | 2.00E+01 | nc |
| Sulfonylbis(4-chlorobenzene), 1,1'- | 80-07-9 | No | No | Organics | - | | - | | 8.00E-04 | U | - | | 1 | 0.0149 | 287 | 0.0970854 | 10.215509 | 4.2564619 | 0.9 | Yes | - | 1.10E+01 | nc |
| Sulfur | 7704-34-9 | No | No | Inorganics | - | | - | | - | - | - | | 1 | 0.001 | 32.1 | 0.0021791 | 0.381786 | 0.1590775 | 1 | Yes | - | - | - |
| Sulfur Dioxide | 7446-09-5 | No | Yes | Inorganics | - | | - | | - | - | - | | 1 | 0.001 | 64.1 | 0.0030793 | 0.576793 | 0.2403304 | 1 | Yes | - | - | - |
| Sulfur Mustard | 505-60-2 | No | Yes | Organics | - | | - | | - | - | - | | 1 | 0.00448 | 159 | 0.0217272 | 1.9609205 | 0.8170502 | 1 | Yes | - | - | - |
| Sulfur Trioxide | 7446-11-9 | No | Yes | Inorganics | - | | - | | - | - | 1.00E-03 | U | 1 | 0.001 | 80.1 | 0.0034423 | 0.7089572 | 0.2953988 | 1 | Yes | - | 2.09E+00 | nc |
| Sulfuric Acid | 7664-93-9 | No | No | Inorganics | - | | - | | - | - | 1.00E-03 | U | 1 | 0.001 | 98.1 | 0.0038094 | 0.8941698 | 0.3725707 | 1 | Yes | - | - | - |
| Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester | 140-57-8 | No | No | Organics | 2.50E-02 | U | 7.10E-06 | U | 5.00E-02 | U | - | | 1 | 0.0328 | 335 | 0.2308995 | 18.969679 | 7.9040331 | 0.8 | Yes | - | 1.34E+00 | ca |
| TCDD, 2,3,7,8- | 1746-01-6 | No | Yes | Organics | 1.30E+05 | U | 3.80E+01 | U | 7.00E-10 | U | 4.00E-08 | U | 1 | 0.808 | 322 | 5.5765545 | 29.479547 | 6.6841894 | 0.5 | No | 3.00E-05 | 1.19E-07 | ca |
| TCDF, 2,3,7,8- | 51207-31-9 | No | Yes | Organics | 1.30E+04 | U | 3.80E+00 | U | 7.00E-09 | U | 4.00E-07 | U | 1 | 0.657 | 306 | 4.4203101 | 23.644243 | 5.4381195 | 0.6 | No | - | 1.19E-06 | ca |
| TCMTB | 21564-17-0 | No | No | Organics | - | | - | | 3.00E-02 | U | - | | 1 | 0.0112 | 238 | 0.0664558 | 5.4307523 | 2.2628134 | 0.9 | Yes | - | 4.81E+02 | nc |
| Tebuthiuron | 34014-18-1 | No | No | Organics | - | | - | | 7.00E-02 | U | - | | 1 | 0.00127 | 228 | 0.0073756 | 4.7737535 | 1.989064 | 1 | Yes | - | 1.36E+03 | nc |
| Technetium | 7440-26-8 | No | No | Inorganics | - | | - | | - | - | - | | 1 | 0.001 | 97.9 | 0.0038056 | 0.8918668 | 0.3716112 | 1 | Yes | - | - | - |
| Tellurium | 13494-80-9 | No | No | Inorganics | - | | - | | - | - | - | | 1 | 0.001 | 128 | 0.0043514 | 1.3148009 | 0.5478337 | 1 | Yes | - | - | - |
| Temphos | 3383-96-8 | No | No | Organics | - | | - | | 2.00E-02 | U | - | | 1 | 0.0345 | 466 | 0.2864433 | 102.72118 | 42.800491 | 0.7 | No | - | 4.01E+02 | nc |
| Terbacil | 5902-51-2 | No | No | Organics | - | | - | | 1.30E-02 | U | - | | 1 | 0.00172 | 217 | 0.0097451 | 4.1424759 | 1.7260316 | 1 | Yes | - | 2.51E+02 | nc |
| Terbufos | 13071-79-9 | No | Yes | Organics | - | | - | | 2.50E-05 | U | - | | 1 | 0.0358 | 288 | 0.2336716 | 10.348085 | 4.3117021 | 0.9 | Yes | - | 2.38E-01 | nc |
| Terbutryn | 886-50-0 | No | No | Organics | - | | - | | 1.00E-03 | U | - | | 1 | 0.0212 | 241 | 0.1265817 | 5.6449486 | 2.3520619 | 0.9 | Yes | - | 1.35E+01 | nc |
| Test Chemical | NA | No | No | Inorganics | - | | - | | - | - | - | | - | - | - | - | - | - | 0 | No | - | - | - |
| Tetrabromodiphenyl ether, 2,2',4,4'-(BDE-47) | 5436-43-1 | No | No | Organics | - | | - | | 1.00E-04 | U | - | | 1 | 0.0929 | 486 | 0.7876994 | 213.21305 | 55.392217 | 0.6 | No | - | 2.01E+00 | nc |
| Tetrabutyl Lead | 1920-90-7 | No | Yes | Organics | - | | - | | - | - | - | | 1 | 4.04 | 436 | 32.44526 | 135.23728 | 29.070249 | 0 | No | - | - | - |
| Tetrachloroaniline, 2,3,5,6- | 3481-20-7 | No | No | Organics | - | | - | | - | - | - | | 1 | 0.0421 | 231 | 0.2461018 | 4.9620369 | 2.0675154 | 0.9 | Yes | - | - | - |
| Tetrachlorobenzene, 1,2,3,4- | 634-66-2 | No | Yes | Organics | - | | - | | - | - | - | | 1 | 0.11 | 216 | 0.6217936 | 6.799393 | 1.7039182 | 1 | Yes | - | - | - |
| Tetrachlorobenzene, 1,2,4,5- | 95-94-3 | No | Yes | Organics | - | | - | | 3.00E-04 | U | - | | 1 | 0.117 | 216 | 0.6613622 | 6.6841932 | 1.7039182 | 1 | Yes | - | 1.70E+00 | nc |

**Site-specific
 Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77) | 32598-13-3 | No | No | Organics | 1.30E+01 | U | 3.80E-03 | U | 7.00E-06 | U | 4.00E-04 | U | 1 | 0.917 | 292 | 6.0268088 | 20.108578 | 4.5399257 | 0.6 | No | - | 5.99E-03 | ca* |
| Tetrachlorobiphenyl, 3,4,4',5- (PCB 81) | 70362-50-4 | No | Yes | Organics | 3.90E+01 | U | 1.14E-02 | U | 2.33E-06 | U | 1.33E-04 | U | 1 | 0.584 | 292 | 3.8382294 | 19.547521 | 4.5399257 | 0.7 | No | - | 3.95E-04 | ca |
| Tetrachloroethane, 1,1,1,2- | 630-20-6 | No | Yes | Organics | 2.60E-02 | U | 7.40E-06 | U | 3.00E-02 | U | - | - | 1 | 0.0159 | 168 | 0.0792644 | 2.2022164 | 0.9175902 | 1 | Yes | - | 5.74E-01 | ca |
| Tetrachloroethane, 1,1,2,2- | 79-34-5 | No | Yes | Organics | 2.00E-01 | U | 5.80E-05 | U | 2.00E-02 | U | - | - | 1 | 0.00694 | 168 | 0.0345972 | 2.2022164 | 0.9175902 | 1 | Yes | - | 7.57E-02 | ca |
| Tetrachloroethylene | 127-18-4 | No | Yes | Organics | 2.10E-03 | U | 2.60E-07 | U | 6.00E-03 | U | 4.00E-02 | U | 1 | 0.0334 | 166 | 0.1655111 | 2.1461496 | 0.894229 | 1 | Yes | 5.00E+00 | 1.13E+01 | ca** |
| Tetrachlorophenol, 2,3,4,5- | 4901-51-3 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.0491 | 232 | 0.2876419 | 5.0264341 | 2.0943475 | 0.9 | Yes | - | - | - |
| Tetrachlorophenol, 2,3,4,6- | 58-90-2 | No | No | Organics | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.071 | 232 | 0.4159384 | 5.0264341 | 2.0943475 | 0.9 | Yes | - | 2.38E+02 | nc |
| Tetrachlorophenols (total) | 25167-83-3 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.071 | 696 | 0.7204264 | 3216.9337 | 830.70868 | 0.3 | No | - | - | - |
| Tetrachloroterephthalate, 2,3,5,6- | 2136-79-0 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.000808 | 304 | 0.0054184 | 12.719206 | 5.299669 | 1 | Yes | - | - | - |
| Tetrachlorotoluene, p- alpha, alpha, alpha- | 5216-25-1 | No | Yes | Organics | 2.00E+01 | U | - | - | - | - | - | - | 1 | 0.0836 | 230 | 0.4876372 | 4.8984648 | 2.041027 | 0.9 | Yes | - | 1.33E-03 | ca |
| Tetraethyl Dithiopyrophosphate | 3689-24-5 | No | No | Organics | - | - | - | - | 5.00E-04 | U | - | - | 1 | 0.0109 | 322 | 0.0752283 | 16.042055 | 6.6841894 | 0.9 | Yes | - | 7.06E+00 | nc |
| Tetraethyl Lead | 78-00-2 | No | Yes | Organics | - | - | - | - | 1.00E-07 | U | - | - | 1 | 0.0137 | 323 | 0.0946997 | 16.250248 | 6.7709366 | 0.9 | Yes | - | 1.31E-03 | nc |
| Tetrafluoroethane, 1,1,1,2- | 811-97-2 | No | Yes | Organics | - | - | - | - | - | - | 8.00E+01 | U | 1 | 0.00548 | 102 | 0.0212866 | 0.940286 | 0.3917859 | 1 | Yes | - | 1.67E+05 | nc |
| Tetrahydrofuran | 109-99-9 | No | Yes | Organics | - | - | - | - | 9.00E-01 | U | 2.00E+00 | U | 1 | 0.00125 | 72.1 | 0.0040823 | 0.6394697 | 0.2664457 | 1 | Yes | - | 3.38E+03 | nc |
| Tetrahydrothiophene | 110-01-0 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00775 | 88.2 | 0.0279939 | 0.7870095 | 0.3279206 | 1 | Yes | - | - | - |
| Tetramethyl Lead | 75-74-1 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00466 | 267 | 0.0292865 | 7.8933251 | 3.2888855 | 1 | Yes | - | - | - |
| Tetramethylcyclohexane | 30501-43-0 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | - | 140 | - | 1.534829 | 0.6395121 | 0 | No | - | - | - |
| Tetrapotassium phosphate | 7320-34-5 | No | No | Inorganics | - | - | - | - | 4.86E+01 | U | - | - | 1 | 0.001 | 330 | 0.0069869 | 17.785251 | 7.4105211 | 1 | Yes | - | 9.70E+05 | nc |
| Tetrapropyl Lead | 3440-75-3 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.412 | 380 | 3.0889841 | 59.800132 | 14.120457 | 0.4 | No | - | - | - |
| Tetrasodium pyrophosphate | 7722-88-5 | No | No | Inorganics | - | - | - | - | 4.86E+01 | U | - | - | 1 | 0.001 | 266 | 0.0062729 | 7.7921982 | 3.2467493 | 1 | Yes | - | 9.70E+05 | nc |
| Tetryl (Trinitrophenylmethylnitramine) | 479-45-8 | No | No | Organics | - | - | - | - | 2.00E-03 | U | - | - | 1 | 0.000474 | 287 | 0.0030885 | 10.215509 | 4.2564619 | 1 | Yes | - | 3.95E+01 | nc |
| Thallic Oxide | 1314-32-5 | No | No | Inorganics | - | - | - | - | 2.00E-05 | U | - | - | 1 | 0.001 | 457 | 0.0082221 | 91.466064 | 38.11086 | 0.9 | Yes | - | 3.99E-01 | nc |
| Thallium (I) Nitrate | 10102-45-1 | No | No | Inorganics | - | - | - | - | 1.00E-05 | U | - | - | 1 | 0.001 | 267 | 0.0062847 | 7.8933251 | 3.2888855 | 1 | Yes | - | 2.00E-01 | nc |
| Thallium (Soluble Salts) | 7440-28-0 | No | No | Inorganics | - | - | - | - | 1.00E-05 | U | - | - | 1 | 0.001 | 204 | 0.0054934 | 3.5031601 | 1.4596501 | 1 | Yes | 2.00E+00 | 2.00E-01 | nc |
| Thallium Acetate | 563-68-8 | No | Yes | Organics | - | - | - | - | 1.00E-05 | U | - | - | 1 | 0.0000399 | 263 | 0.0002489 | 7.496525 | 3.1235521 | 1 | Yes | - | 2.00E-01 | nc |
| Thallium Carbonate | 6533-73-9 | No | Yes | Organics | - | - | - | - | 2.00E-05 | U | - | - | 1 | 9.82E-7 | 469 | 8.1795E-6 | 106.77264 | 44.488601 | 1 | Yes | - | 4.01E-01 | nc |
| Thallium Chloride | 7791-12-0 | No | No | Inorganics | - | - | - | - | 1.00E-05 | U | - | - | 1 | 0.001 | 240 | 0.0059584 | 5.5726272 | 2.321928 | 1 | Yes | - | 2.00E-01 | nc |
| Thallium Selenite | 12039-52-0 | No | No | Inorganics | - | - | - | - | 1.00E-05 | U | - | - | 1 | 0.001 | 283 | 0.0064702 | 9.7019714 | 4.0424881 | 1 | Yes | - | 2.00E-01 | nc |
| Thallium Sulfate | 7446-18-6 | No | No | Inorganics | - | - | - | - | 2.00E-05 | U | - | - | 1 | 0.001 | 505 | 0.0086432 | 169.84783 | 70.769927 | 0.9 | Yes | - | 3.99E-01 | nc |
| Thifensulfuron-methyl | 79277-27-3 | No | No | Organics | - | - | - | - | 4.30E-02 | U | - | - | 1 | 0.000114 | 387 | 0.0008626 | 37.09027 | 15.454279 | 1 | Yes | - | 8.56E+02 | nc |
| Thiobencarb | 28249-77-6 | No | No | Organics | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.0102 | 258 | 0.0630139 | 7.028457 | 2.9285237 | 0.9 | Yes | - | 1.59E+02 | nc |
| Thiocyanates | NA | No | No | Inorganics | - | - | - | - | 2.00E-04 | U | - | - | 1 | 0.001 | - | - | - | - | 0 | Yes | - | 3.99E+00 | nc |
| Thiocyanic Acid | 463-56-9 | No | Yes | Inorganics | - | - | - | - | 2.00E-04 | U | - | - | 1 | 0.001 | 59.1 | 0.0029568 | 0.5407792 | 0.2253247 | 1 | Yes | - | 3.99E+00 | nc |
| Thiodiglycol | 111-48-8 | No | No | Organics | - | - | - | - | 7.00E-02 | U | - | - | 1 | 0.000123 | 122 | 0.0005225 | 1.2169143 | 0.5070476 | 1 | Yes | - | 1.40E+03 | nc |
| Thiofanox | 39196-18-4 | No | No | Organics | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.00627 | 218 | 0.0356059 | 4.1962368 | 1.748432 | 1 | Yes | - | 5.29E+00 | nc |
| Thiophanate, Methyl | 23564-05-8 | No | No | Organics | 1.16E-02 | U | - | - | 2.67E-02 | U | - | - | 1 | 0.00016 | 342 | 0.001138 | 20.76156 | 8.6506502 | 1 | Yes | - | 6.66E+00 | ca* |
| Thiophene | 110-02-1 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00843 | 84.1 | 0.0297339 | 0.7464831 | 0.3110346 | 1 | Yes | - | - | - |
| Thiram | 137-26-8 | No | No | Organics | - | - | - | - | 1.50E-02 | U | - | - | 1 | 0.00099 | 240 | 0.0058989 | 5.5726272 | 2.321928 | 1 | Yes | - | 2.93E+02 | nc |
| Thorium | 7440-29-1 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 232 | 0.0058583 | 5.0264341 | 2.0943475 | 1 | Yes | - | - | - |
| Thymol | 89-83-8 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.0373 | 150 | 0.1757038 | 1.7460633 | 0.7275264 | 1 | Yes | - | - | - |
| Tin | 7440-31-5 | No | No | Inorganics | - | - | - | - | 6.00E-01 | U | - | - | 1 | 0.001 | 119 | 0.0041957 | 1.1707387 | 0.4878078 | 1 | Yes | - | 1.20E+04 | nc |
| Titanium | 7440-32-6 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 47.9 | 0.0026619 | 0.4680583 | 0.1950243 | 1 | Yes | - | - | - |
| Titanium Tetrachloride | 7550-45-0 | No | Yes | Inorganics | - | - | - | - | - | - | 1.00E-04 | U | 1 | 0.001 | 190 | 0.0053016 | 2.9245563 | 1.2185651 | 1 | Yes | - | 2.09E-01 | nc |

Appendix A - Regional Screening Levels from the RSL Calculator

AVX Corporation, Myrtle Beach Facility

Myrtle Beach, South Carolina

**Site-specific
Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---|-------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Toluene | 108-88-3 | No | Yes | Organics | - | | - | | 8.00E-02 | U | 5.00E+00 | U | 1 | 0.0311 | 92.1 | 0.1147934 | 0.8275991 | 0.3448329 | 1 | Yes | 1.00E+03 | 1.10E+03 | nc |
| Toluene-2,4-diisocyanate | 584-84-9 | No | Yes | Organics | - | | 1.10E-05 | U | - | | 8.00E-06 | U | 1 | 0.505 | 174 | 2.5620798 | 4.1334535 | 0.9913996 | 1 | Yes | | 1.67E-02 | nc |
| Toluene-2,5-diamine | 95-70-5 | No | No | Organics | 1.80E-01 | U | - | | 2.00E-04 | U | - | | 1 | 0.00041 | 122 | 0.0017418 | 1.2169143 | 0.5070476 | 1 | Yes | | 4.31E-01 | ca** |
| Toluene-2,6-diisocyanate | 91-08-7 | No | Yes | Organics | - | | 1.10E-05 | U | - | | 8.00E-06 | U | 1 | 0.0505 | 174 | 0.256208 | 2.3793591 | 0.9913996 | 1 | Yes | | 1.67E-02 | nc |
| Toluenediamine, 2,3- | 2687-25-4 | No | No | Organics | - | | - | | - | | - | | 1 | 0.000952 | 122 | 0.0040443 | 1.2169143 | 0.5070476 | 1 | Yes | | | |
| Toluenediamine, 3,4- | 496-72-0 | No | No | Organics | - | | - | | - | | - | | 1 | 0.000887 | 122 | 0.0037682 | 1.2169143 | 0.5070476 | 1 | Yes | | | |
| Toluidine, o- (Methylaniline, 2-) | 95-53-4 | No | No | Organics | 1.60E-02 | U | 5.10E-05 | U | - | | - | | 1 | 0.00296 | 107 | 0.0117763 | 1.0029054 | 0.4178773 | 1 | Yes | | 4.71E+00 | ca |
| Toluidine, p- | 106-49-0 | No | No | Organics | 3.00E-02 | U | - | | 4.00E-03 | U | - | | 1 | 0.00329 | 107 | 0.0130892 | 1.0029054 | 0.4178773 | 1 | Yes | | 2.50E+00 | ca* |
| Total Petroleum Hydrocarbons (Aliphatic High) | NA | No | Yes | Organics | - | | - | | 3.00E+00 | U | - | | 1 | 1.96 | 170 | 9.8289513 | 4.2628507 | 0.9415616 | 1 | No | | 6.02E+04 | nc |
| Total Petroleum Hydrocarbons (Aliphatic Low) | NA | No | Yes | Organics | - | | - | | - | | 6.00E-01 | U | 1 | 0.201 | 86.2 | 0.7177552 | 1.2380278 | 0.319572 | 1 | Yes | | 1.25E+03 | nc |
| Total Petroleum Hydrocarbons (Aliphatic Medium) | NA | No | Yes | Organics | - | | - | | 1.00E-02 | U | 1.00E-01 | U | 1 | 1.7 | 128 | 7.3974248 | 2.4513898 | 0.5478337 | 1 | No | | 1.02E+02 | nc |
| Total Petroleum Hydrocarbons (Aromatic High) | NA | No | No | Organics | - | | - | | 4.00E-02 | U | - | | 1 | 0.308 | 202 | 1.6836548 | 5.7102866 | 1.4224885 | 1 | No | | 8.02E+02 | nc |
| Total Petroleum Hydrocarbons (Aromatic Low) | NA | No | Yes | Organics | - | | - | | 4.00E-03 | U | 3.00E-02 | U | 1 | 0.0149 | 78.1 | 0.0506452 | 0.6909076 | 0.2878782 | 1 | Yes | | 3.32E+01 | nc |
| Total Petroleum Hydrocarbons (Aromatic Medium) | NA | No | Yes | Organics | - | | - | | 4.00E-03 | U | 3.00E-03 | U | 1 | 0.0692 | 135 | 0.3092428 | 1.4389973 | 0.5995822 | 1 | Yes | | 5.45E+00 | nc |
| Toxaphene | 8001-35-2 | No | No | Organics | 1.10E+00 | U | 3.20E-04 | U | - | | - | | 1 | 0.0518 | 448 | 0.4216921 | 81.444168 | 33.93507 | 0.8 | No | 3.00E+00 | 7.08E-02 | ca |
| Tralothrin | 66841-25-6 | No | No | Organics | - | | - | | 7.50E-03 | U | - | | 1 | 0.0305 | 665 | 0.3025083 | 1336.7802 | 556.99173 | 0.5 | No | | 1.50E+02 | nc |
| Tri-n-butyltin | 688-73-3 | No | Yes | Organics | - | | - | | 3.00E-04 | U | - | | 1 | 0.0193 | 291 | 0.1266282 | 10.756228 | 4.4817616 | 0.9 | Yes | | 3.74E+00 | nc |
| Triacetin | 102-76-1 | No | No | Organics | - | | - | | 8.00E+01 | U | - | | 1 | 0.000137 | 218 | 0.000778 | 4.1962368 | 1.748432 | 1 | Yes | | 1.60E+06 | nc |
| Triadimefon | 43121-43-3 | No | No | Organics | - | | - | | 3.40E-02 | U | - | | 1 | 0.00244 | 294 | 0.0160913 | 11.180468 | 4.6585284 | 1 | Yes | | 6.27E+02 | nc |
| Triallate | 2303-17-5 | No | Yes | Organics | 7.17E-02 | U | - | | 2.50E-02 | U | - | | 1 | 0.0349 | 305 | 0.234424 | 12.884275 | 5.368448 | 0.9 | Yes | | 4.70E-01 | ca |
| Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate) | 15136-87-5 | No | No | Inorganics | - | | - | | 4.86E+01 | U | - | | 1 | 0.001 | 888 | 0.0114613 | 23706.093 | 9877.5389 | 0.8 | Yes | | 9.70E+05 | nc |
| Triasulfuron | 82097-50-5 | No | No | Organics | - | | - | | 1.00E-02 | U | - | | 1 | 0.0000469 | 402 | 0.0003617 | 45.00492 | 18.75205 | 1 | Yes | | 2.00E+02 | nc |
| Triaziquone | 68-76-8 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0000101 | 231 | 0.000059 | 4.9620369 | 2.0675154 | 1 | Yes | | | |
| Tribenuron-methyl | 101200-48-0 | No | No | Organics | - | | - | | 8.00E-03 | U | - | | 1 | 0.000468 | 395 | 0.0035774 | 41.120652 | 17.133605 | 1 | Yes | | 1.55E+02 | nc |
| Tribromobenzene, 1,2,4- | 615-54-3 | No | Yes | Organics | - | | - | | 5.00E-03 | U | - | | 1 | 0.0337 | 315 | 0.2300445 | 14.657503 | 6.1072929 | 0.9 | Yes | | 4.47E+01 | nc |
| Tribromochloromethane | 594-15-0 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00243 | 287 | 0.0158334 | 10.215509 | 4.2564619 | 1 | Yes | | | |
| Tribromodiphenyl Ether | 49690-94-0 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0659 | 407 | 0.5113394 | 48.002073 | 20.000864 | 0.7 | Yes | | | |
| Tribromophenol, 2,4,6- | 118-79-6 | No | No | Organics | - | | - | | 9.00E-03 | U | - | | 1 | 0.0121 | 331 | 0.0846693 | 18.016067 | 7.5066946 | 0.9 | Yes | | 1.21E+02 | nc |
| Tributyl Phosphate | 126-73-8 | No | No | Organics | 9.00E-03 | U | - | | 1.00E-02 | U | - | | 1 | 0.0228 | 266 | 0.1430218 | 7.7921982 | 3.2467493 | 0.9 | Yes | | 5.20E+00 | ca* |
| Tributyltin | 56573-85-4 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.034 | 325 | 0.2357476 | 16.674775 | 6.9478231 | 0.8 | Yes | | | |
| Tributyltin Compounds | NA | No | No | Organics | - | | - | | 3.00E-04 | U | - | | 1 | - | - | - | - | - | 0 | No | | 6.02E+00 | nc |
| Tributyltin Oxide | 56-35-9 | No | No | Organics | - | | - | | 3.00E-04 | U | - | | 1 | 0.000252 | 596 | 0.0023662 | 549.11081 | 228.79617 | 1 | Yes | | 5.66E+00 | nc |
| Tributyltin chloride | 1461-22-9 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.034 | 325 | 0.2357476 | 16.674775 | 6.9478231 | 0.8 | Yes | | | |
| Tributyltin fluoride | 1983-10-4 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.0238 | 309 | 0.1609099 | 13.566255 | 5.6526064 | 0.9 | Yes | | | |
| Tributyltin linoleate | 24124-25-2 | No | Yes | Organics | - | | - | | - | | - | | 1 | 12.2 | 569 | 111.929 | 758.29374 | 161.52835 | 0 | No | | | |
| Tributyltin methacrylate | 2155-70-6 | No | Yes | Organics | - | | - | | - | | - | | 1 | 0.00693 | 375 | 0.051615 | 31.773129 | 13.238804 | 0.9 | Yes | | | |
| Tributyltin naphthenate | 85409-17-2 | No | No | Organics | - | | - | | - | | - | | 1 | - | - | - | - | - | 0 | No | | | |
| Tricaine Methanesulfonate | 886-86-2 | No | No | Organics | - | | - | | - | | - | | 1 | 0.0029 | 165 | 0.0143274 | 2.1186538 | 0.8827724 | 1 | Yes | | | |
| Tricalcium phosphate | 7758-87-4 | No | No | Inorganics | - | | - | | 4.86E+01 | U | - | | 1 | 0.001 | 310 | 0.0067719 | 13.742318 | 5.7259658 | 1 | Yes | | 9.70E+05 | nc |

**Site-specific
 Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice) ; c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|--|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Trichloro-1,2,2-trifluoroethane, 1,1,2- | 76-13-1 | No | Yes | Organics | - | - | - | - | 3.00E+01 | U | 5.00E+00 | U | 1 | 0.0175 | 187 | 0.0920419 | 2.8135847 | 1.172327 | 1 | Yes | - | 1.02E+04 | nc |
| Trichloro-2'-hydroxydiphenylether | 3380-34-5 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.0541 | 290 | 0.3543422 | 10.618422 | 4.4243426 | 0.9 | Yes | - | - | - |
| Trichloroacetic Acid | 76-03-9 | No | No | Organics | 7.00E-02 | U | - | - | 2.00E-02 | U | - | - | 1 | 0.00145 | 163 | 0.0071201 | 2.0647144 | 0.8602977 | 1 | Yes | 6.00E+01 | 1.09E+00 | ca |
| Trichloroaniline HCl, 2,4,6- | 33663-50-2 | No | No | Organics | 2.90E-02 | U | - | - | - | - | - | - | 1 | 0.0000276 | 233 | 0.000162 | 5.091667 | 2.1215279 | 1 | Yes | - | 2.68E+00 | ca |
| Trichloroaniline, 2,4,5- | 636-30-6 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.0243 | 196 | 0.1308462 | 3.1598029 | 1.3165845 | 1 | Yes | - | - | - |
| Trichloroaniline, 2,4,6- | 634-93-5 | No | No | Organics | 7.00E-03 | U | - | - | 3.00E-05 | U | - | - | 1 | 0.027 | 196 | 0.1453846 | 3.1598029 | 1.3165845 | 1 | Yes | - | 3.98E-01 | nc |
| Trichlorobenzene | 12002-48-1 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0915 | 363 | 0.6705035 | 44.367152 | 11.340932 | 0.8 | Yes | - | - | - |
| Trichlorobenzene, 1,2,3- | 87-61-6 | No | Yes | Organics | - | - | - | - | 8.00E-04 | U | - | - | 1 | 0.0738 | 181 | 0.3818759 | 2.604114 | 1.0850475 | 1 | Yes | - | 7.06E+00 | nc |
| Trichlorobenzene, 1,2,4- | 120-82-1 | No | Yes | Organics | 2.90E-02 | U | - | - | 1.00E-02 | U | 2.00E-03 | U | 1 | 0.0705 | 181 | 0.3648002 | 2.604114 | 1.0850475 | 1 | Yes | 7.00E+01 | 1.16E+00 | ca** |
| Trichloroethane, 1,1,1- | 71-55-6 | No | Yes | Organics | - | - | - | - | 2.00E+00 | U | 5.00E+00 | U | 1 | 0.0126 | 133 | 0.0558886 | 1.4023615 | 0.5843173 | 1 | Yes | 2.00E+02 | 8.01E+03 | nc |
| Trichloroethane, 1,1,2- | 79-00-5 | No | Yes | Organics | 5.70E-02 | U | 1.60E-05 | U | 4.00E-03 | U | 2.00E-04 | U | 1 | 0.00504 | 133 | 0.0223554 | 1.4023615 | 0.5843173 | 1 | Yes | 5.00E+00 | 2.75E-01 | ca** |
| Trichloroethylene | 79-01-6 | Yes | Yes | Organics | 4.60E-02 | U | 4.10E-06 | U | 5.00E-04 | U | 2.00E-03 | U | 1 | 0.0116 | 131 | 0.0510646 | 1.3666585 | 0.569441 | 1 | Yes | 5.00E+00 | 4.94E-01 | ca** |
| Trichlorofluoromethane | 75-69-4 | No | Yes | Organics | - | - | - | - | 3.00E-01 | U | - | - | 1 | 0.0127 | 137 | 0.057173 | 1.4765902 | 0.6152459 | 1 | Yes | - | 5.16E+03 | nc |
| Trichlorophenol, 2,4,5- | 95-95-4 | No | No | Organics | - | - | - | - | 1.00E-01 | U | - | - | 1 | 0.0362 | 197 | 0.1954197 | 3.2008107 | 1.3336711 | 1 | Yes | - | 1.18E+03 | nc |
| Trichlorophenol, 2,4,6- | 88-06-2 | No | No | Organics | 1.10E-02 | U | 3.10E-06 | U | 1.00E-03 | U | - | - | 1 | 0.0346 | 197 | 0.1867824 | 3.2008107 | 1.3336711 | 1 | Yes | - | 4.12E+00 | ca** |
| Trichlorophenoxyacetic Acid, 2,4,5- | 93-76-5 | No | No | Organics | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.00914 | 255 | 0.0561362 | 6.7617637 | 2.8174016 | 0.9 | Yes | - | 1.63E+02 | nc |
| Trichlorophenoxypropionic acid, -2,4,5 | 93-72-1 | No | No | Organics | - | - | - | - | 8.00E-03 | U | - | - | 1 | 0.0161 | 270 | 0.10175 | 8.2046487 | 3.4186036 | 0.9 | Yes | 5.00E+01 | 1.11E+02 | nc |
| Trichloropropane, 1,1,2- | 598-77-6 | No | Yes | Organics | - | - | - | - | 5.00E-03 | U | - | - | 1 | 0.0096 | 147 | 0.0447669 | 1.6798093 | 0.6999206 | 1 | Yes | - | 8.85E+01 | nc |
| Trichloropropane, 1,2,3- | 96-18-4 | Yes | Yes | Organics | 3.00E+01 | U | - | - | 4.00E-03 | U | 3.00E-04 | U | 1 | 0.00752 | 147 | 0.0350674 | 1.6798093 | 0.6999206 | 1 | Yes | - | 7.49E-04 | ca |
| Trichloropropene, 1,2,3- | 96-19-5 | No | Yes | Organics | - | - | - | - | 3.00E-03 | U | 3.00E-04 | U | 1 | 0.0169 | 145 | 0.0782704 | 1.6370426 | 0.6821011 | 1 | Yes | - | 6.18E-01 | nc |
| Trichlorotoluene, 2,3,6- | 2077-46-5 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.118 | 195 | 0.6337617 | 5.1539199 | 1.2997169 | 1 | Yes | - | - | - |
| Trichlorotoluene, alpha 2,6- | 2014-83-7 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0648 | 195 | 0.3480318 | 3.1193204 | 1.2997169 | 1 | Yes | - | - | - |
| Trichlorophenols (total) | NA | No | No | Organics | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 0 | No | - | - | - |
| Tricresyl Phosphate (TCP) | 1330-78-5 | No | No | Organics | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.0334 | 368 | 0.246432 | 29.030866 | 12.096194 | 0.8 | Yes | - | 1.58E+02 | nc |
| Tridiphane | 58138-08-2 | No | No | Organics | - | - | - | - | 3.00E-03 | U | - | - | 1 | 0.0689 | 320 | 0.4740464 | 15.633636 | 6.5140149 | 0.8 | Yes | - | 1.81E+01 | nc |
| Tridymite | 15468-32-3 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 60.1 | 0.0029817 | 0.5477974 | 0.2282489 | 1 | Yes | - | - | - |
| Triethyl Lead | 5224-23-7 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0125 | 294 | 0.0824348 | 11.180468 | 4.6585284 | 0.9 | Yes | - | - | - |
| Triethyl phosphorothioate [O,O,O-] | 126-68-1 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00684 | 198 | 0.0370182 | 3.2423507 | 1.3509795 | 1 | Yes | - | - | - |
| Triethylamine | 121-44-8 | No | Yes | Organics | - | - | - | - | - | - | 7.00E-03 | U | 1 | 0.0039 | 101 | 0.0150748 | 0.9282394 | 0.3867664 | 1 | Yes | - | 1.46E+01 | nc |
| Triethylene Glycol | 112-27-6 | No | No | Organics | - | - | - | - | 2.00E+00 | U | - | - | 1 | 0.0000155 | 150 | 0.000073 | 1.7460633 | 0.7275264 | 1 | Yes | - | 4.01E+04 | nc |
| Trifluoroethane, 1,1,1- | 420-46-2 | No | Yes | Organics | - | - | - | - | - | - | 2.00E+01 | U | 1 | 0.00757 | 84 | 0.0266847 | 0.7455212 | 0.3106338 | 1 | Yes | - | 4.17E+04 | nc |
| Trifluralin | 1582-09-8 | No | Yes | Organics | 7.70E-03 | U | - | - | 7.50E-03 | U | - | - | 1 | 0.0728 | 335 | 0.5124841 | 18.969679 | 7.9040331 | 0.8 | Yes | - | 2.56E+00 | ca* |
| Trimagnesium phosphate | 7757-87-1 | No | No | Inorganics | - | - | - | - | 4.86E+01 | U | - | - | 1 | 0.001 | 263 | 0.0062374 | 7.496525 | 3.1235521 | 1 | Yes | - | 9.70E+05 | nc |
| Trimethyl Lead | 7442-13-9 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00226 | 253 | 0.013826 | 6.5896142 | 2.7456726 | 1 | Yes | - | - | - |
| Trimethyl Phosphate | 512-56-1 | No | No | Organics | 2.00E-02 | U | - | - | 1.00E-02 | U | - | - | 1 | 0.0000948 | 140 | 0.0004314 | 1.534829 | 0.6395121 | 1 | Yes | - | 3.89E+00 | ca* |
| Trimethyl-4-Propenyl-naphthalene, 1,2,3- | 26137-53-1 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 1.22 | 210 | 6.7997999 | 7.028664 | 1.5770619 | 1 | No | - | - | - |
| Trimethylbenzene, 1,2,3- | 526-73-8 | No | Yes | Organics | - | - | - | - | 1.00E-02 | U | 6.00E-02 | U | 1 | 0.0897 | 120 | 0.3779286 | 1.1859326 | 0.4941386 | 1 | Yes | - | 5.50E+01 | nc |
| Trimethylbenzene, 1,2,4- | 95-63-6 | No | Yes | Organics | - | - | - | - | 1.00E-02 | U | 6.00E-02 | U | 1 | 0.0857 | 120 | 0.3610756 | 1.1859326 | 0.4941386 | 1 | Yes | - | 5.57E+01 | nc |
| Trimethylbenzene, 1,3,5- | 108-67-8 | No | Yes | Organics | - | - | - | - | 1.00E-02 | U | 6.00E-02 | U | 1 | 0.0621 | 120 | 0.2616429 | 1.1859326 | 0.4941386 | 1 | Yes | - | 6.03E+01 | nc |
| Trimethylethyl Lead | 1762-26-1 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0157 | 281 | 0.1012231 | 9.4549664 | 3.9395693 | 0.9 | Yes | - | - | - |
| Trimethylpentane, 2,2,4- | 540-84-1 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.186 | 114 | 0.7638218 | 1.76298 | 0.4573501 | 1 | Yes | - | - | - |
| Trimethylpentene, 2,4,4- | 25167-70-8 | No | Yes | Organics | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.189 | 112 | 0.7693031 | 1.7174241 | 0.4457063 | 1 | Yes | - | 6.49E+01 | nc |
| Trinitrobenzene, 1,3,5- | 99-35-4 | No | No | Organics | - | - | - | - | 3.00E-02 | U | - | - | 1 | 0.000607 | 213 | 0.0034073 | 3.9342322 | 1.6392634 | 1 | Yes | - | 5.94E+02 | nc |

Appendix A - Regional Screening Levels from the RSL Calculator
AVX Corporation, Myrtle Beach Facility
Myrtle Beach, South Carolina
**Site-specific
Resident Screening Levels (RSL) for Tap Water**

Key: I = IRIS; P = PPRTV; D = DWSHA; O = OPP; A = ATSDR; C = Cal EPA; X = APPENDIX PPRTV SCREEN (See FAQ #27); H = HEAST; F = See FAQ; J = New Jersey; E = see user guide Section 2.3.5; L = see user guide on lead; M = mutagen; S = see user guide Section 5; V = volatile; R = RBA applied (See User Guide for Arsenic notice); c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = Concentration may exceed ceiling limit (See User Guide); s = Concentration may exceed Csat (See User Guide)

| Chemical | CAS Number | Mutagen? | VOC? | Chemical Type | Ingestion SF (mg/kg-day) ⁻¹ | SFO Ref | Inhalation Unit Risk (ug/m ³) ⁻¹ | IUR Ref | Chronic RfD (mg/kg-day) | Chronic RfD Ref | Chronic RfC (mg/m ³) | Chronic RfC Ref | GIABS | K _p (cm/hr) | MW | B (unitless) | t (hr) | T _{event} (hr/event) | FA (unitless) | In EPD? | MCL (ug/L) | Screening Level (ug/L) | [basis] |
|---------------------------------------|------------|----------|------|---------------|--|---------|---|---------|-------------------------|-----------------|----------------------------------|-----------------|-------|------------------------|------|--------------|-----------|-------------------------------|---------------|---------|------------|------------------------|---------|
| Trinitrotoluene, 2,4,6- | 118-96-7 | No | No | Organics | 3.00E-02 | U | - | - | 5.00E-04 | U | - | - | 1 | 0.000963 | 227 | 0.0055804 | 4.7125936 | 1.9635807 | 1 | Yes | - | 2.54E+00 | ca** |
| Triphenylphosphine Oxide | 791-28-6 | No | No | Organics | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.00327 | 278 | 0.0209699 | 9.0961998 | 3.7900833 | 1 | Yes | - | 3.63E+02 | nc |
| Triphenyltin | 668-34-8 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.00356 | 351 | 0.0256525 | 23.316319 | 9.715133 | 0.9 | Yes | - | - | - |
| Tripotassium phosphate | 7778-53-2 | No | No | Inorganics | - | - | - | - | 4.86E+01 | U | - | - | 1 | 0.001 | 212 | 0.0056001 | 3.883828 | 1.6182617 | 1 | Yes | - | 9.70E+05 | nc |
| Tripropyl Lead | 6618-03-7 | No | Yes | Organics | - | - | - | - | - | - | - | - | 1 | 0.0693 | 337 | 0.4892996 | 19.46525 | 8.1105209 | 0.8 | Yes | - | - | - |
| Tris(1,3-Dichloro-2-propyl) Phosphate | 13674-87-8 | No | No | Organics | - | - | - | - | 2.00E-02 | U | - | - | 1 | 0.00159 | 431 | 0.0126959 | 65.412386 | 27.255161 | 0.9 | Yes | - | 3.57E+02 | nc |
| Tris(1-chloro-2-propyl)phosphate | 13674-84-5 | No | No | Organics | - | - | - | - | 1.00E-02 | U | - | - | 1 | 0.0012 | 328 | 0.0083588 | 17.332451 | 7.2218548 | 1 | Yes | - | 1.90E+02 | nc |
| Tris(2,3-dibromopropyl)phosphate | 126-72-7 | No | Yes | Organics | 2.30E+00 | U | 6.60E-04 | U | - | - | - | - | 1 | 0.000135 | 698 | 0.0013718 | 2045.785 | 852.41042 | 1 | No | - | 6.80E-03 | ca |
| Tris(2-chloroethyl)phosphate | 115-96-8 | No | No | Organics | 2.00E-02 | U | - | - | 7.00E-03 | U | - | - | 1 | 0.000355 | 285 | 0.002305 | 9.9554293 | 4.1480955 | 1 | Yes | - | 3.85E+00 | ca* |
| Tris(2-ethylhexyl)phosphate | 78-42-2 | No | No | Organics | 3.20E-03 | U | - | - | 1.00E-01 | U | - | - | 1 | 11.6 | 435 | 93.052762 | 134.6187 | 28.69781 | 0 | No | - | 2.43E+01 | ca* |
| Trisbutoxyethyl Phosphate | 78-51-3 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.00282 | 398 | 0.021638 | 42.742507 | 17.809378 | 0.9 | Yes | - | - | - |
| Trisodium phosphate | 7601-54-9 | No | No | Inorganics | - | - | - | - | 4.86E+01 | U | - | - | 1 | 0.001 | 164 | 0.0049255 | 2.0915102 | 0.8714626 | 1 | Yes | - | 9.70E+05 | nc |
| Trithion | 786-19-6 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.065 | 343 | 0.4630065 | 21.031003 | 8.762918 | 0.8 | Yes | - | - | - |
| Tungsten | 7440-33-7 | No | No | Inorganics | - | - | - | - | 8.00E-04 | U | - | - | 1 | 0.001 | 184 | 0.0052172 | 2.7068238 | 1.1278433 | 1 | Yes | - | 1.60E+01 | nc |
| Uranium (Soluble Salts) | NA | No | No | Inorganics | - | - | - | - | 2.00E-04 | U | 4.00E-05 | U | 1 | 0.001 | 238 | 0.0059336 | 5.4307523 | 2.2628134 | 1 | Yes | 3.00E+01 | 3.99E+00 | nc |
| Urea | 57-13-6 | No | No | Organics | - | - | - | - | - | - | - | - | 1 | 0.0000286 | 60.1 | 0.0000853 | 0.5477974 | 0.2282489 | 1 | No | - | - | - |
| Urethane | 51-79-6 | Yes | No | Organics | 1.00E+00 | U | 2.90E-04 | U | - | - | - | - | 1 | 0.000394 | 89.1 | 0.0014304 | 0.796196 | 0.3317483 | 1 | Yes | - | 2.49E-02 | ca |
| Vanadium Pentoxide | 1314-62-1 | No | No | Inorganics | - | - | 8.30E-03 | U | 9.00E-03 | U | 7.00E-06 | U | 0.026 | 0.001 | 182 | 0.0051887 | 2.6379101 | 1.0991292 | 1 | Yes | - | 1.54E+02 | nc |
| Vanadium Sulfate | 36907-42-3 | No | No | Inorganics | - | - | - | - | - | - | - | - | 0.026 | 0.001 | 273 | 0.0063549 | 8.5282513 | 3.5534381 | 1 | Yes | - | - | - |
| Vanadium and Compounds | 7440-62-2 | No | No | Inorganics | - | - | - | - | 5.04E-03 | U | 1.00E-04 | U | 0.026 | 0.001 | 50.9 | 0.002744 | 0.4865192 | 0.2027163 | 1 | Yes | - | 8.64E+01 | nc |
| Vanadyl Sulfate | 27774-13-6 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 164 | 0.0049255 | 2.0915102 | 0.8714626 | 1 | Yes | - | - | - |
| Vernolate | 1929-77-7 | No | Yes | Organics | - | - | - | - | 1.00E-03 | U | - | - | 1 | 0.0403 | 203 | 0.220841 | 3.4582787 | 1.4409495 | 1 | Yes | - | 1.11E+01 | nc |
| Vinclozolin | 50471-44-8 | No | No | Organics | - | - | - | - | 1.20E-03 | U | - | - | 1 | 0.00446 | 286 | 0.0290098 | 10.084631 | 4.2019294 | 0.9 | Yes | - | 2.12E+01 | nc |
| Vinyl Acetate | 108-05-4 | No | Yes | Organics | - | - | - | - | 1.00E+00 | U | 2.00E-01 | U | 1 | 0.00157 | 86.1 | 0.0056031 | 0.7659845 | 0.3191602 | 1 | Yes | - | 4.09E+02 | nc |
| Vinyl Bromide | 593-60-2 | No | Yes | Organics | - | - | 3.20E-05 | U | - | - | 3.00E-03 | U | 1 | 0.00435 | 107 | 0.0173064 | 1.0029054 | 0.4178773 | 1 | Yes | - | 1.75E-01 | ca* |
| Vinyl Chloride | 75-01-4 | Yes | Yes | Organics | 7.20E-01 | U | 4.40E-06 | U | 3.00E-03 | U | 1.00E-01 | U | 1 | 0.00838 | 62.5 | 0.0254807 | 0.565015 | 0.2354229 | 1 | Yes | 2.00E+00 | 1.88E-02 | ca |
| Warfarin | 81-81-2 | No | No | Organics | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.00182 | 308 | 0.012285 | 13.392449 | 5.580187 | 1 | Yes | - | 5.62E+00 | nc |
| Xylene, P- | 106-42-3 | No | Yes | Organics | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 1 | 0.0493 | 106 | 0.195221 | 0.9900565 | 0.4125236 | 1 | Yes | - | 1.93E+02 | nc |
| Xylene, m- | 108-38-3 | No | Yes | Organics | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 1 | 0.0532 | 106 | 0.2106644 | 0.9900565 | 0.4125236 | 1 | Yes | - | 1.93E+02 | nc |
| Xylene, o- | 95-47-6 | No | Yes | Organics | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 1 | 0.0471 | 106 | 0.1865093 | 0.9900565 | 0.4125236 | 1 | Yes | - | 1.93E+02 | nc |
| Xylenes | 1330-20-7 | No | Yes | Organics | - | - | - | - | 2.00E-01 | U | 1.00E-01 | U | 1 | 0.05 | 106 | 0.1979929 | 0.9900565 | 0.4125236 | 1 | Yes | 1.00E+04 | 1.93E+02 | nc |
| Ytterbium | 7440-64-4 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 173 | 0.0050588 | 2.3488755 | 0.9786981 | 1 | Yes | - | - | - |
| Yttrium | 7440-65-5 | No | No | Inorganics | - | - | - | - | - | - | - | - | 1 | 0.001 | 88.9 | 0.0036264 | 0.7941453 | 0.3308939 | 1 | Yes | - | - | - |
| Zinc Cyanide | 557-21-1 | No | No | Inorganics | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.0006 | 117 | 0.0024962 | 1.1409326 | 0.4753886 | 1 | Yes | - | 1.00E+03 | nc |
| Zinc Phosphide | 1314-84-7 | No | No | Inorganics | - | - | - | - | 3.00E-04 | U | - | - | 1 | 0.0006 | 258 | 0.0037067 | 7.028457 | 2.9285237 | 1 | Yes | - | 6.00E+00 | nc |
| Zinc and Compounds | 7440-66-6 | No | No | Inorganics | - | - | - | - | 3.00E-01 | U | - | - | 1 | 0.0006 | 65.4 | 0.0018662 | 0.5865432 | 0.244393 | 1 | Yes | - | 6.00E+03 | nc |
| Zineb | 12122-67-7 | No | No | Organics | - | - | - | - | 5.00E-02 | U | - | - | 1 | 0.000325 | 276 | 0.0020767 | 8.8646173 | 3.6935905 | 1 | Yes | - | 9.92E+02 | nc |
| Zirconium | 7440-67-7 | No | No | Inorganics | - | - | - | - | 8.00E-05 | U | - | - | 1 | 0.001 | 91.2 | 0.003673 | 0.8180503 | 0.3408543 | 1 | Yes | - | 1.60E+00 | nc |

APPENDIX B

ProUCL Output



UCL Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation ProUCL 5.14/11/2017 10:53:43 AM
 From File HHRA Data for Review.xls
 Full Precision OFF
 Confidence Coefficient 95%
 Number of Bootstrap Operations 2000

Result (1,1,1-Trichloroethane)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 149 |
| Number of Detects | 29 | Number of Non-Detects | 171 |
| Number of Distinct Detects | 29 | Number of Distinct Non-Detects | 120 |
| Minimum Detect | 0.94 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 41600 | Maximum Non-Detect | 1160 |
| Variance Detects | 59332683 | Percent Non-Detects | 85.5% |
| Mean Detects | 1640 | SD Detects | 7703 |
| Median Detects | 32.2 | CV Detects | 4.697 |
| Skewness Detects | 5.348 | Kurtosis Detects | 28.71 |
| Mean of Logged Detects | 3.766 | SD of Logged Detects | 2.498 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.221 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.926 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.48 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.161 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 239.8 | KM Standard Error of Mean | 211.5 |
| KM SD | 2939 | 95% KM (BCA) UCL | 653.7 |
| 95% KM (t) UCL | 589.4 | 95% KM (Percentile Bootstrap) UCL | 660.1 |
| 95% KM (z) UCL | 587.7 | 95% KM Bootstrap t UCL | 9260 |
| 90% KM Chebyshev UCL | 874.4 | 95% KM Chebyshev UCL | 1162 |
| 97.5% KM Chebyshev UCL | 1561 | 99% KM Chebyshev UCL | 2344 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 3.618 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.902 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.305 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.18 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.202 | k star (bias corrected MLE) | 0.204 |
| Theta hat (MLE) | 8116 | Theta star (bias corrected MLE) | 8033 |
| nu hat (MLE) | 11.72 | nu star (bias corrected) | 11.84 |
| Mean (detects) | 1640 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.01 | Mean | 237.8 |
| Maximum | 41600 | Median | 0.01 |
| SD | 2947 | CV | 12.39 |
| k hat (MLE) | 0.0925 | k star (bias corrected MLE) | 0.0945 |
| Theta hat (MLE) | 2570 | Theta star (bias corrected MLE) | 2517 |
| nu hat (MLE) | 37.01 | nu star (bias corrected) | 37.79 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (37.79, α) | 24.71 | Adjusted Chi Square Value (37.79, β) | 24.63 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 363.6 | 95% Gamma Adjusted UCL (use when $n < 50$) | 364.7 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-----------|---------------------------|---------|
| Mean (KM) | 239.8 | SD (KM) | 2939 |
| Variance (KM) | 8639121 | SE of Mean (KM) | 211.5 |
| k hat (KM) | 0.00666 | k star (KM) | 0.00989 |
| nu hat (KM) | 2.663 | nu star (KM) | 3.957 |
| theta hat (KM) | 36021 | theta star (KM) | 24246 |
| 80% gamma percentile (KM) | 2.1896E-6 | 90% gamma percentile (KM) | 0.325 |

95% gamma percentile (KM) 77.06 99% gamma percentile (KM) 6335

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (3.96, α) 0.705 Adjusted Chi Square Value (3.96, β) 0.695
 95% Gamma Approximate KM-UCL (use when $n \geq 50$) 1347 95% Gamma Adjusted KM-UCL (use when $n < 50$) 1365

Lognormal GOF Test on Detected Observations Only

| | | | |
|--------------------------------|--------|---|--|
| Shapiro Wilk Test Statistic | 0.96 | Shapiro Wilk GOF Test | |
| 5% Shapiro Wilk Critical Value | 0.926 | Detected Data appear Lognormal at 5% Significance Level | |
| Lilliefors Test Statistic | 0.0907 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.161 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 239.1 | Mean in Log Scale | 0.673 |
| SD in Original Scale | 2947 | SD in Log Scale | 1.75 |
| 95% t UCL (assumes normality of ROS data) | 583.4 | 95% Percentile Bootstrap UCL | 650.5 |
| 95% BCA Bootstrap UCL | 886.1 | 95% Bootstrap t UCL | 9714 |
| 95% H-UCL (Log ROS) | 13.05 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------------|
| KM Mean (logged) | 0.979 | KM Geo Mean | 2.663 |
| KM SD (logged) | 1.558 | 95% Critical H Value (KM-Log) | 2.726 |
| KM Standard Error of Mean (logged) | 0.195 | 95% H-UCL (KM -Log) | 12.1 |
| KM SD (logged) | 1.558 | 95% Critical H Value (KM-Log) | 2.726 |
| KM Standard Error of Mean (logged) | 0.195 | | |

DL/2 Statistics

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 254.7 | Mean in Log Scale | 1.615 |
| SD in Original Scale | 2946 | SD in Log Scale | 1.665 |
| 95% t UCL (Assumes normality) | 599 | 95% H-Stat UCL | 28.12 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 12.1

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (1,1-Dichloroethane)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 150 |
| Number of Detects | 23 | Number of Non-Detects | 177 |
| Number of Distinct Detects | 23 | Number of Distinct Non-Detects | 129 |
| Minimum Detect | 1.41 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 989 | Maximum Non-Detect | 1160 |
| Variance Detects | 46102 | Percent Non-Detects | 88.5% |
| Mean Detects | 84.11 | SD Detects | 214.7 |
| Median Detects | 18.5 | CV Detects | 2.553 |
| Skewness Detects | 3.86 | Kurtosis Detects | 15.7 |
| Mean of Logged Detects | 2.898 | SD of Logged Detects | 1.643 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.415 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.914 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.381 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.18 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 11.79 | KM Standard Error of Mean | 5.59 |
| KM SD | 76.54 | 95% KM (BCA) UCL | 22.49 |
| 95% KM (t) UCL | 21.03 | 95% KM (Percentile Bootstrap) UCL | 21.87 |
| 95% KM (z) UCL | 20.98 | 95% KM Bootstrap t UCL | 60.04 |
| 90% KM Chebyshev UCL | 28.56 | 95% KM Chebyshev UCL | 36.16 |
| 97.5% KM Chebyshev UCL | 46.7 | 99% KM Chebyshev UCL | 67.41 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.776 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.822 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.225 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.194 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.425 | k star (bias corrected MLE) | 0.398 |
| Theta hat (MLE) | 198 | Theta star (bias corrected MLE) | 211.1 |
| nu hat (MLE) | 19.54 | nu star (bias corrected) | 18.33 |
| Mean (detects) | 84.11 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 9.682 |
| Maximum | 989 | Median | 0.01 |
| SD | 76.29 | CV | 7.88 |
| k hat (MLE) | 0.13 | k star (bias corrected MLE) | 0.132 |
| Theta hat (MLE) | 74.25 | Theta star (bias corrected MLE) | 73.47 |
| nu hat (MLE) | 52.16 | nu star (bias corrected) | 52.71 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (52.71, α) | 37.03 | Adjusted Chi Square Value (52.71, β) | 36.94 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 13.78 | 95% Gamma Adjusted UCL (use when $n < 50$) | 13.82 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 11.79 | SD (KM) | 76.54 |
| Variance (KM) | 5858 | SE of Mean (KM) | 5.59 |
| k hat (KM) | 0.0237 | k star (KM) | 0.0267 |
| nu hat (KM) | 9.49 | nu star (KM) | 10.68 |
| theta hat (KM) | 496.9 | theta star (KM) | 441.5 |
| 80% gamma percentile (KM) | 0.0595 | 90% gamma percentile (KM) | 4.953 |
| 95% gamma percentile (KM) | 40.5 | 99% gamma percentile (KM) | 313.3 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (10.68, α) | 4.372 | Adjusted Chi Square Value (10.68, β) | 4.343 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 28.8 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 29 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.96 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.914 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.132 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.18 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 10.65 | Mean in Log Scale | 0.282 |
| SD in Original Scale | 76.17 | SD in Log Scale | 1.217 |
| 95% t UCL (assumes normality of ROS data) | 19.55 | 95% Percentile Bootstrap UCL | 20.36 |
| 95% BCA Bootstrap UCL | 26.72 | 95% Bootstrap t UCL | 61.93 |
| 95% H-UCL (Log ROS) | 3.411 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|--------------|
| KM Mean (logged) | 0.947 | KM Geo Mean | 2.578 |
| KM SD (logged) | 0.953 | 95% Critical H Value (KM-Log) | 2.136 |
| KM Standard Error of Mean (logged) | 0.144 | 95% H-UCL (KM -Log) | 4.691 |
| KM SD (logged) | 0.953 | 95% Critical H Value (KM-Log) | 2.136 |
| KM Standard Error of Mean (logged) | 0.144 | | |

DL/2 Statistics

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 28.4 | Mean in Log Scale | 1.457 |
| SD in Original Scale | 112.3 | SD in Log Scale | 1.318 |
| 95% t UCL (Assumes normality) | 41.53 | 95% H-Stat UCL | 12.89 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 4.691

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (1,1-Dichloroethene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 148 |
| Number of Detects | 6 | Number of Non-Detects | 194 |
| Number of Distinct Detects | 6 | Number of Distinct Non-Detects | 142 |
| Minimum Detect | 1.15 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 535 | Maximum Non-Detect | 1160 |
| Variance Detects | 41887 | Percent Non-Detects | 97% |
| Mean Detects | 137 | SD Detects | 204.7 |
| Median Detects | 58.1 | CV Detects | 1.493 |
| Skewness Detects | 1.988 | Kurtosis Detects | 4.075 |
| Mean of Logged Detects | 3.485 | SD of Logged Detects | 2.293 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.74 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.788 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.279 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.325 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 5.405 | KM Standard Error of Mean | 3.183 |
| KM SD | 40.44 | 95% KM (BCA) UCL | 13.08 |
| 95% KM (t) UCL | 10.67 | 95% KM (Percentile Bootstrap) UCL | 12 |
| 95% KM (z) UCL | 10.64 | 95% KM Bootstrap t UCL | 18.37 |
| 90% KM Chebyshev UCL | 14.95 | 95% KM Chebyshev UCL | 19.28 |
| 97.5% KM Chebyshev UCL | 25.28 | 99% KM Chebyshev UCL | 37.07 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.177 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.744 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.158 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.351 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.45 | k star (bias corrected MLE) | 0.336 |
| Theta hat (MLE) | 304.6 | Theta star (bias corrected MLE) | 407.8 |
| nu hat (MLE) | 5.399 | nu star (bias corrected) | 4.033 |
| Mean (detects) | 137 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 4.121 |
| Maximum | 535 | Median | 0.01 |
| SD | 40.02 | CV | 9.712 |
| k hat (MLE) | 0.135 | k star (bias corrected MLE) | 0.136 |
| Theta hat (MLE) | 30.52 | Theta star (bias corrected MLE) | 30.23 |
| nu hat (MLE) | 54.01 | nu star (bias corrected) | 54.53 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (54.53, α) | 38.56 | Adjusted Chi Square Value (54.53, β) | 38.47 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 5.827 | 95% Gamma Adjusted UCL (use when $n < 50$) | 5.842 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|---------|---------------------------|--------|
| Mean (KM) | 5.405 | SD (KM) | 40.44 |
| Variance (KM) | 1635 | SE of Mean (KM) | 3.183 |
| k hat (KM) | 0.0179 | k star (KM) | 0.0209 |
| nu hat (KM) | 7.148 | nu star (KM) | 8.374 |
| theta hat (KM) | 302.5 | theta star (KM) | 258.2 |
| 80% gamma percentile (KM) | 0.00347 | 90% gamma percentile (KM) | 0.965 |
| 95% gamma percentile (KM) | 13.38 | 99% gamma percentile (KM) | 150.2 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (8.37, α) | 2.954 | Adjusted Chi Square Value (8.37, β) | 2.93 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 15.33 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 15.45 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.967 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.788 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|---|--|
| Lilliefors Test Statistic | 0.169 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.325 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 4.896 | Mean in Log Scale | -0.315 |
| SD in Original Scale | 39.94 | SD in Log Scale | 1.007 |
| 95% t UCL (assumes normality of ROS data) | 9.563 | 95% Percentile Bootstrap UCL | 10.28 |
| 95% BCA Bootstrap UCL | 13.81 | 95% Bootstrap t UCL | 28.36 |
| 95% H-UCL (Log ROS) | 1.415 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | 0.252 | KM Geo Mean | 1.287 |
| KM SD (logged) | 0.699 | 95% Critical H Value (KM-Log) | 1.94 |
| KM Standard Error of Mean (logged) | 0.0565 | 95% H-UCL (KM -Log) | 1.809 |
| KM SD (logged) | 0.699 | 95% Critical H Value (KM-Log) | 1.94 |
| KM Standard Error of Mean (logged) | 0.0565 | | |

DL/2 Statistics

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 24.79 | Mean in Log Scale | 1.415 |
| SD in Original Scale | 92.89 | SD in Log Scale | 1.296 |
| 95% t UCL (Assumes normality) | 35.64 | 95% H-Stat UCL | 11.95 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 10.67

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (1,2,4-Trimethylbenzene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 200 | Number of Distinct Observations | 147 |
| Number of Detects | 8 | Number of Non-Detects | 192 |
| Number of Distinct Detects | 8 | Number of Distinct Non-Detects | 140 |
| Minimum Detect | 5.37 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 329 | Maximum Non-Detect | 1160 |
| Variance Detects | 14449 | Percent Non-Detects | 96% |
| Mean Detects | 161.5 | SD Detects | 120.2 |
| Median Detects | 155 | CV Detects | 0.744 |
| Skewness Detects | 0.279 | Kurtosis Detects | -1.222 |
| Mean of Logged Detects | 4.594 | SD of Logged Detects | 1.366 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.938 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.818 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.154 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.283 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 10.34 | KM Standard Error of Mean | 2.983 |
| KM SD | 38.82 | 95% KM (BCA) UCL | 15.62 |
| 95% KM (t) UCL | 15.27 | 95% KM (Percentile Bootstrap) UCL | 15.73 |
| 95% KM (z) UCL | 15.25 | 95% KM Bootstrap t UCL | 16.71 |
| 90% KM Chebyshev UCL | 19.29 | 95% KM Chebyshev UCL | 23.34 |
| 97.5% KM Chebyshev UCL | 28.97 | 99% KM Chebyshev UCL | 40.02 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.32 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.733 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.191 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.301 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 1.158 | k star (bias corrected MLE) | 0.807 |
| Theta hat (MLE) | 139.4 | Theta star (bias corrected MLE) | 200 |
| nu hat (MLE) | 18.53 | nu star (bias corrected) | 12.92 |
| Mean (detects) | 161.5 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 6.468 |
| Maximum | 329 | Median | 0.01 |
| SD | 38.91 | CV | 6.016 |
| k hat (MLE) | 0.129 | k star (bias corrected MLE) | 0.13 |
| Theta hat (MLE) | 50.27 | Theta star (bias corrected MLE) | 49.73 |
| nu hat (MLE) | 51.47 | nu star (bias corrected) | 52.03 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (52.03, α) | 36.47 | Adjusted Chi Square Value (52.03, β) | 36.37 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 9.23 | 95% Gamma Adjusted UCL (use when $n < 50$) | 9.254 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 10.34 | SD (KM) | 38.82 |
| Variance (KM) | 1507 | SE of Mean (KM) | 2.983 |
| k hat (KM) | 0.0709 | k star (KM) | 0.0732 |
| nu hat (KM) | 28.38 | nu star (KM) | 29.28 |
| theta hat (KM) | 145.7 | theta star (KM) | 141.2 |
| 80% gamma percentile (KM) | 4.097 | 90% gamma percentile (KM) | 23.08 |
| 95% gamma percentile (KM) | 59.76 | 99% gamma percentile (KM) | 190.9 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (29.28, α) | 17.93 | Adjusted Chi Square Value (29.28, β) | 17.87 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 16.89 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 16.95 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.841 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.818 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.225 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.283 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 6.549 | Mean in Log Scale | -2.717 |
| SD in Original Scale | 38.9 | SD in Log Scale | 1.892 |
| 95% t UCL (assumes normality of ROS data) | 11.09 | 95% Percentile Bootstrap UCL | 11.48 |
| 95% BCA Bootstrap UCL | 12.51 | 95% Bootstrap t UCL | 15.1 |
| 95% H-UCL (Log ROS) | 0.599 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | 1.47 | KM Geo Mean | 4.348 |
| KM SD (logged) | 0.702 | 95% Critical H Value (KM-Log) | 1.942 |
| KM Standard Error of Mean (logged) | 0.0542 | 95% H-UCL (KM -Log) | 6.129 |
| KM SD (logged) | 0.702 | 95% Critical H Value (KM-Log) | 1.942 |
| KM Standard Error of Mean (logged) | 0.0542 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 26.67 |
| SD in Original Scale | 91.97 |
| 95% t UCL (Assumes normality) | 37.41 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.44 |
| SD in Log Scale | 1.351 |
| 95% H-Stat UCL | 13.38 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 15.27

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (1,3,5-Trimethylbenzene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 148 |
| Number of Detects | 6 | Number of Non-Detects | 194 |
| Number of Distinct Detects | 6 | Number of Distinct Non-Detects | 142 |
| Minimum Detect | 0.974 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 1100 | Maximum Non-Detect | 1160 |
| Variance Detects | 181193 | Percent Non-Detects | 97% |
| Mean Detects | 243.5 | SD Detects | 425.7 |
| Median Detects | 93.1 | CV Detects | 1.748 |
| Skewness Detects | 2.298 | Kurtosis Detects | 5.408 |
| Mean of Logged Detects | 3.684 | SD of Logged Detects | 2.618 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.642 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.788 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.402 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.325 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 9.675 | KM Standard Error of Mean | 6.234 |
| KM SD | 79.14 | 95% KM (BCA) UCL | 21.81 |
| 95% KM (t) UCL | 19.98 | 95% KM (Percentile Bootstrap) UCL | 21.19 |
| 95% KM (z) UCL | 19.93 | 95% KM Bootstrap t UCL | 44.16 |
| 90% KM Chebyshev UCL | 28.38 | 95% KM Chebyshev UCL | 36.85 |
| 97.5% KM Chebyshev UCL | 48.61 | 99% KM Chebyshev UCL | 71.7 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.253 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.756 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.195 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.354 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.368 | k star (bias corrected MLE) | 0.295 |
| Theta hat (MLE) | 661.1 | Theta star (bias corrected MLE) | 824.6 |
| nu hat (MLE) | 4.419 | nu star (bias corrected) | 3.543 |
| Mean (detects) | 243.5 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 7.314 |
| Maximum | 1100 | Median | 0.01 |
| SD | 79.29 | CV | 10.84 |
| k hat (MLE) | 0.124 | k star (bias corrected MLE) | 0.126 |
| Theta hat (MLE) | 58.81 | Theta star (bias corrected MLE) | 58.13 |
| nu hat (MLE) | 49.74 | nu star (bias corrected) | 50.33 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (50.33, α) | 35.04 | Adjusted Chi Square Value (50.33, β) | 34.95 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 10.51 | 95% Gamma Adjusted UCL (use when $n < 50$) | 10.53 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|---------|---------------------------|--------|
| Mean (KM) | 9.675 | SD (KM) | 79.14 |
| Variance (KM) | 6264 | SE of Mean (KM) | 6.234 |
| k hat (KM) | 0.0149 | k star (KM) | 0.0181 |
| nu hat (KM) | 5.978 | nu star (KM) | 7.221 |
| theta hat (KM) | 647.4 | theta star (KM) | 535.9 |
| 80% gamma percentile (KM) | 0.00131 | 90% gamma percentile (KM) | 0.893 |
| 95% gamma percentile (KM) | 18.43 | 99% gamma percentile (KM) | 272.9 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (7.22, α) | 2.293 | Adjusted Chi Square Value (7.22, β) | 2.273 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 30.47 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 30.74 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.951 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.788 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|---|--|
| Lilliefors Test Statistic | 0.189 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.325 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 9.346 | Mean in Log Scale | 0.624 |
| SD in Original Scale | 79.11 | SD in Log Scale | 0.938 |
| 95% t UCL (assumes normality of ROS data) | 18.59 | 95% Percentile Bootstrap UCL | 20.1 |
| 95% BCA Bootstrap UCL | 26.44 | 95% Bootstrap t UCL | 59.98 |
| 95% H-UCL (Log ROS) | 3.339 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.731 | KM Geo Mean | 2.078 |
| KM SD (logged) | 0.939 | 95% Critical H Value (KM-Log) | 2.124 |
| KM Standard Error of Mean (logged) | 0.505 | 95% H-UCL (KM -Log) | 3.721 |
| KM SD (logged) | 0.939 | 95% Critical H Value (KM-Log) | 2.124 |
| KM Standard Error of Mean (logged) | 0.505 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 28.36 |
| SD in Original Scale | 114.9 |
| 95% t UCL (Assumes normality) | 41.79 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.421 |
| SD in Log Scale | 1.334 |
| 95% H-Stat UCL | 12.76 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 30.47

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (2-Butanone)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 131 |
| Number of Detects | 26 | Number of Non-Detects | 174 |
| Number of Distinct Detects | 26 | Number of Distinct Non-Detects | 107 |
| Minimum Detect | 1.37 | Minimum Non-Detect | 18.9 |
| Maximum Detect | 445 | Maximum Non-Detect | 28900 |
| Variance Detects | 7489 | Percent Non-Detects | 87% |
| Mean Detects | 29.74 | SD Detects | 86.54 |
| Median Detects | 4.53 | CV Detects | 2.91 |
| Skewness Detects | 4.773 | Kurtosis Detects | 23.59 |
| Mean of Logged Detects | 2.014 | SD of Logged Detects | 1.417 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.338 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.92 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.372 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.17 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 8.651 | KM Standard Error of Mean | 2.758 |
| KM SD | 34.21 | 95% KM (BCA) UCL | 13.99 |
| 95% KM (t) UCL | 13.21 | 95% KM (Percentile Bootstrap) UCL | 13.44 |
| 95% KM (z) UCL | 13.19 | 95% KM Bootstrap t UCL | 21.37 |
| 90% KM Chebyshev UCL | 16.93 | 95% KM Chebyshev UCL | 20.67 |
| 97.5% KM Chebyshev UCL | 25.88 | 99% KM Chebyshev UCL | 36.1 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 2.631 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.816 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.247 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.182 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.466 | k star (bias corrected MLE) | 0.438 |
| Theta hat (MLE) | 63.84 | Theta star (bias corrected MLE) | 67.94 |
| nu hat (MLE) | 24.22 | nu star (bias corrected) | 22.76 |
| Mean (detects) | 29.74 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 5.039 |
| Maximum | 445 | Median | 0.01 |
| SD | 32.31 | CV | 6.411 |
| k hat (MLE) | 0.178 | k star (bias corrected MLE) | 0.179 |
| Theta hat (MLE) | 28.31 | Theta star (bias corrected MLE) | 28.21 |
| nu hat (MLE) | 71.19 | nu star (bias corrected) | 71.45 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (71.45, α) | 52.99 | Adjusted Chi Square Value (71.45, β) | 52.88 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 6.795 | 95% Gamma Adjusted UCL (use when $n < 50$) | 6.809 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|--------|
| Mean (KM) | 8.651 | SD (KM) | 34.21 |
| Variance (KM) | 1170 | SE of Mean (KM) | 2.758 |
| k hat (KM) | 0.064 | k star (KM) | 0.0663 |
| nu hat (KM) | 25.59 | nu star (KM) | 26.53 |
| theta hat (KM) | 135.3 | theta star (KM) | 130.4 |
| 80% gamma percentile (KM) | 2.724 | 90% gamma percentile (KM) | 17.86 |
| 95% gamma percentile (KM) | 49.4 | 99% gamma percentile (KM) | 167 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (26.53, α) | 15.79 | Adjusted Chi Square Value (26.53, β) | 15.73 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 14.54 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 14.59 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.887 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.92 | Detected Data Not Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|--|
| Lilliefors Test Statistic | 0.177 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.17 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 7.859 | Mean in Log Scale | 1.506 |
| SD in Original Scale | 31.88 | SD in Log Scale | 0.677 |
| 95% t UCL (assumes normality of ROS data) | 11.58 | 95% Percentile Bootstrap UCL | 12.3 |
| 95% BCA Bootstrap UCL | 15.24 | 95% Bootstrap t UCL | 25.12 |
| 95% H-UCL (Log ROS) | 6.219 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 1.438 | KM Geo Mean | 4.21 |
| KM SD (logged) | 0.856 | 95% Critical H Value (KM-Log) | 2.057 |
| KM Standard Error of Mean (logged) | 0.149 | 95% H-UCL (KM -Log) | 6.884 |
| KM SD (logged) | 0.856 | 95% Critical H Value (KM-Log) | 2.057 |
| KM Standard Error of Mean (logged) | 0.149 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 480.2 |
| SD in Original Scale | 2132 |
| 95% t UCL (Assumes normality) | 729.3 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 3.084 |
| SD in Log Scale | 1.804 |
| 95% H-Stat UCL | 163.3 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 20.67

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Acetone)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 174 |
| Number of Detects | 136 | Number of Non-Detects | 64 |
| Number of Distinct Detects | 116 | Number of Distinct Non-Detects | 58 |
| Minimum Detect | 2.77 | Minimum Non-Detect | 39.4 |
| Maximum Detect | 757 | Maximum Non-Detect | 28900 |
| Variance Detects | 4429 | Percent Non-Detects | 32% |
| Mean Detects | 24.99 | SD Detects | 66.55 |
| Median Detects | 14.4 | CV Detects | 2.663 |
| Skewness Detects | 10.08 | Kurtosis Detects | 110.4 |
| Mean of Logged Detects | 2.652 | SD of Logged Detects | 0.878 |

Normal GOF Test on Detects Only

| | |
|------------------------------|--------|
| Shapiro Wilk Test Statistic | 0.261 |
| 5% Shapiro Wilk P Value | 0 |
| Lilliefors Test Statistic | 0.369 |
| 5% Lilliefors Critical Value | 0.0763 |

Normal GOF Test on Detected Observations Only
 Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 23 | KM Standard Error of Mean | 4.58 |
| KM SD | 59.45 | 95% KM (BCA) UCL | 32.35 |
| 95% KM (t) UCL | 30.57 | 95% KM (Percentile Bootstrap) UCL | 31.49 |
| 95% KM (z) UCL | 30.53 | 95% KM Bootstrap t UCL | 44.49 |
| 90% KM Chebyshev UCL | 36.74 | 95% KM Chebyshev UCL | 42.97 |
| 97.5% KM Chebyshev UCL | 51.6 | 99% KM Chebyshev UCL | 68.57 |

Gamma GOF Tests on Detected Observations Only

| | |
|-----------------------|--------|
| A-D Test Statistic | 6.545 |
| 5% A-D Critical Value | 0.783 |
| K-S Test Statistic | 0.176 |
| 5% K-S Critical Value | 0.0825 |

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 1.016 | k star (bias corrected MLE) | 0.998 |
| Theta hat (MLE) | 24.6 | Theta star (bias corrected MLE) | 25.03 |
| nu hat (MLE) | 276.3 | nu star (bias corrected) | 271.6 |
| Mean (detects) | 24.99 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.01 | Mean | 20.38 |
| Maximum | 757 | Median | 11.33 |
| SD | 55.32 | CV | 2.715 |
| k hat (MLE) | 0.895 | k star (bias corrected MLE) | 0.885 |
| Theta hat (MLE) | 22.78 | Theta star (bias corrected MLE) | 23.03 |
| nu hat (MLE) | 357.9 | nu star (bias corrected) | 353.8 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (353.85, α) | 311.3 | Adjusted Chi Square Value (353.85, β) | 311 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 23.17 | 95% Gamma Adjusted UCL (use when $n < 50$) | 23.19 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 23 | SD (KM) | 59.45 |
| Variance (KM) | 3534 | SE of Mean (KM) | 4.58 |
| k hat (KM) | 0.15 | k star (KM) | 0.151 |
| nu hat (KM) | 59.88 | nu star (KM) | 60.31 |
| theta hat (KM) | 153.7 | theta star (KM) | 152.5 |
| 80% gamma percentile (KM) | 25.14 | 90% gamma percentile (KM) | 68.25 |
| 95% gamma percentile (KM) | 126.5 | 99% gamma percentile (KM) | 295.2 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (60.31, α) | 43.45 | Adjusted Chi Square Value (60.31, β) | 43.35 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 31.92 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 32 |

Lognormal GOF Test on Detected Observations Only

| | |
|---|---------|
| Shapiro Wilk Approximate Test Statistic | 0.961 |
| 5% Shapiro Wilk P Value | 0.00692 |

Shapiro Wilk GOF Test

Detected Data Not Lognormal at 5% Significance Level

| | | |
|------------------------------|--------|---|
| Lilliefors Test Statistic | 0.0666 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.0763 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 21.3 | Mean in Log Scale | 2.631 |
| SD in Original Scale | 55.1 | SD in Log Scale | 0.729 |
| 95% t UCL (assumes normality of ROS data) | 27.74 | 95% Percentile Bootstrap UCL | 28.64 |
| 95% BCA Bootstrap UCL | 33.42 | 95% Bootstrap t UCL | 40.75 |
| 95% H-UCL (Log ROS) | 20.05 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|--------------|
| KM Mean (logged) | 2.621 | KM Geo Mean | 13.75 |
| KM SD (logged) | 0.842 | 95% Critical H Value (KM-Log) | 2.046 |
| KM Standard Error of Mean (logged) | 0.07 | 95% H-UCL (KM -Log) | 22.14 |
| KM SD (logged) | 0.842 | 95% Critical H Value (KM-Log) | 2.046 |
| KM Standard Error of Mean (logged) | 0.07 | | |

DL/2 Statistics

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 499.4 | Mean in Log Scale | 3.43 |
| SD in Original Scale | 2130 | SD in Log Scale | 1.821 |
| 95% t UCL (Assumes normality) | 748.3 | 95% H-Stat UCL | 239 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use
 KM H-UCL 22.14

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. Recommendations are based upon data size, data distribution, and skewness. These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Benzene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 149 |
| Number of Detects | 5 | Number of Non-Detects | 195 |
| Number of Distinct Detects | 5 | Number of Distinct Non-Detects | 144 |
| Minimum Detect | 1.26 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 12.2 | Maximum Non-Detect | 1160 |
| Variance Detects | 21.84 | Percent Non-Detects | 97.5% |
| Mean Detects | 3.892 | SD Detects | 4.673 |
| Median Detects | 2.31 | CV Detects | 1.201 |
| Skewness Detects | 2.168 | Kurtosis Detects | 4.758 |
| Mean of Logged Detects | 0.943 | SD of Logged Detects | 0.919 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.646 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.429 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 1.876 | KM Standard Error of Mean | 0.295 |
| KM SD | 0.946 | 95% KM (BCA) UCL | 2.395 |
| 95% KM (t) UCL | 2.363 | 95% KM (Percentile Bootstrap) UCL | 2.407 |
| 95% KM (z) UCL | 2.361 | 95% KM Bootstrap t UCL | 3.036 |
| 90% KM Chebyshev UCL | 2.76 | 95% KM Chebyshev UCL | 3.161 |
| 97.5% KM Chebyshev UCL | 3.717 | 99% KM Chebyshev UCL | 4.808 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 0.755 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.688 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.395 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.363 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 1.346 | k star (bias corrected MLE) | 0.672 |
| Theta hat (MLE) | 2.893 | Theta star (bias corrected MLE) | 5.796 |
| nu hat (MLE) | 13.46 | nu star (bias corrected) | 6.715 |
| Mean (detects) | 3.892 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.554 | Mean | 1.793 |
| Maximum | 12.2 | Median | 1.673 |
| SD | 0.959 | CV | 0.535 |
| k hat (MLE) | 6.186 | k star (bias corrected MLE) | 6.097 |
| Theta hat (MLE) | 0.29 | Theta star (bias corrected MLE) | 0.294 |
| nu hat (MLE) | 2475 | nu star (bias corrected) | 2439 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (N/A, α) | 2325 | Adjusted Chi Square Value (N/A, β) | 2324 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1.881 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1.881 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 1.876 | SD (KM) | 0.946 |
| Variance (KM) | 0.895 | SE of Mean (KM) | 0.295 |
| k hat (KM) | 3.931 | k star (KM) | 3.876 |
| nu hat (KM) | 1572 | nu star (KM) | 1550 |
| theta hat (KM) | 0.477 | theta star (KM) | 0.484 |
| 80% gamma percentile (KM) | 2.596 | 90% gamma percentile (KM) | 3.154 |
| 95% gamma percentile (KM) | 3.667 | 99% gamma percentile (KM) | 4.766 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (N/A, α) | 1460 | Adjusted Chi Square Value (N/A, β) | 1459 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 1.992 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 1.993 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.801 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.339 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 1.89 | Mean in Log Scale | 0.594 |
| SD in Original Scale | 0.839 | SD in Log Scale | 0.258 |
| 95% t UCL (assumes normality of ROS data) | 1.988 | 95% Percentile Bootstrap UCL | 1.991 |
| 95% BCA Bootstrap UCL | 2.043 | 95% Bootstrap t UCL | 2.065 |
| 95% H-UCL (Log ROS) | 1.932 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|--------------|
| KM Mean (logged) | 0.565 | KM Geo Mean | 1.76 |
| KM SD (logged) | 0.328 | 95% Critical H Value (KM-Log) | 1.735 |
| KM Standard Error of Mean (logged) | 0.163 | 95% H-UCL (KM -Log) | 1.934 |
| KM SD (logged) | 0.328 | 95% Critical H Value (KM-Log) | 1.735 |
| KM Standard Error of Mean (logged) | 0.163 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 21.52 |
| SD in Original Scale | 85 |
| 95% t UCL (Assumes normality) | 31.45 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.374 |
| SD in Log Scale | 1.233 |
| 95% H-Stat UCL | 10.42 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 1.934

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (cis-1,2-Dichloroethene)

General Statistics

| | | | |
|------------------------------|---------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 151 |
| Number of Detects | 27 | Number of Non-Detects | 173 |
| Number of Distinct Detects | 27 | Number of Distinct Non-Detects | 125 |
| Minimum Detect | 1.03 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 7210 | Maximum Non-Detect | 1160 |
| Variance Detects | 2548520 | Percent Non-Detects | 86.5% |
| Mean Detects | 580.4 | SD Detects | 1596 |
| Median Detects | 27.1 | CV Detects | 2.751 |
| Skewness Detects | 3.527 | Kurtosis Detects | 12.66 |
| Mean of Logged Detects | 3.572 | SD of Logged Detects | 2.534 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.418 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.923 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.415 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.167 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 80.59 | KM Standard Error of Mean | 43.86 |
| KM SD | 608.6 | 95% KM (BCA) UCL | 159.7 |
| 95% KM (t) UCL | 153.1 | 95% KM (Percentile Bootstrap) UCL | 160.1 |
| 95% KM (z) UCL | 152.7 | 95% KM Bootstrap t UCL | 408.9 |
| 90% KM Chebyshev UCL | 212.2 | 95% KM Chebyshev UCL | 271.8 |
| 97.5% KM Chebyshev UCL | 354.5 | 99% KM Chebyshev UCL | 517 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.924 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.876 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.219 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.185 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.254 | k star (bias corrected MLE) | 0.25 |
| Theta hat (MLE) | 2287 | Theta star (bias corrected MLE) | 2319 |
| nu hat (MLE) | 13.7 | nu star (bias corrected) | 13.51 |
| Mean (detects) | 580.4 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 78.36 |
| Maximum | 7210 | Median | 0.01 |
| SD | 610.3 | CV | 7.789 |
| k hat (MLE) | 0.103 | k star (bias corrected MLE) | 0.105 |
| Theta hat (MLE) | 761.4 | Theta star (bias corrected MLE) | 748.4 |
| nu hat (MLE) | 41.17 | nu star (bias corrected) | 41.88 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (41.88, α) | 28.05 | Adjusted Chi Square Value (41.88, β) | 27.96 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 117 | 95% Gamma Adjusted UCL (use when $n < 50$) | 117.4 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 80.59 | SD (KM) | 608.6 |
| Variance (KM) | 370369 | SE of Mean (KM) | 43.86 |
| k hat (KM) | 0.0175 | k star (KM) | 0.0206 |
| nu hat (KM) | 7.014 | nu star (KM) | 8.242 |
| theta hat (KM) | 4596 | theta star (KM) | 3911 |
| 80% gamma percentile (KM) | 0.0442 | 90% gamma percentile (KM) | 13.48 |
| 95% gamma percentile (KM) | 194.4 | 99% gamma percentile (KM) | 2244 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (8.24, α) | 2.876 | Adjusted Chi Square Value (8.24, β) | 2.853 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 230.9 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 232.8 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.943 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.923 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|---|--|
| Lilliefors Test Statistic | 0.109 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.167 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 80.48 | Mean in Log Scale | 1.064 |
| SD in Original Scale | 610.1 | SD in Log Scale | 1.495 |
| 95% t UCL (assumes normality of ROS data) | 151.8 | 95% Percentile Bootstrap UCL | 157.8 |
| 95% BCA Bootstrap UCL | 211.7 | 95% Bootstrap t UCL | 396.8 |
| 95% H-UCL (Log ROS) | 11.74 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|--------------|
| KM Mean (logged) | 1.144 | KM Geo Mean | 3.139 |
| KM SD (logged) | 1.386 | 95% Critical H Value (KM-Log) | 2.545 |
| KM Standard Error of Mean (logged) | 0.159 | 95% H-UCL (KM -Log) | 10.52 |
| KM SD (logged) | 1.386 | 95% Critical H Value (KM-Log) | 2.545 |
| KM Standard Error of Mean (logged) | 0.159 | | |

DL/2 Statistics

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 92.27 | Mean in Log Scale | 1.518 |
| SD in Original Scale | 612.4 | SD in Log Scale | 1.561 |
| 95% t UCL (Assumes normality) | 163.8 | 95% H-Stat UCL | 20.89 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 10.52

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Dichlorodifluoromethane)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 152 |
| Number of Detects | 5 | Number of Non-Detects | 195 |
| Number of Distinct Detects | 5 | Number of Distinct Non-Detects | 147 |
| Minimum Detect | 1 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 19 | Maximum Non-Detect | 5790 |
| Variance Detects | 52.43 | Percent Non-Detects | 97.5% |
| Mean Detects | 7.808 | SD Detects | 7.241 |
| Median Detects | 7.64 | CV Detects | 0.927 |
| Skewness Detects | 0.969 | Kurtosis Detects | 0.678 |
| Mean of Logged Detects | 1.573 | SD of Logged Detects | 1.216 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.909 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.207 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 1.63 | KM Standard Error of Mean | 0.367 |
| KM SD | 1.613 | 95% KM (BCA) UCL | 4.064 |
| 95% KM (t) UCL | 2.236 | 95% KM (Percentile Bootstrap) UCL | 4.014 |
| 95% KM (z) UCL | 2.233 | 95% KM Bootstrap t UCL | 3.118 |
| 90% KM Chebyshev UCL | 2.73 | 95% KM Chebyshev UCL | 3.229 |
| 97.5% KM Chebyshev UCL | 3.921 | 99% KM Chebyshev UCL | 5.28 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.275 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.69 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.22 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.363 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 1.175 | k star (bias corrected MLE) | 0.603 |
| Theta hat (MLE) | 6.647 | Theta star (bias corrected MLE) | 12.94 |
| nu hat (MLE) | 11.75 | nu star (bias corrected) | 6.032 |
| Mean (detects) | 7.808 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.01 | Mean | 0.955 |
| Maximum | 19 | Median | 0.62 |
| SD | 1.648 | CV | 1.726 |
| k hat (MLE) | 0.708 | k star (bias corrected MLE) | 0.701 |
| Theta hat (MLE) | 1.349 | Theta star (bias corrected MLE) | 1.363 |
| nu hat (MLE) | 283.1 | nu star (bias corrected) | 280.2 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (280.22, α) | 242.5 | Adjusted Chi Square Value (280.22, β) | 242.2 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1.104 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1.105 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 1.63 | SD (KM) | 1.613 |
| Variance (KM) | 2.602 | SE of Mean (KM) | 0.367 |
| k hat (KM) | 1.021 | k star (KM) | 1.009 |
| nu hat (KM) | 408.4 | nu star (KM) | 403.6 |
| theta hat (KM) | 1.596 | theta star (KM) | 1.615 |
| 80% gamma percentile (KM) | 2.621 | 90% gamma percentile (KM) | 3.745 |
| 95% gamma percentile (KM) | 4.867 | 99% gamma percentile (KM) | 7.472 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (403.59, α) | 358 | Adjusted Chi Square Value (403.59, β) | 357.7 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 1.837 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 1.839 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.932 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.248 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 1.565 | Mean in Log Scale | 0.334 |
| SD in Original Scale | 1.488 | SD in Log Scale | 0.38 |
| 95% t UCL (assumes normality of ROS data) | 1.739 | 95% Percentile Bootstrap UCL | 1.752 |
| 95% BCA Bootstrap UCL | 1.842 | 95% Bootstrap t UCL | 2.016 |
| 95% H-UCL (Log ROS) | 1.574 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.353 | KM Geo Mean | 1.424 |
| KM SD (logged) | 0.422 | 95% Critical H Value (KM-Log) | 1.777 |
| KM Standard Error of Mean (logged) | 0.246 | 95% H-UCL (KM -Log) | 1.641 |
| KM SD (logged) | 0.422 | 95% Critical H Value (KM-Log) | 1.777 |
| KM Standard Error of Mean (logged) | 0.246 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 99.68 |
| SD in Original Scale | 426.5 |
| 95% t UCL (Assumes normality) | 149.5 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.655 |
| SD in Log Scale | 1.79 |
| 95% H-Stat UCL | 37.88 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 2.236

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Ethylbenzene)

General Statistics

| | | | |
|------------------------------|---------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 153 |
| Number of Detects | 20 | Number of Non-Detects | 180 |
| Number of Distinct Detects | 20 | Number of Distinct Non-Detects | 133 |
| Minimum Detect | 0.767 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 3810 | Maximum Non-Detect | 1160 |
| Variance Detects | 1371559 | Percent Non-Detects | 90% |
| Mean Detects | 703.5 | SD Detects | 1171 |
| Median Detects | 72 | CV Detects | 1.665 |
| Skewness Detects | 1.918 | Kurtosis Detects | 2.803 |
| Mean of Logged Detects | 4.178 | SD of Logged Detects | 2.883 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.657 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.905 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.295 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.192 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 71.81 | KM Standard Error of Mean | 30.36 |
| KM SD | 418.2 | 95% KM (BCA) UCL | 133 |
| 95% KM (t) UCL | 122 | 95% KM (Percentile Bootstrap) UCL | 123.8 |
| 95% KM (z) UCL | 121.8 | 95% KM Bootstrap t UCL | 170.7 |
| 90% KM Chebyshev UCL | 162.9 | 95% KM Chebyshev UCL | 204.2 |
| 97.5% KM Chebyshev UCL | 261.4 | 99% KM Chebyshev UCL | 373.9 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.626 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.849 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.158 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.211 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.291 | k star (bias corrected MLE) | 0.281 |
| Theta hat (MLE) | 2414 | Theta star (bias corrected MLE) | 2503 |
| nu hat (MLE) | 11.66 | nu star (bias corrected) | 11.24 |
| Mean (detects) | 703.5 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 70.36 |
| Maximum | 3810 | Median | 0.01 |
| SD | 419.2 | CV | 5.958 |
| k hat (MLE) | 0.102 | k star (bias corrected MLE) | 0.103 |
| Theta hat (MLE) | 692.7 | Theta star (bias corrected MLE) | 680.6 |
| nu hat (MLE) | 40.63 | nu star (bias corrected) | 41.35 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (41.35, α) | 27.61 | Adjusted Chi Square Value (41.35, β) | 27.53 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 105.4 | 95% Gamma Adjusted UCL (use when $n < 50$) | 105.7 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 71.81 | SD (KM) | 418.2 |
| Variance (KM) | 174896 | SE of Mean (KM) | 30.36 |
| k hat (KM) | 0.0295 | k star (KM) | 0.0324 |
| nu hat (KM) | 11.79 | nu star (KM) | 12.95 |
| theta hat (KM) | 2435 | theta star (KM) | 2218 |
| 80% gamma percentile (KM) | 1.299 | 90% gamma percentile (KM) | 50.45 |
| 95% gamma percentile (KM) | 297.3 | 99% gamma percentile (KM) | 1815 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (12.95, α) | 5.859 | Adjusted Chi Square Value (12.95, β) | 5.825 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 158.7 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 159.7 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.927 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.905 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|---|--|
| Lilliefors Test Statistic | 0.165 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.192 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 71.45 | Mean in Log Scale | 0.27 |
| SD in Original Scale | 419 | SD in Log Scale | 1.781 |
| 95% t UCL (assumes normality of ROS data) | 120.4 | 95% Percentile Bootstrap UCL | 124.8 |
| 95% BCA Bootstrap UCL | 137.9 | 95% Bootstrap t UCL | 167.2 |
| 95% H-UCL (Log ROS) | 9.318 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.567 | KM Geo Mean | 1.763 |
| KM SD (logged) | 1.536 | 95% Critical H Value (KM-Log) | 2.702 |
| KM Standard Error of Mean (logged) | 0.176 | 95% H-UCL (KM -Log) | 7.693 |
| KM SD (logged) | 1.536 | 95% Critical H Value (KM-Log) | 2.702 |
| KM Standard Error of Mean (logged) | 0.176 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 82.93 |
| SD in Original Scale | 422.2 |
| 95% t UCL (Assumes normality) | 132.3 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.488 |
| SD in Log Scale | 1.568 |
| 95% H-Stat UCL | 20.53 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 158.7

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Isopropylbenzene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 148 |
| Number of Detects | 8 | Number of Non-Detects | 192 |
| Number of Distinct Detects | 8 | Number of Distinct Non-Detects | 141 |
| Minimum Detect | 0.958 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 401 | Maximum Non-Detect | 1160 |
| Variance Detects | 18420 | Percent Non-Detects | 96% |
| Mean Detects | 69.24 | SD Detects | 135.7 |
| Median Detects | 17.85 | CV Detects | 1.96 |
| Skewness Detects | 2.695 | Kurtosis Detects | 7.413 |
| Mean of Logged Detects | 2.73 | SD of Logged Detects | 2.034 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.556 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.818 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.401 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.283 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 3.883 | KM Standard Error of Mean | 2.241 |
| KM SD | 29.16 | 95% KM (BCA) UCL | 10.23 |
| 95% KM (t) UCL | 7.586 | 95% KM (Percentile Bootstrap) UCL | 8.451 |
| 95% KM (z) UCL | 7.569 | 95% KM Bootstrap t UCL | 21.47 |
| 90% KM Chebyshev UCL | 10.61 | 95% KM Chebyshev UCL | 13.65 |
| 97.5% KM Chebyshev UCL | 17.88 | 99% KM Chebyshev UCL | 26.18 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.414 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.774 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.21 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.312 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.431 | k star (bias corrected MLE) | 0.353 |
| Theta hat (MLE) | 160.6 | Theta star (bias corrected MLE) | 196.3 |
| nu hat (MLE) | 6.898 | nu star (bias corrected) | 5.645 |
| Mean (detects) | 69.24 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 2.779 |
| Maximum | 401 | Median | 0.01 |
| SD | 28.86 | CV | 10.38 |
| k hat (MLE) | 0.145 | k star (bias corrected MLE) | 0.146 |
| Theta hat (MLE) | 19.19 | Theta star (bias corrected MLE) | 19.04 |
| nu hat (MLE) | 57.93 | nu star (bias corrected) | 58.39 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (58.39, α) | 41.83 | Adjusted Chi Square Value (58.39, β) | 41.72 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 3.88 | 95% Gamma Adjusted UCL (use when $n < 50$) | 3.89 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|---------|---------------------------|--------|
| Mean (KM) | 3.883 | SD (KM) | 29.16 |
| Variance (KM) | 850.3 | SE of Mean (KM) | 2.241 |
| k hat (KM) | 0.0177 | k star (KM) | 0.0208 |
| nu hat (KM) | 7.091 | nu star (KM) | 8.318 |
| theta hat (KM) | 219 | theta star (KM) | 186.7 |
| 80% gamma percentile (KM) | 0.00233 | 90% gamma percentile (KM) | 0.674 |
| 95% gamma percentile (KM) | 9.506 | 99% gamma percentile (KM) | 108 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (8.32, α) | 2.92 | Adjusted Chi Square Value (8.32, β) | 2.897 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 11.06 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 11.15 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.948 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.818 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.157 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.283 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|---------|
| Mean in Original Scale | 3.736 | Mean in Log Scale | -0.0318 |
| SD in Original Scale | 28.77 | SD in Log Scale | 0.874 |
| 95% t UCL (assumes normality of ROS data) | 7.099 | 95% Percentile Bootstrap UCL | 7.648 |
| 95% BCA Bootstrap UCL | 10.08 | 95% Bootstrap t UCL | 23.86 |
| 95% H-UCL (Log ROS) | 1.613 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.131 | KM Geo Mean | 1.14 |
| KM SD (logged) | 0.681 | 95% Critical H Value (KM-Log) | 1.928 |
| KM Standard Error of Mean (logged) | 0.067 | 95% H-UCL (KM -Log) | 1.579 |
| KM SD (logged) | 0.681 | 95% Critical H Value (KM-Log) | 1.928 |
| KM Standard Error of Mean (logged) | 0.067 | | |

DL/2 Statistics

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 23.13 | Mean in Log Scale | 1.379 |
| SD in Original Scale | 89.03 | SD in Log Scale | 1.26 |
| 95% t UCL (Assumes normality) | 33.53 | 95% H-Stat UCL | 10.9 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 11.06

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (m-,p-Xylene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 139 |
| Number of Detects | 17 | Number of Non-Detects | 183 |
| Number of Distinct Detects | 17 | Number of Distinct Non-Detects | 123 |
| Minimum Detect | 1.75 | Minimum Non-Detect | 7.58 |
| Maximum Detect | 15400 | Maximum Non-Detect | 2320 |
| Variance Detects | 26121132 | Percent Non-Detects | 91.5% |
| Mean Detects | 3696 | SD Detects | 5111 |
| Median Detects | 355 | CV Detects | 1.383 |
| Skewness Detects | 1.266 | Kurtosis Detects | 0.539 |
| Mean of Logged Detects | 5.767 | SD of Logged Detects | 3.168 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.755 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.892 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.303 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.207 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 317.3 | KM Standard Error of Mean | 129.4 |
| KM SD | 1775 | 95% KM (BCA) UCL | 534.1 |
| 95% KM (t) UCL | 531.1 | 95% KM (Percentile Bootstrap) UCL | 541.7 |
| 95% KM (z) UCL | 530.1 | 95% KM Bootstrap t UCL | 669.4 |
| 90% KM Chebyshev UCL | 705.4 | 95% KM Chebyshev UCL | 881.2 |
| 97.5% KM Chebyshev UCL | 1125 | 99% KM Chebyshev UCL | 1605 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.685 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.849 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.185 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.228 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.284 | k star (bias corrected MLE) | 0.273 |
| Theta hat (MLE) | 13006 | Theta star (bias corrected MLE) | 13526 |
| nu hat (MLE) | 9.662 | nu star (bias corrected) | 9.29 |
| Mean (detects) | 3696 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.01 | Mean | 314.2 |
| Maximum | 15400 | Median | 0.01 |
| SD | 1780 | CV | 5.665 |
| k hat (MLE) | 0.0872 | k star (bias corrected MLE) | 0.0892 |
| Theta hat (MLE) | 3604 | Theta star (bias corrected MLE) | 3522 |
| nu hat (MLE) | 34.87 | nu star (bias corrected) | 35.68 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (35.68, α) | 23.01 | Adjusted Chi Square Value (35.68, β) | 22.94 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 487.1 | 95% Gamma Adjusted UCL (use when $n < 50$) | 488.7 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|---------|---------------------------|--------|
| Mean (KM) | 317.3 | SD (KM) | 1775 |
| Variance (KM) | 3150147 | SE of Mean (KM) | 129.4 |
| k hat (KM) | 0.032 | k star (KM) | 0.0348 |
| nu hat (KM) | 12.78 | nu star (KM) | 13.93 |
| theta hat (KM) | 9928 | theta star (KM) | 9114 |
| 80% gamma percentile (KM) | 8.673 | 90% gamma percentile (KM) | 262.4 |
| 95% gamma percentile (KM) | 1391 | 99% gamma percentile (KM) | 7848 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (13.93, α) | 6.521 | Adjusted Chi Square Value (13.93, β) | 6.484 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 677.7 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 681.5 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.901 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.892 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|---|--|
| Lilliefors Test Statistic | 0.178 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.207 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 316 | Mean in Log Scale | 0.464 |
| SD in Original Scale | 1780 | SD in Log Scale | 2.192 |
| 95% t UCL (assumes normality of ROS data) | 523.9 | 95% Percentile Bootstrap UCL | 538.9 |
| 95% BCA Bootstrap UCL | 609 | 95% Bootstrap t UCL | 678.5 |
| 95% H-UCL (Log ROS) | 30.02 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 1.457 | KM Geo Mean | 4.294 |
| KM SD (logged) | 1.665 | 95% Critical H Value (KM-Log) | 2.843 |
| KM Standard Error of Mean (logged) | 0.274 | 95% H-UCL (KM -Log) | 24.02 |
| KM SD (logged) | 1.665 | 95% Critical H Value (KM-Log) | 2.843 |
| KM Standard Error of Mean (logged) | 0.274 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 339.1 |
| SD in Original Scale | 1780 |
| 95% t UCL (Assumes normality) | 547.2 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.215 |
| SD in Log Scale | 1.687 |
| 95% H-Stat UCL | 53.56 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 677.7

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Methylene chloride)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 136 |
| Number of Detects | 62 | Number of Non-Detects | 138 |
| Number of Distinct Detects | 60 | Number of Distinct Non-Detects | 77 |
| Minimum Detect | 0.869 | Minimum Non-Detect | 15.4 |
| Maximum Detect | 1460 | Maximum Non-Detect | 5790 |
| Variance Detects | 37390 | Percent Non-Detects | 69% |
| Mean Detects | 49.1 | SD Detects | 193.4 |
| Median Detects | 2.56 | CV Detects | 3.938 |
| Skewness Detects | 6.652 | Kurtosis Detects | 48.22 |
| Mean of Logged Detects | 1.551 | SD of Logged Detects | 1.715 |

Normal GOF Test on Detects Only

| | |
|------------------------------|-------|
| Shapiro Wilk Test Statistic | 0.279 |
| 5% Shapiro Wilk P Value | 0 |
| Lilliefors Test Statistic | 0.417 |
| 5% Lilliefors Critical Value | 0.112 |

Normal GOF Test on Detected Observations Only
 Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 18.05 | KM Standard Error of Mean | 7.943 |
| KM SD | 110.1 | 95% KM (BCA) UCL | 33.03 |
| 95% KM (t) UCL | 31.18 | 95% KM (Percentile Bootstrap) UCL | 33 |
| 95% KM (z) UCL | 31.12 | 95% KM Bootstrap t UCL | 56.74 |
| 90% KM Chebyshev UCL | 41.88 | 95% KM Chebyshev UCL | 52.67 |
| 97.5% KM Chebyshev UCL | 67.65 | 99% KM Chebyshev UCL | 97.08 |

Gamma GOF Tests on Detected Observations Only

| | |
|-----------------------|-------|
| A-D Test Statistic | 11.05 |
| 5% A-D Critical Value | 0.866 |
| K-S Test Statistic | 0.389 |
| 5% K-S Critical Value | 0.123 |

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.295 | k star (bias corrected MLE) | 0.292 |
| Theta hat (MLE) | 166.4 | Theta star (bias corrected MLE) | 168.4 |
| nu hat (MLE) | 36.6 | nu star (bias corrected) | 36.16 |
| Mean (detects) | 49.1 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 17.01 |
| Maximum | 1460 | Median | 0.01 |
| SD | 109.4 | CV | 6.433 |
| k hat (MLE) | 0.154 | k star (bias corrected MLE) | 0.155 |
| Theta hat (MLE) | 110.3 | Theta star (bias corrected MLE) | 109.6 |
| nu hat (MLE) | 61.7 | nu star (bias corrected) | 62.11 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (62.11, α) | 44.98 | Adjusted Chi Square Value (62.11, β) | 44.88 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 23.49 | 95% Gamma Adjusted UCL (use when $n < 50$) | 23.54 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 18.05 | SD (KM) | 110.1 |
| Variance (KM) | 12115 | SE of Mean (KM) | 7.943 |
| k hat (KM) | 0.0269 | k star (KM) | 0.0298 |
| nu hat (KM) | 10.76 | nu star (KM) | 11.93 |
| theta hat (KM) | 671.1 | theta star (KM) | 605.2 |
| 80% gamma percentile (KM) | 0.196 | 90% gamma percentile (KM) | 10.35 |
| 95% gamma percentile (KM) | 69.51 | 99% gamma percentile (KM) | 466.8 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (11.93, α) | 5.182 | Adjusted Chi Square Value (11.93, β) | 5.149 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 41.57 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 41.83 |

Lognormal GOF Test on Detected Observations Only

| | |
|---|-----------|
| Shapiro Wilk Approximate Test Statistic | 0.761 |
| 5% Shapiro Wilk P Value | 2.756E-13 |

Shapiro Wilk GOF Test

Detected Data Not Lognormal at 5% Significance Level

| | | |
|------------------------------|-------|--|
| Lilliefors Test Statistic | 0.272 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.112 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 17.78 | Mean in Log Scale | 1.266 |
| SD in Original Scale | 109.1 | SD in Log Scale | 1.09 |
| 95% t UCL (assumes normality of ROS data) | 30.53 | 95% Percentile Bootstrap UCL | 32.24 |
| 95% BCA Bootstrap UCL | 41.17 | 95% Bootstrap t UCL | 56.91 |
| 95% H-UCL (Log ROS) | 7.643 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 1.105 | KM Geo Mean | 3.019 |
| KM SD (logged) | 1.156 | 95% Critical H Value (KM-Log) | 2.318 |
| KM Standard Error of Mean (logged) | 0.111 | 95% H-UCL (KM -Log) | 7.118 |
| KM SD (logged) | 1.156 | 95% Critical H Value (KM-Log) | 2.318 |
| KM Standard Error of Mean (logged) | 0.111 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 75.94 |
| SD in Original Scale | 344.8 |
| 95% t UCL (Assumes normality) | 116.2 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.372 |
| SD in Log Scale | 1.49 |
| 95% H-Stat UCL | 43.07 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 52.67

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Naphthalene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 200 | Number of Distinct Observations | 147 |
| Number of Detects | 5 | Number of Non-Detects | 195 |
| Number of Distinct Detects | 5 | Number of Distinct Non-Detects | 142 |
| Minimum Detect | 17.1 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 187 | Maximum Non-Detect | 1160 |
| Variance Detects | 4276 | Percent Non-Detects | 97.5% |
| Mean Detects | 97.78 | SD Detects | 65.39 |
| Median Detects | 80.8 | CV Detects | 0.669 |
| Skewness Detects | 0.312 | Kurtosis Detects | -0.567 |
| Mean of Logged Detects | 4.319 | SD of Logged Detects | 0.921 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.978 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.202 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 6.26 | KM Standard Error of Mean | 1.43 |
| KM SD | 17.71 | 95% KM (BCA) UCL | 8.99 |
| 95% KM (t) UCL | 8.623 | 95% KM (Percentile Bootstrap) UCL | 8.793 |
| 95% KM (z) UCL | 8.612 | 95% KM Bootstrap t UCL | 7.82 |
| 90% KM Chebyshev UCL | 10.55 | 95% KM Chebyshev UCL | 12.49 |
| 97.5% KM Chebyshev UCL | 15.19 | 99% KM Chebyshev UCL | 20.49 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.249 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.684 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.202 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.36 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 2.046 | k star (bias corrected MLE) | 0.952 |
| Theta hat (MLE) | 47.79 | Theta star (bias corrected MLE) | 102.7 |
| nu hat (MLE) | 20.46 | nu star (bias corrected) | 9.517 |
| Mean (detects) | 97.78 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 2.454 |
| Maximum | 187 | Median | 0.01 |
| SD | 17.89 | CV | 7.29 |
| k hat (MLE) | 0.146 | k star (bias corrected MLE) | 0.147 |
| Theta hat (MLE) | 16.8 | Theta star (bias corrected MLE) | 16.67 |
| nu hat (MLE) | 58.45 | nu star (bias corrected) | 58.9 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (58.90, α) | 42.26 | Adjusted Chi Square Value (58.90, β) | 42.16 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 3.421 | 95% Gamma Adjusted UCL (use when $n < 50$) | 3.429 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 6.26 | SD (KM) | 17.71 |
| Variance (KM) | 313.5 | SE of Mean (KM) | 1.43 |
| k hat (KM) | 0.125 | k star (KM) | 0.126 |
| nu hat (KM) | 50.01 | nu star (KM) | 50.6 |
| theta hat (KM) | 50.07 | theta star (KM) | 49.49 |
| 80% gamma percentile (KM) | 5.815 | 90% gamma percentile (KM) | 17.98 |
| 95% gamma percentile (KM) | 35.47 | 99% gamma percentile (KM) | 88.18 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (50.60, α) | 35.26 | Adjusted Chi Square Value (50.60, β) | 35.17 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 8.983 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 9.007 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.911 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|--|-------|---|--|
| Lilliefors Test Statistic | 0.257 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Lognormal at 5% Significance Level | |
| Detected Data appear Lognormal at 5% Significance Level | | | |

| | | | |
|---|-------|------------------------------|--------|
| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
| Mean in Original Scale | 2.609 | Mean in Log Scale | -2.055 |
| SD in Original Scale | 17.87 | SD in Log Scale | 1.387 |
| 95% t UCL (assumes normality of ROS data) | 4.698 | 95% Percentile Bootstrap UCL | 4.905 |
| 95% BCA Bootstrap UCL | 6.004 | 95% Bootstrap t UCL | 8.089 |
| 95% H-UCL (Log ROS) | 0.431 | | |

| | | | |
|---|--------|-------------------------------|-------|
| Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution | | | |
| KM Mean (logged) | 1.412 | KM Geo Mean | 4.103 |
| KM SD (logged) | 0.497 | 95% Critical H Value (KM-Log) | 1.816 |
| KM Standard Error of Mean (logged) | 0.0404 | 95% H-UCL (KM -Log) | 4.95 |
| KM SD (logged) | 0.497 | 95% Critical H Value (KM-Log) | 1.816 |
| KM Standard Error of Mean (logged) | 0.0404 | | |

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Statistics | | | |
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 23.03 | Mean in Log Scale | 1.405 |
| SD in Original Scale | 86.16 | SD in Log Scale | 1.277 |
| 95% t UCL (Assumes normality) | 33.1 | 95% H-Stat UCL | 11.49 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use
 95% KM (t) UCL 8.623

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. Recommendations are based upon data size, data distribution, and skewness. These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (n-Propylbenzene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 148 |
| Number of Detects | 10 | Number of Non-Detects | 190 |
| Number of Distinct Detects | 10 | Number of Distinct Non-Detects | 138 |
| Minimum Detect | 2.37 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 165 | Maximum Non-Detect | 1160 |
| Variance Detects | 3127 | Percent Non-Detects | 95% |
| Mean Detects | 57.08 | SD Detects | 55.92 |
| Median Detects | 37.3 | CV Detects | 0.98 |
| Skewness Detects | 1.367 | Kurtosis Detects | 0.71 |
| Mean of Logged Detects | 3.515 | SD of Logged Detects | 1.255 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.799 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.842 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.271 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.262 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 5.279 | KM Standard Error of Mean | 1.309 |
| KM SD | 17.18 | 95% KM (BCA) UCL | 8.936 |
| 95% KM (t) UCL | 7.442 | 95% KM (Percentile Bootstrap) UCL | 8.224 |
| 95% KM (z) UCL | 7.432 | 95% KM Bootstrap t UCL | 8.576 |
| 90% KM Chebyshev UCL | 9.206 | 95% KM Chebyshev UCL | 10.99 |
| 97.5% KM Chebyshev UCL | 13.45 | 99% KM Chebyshev UCL | 18.31 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.327 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.747 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.174 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.273 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 1.081 | k star (bias corrected MLE) | 0.823 |
| Theta hat (MLE) | 52.8 | Theta star (bias corrected MLE) | 69.32 |
| nu hat (MLE) | 21.62 | nu star (bias corrected) | 16.47 |
| Mean (detects) | 57.08 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 2.863 |
| Maximum | 165 | Median | 0.01 |
| SD | 17.23 | CV | 6.018 |
| k hat (MLE) | 0.147 | k star (bias corrected MLE) | 0.148 |
| Theta hat (MLE) | 19.5 | Theta star (bias corrected MLE) | 19.35 |
| nu hat (MLE) | 58.73 | nu star (bias corrected) | 59.18 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (59.18, α) | 42.49 | Adjusted Chi Square Value (59.18, β) | 42.39 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 3.988 | 95% Gamma Adjusted UCL (use when $n < 50$) | 3.997 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 5.279 | SD (KM) | 17.18 |
| Variance (KM) | 295 | SE of Mean (KM) | 1.309 |
| k hat (KM) | 0.0944 | k star (KM) | 0.0964 |
| nu hat (KM) | 37.78 | nu star (KM) | 38.54 |
| theta hat (KM) | 55.89 | theta star (KM) | 54.78 |
| 80% gamma percentile (KM) | 3.466 | 90% gamma percentile (KM) | 13.83 |
| 95% gamma percentile (KM) | 30.7 | 99% gamma percentile (KM) | 85.42 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (38.54, α) | 25.32 | Adjusted Chi Square Value (38.54, β) | 25.25 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 8.034 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 8.059 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.916 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.842 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.243 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.262 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 4.616 | Mean in Log Scale | 0.637 |
| SD in Original Scale | 16.97 | SD in Log Scale | 0.875 |
| 95% t UCL (assumes normality of ROS data) | 6.599 | 95% Percentile Bootstrap UCL | 6.75 |
| 95% BCA Bootstrap UCL | 7.883 | 95% Bootstrap t UCL | 9.327 |
| 95% H-UCL (Log ROS) | 3.153 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | 1.007 | KM Geo Mean | 2.736 |
| KM SD (logged) | 0.658 | 95% Critical H Value (KM-Log) | 1.912 |
| KM Standard Error of Mean (logged) | 0.0509 | 95% H-UCL (KM -Log) | 3.716 |
| KM SD (logged) | 0.658 | 95% Critical H Value (KM-Log) | 1.912 |
| KM Standard Error of Mean (logged) | 0.0509 | | |

DL/2 Statistics

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 22.52 | Mean in Log Scale | 1.393 |
| SD in Original Scale | 85.91 | SD in Log Scale | 1.257 |
| 95% t UCL (Assumes normality) | 32.55 | 95% H-Stat UCL | 11.01 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 8.034

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (o-Xylene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 149 |
| Number of Detects | 10 | Number of Non-Detects | 190 |
| Number of Distinct Detects | 10 | Number of Distinct Non-Detects | 139 |
| Minimum Detect | 0.978 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 818 | Maximum Non-Detect | 1160 |
| Variance Detects | 96313 | Percent Non-Detects | 95% |
| Mean Detects | 211.5 | SD Detects | 310.3 |
| Median Detects | 21.6 | CV Detects | 1.467 |
| Skewness Detects | 1.318 | Kurtosis Detects | 0.209 |
| Mean of Logged Detects | 3.61 | SD of Logged Detects | 2.375 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.721 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.842 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.326 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.262 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 12.09 | KM Standard Error of Mean | 6.105 |
| KM SD | 81.01 | 95% KM (BCA) UCL | 24.97 |
| 95% KM (t) UCL | 22.18 | 95% KM (Percentile Bootstrap) UCL | 23.09 |
| 95% KM (z) UCL | 22.13 | 95% KM Bootstrap t UCL | 34.91 |
| 90% KM Chebyshev UCL | 30.4 | 95% KM Chebyshev UCL | 38.7 |
| 97.5% KM Chebyshev UCL | 50.21 | 99% KM Chebyshev UCL | 72.83 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.516 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.799 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.258 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.285 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.38 | k star (bias corrected MLE) | 0.333 |
| Theta hat (MLE) | 555.9 | Theta star (bias corrected MLE) | 635.1 |
| nu hat (MLE) | 7.609 | nu star (bias corrected) | 6.66 |
| Mean (detects) | 211.5 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 10.58 |
| Maximum | 818 | Median | 0.01 |
| SD | 80.57 | CV | 7.612 |
| k hat (MLE) | 0.121 | k star (bias corrected MLE) | 0.122 |
| Theta hat (MLE) | 87.55 | Theta star (bias corrected MLE) | 86.47 |
| nu hat (MLE) | 48.35 | nu star (bias corrected) | 48.96 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (48.96, α) | 33.9 | Adjusted Chi Square Value (48.96, β) | 33.81 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 15.29 | 95% Gamma Adjusted UCL (use when $n < 50$) | 15.33 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 12.09 | SD (KM) | 81.01 |
| Variance (KM) | 6562 | SE of Mean (KM) | 6.105 |
| k hat (KM) | 0.0223 | k star (KM) | 0.0253 |
| nu hat (KM) | 8.908 | nu star (KM) | 10.11 |
| theta hat (KM) | 542.8 | theta star (KM) | 478.4 |
| 80% gamma percentile (KM) | 0.0401 | 90% gamma percentile (KM) | 4.276 |
| 95% gamma percentile (KM) | 38.93 | 99% gamma percentile (KM) | 325.1 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (10.11, α) | 4.009 | Adjusted Chi Square Value (10.11, β) | 3.981 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 30.48 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 30.69 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.924 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.842 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.165 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.262 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 11.62 | Mean in Log Scale | 0.0386 |
| SD in Original Scale | 80.43 | SD in Log Scale | 1.187 |
| 95% t UCL (assumes normality of ROS data) | 21.02 | 95% Percentile Bootstrap UCL | 21.18 |
| 95% BCA Bootstrap UCL | 27.37 | 95% Bootstrap t UCL | 34.88 |
| 95% H-UCL (Log ROS) | 2.562 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.421 | KM Geo Mean | 1.523 |
| KM SD (logged) | 0.943 | 95% Critical H Value (KM-Log) | 2.128 |
| KM Standard Error of Mean (logged) | 0.201 | 95% H-UCL (KM -Log) | 2.74 |
| KM SD (logged) | 0.943 | 95% Critical H Value (KM-Log) | 2.128 |
| KM Standard Error of Mean (logged) | 0.201 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 27.48 |
| SD in Original Scale | 109.3 |
| 95% t UCL (Assumes normality) | 40.25 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.408 |
| SD in Log Scale | 1.309 |
| 95% H-Stat UCL | 12.1 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 30.48

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (p-Isopropyltoluene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 149 |
| Number of Detects | 14 | Number of Non-Detects | 186 |
| Number of Distinct Detects | 14 | Number of Distinct Non-Detects | 136 |
| Minimum Detect | 1.35 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 1370 | Maximum Non-Detect | 1090 |
| Variance Detects | 122330 | Percent Non-Detects | 93% |
| Mean Detects | 168.4 | SD Detects | 349.8 |
| Median Detects | 93.4 | CV Detects | 2.077 |
| Skewness Detects | 3.597 | Kurtosis Detects | 13.23 |
| Mean of Logged Detects | 3.873 | SD of Logged Detects | 1.917 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.434 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.874 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.437 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.226 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------------|
| KM Mean | 13.93 | KM Standard Error of Mean | 7.266 |
| KM SD | 98.83 | 95% KM (BCA) UCL | 28.82 |
| 95% KM (t) UCL | 25.93 | 95% KM (Percentile Bootstrap) UCL | 27.52 |
| 95% KM (z) UCL | 25.88 | 95% KM Bootstrap t UCL | 59.88 |
| 90% KM Chebyshev UCL | 35.72 | 95% KM Chebyshev UCL | 45.6 |
| 97.5% KM Chebyshev UCL | 59.3 | 99% KM Chebyshev UCL | 86.22 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 0.975 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.793 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.258 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.242 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.506 | k star (bias corrected MLE) | 0.445 |
| Theta hat (MLE) | 332.7 | Theta star (bias corrected MLE) | 378.2 |
| nu hat (MLE) | 14.17 | nu star (bias corrected) | 12.47 |
| Mean (detects) | 168.4 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 11.8 |
| Maximum | 1370 | Median | 0.01 |
| SD | 99.23 | CV | 8.412 |
| k hat (MLE) | 0.122 | k star (bias corrected MLE) | 0.124 |
| Theta hat (MLE) | 96.6 | Theta star (bias corrected MLE) | 95.43 |
| nu hat (MLE) | 48.84 | nu star (bias corrected) | 49.44 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (49.44, α) | 34.3 | Adjusted Chi Square Value (49.44, β) | 34.21 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 17 | 95% Gamma Adjusted UCL (use when $n < 50$) | 17.05 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 13.93 | SD (KM) | 98.83 |
| Variance (KM) | 9767 | SE of Mean (KM) | 7.266 |
| k hat (KM) | 0.0199 | k star (KM) | 0.0229 |
| nu hat (KM) | 7.943 | nu star (KM) | 9.157 |
| theta hat (KM) | 701.3 | theta star (KM) | 608.3 |
| 80% gamma percentile (KM) | 0.0203 | 90% gamma percentile (KM) | 3.51 |
| 95% gamma percentile (KM) | 39.41 | 99% gamma percentile (KM) | 381.7 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (9.16, α) | 3.422 | Adjusted Chi Square Value (9.16, β) | 3.397 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 37.27 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 37.54 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.853 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.874 | Detected Data Not Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|--|
| Lilliefors Test Statistic | 0.268 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.226 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 14.23 | Mean in Log Scale | 0.997 |
| SD in Original Scale | 98.95 | SD in Log Scale | 1.103 |
| 95% t UCL (assumes normality of ROS data) | 25.79 | 95% Percentile Bootstrap UCL | 27.1 |
| 95% BCA Bootstrap UCL | 35.71 | 95% Bootstrap t UCL | 61.17 |
| 95% H-UCL (Log ROS) | 5.943 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.927 | KM Geo Mean | 2.526 |
| KM SD (logged) | 1.001 | 95% Critical H Value (KM-Log) | 2.177 |
| KM Standard Error of Mean (logged) | 0.176 | 95% H-UCL (KM -Log) | 4.864 |
| KM SD (logged) | 1.001 | 95% Critical H Value (KM-Log) | 2.177 |
| KM Standard Error of Mean (logged) | 0.176 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 28.29 |
| SD in Original Scale | 122.7 |
| 95% t UCL (Assumes normality) | 42.63 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.429 |
| SD in Log Scale | 1.34 |
| 95% H-Stat UCL | 12.99 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 45.6

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Tetrachloroethene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 200 | Number of Distinct Observations | 149 |
| Number of Detects | 7 | Number of Non-Detects | 193 |
| Number of Distinct Detects | 7 | Number of Distinct Non-Detects | 142 |
| Minimum Detect | 1.04 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 36.2 | Maximum Non-Detect | 1160 |
| Variance Detects | 202.7 | Percent Non-Detects | 96.5% |
| Mean Detects | 12.02 | SD Detects | 14.24 |
| Median Detects | 1.99 | CV Detects | 1.185 |
| Skewness Detects | 0.919 | Kurtosis Detects | -0.687 |
| Mean of Logged Detects | 1.568 | SD of Logged Detects | 1.573 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.799 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.803 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.331 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.304 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 1.863 | KM Standard Error of Mean | 0.34 |
| KM SD | 3.402 | 95% KM (BCA) UCL | 2.583 |
| 95% KM (t) UCL | 2.425 | 95% KM (Percentile Bootstrap) UCL | 2.504 |
| 95% KM (z) UCL | 2.422 | 95% KM Bootstrap t UCL | 2.683 |
| 90% KM Chebyshev UCL | 2.882 | 95% KM Chebyshev UCL | 3.344 |
| 97.5% KM Chebyshev UCL | 3.985 | 99% KM Chebyshev UCL | 5.243 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.725 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.741 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.326 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.324 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.663 | k star (bias corrected MLE) | 0.474 |
| Theta hat (MLE) | 18.12 | Theta star (bias corrected MLE) | 25.34 |
| nu hat (MLE) | 9.286 | nu star (bias corrected) | 6.64 |
| Mean (detects) | 12.02 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.01 | Mean | 1.314 |
| Maximum | 36.2 | Median | 0.496 |
| SD | 3.415 | CV | 2.599 |
| k hat (MLE) | 0.503 | k star (bias corrected MLE) | 0.499 |
| Theta hat (MLE) | 2.611 | Theta star (bias corrected MLE) | 2.633 |
| nu hat (MLE) | 201.3 | nu star (bias corrected) | 199.6 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (199.58, α) | 167.9 | Adjusted Chi Square Value (199.58, β) | 167.7 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1.562 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1.564 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 1.863 | SD (KM) | 3.402 |
| Variance (KM) | 11.58 | SE of Mean (KM) | 0.34 |
| k hat (KM) | 0.3 | k star (KM) | 0.299 |
| nu hat (KM) | 120 | nu star (KM) | 119.5 |
| theta hat (KM) | 6.213 | theta star (KM) | 6.237 |
| 80% gamma percentile (KM) | 2.855 | 90% gamma percentile (KM) | 5.498 |
| 95% gamma percentile (KM) | 8.535 | 99% gamma percentile (KM) | 16.43 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (119.50, α) | 95.26 | Adjusted Chi Square Value (119.50, β) | 95.1 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 2.338 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 2.341 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.813 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.803 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.284 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.304 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 2.012 | Mean in Log Scale | 0.474 |
| SD in Original Scale | 3.184 | SD in Log Scale | 0.496 |
| 95% t UCL (assumes normality of ROS data) | 2.384 | 95% Percentile Bootstrap UCL | 2.422 |
| 95% BCA Bootstrap UCL | 2.585 | 95% Bootstrap t UCL | 2.766 |
| 95% H-UCL (Log ROS) | 1.937 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.378 | KM Geo Mean | 1.46 |
| KM SD (logged) | 0.454 | 95% Critical H Value (KM-Log) | 1.793 |
| KM Standard Error of Mean (logged) | 0.136 | 95% H-UCL (KM -Log) | 1.714 |
| KM SD (logged) | 0.454 | 95% Critical H Value (KM-Log) | 1.793 |
| KM Standard Error of Mean (logged) | 0.136 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 21.51 |
| SD in Original Scale | 84.99 |
| 95% t UCL (Assumes normality) | 31.44 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.373 |
| SD in Log Scale | 1.236 |
| 95% H-Stat UCL | 10.45 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 2.338

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Toluene)

General Statistics

| | | | |
|------------------------------|---------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 159 |
| Number of Detects | 40 | Number of Non-Detects | 160 |
| Number of Distinct Detects | 38 | Number of Distinct Non-Detects | 121 |
| Minimum Detect | 0.828 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 8280 | Maximum Non-Detect | 1090 |
| Variance Detects | 1709116 | Percent Non-Detects | 80% |
| Mean Detects | 235 | SD Detects | 1307 |
| Median Detects | 1.385 | CV Detects | 5.563 |
| Skewness Detects | 6.285 | Kurtosis Detects | 39.65 |
| Mean of Logged Detects | 1.597 | SD of Logged Detects | 2.128 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.186 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.94 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.468 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.139 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 48.3 | KM Standard Error of Mean | 41.88 |
| KM SD | 584.8 | 95% KM (BCA) UCL | 131 |
| 95% KM (t) UCL | 117.5 | 95% KM (Percentile Bootstrap) UCL | 130.6 |
| 95% KM (z) UCL | 117.2 | 95% KM Bootstrap t UCL | 1882 |
| 90% KM Chebyshev UCL | 173.9 | 95% KM Chebyshev UCL | 230.9 |
| 97.5% KM Chebyshev UCL | 309.9 | 99% KM Chebyshev UCL | 465 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 7.852 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.917 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.301 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.155 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.192 | k star (bias corrected MLE) | 0.194 |
| Theta hat (MLE) | 1225 | Theta star (bias corrected MLE) | 1211 |
| nu hat (MLE) | 15.34 | nu star (bias corrected) | 15.53 |
| Mean (detects) | 235 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 47.01 |
| Maximum | 8280 | Median | 0.01 |
| SD | 586.4 | CV | 12.47 |
| k hat (MLE) | 0.111 | k star (bias corrected MLE) | 0.113 |
| Theta hat (MLE) | 423.3 | Theta star (bias corrected MLE) | 417 |
| nu hat (MLE) | 44.42 | nu star (bias corrected) | 45.09 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (45.09, α) | 30.69 | Adjusted Chi Square Value (45.09, β) | 30.6 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 69.07 | 95% Gamma Adjusted UCL (use when $n < 50$) | 69.27 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-----------|---------------------------|--------|
| Mean (KM) | 48.3 | SD (KM) | 584.8 |
| Variance (KM) | 342028 | SE of Mean (KM) | 41.88 |
| k hat (KM) | 0.00682 | k star (KM) | 0.0101 |
| nu hat (KM) | 2.728 | nu star (KM) | 4.021 |
| theta hat (KM) | 7081 | theta star (KM) | 4805 |
| 80% gamma percentile (KM) | 6.2140E-7 | 90% gamma percentile (KM) | 0.0763 |
| 95% gamma percentile (KM) | 16.59 | 99% gamma percentile (KM) | 1282 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (4.02, α) | 0.73 | Adjusted Chi Square Value (4.02, β) | 0.72 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 266.1 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 269.6 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.781 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.94 | Detected Data Not Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|--|
| Lilliefors Test Statistic | 0.252 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.139 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 48.5 | Mean in Log Scale | 0.741 |
| SD in Original Scale | 586.3 | SD in Log Scale | 1.112 |
| 95% t UCL (assumes normality of ROS data) | 117 | 95% Percentile Bootstrap UCL | 130.7 |
| 95% BCA Bootstrap UCL | 180.2 | 95% Bootstrap t UCL | 1868 |
| 95% H-UCL (Log ROS) | 4.659 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.522 | KM Geo Mean | 1.685 |
| KM SD (logged) | 1.149 | 95% Critical H Value (KM-Log) | 2.311 |
| KM Standard Error of Mean (logged) | 0.103 | 95% H-UCL (KM -Log) | 3.935 |
| KM SD (logged) | 1.149 | 95% Critical H Value (KM-Log) | 2.311 |
| KM Standard Error of Mean (logged) | 0.103 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 61.78 |
| SD in Original Scale | 589.5 |
| 95% t UCL (Assumes normality) | 130.7 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.351 |
| SD in Log Scale | 1.385 |
| 95% H-Stat UCL | 12.95 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 230.9

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Trichloroethene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 163 |
| Number of Detects | 59 | Number of Non-Detects | 141 |
| Number of Distinct Detects | 59 | Number of Distinct Non-Detects | 105 |
| Minimum Detect | 0.908 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 30100 | Maximum Non-Detect | 1160 |
| Variance Detects | 19484012 | Percent Non-Detects | 70.5% |
| Mean Detects | 941.9 | SD Detects | 4414 |
| Median Detects | 10.4 | CV Detects | 4.686 |
| Skewness Detects | 5.903 | Kurtosis Detects | 36.12 |
| Mean of Logged Detects | 3.157 | SD of Logged Detects | 2.515 |

Normal GOF Test on Detects Only

| | |
|------------------------------|-------|
| Shapiro Wilk Test Statistic | 0.234 |
| 5% Shapiro Wilk P Value | 0 |
| Lilliefors Test Statistic | 0.437 |
| 5% Lilliefors Critical Value | 0.115 |

Normal GOF Test on Detected Observations Only
 Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------------|
| KM Mean | 280.2 | KM Standard Error of Mean | 172.3 |
| KM SD | 2415 | 95% KM (BCA) UCL | 596.9 |
| 95% KM (t) UCL | 564.9 | 95% KM (Percentile Bootstrap) UCL | 586.8 |
| 95% KM (z) UCL | 563.5 | 95% KM Bootstrap t UCL | 3682 |
| 90% KM Chebyshev UCL | 797 | 95% KM Chebyshev UCL | 1031 |
| 97.5% KM Chebyshev UCL | 1356 | 99% KM Chebyshev UCL | 1994 |

Gamma GOF Tests on Detected Observations Only

| | |
|-----------------------|-------|
| A-D Test Statistic | 7.239 |
| 5% A-D Critical Value | 0.915 |
| K-S Test Statistic | 0.267 |
| 5% K-S Critical Value | 0.129 |

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.199 | k star (bias corrected MLE) | 0.201 |
| Theta hat (MLE) | 4722 | Theta star (bias corrected MLE) | 4695 |
| nu hat (MLE) | 23.54 | nu star (bias corrected) | 23.67 |
| Mean (detects) | 941.9 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 277.9 |
| Maximum | 30100 | Median | 0.01 |
| SD | 2422 | CV | 8.715 |
| k hat (MLE) | 0.102 | k star (bias corrected MLE) | 0.104 |
| Theta hat (MLE) | 2724 | Theta star (bias corrected MLE) | 2677 |
| nu hat (MLE) | 40.8 | nu star (bias corrected) | 41.52 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (41.52, α) | 27.75 | Adjusted Chi Square Value (41.52, β) | 27.67 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 415.7 | 95% Gamma Adjusted UCL (use when $n < 50$) | 417 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|---------|---------------------------|--------|
| Mean (KM) | 280.2 | SD (KM) | 2415 |
| Variance (KM) | 5833929 | SE of Mean (KM) | 172.3 |
| k hat (KM) | 0.0135 | k star (KM) | 0.0166 |
| nu hat (KM) | 5.383 | nu star (KM) | 6.635 |
| theta hat (KM) | 20822 | theta star (KM) | 16891 |
| 80% gamma percentile (KM) | 0.0138 | 90% gamma percentile (KM) | 16.78 |
| 95% gamma percentile (KM) | 447.9 | 99% gamma percentile (KM) | 7935 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (6.64, α) | 1.973 | Adjusted Chi Square Value (6.64, β) | 1.954 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 942.4 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 951.2 |

Lognormal GOF Test on Detected Observations Only

| | |
|---|-----------|
| Shapiro Wilk Approximate Test Statistic | 0.908 |
| 5% Shapiro Wilk P Value | 1.3357E-4 |

Shapiro Wilk GOF Test

Detected Data Not Lognormal at 5% Significance Level

| | | |
|------------------------------|-------|--|
| Lilliefors Test Statistic | 0.145 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.115 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 279.3 | Mean in Log Scale | 1.311 |
| SD in Original Scale | 2421 | SD in Log Scale | 1.89 |
| 95% t UCL (assumes normality of ROS data) | 562.3 | 95% Percentile Bootstrap UCL | 579.2 |
| 95% BCA Bootstrap UCL | 747.6 | 95% Bootstrap t UCL | 3718 |
| 95% H-UCL (Log ROS) | 33.52 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 1.437 | KM Geo Mean | 4.207 |
| KM SD (logged) | 1.828 | 95% Critical H Value (KM-Log) | 3.028 |
| KM Standard Error of Mean (logged) | 0.158 | 95% H-UCL (KM -Log) | 33.11 |
| KM SD (logged) | 1.828 | 95% Critical H Value (KM-Log) | 3.028 |
| KM Standard Error of Mean (logged) | 0.158 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 291 |
| SD in Original Scale | 2421 |
| 95% t UCL (Assumes normality) | 573.9 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.785 |
| SD in Log Scale | 1.865 |
| 95% H-Stat UCL | 50.89 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 1031

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Trichlorofluoromethane)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 149 |
| Number of Detects | 5 | Number of Non-Detects | 195 |
| Number of Distinct Detects | 5 | Number of Distinct Non-Detects | 144 |
| Minimum Detect | 1.05 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 33.6 | Maximum Non-Detect | 1160 |
| Variance Detects | 205.5 | Percent Non-Detects | 97.5% |
| Mean Detects | 7.978 | SD Detects | 14.34 |
| Median Detects | 1.45 | CV Detects | 1.797 |
| Skewness Detects | 2.225 | Kurtosis Detects | 4.961 |
| Mean of Logged Detects | 1.01 | SD of Logged Detects | 1.445 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.588 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.445 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 1.761 | KM Standard Error of Mean | 0.407 |
| KM SD | 2.528 | 95% KM (BCA) UCL | 2.696 |
| 95% KM (t) UCL | 2.434 | 95% KM (Percentile Bootstrap) UCL | 2.63 |
| 95% KM (z) UCL | 2.431 | 95% KM Bootstrap t UCL | 4.101 |
| 90% KM Chebyshev UCL | 2.983 | 95% KM Chebyshev UCL | 3.536 |
| 97.5% KM Chebyshev UCL | 4.304 | 99% KM Chebyshev UCL | 5.813 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 0.919 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.707 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.399 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.37 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.582 | k star (bias corrected MLE) | 0.366 |
| Theta hat (MLE) | 13.71 | Theta star (bias corrected MLE) | 21.79 |
| nu hat (MLE) | 5.819 | nu star (bias corrected) | 3.661 |
| Mean (detects) | 7.978 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.01 | Mean | 1.407 |
| Maximum | 33.6 | Median | 0.916 |
| SD | 2.59 | CV | 1.841 |
| k hat (MLE) | 0.642 | k star (bias corrected MLE) | 0.635 |
| Theta hat (MLE) | 2.192 | Theta star (bias corrected MLE) | 2.214 |
| nu hat (MLE) | 256.6 | nu star (bias corrected) | 254.1 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (254.13, α) | 218.2 | Adjusted Chi Square Value (254.13, β) | 218 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1.638 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1.64 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 1.761 | SD (KM) | 2.528 |
| Variance (KM) | 6.39 | SE of Mean (KM) | 0.407 |
| k hat (KM) | 0.485 | k star (KM) | 0.481 |
| nu hat (KM) | 194.1 | nu star (KM) | 192.5 |
| theta hat (KM) | 3.629 | theta star (KM) | 3.659 |
| 80% gamma percentile (KM) | 2.887 | 90% gamma percentile (KM) | 4.802 |
| 95% gamma percentile (KM) | 6.857 | 99% gamma percentile (KM) | 11.93 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (192.52, α) | 161.4 | Adjusted Chi Square Value (192.52, β) | 161.2 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 2.1 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 2.103 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.749 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data Not Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|---|--|
| Lilliefors Test Statistic | 0.312 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 1.822 | Mean in Log Scale | 0.466 |
| SD in Original Scale | 2.334 | SD in Log Scale | 0.403 |
| 95% t UCL (assumes normality of ROS data) | 2.095 | 95% Percentile Bootstrap UCL | 2.136 |
| 95% BCA Bootstrap UCL | 2.37 | 95% Bootstrap t UCL | 2.639 |
| 95% H-UCL (Log ROS) | 1.817 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------------|
| KM Mean (logged) | 0.402 | KM Geo Mean | 1.495 |
| KM SD (logged) | 0.428 | 95% Critical H Value (KM-Log) | 1.781 |
| KM Standard Error of Mean (logged) | 0.199 | 95% H-UCL (KM -Log) | 1.73 |
| KM SD (logged) | 0.428 | 95% Critical H Value (KM-Log) | 1.781 |
| KM Standard Error of Mean (logged) | 0.199 | | |

DL/2 Statistics

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 21.65 | Mean in Log Scale | 1.38 |
| SD in Original Scale | 85 | SD in Log Scale | 1.242 |
| 95% t UCL (Assumes normality) | 31.58 | 95% H-Stat UCL | 10.63 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 1.73

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Vinyl chloride)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 200 | Number of Distinct Observations | 148 |
| Number of Detects | 5 | Number of Non-Detects | 195 |
| Number of Distinct Detects | 5 | Number of Distinct Non-Detects | 143 |
| Minimum Detect | 7.74 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 288 | Maximum Non-Detect | 1160 |
| Variance Detects | 13219 | Percent Non-Detects | 97.5% |
| Mean Detects | 91.17 | SD Detects | 115 |
| Median Detects | 60 | CV Detects | 1.261 |
| Skewness Detects | 1.79 | Kurtosis Detects | 3.365 |
| Mean of Logged Detects | 3.76 | SD of Logged Detects | 1.475 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.79 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.312 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 6.077 | KM Standard Error of Mean | 1.737 |
| KM SD | 21.59 | 95% KM (BCA) UCL | 9.298 |
| 95% KM (t) UCL | 8.947 | 95% KM (Percentile Bootstrap) UCL | 9.256 |
| 95% KM (z) UCL | 8.933 | 95% KM Bootstrap t UCL | 11.77 |
| 90% KM Chebyshev UCL | 11.29 | 95% KM Chebyshev UCL | 13.65 |
| 97.5% KM Chebyshev UCL | 16.92 | 99% KM Chebyshev UCL | 23.36 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.278 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.697 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.223 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.366 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.79 | k star (bias corrected MLE) | 0.449 |
| Theta hat (MLE) | 115.4 | Theta star (bias corrected MLE) | 202.9 |
| nu hat (MLE) | 7.902 | nu star (bias corrected) | 4.494 |
| Mean (detects) | 91.17 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 2.289 |
| Maximum | 288 | Median | 0.01 |
| SD | 21.66 | CV | 9.464 |
| k hat (MLE) | 0.147 | k star (bias corrected MLE) | 0.149 |
| Theta hat (MLE) | 15.52 | Theta star (bias corrected MLE) | 15.4 |
| nu hat (MLE) | 58.99 | nu star (bias corrected) | 59.44 |
| Adjusted Level of Significance (β) | 0.0488 | | |
| Approximate Chi Square Value (59.44, α) | 42.71 | Adjusted Chi Square Value (59.44, β) | 42.61 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 3.185 | 95% Gamma Adjusted UCL (use when $n < 50$) | 3.193 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 6.077 | SD (KM) | 21.59 |
| Variance (KM) | 466 | SE of Mean (KM) | 1.737 |
| k hat (KM) | 0.0792 | k star (KM) | 0.0814 |
| nu hat (KM) | 31.7 | nu star (KM) | 32.56 |
| theta hat (KM) | 76.69 | theta star (KM) | 74.66 |
| 80% gamma percentile (KM) | 2.99 | 90% gamma percentile (KM) | 14.56 |
| 95% gamma percentile (KM) | 35.36 | 99% gamma percentile (KM) | 106.8 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (32.56, α) | 20.51 | Adjusted Chi Square Value (32.56, β) | 20.44 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 9.645 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 9.677 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.949 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|---|--|
| Lilliefors Test Statistic | 0.199 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|--------|------------------------------|-------|
| Mean in Original Scale | 2.284 | Mean in Log Scale | -6.07 |
| SD in Original Scale | 21.66 | SD in Log Scale | 2.126 |
| 95% t UCL (assumes normality of ROS data) | 4.815 | 95% Percentile Bootstrap UCL | 5.14 |
| 95% BCA Bootstrap UCL | 6.682 | 95% Bootstrap t UCL | 12.39 |
| 95% H-UCL (Log ROS) | 0.0368 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | 1.397 | KM Geo Mean | 4.045 |
| KM SD (logged) | 0.444 | 95% Critical H Value (KM-Log) | 1.788 |
| KM Standard Error of Mean (logged) | 0.0361 | 95% H-UCL (KM -Log) | 4.722 |
| KM SD (logged) | 0.444 | 95% Critical H Value (KM-Log) | 1.788 |
| KM Standard Error of Mean (logged) | 0.0361 | | |

DL/2 Statistics

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 22.86 | Mean in Log Scale | 1.4 |
| SD in Original Scale | 87.03 | SD in Log Scale | 1.259 |
| 95% t UCL (Assumes normality) | 33.03 | 95% H-Stat UCL | 11.12 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 8.947

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Xylenes (total))

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 104 | Number of Distinct Observations | 84 |
| Number of Detects | 7 | Number of Non-Detects | 97 |
| Number of Distinct Detects | 7 | Number of Distinct Non-Detects | 77 |
| Minimum Detect | 2.73 | Minimum Non-Detect | 8.24 |
| Maximum Detect | 424 | Maximum Non-Detect | 2320 |
| Variance Detects | 31949 | Percent Non-Detects | 93.27% |
| Mean Detects | 131.2 | SD Detects | 178.7 |
| Median Detects | 41.8 | CV Detects | 1.362 |
| Skewness Detects | 1.226 | Kurtosis Detects | -0.562 |
| Mean of Logged Detects | 3.681 | SD of Logged Detects | 1.914 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.728 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.803 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.364 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.304 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 12.94 | KM Standard Error of Mean | 5.911 |
| KM SD | 54.28 | 95% KM (BCA) UCL | 24.77 |
| 95% KM (t) UCL | 22.75 | 95% KM (Percentile Bootstrap) UCL | 23.83 |
| 95% KM (z) UCL | 22.66 | 95% KM Bootstrap t UCL | 56.44 |
| 90% KM Chebyshev UCL | 30.67 | 95% KM Chebyshev UCL | 38.7 |
| 97.5% KM Chebyshev UCL | 49.85 | 99% KM Chebyshev UCL | 71.75 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.376 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.75 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.213 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.327 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.527 | k star (bias corrected MLE) | 0.396 |
| Theta hat (MLE) | 249.2 | Theta star (bias corrected MLE) | 331.2 |
| nu hat (MLE) | 7.374 | nu star (bias corrected) | 5.547 |
| Mean (detects) | 131.2 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 8.842 |
| Maximum | 424 | Median | 0.01 |
| SD | 54.34 | CV | 6.145 |
| k hat (MLE) | 0.126 | k star (bias corrected MLE) | 0.129 |
| Theta hat (MLE) | 69.93 | Theta star (bias corrected MLE) | 68.43 |
| nu hat (MLE) | 26.3 | nu star (bias corrected) | 26.88 |
| Adjusted Level of Significance (β) | 0.0477 | | |
| Approximate Chi Square Value (26.88, α) | 16.06 | Adjusted Chi Square Value (26.88, β) | 15.94 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 14.8 | 95% Gamma Adjusted UCL (use when $n < 50$) | 14.91 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 12.94 | SD (KM) | 54.28 |
| Variance (KM) | 2946 | SE of Mean (KM) | 5.911 |
| k hat (KM) | 0.0568 | k star (KM) | 0.0616 |
| nu hat (KM) | 11.81 | nu star (KM) | 12.81 |
| theta hat (KM) | 227.8 | theta star (KM) | 210.1 |
| 80% gamma percentile (KM) | 3.355 | 90% gamma percentile (KM) | 24.96 |
| 95% gamma percentile (KM) | 72.9 | 99% gamma percentile (KM) | 258.1 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (12.81, α) | 5.763 | Adjusted Chi Square Value (12.81, β) | 5.696 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 28.75 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 29.08 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.936 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.803 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.16 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.304 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 12.3 | Mean in Log Scale | 1.372 |
| SD in Original Scale | 53.81 | SD in Log Scale | 0.896 |
| 95% t UCL (assumes normality of ROS data) | 21.05 | 95% Percentile Bootstrap UCL | 22.14 |
| 95% BCA Bootstrap UCL | 26.19 | 95% Bootstrap t UCL | 71.72 |
| 95% H-UCL (Log ROS) | 7.102 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 1.505 | KM Geo Mean | 4.503 |
| KM SD (logged) | 0.829 | 95% Critical H Value (KM-Log) | 2.061 |
| KM Standard Error of Mean (logged) | 0.254 | 95% H-UCL (KM -Log) | 7.515 |
| KM SD (logged) | 0.829 | 95% Critical H Value (KM-Log) | 2.061 |
| KM Standard Error of Mean (logged) | 0.254 | | |

DL/2 Statistics

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 49.12 | Mean in Log Scale | 2.031 |
| SD in Original Scale | 186.7 | SD in Log Scale | 1.307 |
| 95% t UCL (Assumes normality) | 79.51 | 95% H-Stat UCL | 24.73 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

| | |
|------------------------------|-------|
| 95% KM Approximate Gamma UCL | 28.75 |
|------------------------------|-------|

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. Recommendations are based upon data size, data distribution, and skewness. These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

UCL Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation ProUCL 5.15/9/2017 2:02:14 PM
 From File HHRA Data for Review.xls
 Full Precision OFF
 Confidence Coefficient 95%
 Number of Bootstrap Operations 2000

Result (1,1,1-Trichloroethane)

General Statistics

| | | | |
|------------------------------|-----------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 246 |
| Number of Detects | 56 | Number of Non-Detects | 268 |
| Number of Distinct Detects | 55 | Number of Distinct Non-Detects | 193 |
| Minimum Detect | 0.94 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 1840000 | Maximum Non-Detect | 235000 |
| Variance Detects | 8.102E+10 | Percent Non-Detects | 82.72% |
| Mean Detects | 77675 | SD Detects | 284638 |
| Median Detects | 112.3 | CV Detects | 3.664 |
| Skewness Detects | 4.993 | Kurtosis Detects | 27.94 |
| Mean of Logged Detects | 5.265 | SD of Logged Detects | 3.799 |

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic 0.326
 5% Shapiro Wilk P Value 0
 Lilliefors Test Statistic 0.426
 5% Lilliefors Critical Value 0.118

Normal GOF Test on Detected Observations Only
 Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|--------|-----------------------------------|--------------|
| KM Mean | 13438 | KM Standard Error of Mean | 6778 |
| KM SD | 120898 | 95% KM (BCA) UCL | 26923 |
| 95% KM (t) UCL | 24618 | 95% KM (Percentile Bootstrap) UCL | 25452 |
| 95% KM (z) UCL | 24586 | 95% KM Bootstrap t UCL | 39321 |
| 90% KM Chebyshev UCL | 33770 | 95% KM Chebyshev UCL | 42980 |
| 97.5% KM Chebyshev UCL | 55764 | 99% KM Chebyshev UCL | 80874 |

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic 7.137
 5% A-D Critical Value 0.98
 K-S Test Statistic 0.317
 5% K-S Critical Value 0.135

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|--------|---------------------------------|--------|
| k hat (MLE) | 0.131 | k star (bias corrected MLE) | 0.136 |
| Theta hat (MLE) | 594178 | Theta star (bias corrected MLE) | 572705 |
| nu hat (MLE) | 14.64 | nu star (bias corrected) | 15.19 |
| Mean (detects) | 77675 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|---------|---|--------|
| Minimum | 0.01 | Mean | 13425 |
| Maximum | 1840000 | Median | 0.01 |
| SD | 121083 | CV | 9.019 |
| k hat (MLE) | 0.0684 | k star (bias corrected MLE) | 0.0698 |
| Theta hat (MLE) | 196228 | Theta star (bias corrected MLE) | 192227 |
| nu hat (MLE) | 44.33 | nu star (bias corrected) | 45.26 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (45.26, α) | 30.82 | Adjusted Chi Square Value (45.26, β) | 30.77 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 19711 | 95% Gamma Adjusted UCL (use when $n < 50$) | 19745 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-----------|---------------------------|--------|
| Mean (KM) | 13438 | SD (KM) | 120898 |
| Variance (KM) | 1.462E+10 | SE of Mean (KM) | 6778 |
| k hat (KM) | 0.0124 | k star (KM) | 0.0143 |
| nu hat (KM) | 8.005 | nu star (KM) | 9.265 |
| theta hat (KM) | 1087713 | theta star (KM) | 939876 |
| 80% gamma percentile (KM) | 0.089 | 90% gamma percentile (KM) | 336.7 |

95% gamma percentile (KM) 15003

99% gamma percentile (KM) 379689

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (9.26, α) | 3.488 | Adjusted Chi Square Value (9.26, β) | 3.472 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 35697 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 35859 |

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Approximate Test Statistic 0.906
 5% Shapiro Wilk P Value 1.7852E-4
 Lilliefors Test Statistic 0.13
 5% Lilliefors Critical Value 0.118

Shapiro Wilk GOF Test
 Detected Data Not Lognormal at 5% Significance Level

Lilliefors GOF Test
 Detected Data Not Lognormal at 5% Significance Level

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|--------|------------------------------|--------|
| Mean in Original Scale | 13426 | Mean in Log Scale | 0.0746 |
| SD in Original Scale | 121082 | SD in Log Scale | 3.081 |
| 95% t UCL (assumes normality of ROS data) | 24522 | 95% Percentile Bootstrap UCL | 25340 |
| 95% BCA Bootstrap UCL | 31534 | 95% Bootstrap t UCL | 42521 |
| 95% H-UCL (Log ROS) | 261.6 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 1.383 | KM Geo Mean | 3.988 |
| KM SD (logged) | 2.459 | 95% Critical H Value (KM-Log) | 3.594 |
| KM Standard Error of Mean (logged) | 0.194 | 95% H-UCL (KM -Log) | 133.9 |
| KM SD (logged) | 2.459 | 95% Critical H Value (KM-Log) | 3.594 |
| KM Standard Error of Mean (logged) | 0.194 | | |

DL/2 Statistics

DL/2 Normal

Mean in Original Scale 14203
 SD in Original Scale 121230
 95% t UCL (Assumes normality) 25313

DL/2 Log-Transformed

Mean in Log Scale 2.543
 SD in Log Scale 2.769
 95% H-Stat UCL 1081

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

99% KM (Chebyshev) UCL 80874

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (1,1-Dichloroethane)

General Statistics

| | | | |
|------------------------------|---------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 255 |
| Number of Detects | 66 | Number of Non-Detects | 258 |
| Number of Distinct Detects | 66 | Number of Distinct Non-Detects | 193 |
| Minimum Detect | 1.41 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 12200 | Maximum Non-Detect | 235000 |
| Variance Detects | 7615171 | Percent Non-Detects | 79.63% |
| Mean Detects | 975.2 | SD Detects | 2760 |
| Median Detects | 34.4 | CV Detects | 2.83 |
| Skewness Detects | 3.33 | Kurtosis Detects | 10.24 |
| Mean of Logged Detects | 3.959 | SD of Logged Detects | 2.373 |

Normal GOF Test on Detects Only

| | |
|------------------------------|-------|
| Shapiro Wilk Test Statistic | 0.399 |
| 5% Shapiro Wilk P Value | 0 |
| Lilliefors Test Statistic | 0.414 |
| 5% Lilliefors Critical Value | 0.109 |

Normal GOF Test on Detected Observations Only
 Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 207.3 | KM Standard Error of Mean | 74.31 |
| KM SD | 1312 | 95% KM (BCA) UCL | 338.7 |
| 95% KM (t) UCL | 329.9 | 95% KM (Percentile Bootstrap) UCL | 341.6 |
| 95% KM (z) UCL | 329.5 | 95% KM Bootstrap t UCL | 408.6 |
| 90% KM Chebyshev UCL | 430.2 | 95% KM Chebyshev UCL | 531.2 |
| 97.5% KM Chebyshev UCL | 671.3 | 99% KM Chebyshev UCL | 946.7 |

Gamma GOF Tests on Detected Observations Only

| | |
|-----------------------|-------|
| A-D Test Statistic | 6.707 |
| 5% A-D Critical Value | 0.893 |
| K-S Test Statistic | 0.268 |
| 5% K-S Critical Value | 0.121 |

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.244 | k star (bias corrected MLE) | 0.243 |
| Theta hat (MLE) | 3998 | Theta star (bias corrected MLE) | 4014 |
| nu hat (MLE) | 32.2 | nu star (bias corrected) | 32.07 |
| Mean (detects) | 975.2 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 198.7 |
| Maximum | 12200 | Median | 0.01 |
| SD | 1299 | CV | 6.538 |
| k hat (MLE) | 0.0997 | k star (bias corrected MLE) | 0.101 |
| Theta hat (MLE) | 1993 | Theta star (bias corrected MLE) | 1971 |
| nu hat (MLE) | 64.58 | nu star (bias corrected) | 65.32 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (65.32, α) | 47.72 | Adjusted Chi Square Value (65.32, β) | 47.65 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 271.9 | 95% Gamma Adjusted UCL (use when $n < 50$) | 272.3 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|---------|---------------------------|--------|
| Mean (KM) | 207.3 | SD (KM) | 1312 |
| Variance (KM) | 1720266 | SE of Mean (KM) | 74.31 |
| k hat (KM) | 0.025 | k star (KM) | 0.0268 |
| nu hat (KM) | 16.18 | nu star (KM) | 17.37 |
| theta hat (KM) | 8300 | theta star (KM) | 7734 |
| 80% gamma percentile (KM) | 1.074 | 90% gamma percentile (KM) | 88.01 |
| 95% gamma percentile (KM) | 714.8 | 99% gamma percentile (KM) | 5503 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (17.37, α) | 8.934 | Adjusted Chi Square Value (17.37, β) | 8.907 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 402.9 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 404.1 |

Lognormal GOF Test on Detected Observations Only

| | |
|---|-----------|
| Shapiro Wilk Approximate Test Statistic | 0.918 |
| 5% Shapiro Wilk P Value | 1.9765E-4 |

Shapiro Wilk GOF Test

Detected Data Not Lognormal at 5% Significance Level

| | | | |
|------------------------------|-------|--|--|
| Lilliefors Test Statistic | 0.111 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.109 | Detected Data Not Lognormal at 5% Significance Level | |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 199.3 | Mean in Log Scale | 0.419 |
| SD in Original Scale | 1299 | SD in Log Scale | 2.225 |
| 95% t UCL (assumes normality of ROS data) | 318.3 | 95% Percentile Bootstrap UCL | 326.9 |
| 95% BCA Bootstrap UCL | 354.3 | 95% Bootstrap t UCL | 378.1 |
| 95% H-UCL (Log ROS) | 27.31 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 1.511 | KM Geo Mean | 4.532 |
| KM SD (logged) | 1.728 | 95% Critical H Value (KM-Log) | 2.804 |
| KM Standard Error of Mean (logged) | 0.122 | 95% H-UCL (KM -Log) | 26.42 |
| KM SD (logged) | 1.728 | 95% Critical H Value (KM-Log) | 2.804 |
| KM Standard Error of Mean (logged) | 0.122 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|------|
| Mean in Original Scale | 1474 |
| SD in Original Scale | 9969 |
| 95% t UCL (Assumes normality) | 2387 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.426 |
| SD in Log Scale | 2.438 |
| 95% H-Stat UCL | 359 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 531.2

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (1,1-Dichloroethene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 240 |
| Number of Detects | 30 | Number of Non-Detects | 294 |
| Number of Distinct Detects | 30 | Number of Distinct Non-Detects | 211 |
| Minimum Detect | 0.928 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 136000 | Maximum Non-Detect | 235000 |
| Variance Detects | 1.133E+9 | Percent Non-Detects | 90.74% |
| Mean Detects | 14110 | SD Detects | 33663 |
| Median Detects | 103.3 | CV Detects | 2.386 |
| Skewness Detects | 3.049 | Kurtosis Detects | 9.001 |
| Mean of Logged Detects | 5.296 | SD of Logged Detects | 3.764 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.481 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.927 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.367 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.159 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------------|
| KM Mean | 1318 | KM Standard Error of Mean | 616.8 |
| KM SD | 10892 | 95% KM (BCA) UCL | 2490 |
| 95% KM (t) UCL | 2335 | 95% KM (Percentile Bootstrap) UCL | 2412 |
| 95% KM (z) UCL | 2332 | 95% KM Bootstrap t UCL | 3962 |
| 90% KM Chebyshev UCL | 3168 | 95% KM Chebyshev UCL | 4006 |
| 97.5% KM Chebyshev UCL | 5169 | 99% KM Chebyshev UCL | 7454 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.932 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.927 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.27 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.179 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.176 | k star (bias corrected MLE) | 0.181 |
| Theta hat (MLE) | 80081 | Theta star (bias corrected MLE) | 78042 |
| nu hat (MLE) | 10.57 | nu star (bias corrected) | 10.85 |
| Mean (detects) | 14110 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.01 | Mean | 1306 |
| Maximum | 136000 | Median | 0.01 |
| SD | 10887 | CV | 8.333 |
| k hat (MLE) | 0.0771 | k star (bias corrected MLE) | 0.0785 |
| Theta hat (MLE) | 16943 | Theta star (bias corrected MLE) | 16653 |
| nu hat (MLE) | 49.97 | nu star (bias corrected) | 50.84 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (50.84, α) | 35.46 | Adjusted Chi Square Value (50.84, β) | 35.41 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1873 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1876 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|----------|---------------------------|--------|
| Mean (KM) | 1318 | SD (KM) | 10892 |
| Variance (KM) | 1.186E+8 | SE of Mean (KM) | 616.8 |
| k hat (KM) | 0.0146 | k star (KM) | 0.0166 |
| nu hat (KM) | 9.482 | nu star (KM) | 10.73 |
| theta hat (KM) | 90042 | theta star (KM) | 79587 |
| 80% gamma percentile (KM) | 0.0634 | 90% gamma percentile (KM) | 78.06 |
| 95% gamma percentile (KM) | 2097 | 99% gamma percentile (KM) | 37315 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (10.73, α) | 4.401 | Adjusted Chi Square Value (10.73, β) | 4.383 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 3211 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 3225 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.921 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.927 | Detected Data Not Lognormal at 5% Significance Level |

| | | | |
|--|-------|---|--|
| Lilliefors Test Statistic | 0.153 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.159 | Detected Data appear Lognormal at 5% Significance Level | |
| Detected Data appear Approximate Lognormal at 5% Significance Level | | | |

| | | | |
|---|-------|------------------------------|---------|
| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
| Mean in Original Scale | 1307 | Mean in Log Scale | -0.0822 |
| SD in Original Scale | 10887 | SD in Log Scale | 2.349 |
| 95% t UCL (assumes normality of ROS data) | 2305 | 95% Percentile Bootstrap UCL | 2479 |
| 95% BCA Bootstrap UCL | 2873 | 95% Bootstrap t UCL | 4082 |
| 95% H-UCL (Log ROS) | 22.9 | | |

| | | | |
|---|-------|-------------------------------|-------|
| Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution | | | |
| KM Mean (logged) | 0.808 | KM Geo Mean | 2.244 |
| KM SD (logged) | 1.911 | 95% Critical H Value (KM-Log) | 2.999 |
| KM Standard Error of Mean (logged) | 0.211 | 95% H-UCL (KM -Log) | 19.17 |
| KM SD (logged) | 1.911 | 95% Critical H Value (KM-Log) | 2.999 |
| KM Standard Error of Mean (logged) | 0.211 | | |

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Statistics | | | |
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 2205 | Mean in Log Scale | 2.28 |
| SD in Original Scale | 13313 | SD in Log Scale | 2.484 |
| 95% t UCL (Assumes normality) | 3425 | 95% H-Stat UCL | 352.8 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use
 99% KM (Chebyshev) UCL 7454

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. Recommendations are based upon data size, data distribution, and skewness. These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (1,2,4-Trimethylbenzene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 235 |
| Number of Detects | 28 | Number of Non-Detects | 296 |
| Number of Distinct Detects | 27 | Number of Distinct Non-Detects | 211 |
| Minimum Detect | 0.569 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 20900 | Maximum Non-Detect | 235000 |
| Variance Detects | 18224096 | Percent Non-Detects | 91.36% |
| Mean Detects | 1284 | SD Detects | 4269 |
| Median Detects | 69.15 | CV Detects | 3.326 |
| Skewness Detects | 4.174 | Kurtosis Detects | 18.03 |
| Mean of Logged Detects | 4.158 | SD of Logged Detects | 2.541 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.336 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.924 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.431 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.164 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 117.2 | KM Standard Error of Mean | 75.01 |
| KM SD | 1305 | 95% KM (BCA) UCL | 259.3 |
| 95% KM (t) UCL | 240.9 | 95% KM (Percentile Bootstrap) UCL | 253.3 |
| 95% KM (z) UCL | 240.5 | 95% KM Bootstrap t UCL | 1506 |
| 90% KM Chebyshev UCL | 342.2 | 95% KM Chebyshev UCL | 444.1 |
| 97.5% KM Chebyshev UCL | 585.6 | 99% KM Chebyshev UCL | 863.5 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 2.335 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.884 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.246 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.182 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.239 | k star (bias corrected MLE) | 0.237 |
| Theta hat (MLE) | 5380 | Theta star (bias corrected MLE) | 5420 |
| nu hat (MLE) | 13.36 | nu star (bias corrected) | 13.26 |
| Mean (detects) | 1284 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.01 | Mean | 110.9 |
| Maximum | 20900 | Median | 0.01 |
| SD | 1286 | CV | 11.59 |
| k hat (MLE) | 0.0955 | k star (bias corrected MLE) | 0.0966 |
| Theta hat (MLE) | 1162 | Theta star (bias corrected MLE) | 1148 |
| nu hat (MLE) | 61.86 | nu star (bias corrected) | 62.62 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (62.62, α) | 45.42 | Adjusted Chi Square Value (62.62, β) | 45.35 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 153 | 95% Gamma Adjusted UCL (use when $n < 50$) | 153.2 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-----------|---------------------------|-------|
| Mean (KM) | 117.2 | SD (KM) | 1305 |
| Variance (KM) | 1701850 | SE of Mean (KM) | 75.01 |
| k hat (KM) | 0.00807 | k star (KM) | 0.01 |
| nu hat (KM) | 5.227 | nu star (KM) | 6.512 |
| theta hat (KM) | 14525 | theta star (KM) | 11659 |
| 80% gamma percentile (KM) | 1.4992E-6 | 90% gamma percentile (KM) | 0.185 |
| 95% gamma percentile (KM) | 40.2 | 99% gamma percentile (KM) | 3110 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (6.51, α) | 1.907 | Adjusted Chi Square Value (6.51, β) | 1.896 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 400.1 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 402.4 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.975 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.924 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.106 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.164 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 111.5 | Mean in Log Scale | -0.556 |
| SD in Original Scale | 1286 | SD in Log Scale | 1.877 |
| 95% t UCL (assumes normality of ROS data) | 229.3 | 95% Percentile Bootstrap UCL | 259.7 |
| 95% BCA Bootstrap UCL | 324.4 | 95% Bootstrap t UCL | 1424 |
| 95% H-UCL (Log ROS) | 4.552 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|--------------|
| KM Mean (logged) | 0.685 | KM Geo Mean | 1.984 |
| KM SD (logged) | 1.49 | 95% Critical H Value (KM-Log) | 2.561 |
| KM Standard Error of Mean (logged) | 0.333 | 95% H-UCL (KM -Log) | 7.441 |
| KM SD (logged) | 1.49 | 95% Critical H Value (KM-Log) | 2.561 |
| KM Standard Error of Mean (logged) | 0.333 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 1664 |
| SD in Original Scale | 10236 |
| 95% t UCL (Assumes normality) | 2602 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.309 |
| SD in Log Scale | 2.484 |
| 95% H-Stat UCL | 362.9 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 7.441

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (1,3,5-Trimethylbenzene)

| General Statistics | | | |
|------------------------------|---------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 237 |
| Number of Detects | 22 | Number of Non-Detects | 302 |
| Number of Distinct Detects | 22 | Number of Distinct Non-Detects | 216 |
| Minimum Detect | 0.76 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 5770 | Maximum Non-Detect | 235000 |
| Variance Detects | 1923180 | Percent Non-Detects | 93.21% |
| Mean Detects | 611.8 | SD Detects | 1387 |
| Median Detects | 78.05 | CV Detects | 2.267 |
| Skewness Detects | 3.138 | Kurtosis Detects | 9.944 |
| Mean of Logged Detects | 3.906 | SD of Logged Detects | 2.821 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.495 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.911 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.351 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.184 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 46.06 | KM Standard Error of Mean | 23.1 |
| KM SD | 395.3 | 95% KM (BCA) UCL | 87.86 |
| 95% KM (t) UCL | 84.16 | 95% KM (Percentile Bootstrap) UCL | 87.67 |
| 95% KM (z) UCL | 84.05 | 95% KM Bootstrap t UCL | 191.7 |
| 90% KM Chebyshev UCL | 115.3 | 95% KM Chebyshev UCL | 146.7 |
| 97.5% KM Chebyshev UCL | 190.3 | 99% KM Chebyshev UCL | 275.9 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.645 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.858 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.123 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.202 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|------|
| k hat (MLE) | 0.278 | k star (bias corrected MLE) | 0.27 |
| Theta hat (MLE) | 2200 | Theta star (bias corrected MLE) | 2262 |
| nu hat (MLE) | 12.23 | nu star (bias corrected) | 11.9 |
| Mean (detects) | 611.8 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 41.55 |
| Maximum | 5770 | Median | 0.01 |
| SD | 385.7 | CV | 9.284 |
| k hat (MLE) | 0.104 | k star (bias corrected MLE) | 0.105 |
| Theta hat (MLE) | 398.8 | Theta star (bias corrected MLE) | 394.7 |
| nu hat (MLE) | 67.51 | nu star (bias corrected) | 68.22 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (68.22, α) | 50.21 | Adjusted Chi Square Value (68.22, β) | 50.14 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 56.46 | 95% Gamma Adjusted UCL (use when $n < 50$) | 56.53 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-----------|---------------------------|--------|
| Mean (KM) | 46.06 | SD (KM) | 395.3 |
| Variance (KM) | 156252 | SE of Mean (KM) | 23.1 |
| k hat (KM) | 0.0136 | k star (KM) | 0.0155 |
| nu hat (KM) | 8.798 | nu star (KM) | 10.05 |
| theta hat (KM) | 3392 | theta star (KM) | 2970 |
| 80% gamma percentile (KM) | 9.5278E-4 | 90% gamma percentile (KM) | 1.894 |
| 95% gamma percentile (KM) | 63.13 | 99% gamma percentile (KM) | 1305 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (10.05, α) | 3.973 | Adjusted Chi Square Value (10.05, β) | 3.956 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 116.5 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 117 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.94 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.911 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|---|--|
| Lilliefors Test Statistic | 0.126 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.184 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 43.29 | Mean in Log Scale | 0.562 |
| SD in Original Scale | 385.6 | SD in Log Scale | 1.391 |
| 95% t UCL (assumes normality of ROS data) | 78.63 | 95% Percentile Bootstrap UCL | 81.24 |
| 95% BCA Bootstrap UCL | 108.2 | 95% Bootstrap t UCL | 191.3 |
| 95% H-UCL (Log ROS) | 5.58 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.608 | KM Geo Mean | 1.837 |
| KM SD (logged) | 1.342 | 95% Critical H Value (KM-Log) | 2.419 |
| KM Standard Error of Mean (logged) | 0.238 | 95% H-UCL (KM -Log) | 5.415 |
| KM SD (logged) | 1.342 | 95% Critical H Value (KM-Log) | 2.419 |
| KM Standard Error of Mean (logged) | 0.238 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 1595 |
| SD in Original Scale | 10172 |
| 95% t UCL (Assumes normality) | 2527 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.28 |
| SD in Log Scale | 2.461 |
| 95% H-Stat UCL | 330.8 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 116.5

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (2-Butanone)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|---------|
| Total Number of Observations | 324 | Number of Distinct Observations | 208 |
| Number of Detects | 30 | Number of Non-Detects | 294 |
| Number of Distinct Detects | 30 | Number of Distinct Non-Detects | 180 |
| Minimum Detect | 1.37 | Minimum Non-Detect | 18.9 |
| Maximum Detect | 445 | Maximum Non-Detect | 5880000 |
| Variance Detects | 18791 | Percent Non-Detects | 90.74% |
| Mean Detects | 64.86 | SD Detects | 137.1 |
| Median Detects | 5.565 | CV Detects | 2.113 |
| Skewness Detects | 2.282 | Kurtosis Detects | 3.689 |
| Mean of Logged Detects | 2.399 | SD of Logged Detects | 1.786 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.499 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.927 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.379 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.159 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------------|
| KM Mean | 12.73 | KM Standard Error of Mean | 3.618 |
| KM SD | 52.84 | 95% KM (BCA) UCL | 19.3 |
| 95% KM (t) UCL | 18.69 | 95% KM (Percentile Bootstrap) UCL | 18.93 |
| 95% KM (z) UCL | 18.68 | 95% KM Bootstrap t UCL | 22.11 |
| 90% KM Chebyshev UCL | 23.58 | 95% KM Chebyshev UCL | 28.5 |
| 97.5% KM Chebyshev UCL | 35.32 | 99% KM Chebyshev UCL | 48.73 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 3.269 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.837 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.253 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.172 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.375 | k star (bias corrected MLE) | 0.36 |
| Theta hat (MLE) | 173 | Theta star (bias corrected MLE) | 180.3 |
| nu hat (MLE) | 22.5 | nu star (bias corrected) | 21.58 |
| Mean (detects) | 64.86 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 7.626 |
| Maximum | 445 | Median | 0.01 |
| SD | 45.28 | CV | 5.938 |
| k hat (MLE) | 0.147 | k star (bias corrected MLE) | 0.148 |
| Theta hat (MLE) | 51.81 | Theta star (bias corrected MLE) | 51.56 |
| nu hat (MLE) | 95.39 | nu star (bias corrected) | 95.84 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (95.84, α) | 74.26 | Adjusted Chi Square Value (95.84, β) | 74.17 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 9.842 | 95% Gamma Adjusted UCL (use when $n < 50$) | 9.853 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|--------|
| Mean (KM) | 12.73 | SD (KM) | 52.84 |
| Variance (KM) | 2792 | SE of Mean (KM) | 3.618 |
| k hat (KM) | 0.058 | k star (KM) | 0.0595 |
| nu hat (KM) | 37.59 | nu star (KM) | 38.58 |
| theta hat (KM) | 219.4 | theta star (KM) | 213.8 |
| 80% gamma percentile (KM) | 3.005 | 90% gamma percentile (KM) | 23.75 |
| 95% gamma percentile (KM) | 71.2 | 99% gamma percentile (KM) | 257.6 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|------|
| Approximate Chi Square Value (38.58, α) | 25.35 | Adjusted Chi Square Value (38.58, β) | 25.3 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 19.36 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 19.4 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.857 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.927 | Detected Data Not Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|--|
| Lilliefors Test Statistic | 0.192 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.159 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 10.79 | Mean in Log Scale | 1.6 |
| SD in Original Scale | 44.66 | SD in Log Scale | 0.788 |
| 95% t UCL (assumes normality of ROS data) | 14.88 | 95% Percentile Bootstrap UCL | 15.16 |
| 95% BCA Bootstrap UCL | 16.72 | 95% Bootstrap t UCL | 17.74 |
| 95% H-UCL (Log ROS) | 7.365 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 1.485 | KM Geo Mean | 4.416 |
| KM SD (logged) | 0.948 | 95% Critical H Value (KM-Log) | 2.08 |
| KM Standard Error of Mean (logged) | 0.143 | 95% H-UCL (KM -Log) | 7.727 |
| KM SD (logged) | 0.948 | 95% Critical H Value (KM-Log) | 2.08 |
| KM Standard Error of Mean (logged) | 0.143 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|--------|
| Mean in Original Scale | 39230 |
| SD in Original Scale | 254258 |
| 95% t UCL (Assumes normality) | 62531 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 4.223 |
| SD in Log Scale | 3.061 |
| 95% H-Stat UCL | 15460 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 28.5

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Acetone)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|---------|
| Total Number of Observations | 324 | Number of Distinct Observations | 276 |
| Number of Detects | 177 | Number of Non-Detects | 147 |
| Number of Distinct Detects | 145 | Number of Distinct Non-Detects | 131 |
| Minimum Detect | 2.77 | Minimum Non-Detect | 39.4 |
| Maximum Detect | 757 | Maximum Non-Detect | 5880000 |
| Variance Detects | 3466 | Percent Non-Detects | 45.37% |
| Mean Detects | 24.64 | SD Detects | 58.87 |
| Median Detects | 15 | CV Detects | 2.389 |
| Skewness Detects | 11.16 | Kurtosis Detects | 137.9 |
| Mean of Logged Detects | 2.727 | SD of Logged Detects | 0.827 |

Normal GOF Test on Detects Only

| | |
|------------------------------|-------|
| Shapiro Wilk Test Statistic | 0.27 |
| 5% Shapiro Wilk P Value | 0 |
| Lilliefors Test Statistic | 0.355 |
| 5% Lilliefors Critical Value | 0.067 |

Normal GOF Test on Detected Observations Only
 Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 22.84 | KM Standard Error of Mean | 3.52 |
| KM SD | 52.39 | 95% KM (BCA) UCL | 30.06 |
| 95% KM (t) UCL | 28.65 | 95% KM (Percentile Bootstrap) UCL | 29.28 |
| 95% KM (z) UCL | 28.63 | 95% KM Bootstrap t UCL | 38.09 |
| 90% KM Chebyshev UCL | 33.4 | 95% KM Chebyshev UCL | 38.19 |
| 97.5% KM Chebyshev UCL | 44.83 | 99% KM Chebyshev UCL | 57.87 |

Gamma GOF Tests on Detected Observations Only

| | |
|-----------------------|--------|
| A-D Test Statistic | 6.872 |
| 5% A-D Critical Value | 0.779 |
| K-S Test Statistic | 0.159 |
| 5% K-S Critical Value | 0.0713 |

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 1.187 | k star (bias corrected MLE) | 1.17 |
| Theta hat (MLE) | 20.76 | Theta star (bias corrected MLE) | 21.05 |
| nu hat (MLE) | 420.1 | nu star (bias corrected) | 414.3 |
| Mean (detects) | 24.64 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.01 | Mean | 19.39 |
| Maximum | 757 | Median | 13.31 |
| SD | 44.02 | CV | 2.27 |
| k hat (MLE) | 1.395 | k star (bias corrected MLE) | 1.384 |
| Theta hat (MLE) | 13.91 | Theta star (bias corrected MLE) | 14.02 |
| nu hat (MLE) | 903.7 | nu star (bias corrected) | 896.6 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (896.63, α) | 828.1 | Adjusted Chi Square Value (896.63, β) | 827.8 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 21 | 95% Gamma Adjusted UCL (use when $n < 50$) | 21.01 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 22.84 | SD (KM) | 52.39 |
| Variance (KM) | 2745 | SE of Mean (KM) | 3.52 |
| k hat (KM) | 0.19 | k star (KM) | 0.19 |
| nu hat (KM) | 123.2 | nu star (KM) | 123.4 |
| theta hat (KM) | 120.2 | theta star (KM) | 120 |
| 80% gamma percentile (KM) | 29.3 | 90% gamma percentile (KM) | 69.04 |
| 95% gamma percentile (KM) | 119.2 | 99% gamma percentile (KM) | 258.4 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (123.39, α) | 98.74 | Adjusted Chi Square Value (123.39, β) | 98.64 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 28.55 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 28.58 |

Lognormal GOF Test on Detected Observations Only

| | |
|---|--------|
| Shapiro Wilk Approximate Test Statistic | 0.97 |
| 5% Shapiro Wilk P Value | 0.0303 |

Shapiro Wilk GOF Test

Detected Data Not Lognormal at 5% Significance Level

| | | | |
|--|--------|---|--|
| Lilliefors Test Statistic | 0.0621 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.067 | Detected Data appear Lognormal at 5% Significance Level | |
| Detected Data appear Approximate Lognormal at 5% Significance Level | | | |

| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 20.16 | Mean in Log Scale | 2.705 |
| SD in Original Scale | 43.77 | SD in Log Scale | 0.621 |
| 95% t UCL (assumes normality of ROS data) | 24.17 | 95% Percentile Bootstrap UCL | 24.78 |
| 95% BCA Bootstrap UCL | 27.91 | 95% Bootstrap t UCL | 31.62 |
| 95% H-UCL (Log ROS) | 19.34 | | |

| Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution | | | |
|---|--------|-------------------------------|--------------|
| KM Mean (logged) | 2.697 | KM Geo Mean | 14.84 |
| KM SD (logged) | 0.794 | 95% Critical H Value (KM-Log) | 1.966 |
| KM Standard Error of Mean (logged) | 0.0578 | 95% H-UCL (KM -Log) | 22.18 |
| KM SD (logged) | 0.794 | 95% Critical H Value (KM-Log) | 1.966 |
| KM Standard Error of Mean (logged) | 0.0578 | | |

| DL/2 Statistics | | | |
|-------------------------------|--------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 39245 | Mean in Log Scale | 4.524 |
| SD in Original Scale | 254256 | SD in Log Scale | 2.947 |
| 95% t UCL (Assumes normality) | 62546 | 95% H-Stat UCL | 14062 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use
 KM H-UCL 22.18

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. Recommendations are based upon data size, data distribution, and skewness. These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Benzene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 237 |
| Number of Detects | 11 | Number of Non-Detects | 313 |
| Number of Distinct Detects | 11 | Number of Distinct Non-Detects | 226 |
| Minimum Detect | 0.683 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 38.2 | Maximum Non-Detect | 235000 |
| Variance Detects | 127.1 | Percent Non-Detects | 96.6% |
| Mean Detects | 5.697 | SD Detects | 11.27 |
| Median Detects | 1.28 | CV Detects | 1.979 |
| Skewness Detects | 2.888 | Kurtosis Detects | 8.568 |
| Mean of Logged Detects | 0.749 | SD of Logged Detects | 1.232 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.501 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.85 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.435 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.251 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------------|
| KM Mean | 1.575 | KM Standard Error of Mean | 0.263 |
| KM SD | 2.616 | 95% KM (BCA) UCL | 2.082 |
| 95% KM (t) UCL | 2.008 | 95% KM (Percentile Bootstrap) UCL | 2.013 |
| 95% KM (z) UCL | 2.007 | 95% KM Bootstrap t UCL | 2.275 |
| 90% KM Chebyshev UCL | 2.363 | 95% KM Chebyshev UCL | 2.72 |
| 97.5% KM Chebyshev UCL | 3.215 | 99% KM Chebyshev UCL | 4.188 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.739 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.772 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.383 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.267 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.621 | k star (bias corrected MLE) | 0.512 |
| Theta hat (MLE) | 9.178 | Theta star (bias corrected MLE) | 11.13 |
| nu hat (MLE) | 13.66 | nu star (bias corrected) | 11.26 |
| Mean (detects) | 5.697 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.01 | Mean | 0.979 |
| Maximum | 38.2 | Median | 0.452 |
| SD | 2.394 | CV | 2.445 |
| k hat (MLE) | 0.554 | k star (bias corrected MLE) | 0.551 |
| Theta hat (MLE) | 1.766 | Theta star (bias corrected MLE) | 1.776 |
| nu hat (MLE) | 359.2 | nu star (bias corrected) | 357.2 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (357.20, α) | 314.4 | Adjusted Chi Square Value (357.20, β) | 314.2 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1.112 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1.113 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 1.575 | SD (KM) | 2.616 |
| Variance (KM) | 6.841 | SE of Mean (KM) | 0.263 |
| k hat (KM) | 0.363 | k star (KM) | 0.361 |
| nu hat (KM) | 235.1 | nu star (KM) | 234.2 |
| theta hat (KM) | 4.342 | theta star (KM) | 4.358 |
| 80% gamma percentile (KM) | 2.508 | 90% gamma percentile (KM) | 4.526 |
| 95% gamma percentile (KM) | 6.776 | 99% gamma percentile (KM) | 12.5 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (234.24, α) | 199.8 | Adjusted Chi Square Value (234.24, β) | 199.7 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 1.847 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 1.848 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.772 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.85 | Detected Data Not Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|--|
| Lilliefors Test Statistic | 0.284 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.251 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 1.597 | Mean in Log Scale | 0.339 |
| SD in Original Scale | 2.177 | SD in Log Scale | 0.383 |
| 95% t UCL (assumes normality of ROS data) | 1.796 | 95% Percentile Bootstrap UCL | 1.833 |
| 95% BCA Bootstrap UCL | 2.011 | 95% Bootstrap t UCL | 2.324 |
| 95% H-UCL (Log ROS) | 1.568 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.259 | KM Geo Mean | 1.295 |
| KM SD (logged) | 0.47 | 95% Critical H Value (KM-Log) | 1.777 |
| KM Standard Error of Mean (logged) | 0.135 | 95% H-UCL (KM -Log) | 1.515 |
| KM SD (logged) | 0.47 | 95% Critical H Value (KM-Log) | 1.777 |
| KM Standard Error of Mean (logged) | 0.135 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 1571 |
| SD in Original Scale | 10172 |
| 95% t UCL (Assumes normality) | 2503 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.194 |
| SD in Log Scale | 2.388 |
| 95% H-Stat UCL | 248 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 2.72

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Carbon tetrachloride)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 232 |
| Number of Detects | 5 | Number of Non-Detects | 319 |
| Number of Distinct Detects | 5 | Number of Distinct Non-Detects | 229 |
| Minimum Detect | 2.33 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 21.2 | Maximum Non-Detect | 235000 |
| Variance Detects | 59.18 | Percent Non-Detects | 98.46% |
| Mean Detects | 8.036 | SD Detects | 7.693 |
| Median Detects | 4.3 | CV Detects | 0.957 |
| Skewness Detects | 1.807 | Kurtosis Detects | 3.266 |
| Mean of Logged Detects | 1.772 | SD of Logged Detects | 0.85 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.784 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.286 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 2.686 | KM Standard Error of Mean | 0.231 |
| KM SD | 1.434 | 95% KM (BCA) UCL | 4.071 |
| 95% KM (t) UCL | 3.067 | 95% KM (Percentile Bootstrap) UCL | 4.035 |
| 95% KM (z) UCL | 3.066 | 95% KM Bootstrap t UCL | 3.22 |
| 90% KM Chebyshev UCL | 3.379 | 95% KM Chebyshev UCL | 3.693 |
| 97.5% KM Chebyshev UCL | 4.128 | 99% KM Chebyshev UCL | 4.984 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.39 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.685 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.286 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.361 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 1.75 | k star (bias corrected MLE) | 0.833 |
| Theta hat (MLE) | 4.592 | Theta star (bias corrected MLE) | 9.642 |
| nu hat (MLE) | 17.5 | nu star (bias corrected) | 8.334 |
| Mean (detects) | 8.036 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.01 | Mean | 0.411 |
| Maximum | 21.2 | Median | 0.01 |
| SD | 1.429 | CV | 3.477 |
| k hat (MLE) | 0.266 | k star (bias corrected MLE) | 0.266 |
| Theta hat (MLE) | 1.544 | Theta star (bias corrected MLE) | 1.546 |
| nu hat (MLE) | 172.5 | nu star (bias corrected) | 172.3 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (172.27, α) | 142.9 | Adjusted Chi Square Value (172.27, β) | 142.8 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.496 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.496 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 2.686 | SD (KM) | 1.434 |
| Variance (KM) | 2.056 | SE of Mean (KM) | 0.231 |
| k hat (KM) | 3.51 | k star (KM) | 3.479 |
| nu hat (KM) | 2274 | nu star (KM) | 2254 |
| theta hat (KM) | 0.765 | theta star (KM) | 0.772 |
| 80% gamma percentile (KM) | 3.764 | 90% gamma percentile (KM) | 4.617 |
| 95% gamma percentile (KM) | 5.407 | 99% gamma percentile (KM) | 7.106 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (N/A, α) | 2145 | Adjusted Chi Square Value (N/A, β) | 2145 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 2.823 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 2.824 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.943 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|--|-------|---|--|
| Lilliefors Test Statistic | 0.244 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Lognormal at 5% Significance Level | |
| Detected Data appear Lognormal at 5% Significance Level | | | |

| | | | |
|---|-------|------------------------------|-------|
| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
| Mean in Original Scale | 2.19 | Mean in Log Scale | 0.734 |
| SD in Original Scale | 1.217 | SD in Log Scale | 0.269 |
| 95% t UCL (assumes normality of ROS data) | 2.301 | 95% Percentile Bootstrap UCL | 2.319 |
| 95% BCA Bootstrap UCL | 2.394 | 95% Bootstrap t UCL | 2.419 |
| 95% H-UCL (Log ROS) | 2.215 | | |

| | | | |
|---|--------|-------------------------------|-------|
| Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution | | | |
| KM Mean (logged) | 0.94 | KM Geo Mean | 2.561 |
| KM SD (logged) | 0.251 | 95% Critical H Value (KM-Log) | 1.695 |
| KM Standard Error of Mean (logged) | 0.0691 | 95% H-UCL (KM -Log) | 2.706 |
| KM SD (logged) | 0.251 | 95% Critical H Value (KM-Log) | 1.695 |
| KM Standard Error of Mean (logged) | 0.0691 | | |

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Statistics | | | |
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 1571 | Mean in Log Scale | 2.229 |
| SD in Original Scale | 10172 | SD in Log Scale | 2.371 |
| 95% t UCL (Assumes normality) | 2503 | 95% H-Stat UCL | 244.7 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use
 95% KM (t) UCL 3.067

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. Recommendations are based upon data size, data distribution, and skewness. These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Chloroethane)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 240 |
| Number of Detects | 12 | Number of Non-Detects | 312 |
| Number of Distinct Detects | 12 | Number of Distinct Non-Detects | 229 |
| Minimum Detect | 1.39 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 459 | Maximum Non-Detect | 235000 |
| Variance Detects | 16241 | Percent Non-Detects | 96.3% |
| Mean Detects | 60.75 | SD Detects | 127.4 |
| Median Detects | 21.75 | CV Detects | 2.098 |
| Skewness Detects | 3.275 | Kurtosis Detects | 11.03 |
| Mean of Logged Detects | 2.856 | SD of Logged Detects | 1.668 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.483 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.859 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.376 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.243 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 4.752 | KM Standard Error of Mean | 1.748 |
| KM SD | 27.41 | 95% KM (BCA) UCL | 8.316 |
| 95% KM (t) UCL | 7.635 | 95% KM (Percentile Bootstrap) UCL | 7.969 |
| 95% KM (z) UCL | 7.626 | 95% KM Bootstrap t UCL | 13.91 |
| 90% KM Chebyshev UCL | 9.995 | 95% KM Chebyshev UCL | 12.37 |
| 97.5% KM Chebyshev UCL | 15.67 | 99% KM Chebyshev UCL | 22.14 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.598 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.784 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.189 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.259 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.507 | k star (bias corrected MLE) | 0.436 |
| Theta hat (MLE) | 119.9 | Theta star (bias corrected MLE) | 139.5 |
| nu hat (MLE) | 12.16 | nu star (bias corrected) | 10.46 |
| Mean (detects) | 60.75 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 2.26 |
| Maximum | 459 | Median | 0.01 |
| SD | 26.17 | CV | 11.58 |
| k hat (MLE) | 0.149 | k star (bias corrected MLE) | 0.15 |
| Theta hat (MLE) | 15.12 | Theta star (bias corrected MLE) | 15.05 |
| nu hat (MLE) | 96.87 | nu star (bias corrected) | 97.3 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (97.30, α) | 75.55 | Adjusted Chi Square Value (97.30, β) | 75.46 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 2.91 | 95% Gamma Adjusted UCL (use when $n < 50$) | 2.914 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 4.752 | SD (KM) | 27.41 |
| Variance (KM) | 751.1 | SE of Mean (KM) | 1.748 |
| k hat (KM) | 0.0301 | k star (KM) | 0.0318 |
| nu hat (KM) | 19.48 | nu star (KM) | 20.63 |
| theta hat (KM) | 158.1 | theta star (KM) | 149.2 |
| 80% gamma percentile (KM) | 0.0778 | 90% gamma percentile (KM) | 3.209 |
| 95% gamma percentile (KM) | 19.4 | 99% gamma percentile (KM) | 120.7 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (20.63, α) | 11.32 | Adjusted Chi Square Value (20.63, β) | 11.29 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 8.661 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 8.685 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.968 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.859 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.11 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.243 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 4.067 | Mean in Log Scale | 0.617 |
| SD in Original Scale | 26.04 | SD in Log Scale | 0.701 |
| 95% t UCL (assumes normality of ROS data) | 6.453 | 95% Percentile Bootstrap UCL | 6.965 |
| 95% BCA Bootstrap UCL | 9.262 | 95% Bootstrap t UCL | 16.9 |
| 95% H-UCL (Log ROS) | 2.552 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.813 | KM Geo Mean | 2.254 |
| KM SD (logged) | 0.673 | 95% Critical H Value (KM-Log) | 1.888 |
| KM Standard Error of Mean (logged) | 0.215 | 95% H-UCL (KM -Log) | 3.033 |
| KM SD (logged) | 0.673 | 95% Critical H Value (KM-Log) | 1.888 |
| KM Standard Error of Mean (logged) | 0.215 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 1573 |
| SD in Original Scale | 10172 |
| 95% t UCL (Assumes normality) | 2505 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.262 |
| SD in Log Scale | 2.381 |
| 95% H-Stat UCL | 260.6 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 8.661

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (cis-1,2-Dichloroethene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 260 |
| Number of Detects | 115 | Number of Non-Detects | 209 |
| Number of Distinct Detects | 113 | Number of Distinct Non-Detects | 150 |
| Minimum Detect | 0.893 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 252000 | Maximum Non-Detect | 89300 |
| Variance Detects | 1.329E+9 | Percent Non-Detects | 64.51% |
| Mean Detects | 13478 | SD Detects | 36453 |
| Median Detects | 130 | CV Detects | 2.705 |
| Skewness Detects | 3.914 | Kurtosis Detects | 18.52 |
| Mean of Logged Detects | 5.238 | SD of Logged Detects | 3.514 |

Normal GOF Test on Detects Only

| | |
|------------------------------|--------|
| Shapiro Wilk Test Statistic | 0.45 |
| 5% Shapiro Wilk P Value | 0 |
| Lilliefors Test Statistic | 0.39 |
| 5% Lilliefors Critical Value | 0.0829 |

Normal GOF Test on Detected Observations Only
 Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 4794 | KM Standard Error of Mean | 1260 |
| KM SD | 22571 | 95% KM (BCA) UCL | 7008 |
| 95% KM (t) UCL | 6872 | 95% KM (Percentile Bootstrap) UCL | 6865 |
| 95% KM (z) UCL | 6866 | 95% KM Bootstrap t UCL | 7643 |
| 90% KM Chebyshev UCL | 8574 | 95% KM Chebyshev UCL | 10286 |
| 97.5% KM Chebyshev UCL | 12662 | 99% KM Chebyshev UCL | 17330 |

Gamma GOF Tests on Detected Observations Only

| | |
|-----------------------|--------|
| A-D Test Statistic | 7.835 |
| 5% A-D Critical Value | 0.942 |
| K-S Test Statistic | 0.221 |
| 5% K-S Critical Value | 0.0958 |

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.176 | k star (bias corrected MLE) | 0.177 |
| Theta hat (MLE) | 76686 | Theta star (bias corrected MLE) | 76161 |
| nu hat (MLE) | 40.42 | nu star (bias corrected) | 40.7 |
| Mean (detects) | 13478 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.01 | Mean | 4784 |
| Maximum | 252000 | Median | 0.01 |
| SD | 22599 | CV | 4.724 |
| k hat (MLE) | 0.0863 | k star (bias corrected MLE) | 0.0875 |
| Theta hat (MLE) | 55451 | Theta star (bias corrected MLE) | 54654 |
| nu hat (MLE) | 55.9 | nu star (bias corrected) | 56.72 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (56.72, α) | 40.41 | Adjusted Chi Square Value (56.72, β) | 40.35 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 6715 | 95% Gamma Adjusted UCL (use when $n < 50$) | 6725 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|----------|---------------------------|--------|
| Mean (KM) | 4794 | SD (KM) | 22571 |
| Variance (KM) | 5.095E+8 | SE of Mean (KM) | 1260 |
| k hat (KM) | 0.0451 | k star (KM) | 0.0467 |
| nu hat (KM) | 29.23 | nu star (KM) | 30.29 |
| theta hat (KM) | 106272 | theta star (KM) | 102544 |
| 80% gamma percentile (KM) | 507.8 | 90% gamma percentile (KM) | 6674 |
| 95% gamma percentile (KM) | 24839 | 99% gamma percentile (KM) | 107040 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (30.29, α) | 18.72 | Adjusted Chi Square Value (30.29, β) | 18.68 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 7756 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 7773 |

Lognormal GOF Test on Detected Observations Only

| | |
|---|-----------|
| Shapiro Wilk Approximate Test Statistic | 0.925 |
| 5% Shapiro Wilk P Value | 6.5841E-7 |

Shapiro Wilk GOF Test

Detected Data Not Lognormal at 5% Significance Level

| | | |
|------------------------------|--------|---|
| Lilliefors Test Statistic | 0.0764 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.0829 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 4785 | Mean in Log Scale | 2.15 |
| SD in Original Scale | 22599 | SD in Log Scale | 3.213 |
| 95% t UCL (assumes normality of ROS data) | 6857 | 95% Percentile Bootstrap UCL | 6956 |
| 95% BCA Bootstrap UCL | 7637 | 95% Bootstrap t UCL | 7570 |
| 95% H-UCL (Log ROS) | 3358 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 2.331 | KM Geo Mean | 10.29 |
| KM SD (logged) | 3.043 | 95% Critical H Value (KM-Log) | 4.303 |
| KM Standard Error of Mean (logged) | 0.181 | 95% H-UCL (KM -Log) | 2184 |
| KM SD (logged) | 3.043 | 95% Critical H Value (KM-Log) | 4.303 |
| KM Standard Error of Mean (logged) | 0.181 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 4937 |
| SD in Original Scale | 22703 |
| 95% t UCL (Assumes normality) | 7017 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.755 |
| SD in Log Scale | 3.001 |
| 95% H-Stat UCL | 2890 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

99% KM (Chebyshev) UCL 17330

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Dichlorodifluoromethane)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|---------|
| Total Number of Observations | 324 | Number of Distinct Observations | 234 |
| Number of Detects | 5 | Number of Non-Detects | 319 |
| Number of Distinct Detects | 5 | Number of Distinct Non-Detects | 229 |
| Minimum Detect | 1 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 19 | Maximum Non-Detect | 1180000 |
| Variance Detects | 52.43 | Percent Non-Detects | 98.46% |
| Mean Detects | 7.808 | SD Detects | 7.241 |
| Median Detects | 7.64 | CV Detects | 0.927 |
| Skewness Detects | 0.969 | Kurtosis Detects | 0.678 |
| Mean of Logged Detects | 1.573 | SD of Logged Detects | 1.216 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.909 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.207 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 1.584 | KM Standard Error of Mean | 0.358 |
| KM SD | 1.425 | 95% KM (BCA) UCL | 4.017 |
| 95% KM (t) UCL | 2.175 | 95% KM (Percentile Bootstrap) UCL | 3.959 |
| 95% KM (z) UCL | 2.173 | 95% KM Bootstrap t UCL | 3.433 |
| 90% KM Chebyshev UCL | 2.658 | 95% KM Chebyshev UCL | 3.144 |
| 97.5% KM Chebyshev UCL | 3.82 | 99% KM Chebyshev UCL | 5.146 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.275 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.69 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.22 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.363 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 1.175 | k star (bias corrected MLE) | 0.603 |
| Theta hat (MLE) | 6.647 | Theta star (bias corrected MLE) | 12.94 |
| nu hat (MLE) | 11.75 | nu star (bias corrected) | 6.032 |
| Mean (detects) | 7.808 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.01 | Mean | 0.913 |
| Maximum | 19 | Median | 0.638 |
| SD | 1.379 | CV | 1.51 |
| k hat (MLE) | 0.676 | k star (bias corrected MLE) | 0.672 |
| Theta hat (MLE) | 1.35 | Theta star (bias corrected MLE) | 1.359 |
| nu hat (MLE) | 438.3 | nu star (bias corrected) | 435.5 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (435.53, α) | 388.1 | Adjusted Chi Square Value (435.53, β) | 388 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1.025 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1.025 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 1.584 | SD (KM) | 1.425 |
| Variance (KM) | 2.032 | SE of Mean (KM) | 0.358 |
| k hat (KM) | 1.235 | k star (KM) | 1.226 |
| nu hat (KM) | 800.5 | nu star (KM) | 794.4 |
| theta hat (KM) | 1.282 | theta star (KM) | 1.292 |
| 80% gamma percentile (KM) | 2.503 | 90% gamma percentile (KM) | 3.469 |
| 95% gamma percentile (KM) | 4.42 | 99% gamma percentile (KM) | 6.596 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (794.40, α) | 730 | Adjusted Chi Square Value (794.40, β) | 729.7 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 1.724 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 1.725 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.932 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|---|--|
| Lilliefors Test Statistic | 0.248 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 1.508 | Mean in Log Scale | 0.321 |
| SD in Original Scale | 1.203 | SD in Log Scale | 0.356 |
| 95% t UCL (assumes normality of ROS data) | 1.618 | 95% Percentile Bootstrap UCL | 1.626 |
| 95% BCA Bootstrap UCL | 1.674 | 95% Bootstrap t UCL | 1.738 |
| 95% H-UCL (Log ROS) | 1.519 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.344 | KM Geo Mean | 1.411 |
| KM SD (logged) | 0.399 | 95% Critical H Value (KM-Log) | 1.747 |
| KM Standard Error of Mean (logged) | 0.247 | 95% H-UCL (KM -Log) | 1.588 |
| KM SD (logged) | 0.399 | 95% Critical H Value (KM-Log) | 1.747 |
| KM Standard Error of Mean (logged) | 0.247 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 7857 |
| SD in Original Scale | 50950 |
| 95% t UCL (Assumes normality) | 12526 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.733 |
| SD in Log Scale | 3.018 |
| 95% H-Stat UCL | 2997 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 2.175

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Ethylbenzene)

General Statistics

| | | | |
|------------------------------|---------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 244 |
| Number of Detects | 45 | Number of Non-Detects | 279 |
| Number of Distinct Detects | 45 | Number of Distinct Non-Detects | 200 |
| Minimum Detect | 0.767 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 10100 | Maximum Non-Detect | 235000 |
| Variance Detects | 2904512 | Percent Non-Detects | 86.11% |
| Mean Detects | 711.1 | SD Detects | 1704 |
| Median Detects | 82.6 | CV Detects | 2.397 |
| Skewness Detects | 4.251 | Kurtosis Detects | 21.36 |
| Mean of Logged Detects | 4.041 | SD of Logged Detects | 2.711 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.476 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.945 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.338 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.131 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 106.4 | KM Standard Error of Mean | 39.58 |
| KM SD | 688.8 | 95% KM (BCA) UCL | 179.7 |
| 95% KM (t) UCL | 171.7 | 95% KM (Percentile Bootstrap) UCL | 174.8 |
| 95% KM (z) UCL | 171.5 | 95% KM Bootstrap t UCL | 244.2 |
| 90% KM Chebyshev UCL | 225.1 | 95% KM Chebyshev UCL | 278.9 |
| 97.5% KM Chebyshev UCL | 353.6 | 99% KM Chebyshev UCL | 500.2 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.474 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.873 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.184 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.144 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.277 | k star (bias corrected MLE) | 0.273 |
| Theta hat (MLE) | 2571 | Theta star (bias corrected MLE) | 2605 |
| nu hat (MLE) | 24.9 | nu star (bias corrected) | 24.57 |
| Mean (detects) | 711.1 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 98.78 |
| Maximum | 10100 | Median | 0.01 |
| SD | 675.5 | CV | 6.839 |
| k hat (MLE) | 0.101 | k star (bias corrected MLE) | 0.102 |
| Theta hat (MLE) | 974.3 | Theta star (bias corrected MLE) | 963.7 |
| nu hat (MLE) | 65.69 | nu star (bias corrected) | 66.42 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (66.42, α) | 48.66 | Adjusted Chi Square Value (66.42, β) | 48.59 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 134.8 | 95% Gamma Adjusted UCL (use when $n < 50$) | 135 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 106.4 | SD (KM) | 688.8 |
| Variance (KM) | 474513 | SE of Mean (KM) | 39.58 |
| k hat (KM) | 0.0239 | k star (KM) | 0.0257 |
| nu hat (KM) | 15.46 | nu star (KM) | 16.65 |
| theta hat (KM) | 4460 | theta star (KM) | 4141 |
| 80% gamma percentile (KM) | 0.402 | 90% gamma percentile (KM) | 39.7 |
| 95% gamma percentile (KM) | 349.6 | 99% gamma percentile (KM) | 2852 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (16.65, α) | 8.423 | Adjusted Chi Square Value (16.65, β) | 8.397 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 210.3 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 211 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.941 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.945 | Detected Data Not Lognormal at 5% Significance Level |

| | | | |
|--|-------|---|--|
| Lilliefors Test Statistic | 0.109 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.131 | Detected Data appear Lognormal at 5% Significance Level | |
| Detected Data appear Approximate Lognormal at 5% Significance Level | | | |

| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 100.4 | Mean in Log Scale | 0.828 |
| SD in Original Scale | 675.3 | SD in Log Scale | 1.809 |
| 95% t UCL (assumes normality of ROS data) | 162.3 | 95% Percentile Bootstrap UCL | 164.3 |
| 95% BCA Bootstrap UCL | 191.6 | 95% Bootstrap t UCL | 228.8 |
| 95% H-UCL (Log ROS) | 15.73 | | |

| Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution | | | |
|---|-------|-------------------------------|--------------|
| KM Mean (logged) | 0.954 | KM Geo Mean | 2.596 |
| KM SD (logged) | 1.73 | 95% Critical H Value (KM-Log) | 2.806 |
| KM Standard Error of Mean (logged) | 0.157 | 95% H-UCL (KM -Log) | 15.19 |
| KM SD (logged) | 1.73 | 95% Critical H Value (KM-Log) | 2.806 |
| KM Standard Error of Mean (logged) | 0.157 | | |

| DL/2 Statistics | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 1643 | Mean in Log Scale | 2.34 |
| SD in Original Scale | 10180 | SD in Log Scale | 2.539 |
| 95% t UCL (Assumes normality) | 2576 | 95% H-Stat UCL | 439.2 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use
 KM H-UCL 15.19

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. Recommendations are based upon data size, data distribution, and skewness. These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Isopropylbenzene)

General Statistics

| | | | |
|------------------------------|---------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 235 |
| Number of Detects | 29 | Number of Non-Detects | 295 |
| Number of Distinct Detects | 29 | Number of Distinct Non-Detects | 209 |
| Minimum Detect | 0.958 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 8970 | Maximum Non-Detect | 235000 |
| Variance Detects | 2785062 | Percent Non-Detects | 91.05% |
| Mean Detects | 456.3 | SD Detects | 1669 |
| Median Detects | 45.4 | CV Detects | 3.657 |
| Skewness Detects | 5.094 | Kurtosis Detects | 26.65 |
| Mean of Logged Detects | 3.592 | SD of Logged Detects | 2.258 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.288 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.926 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.439 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.161 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 45.23 | KM Standard Error of Mean | 29.93 |
| KM SD | 518.2 | 95% KM (BCA) UCL | 102.6 |
| 95% KM (t) UCL | 94.61 | 95% KM (Percentile Bootstrap) UCL | 100.3 |
| 95% KM (z) UCL | 94.47 | 95% KM Bootstrap t UCL | 438.7 |
| 90% KM Chebyshev UCL | 135 | 95% KM Chebyshev UCL | 175.7 |
| 97.5% KM Chebyshev UCL | 232.2 | 99% KM Chebyshev UCL | 343 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 2.161 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.867 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.234 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.178 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.276 | k star (bias corrected MLE) | 0.271 |
| Theta hat (MLE) | 1652 | Theta star (bias corrected MLE) | 1686 |
| nu hat (MLE) | 16.02 | nu star (bias corrected) | 15.69 |
| Mean (detects) | 456.3 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 40.85 |
| Maximum | 8970 | Median | 0.01 |
| SD | 508.4 | CV | 12.44 |
| k hat (MLE) | 0.106 | k star (bias corrected MLE) | 0.107 |
| Theta hat (MLE) | 384.3 | Theta star (bias corrected MLE) | 380.5 |
| nu hat (MLE) | 68.88 | nu star (bias corrected) | 69.57 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (69.57, α) | 51.37 | Adjusted Chi Square Value (69.57, β) | 51.3 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 55.33 | 95% Gamma Adjusted UCL (use when $n < 50$) | 55.4 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-----------|---------------------------|---------|
| Mean (KM) | 45.23 | SD (KM) | 518.2 |
| Variance (KM) | 268548 | SE of Mean (KM) | 29.93 |
| k hat (KM) | 0.00762 | k star (KM) | 0.00961 |
| nu hat (KM) | 4.937 | nu star (KM) | 6.225 |
| theta hat (KM) | 5937 | theta star (KM) | 4709 |
| 80% gamma percentile (KM) | 2.1751E-7 | 90% gamma percentile (KM) | 0.046 |
| 95% gamma percentile (KM) | 12.82 | 99% gamma percentile (KM) | 1183 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (6.22, α) | 1.756 | Adjusted Chi Square Value (6.22, β) | 1.745 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 160.4 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 161.3 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.971 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.926 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|--|--------|---|
| Lilliefors Test Statistic | 0.0805 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.161 | Detected Data appear Lognormal at 5% Significance Level |
| Detected Data appear Lognormal at 5% Significance Level | | |

| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
|--|-------|------------------------------|-------|
| Mean in Original Scale | 42.41 | Mean in Log Scale | 0.594 |
| SD in Original Scale | 508.3 | SD in Log Scale | 1.339 |
| 95% t UCL (assumes normality of ROS data) | 88.98 | 95% Percentile Bootstrap UCL | 96.28 |
| 95% BCA Bootstrap UCL | 129.4 | 95% Bootstrap t UCL | 459.8 |
| 95% H-UCL (Log ROS) | 5.316 | | |

| Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution | | | |
|--|-------|-------------------------------|--------------|
| KM Mean (logged) | 0.911 | KM Geo Mean | 2.486 |
| KM SD (logged) | 1.22 | 95% Critical H Value (KM-Log) | 2.308 |
| KM Standard Error of Mean (logged) | 0.181 | 95% H-UCL (KM -Log) | 6.121 |
| KM SD (logged) | 1.22 | 95% Critical H Value (KM-Log) | 2.308 |
| KM Standard Error of Mean (logged) | 0.181 | | |

| DL/2 Statistics | | | |
|-------------------------------|-------|----------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 1605 | Mean in Log Scale | 2.249 |
| SD in Original Scale | 10179 | SD in Log Scale | 2.438 |
| 95% t UCL (Assumes normality) | 2537 | 95% H-Stat UCL | 300.7 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use
 KM H-UCL 6.121

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. Recommendations are based upon data size, data distribution, and skewness. These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (m-,p-Xylene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 232 |
| Number of Detects | 36 | Number of Non-Detects | 288 |
| Number of Distinct Detects | 36 | Number of Distinct Non-Detects | 199 |
| Minimum Detect | 1.75 | Minimum Non-Detect | 7.58 |
| Maximum Detect | 35700 | Maximum Non-Detect | 471000 |
| Variance Detects | 47393661 | Percent Non-Detects | 88.89% |
| Mean Detects | 3309 | SD Detects | 6884 |
| Median Detects | 173 | CV Detects | 2.081 |
| Skewness Detects | 3.4 | Kurtosis Detects | 13.93 |
| Mean of Logged Detects | 5.238 | SD of Logged Detects | 3.061 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.553 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.935 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.315 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.145 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 390.3 | KM Standard Error of Mean | 145.9 |
| KM SD | 2538 | 95% KM (BCA) UCL | 643 |
| 95% KM (t) UCL | 630.9 | 95% KM (Percentile Bootstrap) UCL | 654.3 |
| 95% KM (z) UCL | 630.3 | 95% KM Bootstrap t UCL | 838.1 |
| 90% KM Chebyshev UCL | 827.9 | 95% KM Chebyshev UCL | 1026 |
| 97.5% KM Chebyshev UCL | 1301 | 99% KM Chebyshev UCL | 1842 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.311 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.883 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.164 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.161 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.248 | k star (bias corrected MLE) | 0.246 |
| Theta hat (MLE) | 13334 | Theta star (bias corrected MLE) | 13451 |
| nu hat (MLE) | 17.87 | nu star (bias corrected) | 17.71 |
| Mean (detects) | 3309 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.01 | Mean | 367.6 |
| Maximum | 35700 | Median | 0.01 |
| SD | 2494 | CV | 6.784 |
| k hat (MLE) | 0.0876 | k star (bias corrected MLE) | 0.0889 |
| Theta hat (MLE) | 4195 | Theta star (bias corrected MLE) | 4137 |
| nu hat (MLE) | 56.78 | nu star (bias corrected) | 57.59 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (57.59, α) | 41.15 | Adjusted Chi Square Value (57.59, β) | 41.08 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 514.6 | 95% Gamma Adjusted UCL (use when $n < 50$) | 515.4 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|---------|---------------------------|--------|
| Mean (KM) | 390.3 | SD (KM) | 2538 |
| Variance (KM) | 6440022 | SE of Mean (KM) | 145.9 |
| k hat (KM) | 0.0237 | k star (KM) | 0.0255 |
| nu hat (KM) | 15.33 | nu star (KM) | 16.52 |
| theta hat (KM) | 16498 | theta star (KM) | 15309 |
| 80% gamma percentile (KM) | 1.389 | 90% gamma percentile (KM) | 142.1 |
| 95% gamma percentile (KM) | 1271 | 99% gamma percentile (KM) | 10479 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (16.52, α) | 8.333 | Adjusted Chi Square Value (16.52, β) | 8.307 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 774.1 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 776.5 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.923 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.935 | Detected Data Not Lognormal at 5% Significance Level |

| | | | |
|--|-------|---|--|
| Lilliefors Test Statistic | 0.128 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.145 | Detected Data appear Lognormal at 5% Significance Level | |
| Detected Data appear Approximate Lognormal at 5% Significance Level | | | |

| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 371.4 | Mean in Log Scale | 1.47 |
| SD in Original Scale | 2493 | SD in Log Scale | 1.906 |
| 95% t UCL (assumes normality of ROS data) | 599.9 | 95% Percentile Bootstrap UCL | 620.9 |
| 95% BCA Bootstrap UCL | 726.3 | 95% Bootstrap t UCL | 817.6 |
| 95% H-UCL (Log ROS) | 36.74 | | |

| Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution | | | |
|---|-------|-------------------------------|--------------|
| KM Mean (logged) | 1.771 | KM Geo Mean | 5.879 |
| KM SD (logged) | 1.697 | 95% Critical H Value (KM-Log) | 2.771 |
| KM Standard Error of Mean (logged) | 0.157 | 95% H-UCL (KM -Log) | 32.23 |
| KM SD (logged) | 1.697 | 95% Critical H Value (KM-Log) | 2.771 |
| KM Standard Error of Mean (logged) | 0.157 | | |

| DL/2 Statistics | | | |
|-------------------------------|-------|-----------------------------|------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 3466 | Mean in Log Scale | 3.06 |
| SD in Original Scale | 20461 | SD in Log Scale | 2.59 |
| 95% t UCL (Assumes normality) | 5341 | 95% H-Stat UCL | 1046 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use
 KM H-UCL 32.23

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
 Recommendations are based upon data size, data distribution, and skewness.
 These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
 However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Methylene chloride)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|---------|
| Total Number of Observations | 324 | Number of Distinct Observations | 213 |
| Number of Detects | 75 | Number of Non-Detects | 249 |
| Number of Distinct Detects | 71 | Number of Distinct Non-Detects | 145 |
| Minimum Detect | 0.869 | Minimum Non-Detect | 15.4 |
| Maximum Detect | 1460 | Maximum Non-Detect | 1180000 |
| Variance Detects | 32745 | Percent Non-Detects | 76.85% |
| Mean Detects | 51.9 | SD Detects | 181 |
| Median Detects | 3.01 | CV Detects | 3.487 |
| Skewness Detects | 6.673 | Kurtosis Detects | 50.81 |
| Mean of Logged Detects | 1.725 | SD of Logged Detects | 1.779 |

Normal GOF Test on Detects Only

| | |
|------------------------------|-------|
| Shapiro Wilk Test Statistic | 0.319 |
| 5% Shapiro Wilk P Value | 0 |
| Lilliefors Test Statistic | 0.399 |
| 5% Lilliefors Critical Value | 0.102 |

Normal GOF Test on Detected Observations Only
 Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 16.99 | KM Standard Error of Mean | 5.649 |
| KM SD | 94.51 | 95% KM (BCA) UCL | 29.03 |
| 95% KM (t) UCL | 26.3 | 95% KM (Percentile Bootstrap) UCL | 27.13 |
| 95% KM (z) UCL | 26.28 | 95% KM Bootstrap t UCL | 37.67 |
| 90% KM Chebyshev UCL | 33.93 | 95% KM Chebyshev UCL | 41.61 |
| 97.5% KM Chebyshev UCL | 52.26 | 99% KM Chebyshev UCL | 73.19 |

Gamma GOF Tests on Detected Observations Only

| | |
|-----------------------|-------|
| A-D Test Statistic | 11.81 |
| 5% A-D Critical Value | 0.863 |
| K-S Test Statistic | 0.375 |
| 5% K-S Critical Value | 0.112 |

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.309 | k star (bias corrected MLE) | 0.305 |
| Theta hat (MLE) | 168.2 | Theta star (bias corrected MLE) | 170.1 |
| nu hat (MLE) | 46.29 | nu star (bias corrected) | 45.77 |
| Mean (detects) | 51.9 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 14.07 |
| Maximum | 1460 | Median | 0.01 |
| SD | 89.46 | CV | 6.356 |
| k hat (MLE) | 0.15 | k star (bias corrected MLE) | 0.15 |
| Theta hat (MLE) | 94.03 | Theta star (bias corrected MLE) | 93.61 |
| nu hat (MLE) | 96.99 | nu star (bias corrected) | 97.42 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (97.42, α) | 75.66 | Adjusted Chi Square Value (97.42, β) | 75.57 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 18.12 | 95% Gamma Adjusted UCL (use when $n < 50$) | 18.14 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 16.99 | SD (KM) | 94.51 |
| Variance (KM) | 8931 | SE of Mean (KM) | 5.649 |
| k hat (KM) | 0.0323 | k star (KM) | 0.0341 |
| nu hat (KM) | 20.93 | nu star (KM) | 22.07 |
| theta hat (KM) | 525.8 | theta star (KM) | 498.7 |
| 80% gamma percentile (KM) | 0.411 | 90% gamma percentile (KM) | 13.39 |
| 95% gamma percentile (KM) | 73.22 | 99% gamma percentile (KM) | 422.9 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (22.07, α) | 12.39 | Adjusted Chi Square Value (22.07, β) | 12.36 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 30.25 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 30.33 |

Lognormal GOF Test on Detected Observations Only

| | |
|---|-----------|
| Shapiro Wilk Approximate Test Statistic | 0.78 |
| 5% Shapiro Wilk P Value | 1.221E-15 |

Shapiro Wilk GOF Test

Detected Data Not Lognormal at 5% Significance Level

| | | |
|------------------------------|-------|--|
| Lilliefors Test Statistic | 0.272 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.102 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 15.21 | Mean in Log Scale | 1.354 |
| SD in Original Scale | 88.96 | SD in Log Scale | 1.03 |
| 95% t UCL (assumes normality of ROS data) | 23.36 | 95% Percentile Bootstrap UCL | 24.61 |
| 95% BCA Bootstrap UCL | 30.74 | 95% Bootstrap t UCL | 34.71 |
| 95% H-UCL (Log ROS) | 7.444 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | 1.182 | KM Geo Mean | 3.262 |
| KM SD (logged) | 1.158 | 95% Critical H Value (KM-Log) | 2.252 |
| KM Standard Error of Mean (logged) | 0.0997 | 95% H-UCL (KM -Log) | 7.37 |
| KM SD (logged) | 1.158 | 95% Critical H Value (KM-Log) | 2.252 |
| KM Standard Error of Mean (logged) | 0.0997 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 7842 |
| SD in Original Scale | 50952 |
| 95% t UCL (Assumes normality) | 12511 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 3.366 |
| SD in Log Scale | 2.636 |
| 95% H-Stat UCL | 1631 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 41.61

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Naphthalene)

| General Statistics | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 236 |
| Number of Detects | 13 | Number of Non-Detects | 311 |
| Number of Distinct Detects | 13 | Number of Distinct Non-Detects | 223 |
| Minimum Detect | 0.78 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 187 | Maximum Non-Detect | 235000 |
| Variance Detects | 3352 | Percent Non-Detects | 95.99% |
| Mean Detects | 56.93 | SD Detects | 57.9 |
| Median Detects | 30.2 | CV Detects | 1.017 |
| Skewness Detects | 1.086 | Kurtosis Detects | 0.52 |
| Mean of Logged Detects | 3.254 | SD of Logged Detects | 1.629 |

| Normal GOF Test on Detects Only | | | |
|---------------------------------|-------|--|--|
| Shapiro Wilk Test Statistic | 0.868 | Shapiro Wilk GOF Test | |
| 5% Shapiro Wilk Critical Value | 0.866 | Detected Data appear Normal at 5% Significance Level | |
| Lilliefors Test Statistic | 0.216 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.234 | Detected Data appear Normal at 5% Significance Level | |

Detected Data appear Normal at 5% Significance Level

| Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs | | | |
|--|-------|-----------------------------------|-------|
| KM Mean | 4.187 | KM Standard Error of Mean | 1.172 |
| KM SD | 16.87 | 95% KM (BCA) UCL | 7.759 |
| 95% KM (t) UCL | 6.12 | 95% KM (Percentile Bootstrap) UCL | 6.888 |
| 95% KM (z) UCL | 6.114 | 95% KM Bootstrap t UCL | 7.06 |
| 90% KM Chebyshev UCL | 7.702 | 95% KM Chebyshev UCL | 9.294 |
| 97.5% KM Chebyshev UCL | 11.5 | 99% KM Chebyshev UCL | 15.84 |

| Gamma GOF Tests on Detected Observations Only | | | |
|---|-------|---|--|
| A-D Test Statistic | 0.258 | Anderson-Darling GOF Test | |
| 5% A-D Critical Value | 0.77 | Detected data appear Gamma Distributed at 5% Significance Level | |
| K-S Test Statistic | 0.168 | Kolmogorov-Smirnov GOF | |
| 5% K-S Critical Value | 0.246 | Detected data appear Gamma Distributed at 5% Significance Level | |

Detected data appear Gamma Distributed at 5% Significance Level

| Gamma Statistics on Detected Data Only | | | |
|--|-------|---------------------------------|-------|
| k hat (MLE) | 0.758 | k star (bias corrected MLE) | 0.635 |
| Theta hat (MLE) | 75.08 | Theta star (bias corrected MLE) | 89.72 |
| nu hat (MLE) | 19.72 | nu star (bias corrected) | 16.5 |
| Mean (detects) | 56.93 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 2.294 |
| Maximum | 187 | Median | 0.01 |
| SD | 15.8 | CV | 6.889 |
| k hat (MLE) | 0.15 | k star (bias corrected MLE) | 0.151 |
| Theta hat (MLE) | 15.28 | Theta star (bias corrected MLE) | 15.22 |
| nu hat (MLE) | 97.26 | nu star (bias corrected) | 97.69 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (97.69, α) | 75.89 | Adjusted Chi Square Value (97.69, β) | 75.81 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 2.953 | 95% Gamma Adjusted UCL (use when $n < 50$) | 2.956 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 4.187 | SD (KM) | 16.87 |
| Variance (KM) | 284.5 | SE of Mean (KM) | 1.172 |
| k hat (KM) | 0.0616 | k star (KM) | 0.0631 |
| nu hat (KM) | 39.94 | nu star (KM) | 40.9 |
| theta hat (KM) | 67.94 | theta star (KM) | 66.34 |
| 80% gamma percentile (KM) | 1.161 | 90% gamma percentile (KM) | 8.271 |
| 95% gamma percentile (KM) | 23.71 | 99% gamma percentile (KM) | 82.64 |

| Gamma Kaplan-Meier (KM) Statistics | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (40.90, α) | 27.24 | Adjusted Chi Square Value (40.90, β) | 27.19 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 6.286 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 6.298 |

| Lognormal GOF Test on Detected Observations Only | | | |
|--|-------|---|--|
| Shapiro Wilk Test Statistic | 0.916 | Shapiro Wilk GOF Test | |
| 5% Shapiro Wilk Critical Value | 0.866 | Detected Data appear Lognormal at 5% Significance Level | |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.185 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.234 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 3.514 | Mean in Log Scale | 0.207 |
| SD in Original Scale | 15.65 | SD in Log Scale | 0.903 |
| 95% t UCL (assumes normality of ROS data) | 4.948 | 95% Percentile Bootstrap UCL | 5.063 |
| 95% BCA Bootstrap UCL | 5.582 | 95% Bootstrap t UCL | 5.844 |
| 95% H-UCL (Log ROS) | 2.051 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.423 | KM Geo Mean | 1.527 |
| KM SD (logged) | 0.894 | 95% Critical H Value (KM-Log) | 2.038 |
| KM Standard Error of Mean (logged) | 0.37 | 95% H-UCL (KM -Log) | 2.519 |
| KM SD (logged) | 0.894 | 95% Critical H Value (KM-Log) | 2.038 |
| KM Standard Error of Mean (logged) | 0.37 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 1572 |
| SD in Original Scale | 10172 |
| 95% t UCL (Assumes normality) | 2504 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.223 |
| SD in Log Scale | 2.39 |
| 95% H-Stat UCL | 256.6 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 6.12

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (n-Propylbenzene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 238 |
| Number of Detects | 23 | Number of Non-Detects | 301 |
| Number of Distinct Detects | 23 | Number of Distinct Non-Detects | 215 |
| Minimum Detect | 0.859 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 36400 | Maximum Non-Detect | 235000 |
| Variance Detects | 57531383 | Percent Non-Detects | 92.9% |
| Mean Detects | 2193 | SD Detects | 7585 |
| Median Detects | 150 | CV Detects | 3.458 |
| Skewness Detects | 4.553 | Kurtosis Detects | 21.26 |
| Mean of Logged Detects | 4.666 | SD of Logged Detects | 2.663 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.314 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.914 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.409 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.18 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 163.1 | KM Standard Error of Mean | 119.8 |
| KM SD | 2082 | 95% KM (BCA) UCL | 380.7 |
| 95% KM (t) UCL | 360.7 | 95% KM (Percentile Bootstrap) UCL | 390.2 |
| 95% KM (z) UCL | 360.1 | 95% KM Bootstrap t UCL | 1502 |
| 90% KM Chebyshev UCL | 522.5 | 95% KM Chebyshev UCL | 685.3 |
| 97.5% KM Chebyshev UCL | 911.2 | 99% KM Chebyshev UCL | 1355 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.662 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.88 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.228 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.199 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.237 | k star (bias corrected MLE) | 0.235 |
| Theta hat (MLE) | 9266 | Theta star (bias corrected MLE) | 9341 |
| nu hat (MLE) | 10.89 | nu star (bias corrected) | 10.8 |
| Mean (detects) | 2193 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.01 | Mean | 155.7 |
| Maximum | 36400 | Median | 0.01 |
| SD | 2058 | CV | 13.22 |
| k hat (MLE) | 0.0913 | k star (bias corrected MLE) | 0.0925 |
| Theta hat (MLE) | 1705 | Theta star (bias corrected MLE) | 1683 |
| nu hat (MLE) | 59.17 | nu star (bias corrected) | 59.95 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (59.95, α) | 43.15 | Adjusted Chi Square Value (59.95, β) | 43.08 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 216.4 | 95% Gamma Adjusted UCL (use when $n < 50$) | 216.7 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-----------|---------------------------|---------|
| Mean (KM) | 163.1 | SD (KM) | 2082 |
| Variance (KM) | 4333569 | SE of Mean (KM) | 119.8 |
| k hat (KM) | 0.00613 | k star (KM) | 0.00814 |
| nu hat (KM) | 3.975 | nu star (KM) | 5.272 |
| theta hat (KM) | 26578 | theta star (KM) | 20042 |
| 80% gamma percentile (KM) | 1.3884E-8 | 90% gamma percentile (KM) | 0.0269 |
| 95% gamma percentile (KM) | 20.73 | 99% gamma percentile (KM) | 3972 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (5.27, α) | 1.28 | Adjusted Chi Square Value (5.27, β) | 1.271 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 671.6 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 676.2 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.986 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.914 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|--------|---|
| Lilliefors Test Statistic | 0.0913 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.18 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 156.6 | Mean in Log Scale | -0.147 |
| SD in Original Scale | 2058 | SD in Log Scale | 1.778 |
| 95% t UCL (assumes normality of ROS data) | 345.2 | 95% Percentile Bootstrap UCL | 375.4 |
| 95% BCA Bootstrap UCL | 509.2 | 95% Bootstrap t UCL | 1573 |
| 95% H-UCL (Log ROS) | 5.562 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|--------------|
| KM Mean (logged) | 0.722 | KM Geo Mean | 2.058 |
| KM SD (logged) | 1.419 | 95% Critical H Value (KM-Log) | 2.492 |
| KM Standard Error of Mean (logged) | 0.241 | 95% H-UCL (KM -Log) | 6.858 |
| KM SD (logged) | 1.419 | 95% Critical H Value (KM-Log) | 2.492 |
| KM Standard Error of Mean (logged) | 0.241 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 1706 |
| SD in Original Scale | 10355 |
| 95% t UCL (Assumes normality) | 2655 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.287 |
| SD in Log Scale | 2.484 |
| 95% H-Stat UCL | 355.4 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 6.858

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (o-Xylene)

General Statistics

| | | | |
|------------------------------|---------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 236 |
| Number of Detects | 28 | Number of Non-Detects | 296 |
| Number of Distinct Detects | 28 | Number of Distinct Non-Detects | 210 |
| Minimum Detect | 0.978 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 11700 | Maximum Non-Detect | 235000 |
| Variance Detects | 4808120 | Percent Non-Detects | 91.36% |
| Mean Detects | 625.6 | SD Detects | 2193 |
| Median Detects | 56.35 | CV Detects | 3.505 |
| Skewness Detects | 5.124 | Kurtosis Detects | 26.74 |
| Mean of Logged Detects | 3.771 | SD of Logged Detects | 2.607 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.292 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.924 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.388 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.164 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 58.74 | KM Standard Error of Mean | 38.51 |
| KM SD | 668.6 | 95% KM (BCA) UCL | 136.3 |
| 95% KM (t) UCL | 122.3 | 95% KM (Percentile Bootstrap) UCL | 132 |
| 95% KM (z) UCL | 122.1 | 95% KM Bootstrap t UCL | 413.5 |
| 90% KM Chebyshev UCL | 174.3 | 95% KM Chebyshev UCL | 226.6 |
| 97.5% KM Chebyshev UCL | 299.2 | 99% KM Chebyshev UCL | 441.9 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 1.41 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.872 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.168 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.181 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.264 | k star (bias corrected MLE) | 0.259 |
| Theta hat (MLE) | 2370 | Theta star (bias corrected MLE) | 2411 |
| nu hat (MLE) | 14.78 | nu star (bias corrected) | 14.53 |
| Mean (detects) | 625.6 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 54.07 |
| Maximum | 11700 | Median | 0.01 |
| SD | 658 | CV | 12.17 |
| k hat (MLE) | 0.103 | k star (bias corrected MLE) | 0.104 |
| Theta hat (MLE) | 525.9 | Theta star (bias corrected MLE) | 520.3 |
| nu hat (MLE) | 66.62 | nu star (bias corrected) | 67.34 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (67.34, α) | 49.45 | Adjusted Chi Square Value (67.34, β) | 49.38 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 73.62 | 95% Gamma Adjusted UCL (use when $n < 50$) | 73.73 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-----------|---------------------------|---------|
| Mean (KM) | 58.74 | SD (KM) | 668.6 |
| Variance (KM) | 446960 | SE of Mean (KM) | 38.51 |
| k hat (KM) | 0.00772 | k star (KM) | 0.00971 |
| nu hat (KM) | 5.002 | nu star (KM) | 6.289 |
| theta hat (KM) | 7609 | theta star (KM) | 6052 |
| 80% gamma percentile (KM) | 3.5425E-7 | 90% gamma percentile (KM) | 0.0661 |
| 95% gamma percentile (KM) | 17.4 | 99% gamma percentile (KM) | 1542 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (6.29, α) | 1.789 | Adjusted Chi Square Value (6.29, β) | 1.779 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 206.5 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 207.7 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.936 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.924 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.125 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.164 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 56.22 | Mean in Log Scale | 0.866 |
| SD in Original Scale | 657.8 | SD in Log Scale | 1.371 |
| 95% t UCL (assumes normality of ROS data) | 116.5 | 95% Percentile Bootstrap UCL | 128.5 |
| 95% BCA Bootstrap UCL | 202.2 | 95% Bootstrap t UCL | 416.6 |
| 95% H-UCL (Log ROS) | 7.329 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.823 | KM Geo Mean | 2.278 |
| KM SD (logged) | 1.293 | 95% Critical H Value (KM-Log) | 2.374 |
| KM Standard Error of Mean (logged) | 0.141 | 95% H-UCL (KM -Log) | 6.234 |
| KM SD (logged) | 1.293 | 95% Critical H Value (KM-Log) | 2.374 |
| KM Standard Error of Mean (logged) | 0.141 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 1605 |
| SD in Original Scale | 10185 |
| 95% t UCL (Assumes normality) | 2538 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.268 |
| SD in Log Scale | 2.451 |
| 95% H-Stat UCL | 317.8 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 206.5

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (p-Isopropyltoluene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 241 |
| Number of Detects | 35 | Number of Non-Detects | 289 |
| Number of Distinct Detects | 35 | Number of Distinct Non-Detects | 208 |
| Minimum Detect | 0.707 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 71500 | Maximum Non-Detect | 235000 |
| Variance Detects | 1.458E+8 | Percent Non-Detects | 89.2% |
| Mean Detects | 2388 | SD Detects | 12074 |
| Median Detects | 44.7 | CV Detects | 5.055 |
| Skewness Detects | 5.845 | Kurtosis Detects | 34.39 |
| Mean of Logged Detects | 3.788 | SD of Logged Detects | 2.697 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.207 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.934 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.473 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.148 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 264.9 | KM Standard Error of Mean | 227.2 |
| KM SD | 4006 | 95% KM (BCA) UCL | 716.7 |
| 95% KM (t) UCL | 639.8 | 95% KM (Percentile Bootstrap) UCL | 712.1 |
| 95% KM (z) UCL | 638.7 | 95% KM Bootstrap t UCL | 8826 |
| 90% KM Chebyshev UCL | 946.7 | 95% KM Chebyshev UCL | 1255 |
| 97.5% KM Chebyshev UCL | 1684 | 99% KM Chebyshev UCL | 2526 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 4.376 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.92 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.321 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.166 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.186 | k star (bias corrected MLE) | 0.19 |
| Theta hat (MLE) | 12810 | Theta star (bias corrected MLE) | 12603 |
| nu hat (MLE) | 13.05 | nu star (bias corrected) | 13.27 |
| Mean (detects) | 2388 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.01 | Mean | 258 |
| Maximum | 71500 | Median | 0.01 |
| SD | 3987 | CV | 15.45 |
| k hat (MLE) | 0.089 | k star (bias corrected MLE) | 0.0903 |
| Theta hat (MLE) | 2898 | Theta star (bias corrected MLE) | 2858 |
| nu hat (MLE) | 57.7 | nu star (bias corrected) | 58.5 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (58.50, α) | 41.91 | Adjusted Chi Square Value (58.50, β) | 41.85 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 360.1 | 95% Gamma Adjusted UCL (use when $n < 50$) | 360.7 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-----------|---------------------------|---------|
| Mean (KM) | 264.9 | SD (KM) | 4006 |
| Variance (KM) | 16047577 | SE of Mean (KM) | 227.2 |
| k hat (KM) | 0.00437 | k star (KM) | 0.00639 |
| nu hat (KM) | 2.834 | nu star (KM) | 4.141 |
| theta hat (KM) | 60576 | theta star (KM) | 41455 |
| 80% gamma percentile (KM) | 1.600E-11 | 90% gamma percentile (KM) | 0.00162 |
| 95% gamma percentile (KM) | 7.644 | 99% gamma percentile (KM) | 5518 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (4.14, α) | 0.778 | Adjusted Chi Square Value (4.14, β) | 0.772 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 1410 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 1421 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.948 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.934 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|--|-------|---|--|
| Lilliefors Test Statistic | 0.116 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.148 | Detected Data appear Lognormal at 5% Significance Level | |
| Detected Data appear Lognormal at 5% Significance Level | | | |

| | | | |
|---|-------|------------------------------|-------|
| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
| Mean in Original Scale | 259.6 | Mean in Log Scale | 0.679 |
| SD in Original Scale | 3987 | SD in Log Scale | 1.584 |
| 95% t UCL (assumes normality of ROS data) | 625 | 95% Percentile Bootstrap UCL | 696.6 |
| 95% BCA Bootstrap UCL | 1155 | 95% Bootstrap t UCL | 9280 |
| 95% H-UCL (Log ROS) | 8.743 | | |

| | | | |
|---|-------|-------------------------------|--------------|
| Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution | | | |
| KM Mean (logged) | 0.717 | KM Geo Mean | 2.049 |
| KM SD (logged) | 1.529 | 95% Critical H Value (KM-Log) | 2.6 |
| KM Standard Error of Mean (logged) | 0.168 | 95% H-UCL (KM -Log) | 8.228 |
| KM SD (logged) | 1.529 | 95% Critical H Value (KM-Log) | 2.6 |
| KM Standard Error of Mean (logged) | 0.168 | | |

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Statistics | | | |
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 1702 | Mean in Log Scale | 2.262 |
| SD in Original Scale | 10693 | SD in Log Scale | 2.471 |
| 95% t UCL (Assumes normality) | 2682 | 95% H-Stat UCL | 334 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use
 KM H-UCL 8.228

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. Recommendations are based upon data size, data distribution, and skewness. These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (sec-Butylbenzene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 232 |
| Number of Detects | 8 | Number of Non-Detects | 316 |
| Number of Distinct Detects | 8 | Number of Distinct Non-Detects | 225 |
| Minimum Detect | 0.916 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 1540 | Maximum Non-Detect | 235000 |
| Variance Detects | 283659 | Percent Non-Detects | 97.53% |
| Mean Detects | 224.5 | SD Detects | 532.6 |
| Median Detects | 31.4 | CV Detects | 2.372 |
| Skewness Detects | 2.806 | Kurtosis Detects | 7.903 |
| Mean of Logged Detects | 3.327 | SD of Logged Detects | 2.336 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.475 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.818 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.464 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.283 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 7.358 | KM Standard Error of Mean | 5.466 |
| KM SD | 88.7 | 95% KM (BCA) UCL | 18.3 |
| 95% KM (t) UCL | 16.37 | 95% KM (Percentile Bootstrap) UCL | 17.75 |
| 95% KM (z) UCL | 16.35 | 95% KM Bootstrap t UCL | 89.13 |
| 90% KM Chebyshev UCL | 23.76 | 95% KM Chebyshev UCL | 31.18 |
| 97.5% KM Chebyshev UCL | 41.49 | 99% KM Chebyshev UCL | 61.75 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.712 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.793 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.291 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.316 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.326 | k star (bias corrected MLE) | 0.287 |
| Theta hat (MLE) | 688.8 | Theta star (bias corrected MLE) | 782.2 |
| nu hat (MLE) | 5.216 | nu star (bias corrected) | 4.593 |
| Mean (detects) | 224.5 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 5.554 |
| Maximum | 1540 | Median | 0.01 |
| SD | 85.82 | CV | 15.45 |
| k hat (MLE) | 0.128 | k star (bias corrected MLE) | 0.129 |
| Theta hat (MLE) | 43.28 | Theta star (bias corrected MLE) | 42.99 |
| nu hat (MLE) | 83.15 | nu star (bias corrected) | 83.71 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (83.71, α) | 63.63 | Adjusted Chi Square Value (83.71, β) | 63.55 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 7.308 | 95% Gamma Adjusted UCL (use when $n < 50$) | 7.317 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-----------|---------------------------|---------|
| Mean (KM) | 7.358 | SD (KM) | 88.7 |
| Variance (KM) | 7867 | SE of Mean (KM) | 5.466 |
| k hat (KM) | 0.00688 | k star (KM) | 0.00888 |
| nu hat (KM) | 4.459 | nu star (KM) | 5.751 |
| theta hat (KM) | 1069 | theta star (KM) | 829 |
| 80% gamma percentile (KM) | 5.6525E-9 | 90% gamma percentile (KM) | 0.00328 |
| 95% gamma percentile (KM) | 1.452 | 99% gamma percentile (KM) | 186.7 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (5.75, α) | 1.514 | Adjusted Chi Square Value (5.75, β) | 1.505 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 27.95 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 28.12 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.935 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.818 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|---|--|
| Lilliefors Test Statistic | 0.229 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.283 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 6.744 | Mean in Log Scale | 0.08 |
| SD in Original Scale | 85.75 | SD in Log Scale | 0.893 |
| 95% t UCL (assumes normality of ROS data) | 14.6 | 95% Percentile Bootstrap UCL | 16.17 |
| 95% BCA Bootstrap UCL | 25.53 | 95% Bootstrap t UCL | 116.8 |
| 95% H-UCL (Log ROS) | 1.785 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.303 | KM Geo Mean | 1.354 |
| KM SD (logged) | 0.712 | 95% Critical H Value (KM-Log) | 1.912 |
| KM Standard Error of Mean (logged) | 0.221 | 95% H-UCL (KM -Log) | 1.882 |
| KM SD (logged) | 0.712 | 95% Critical H Value (KM-Log) | 1.912 |
| KM Standard Error of Mean (logged) | 0.221 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 1573 |
| SD in Original Scale | 10172 |
| 95% t UCL (Assumes normality) | 2506 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.219 |
| SD in Log Scale | 2.385 |
| 95% H-Stat UCL | 252.3 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 27.95

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Tetrachloroethene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|---------|
| Total Number of Observations | 324 | Number of Distinct Observations | 235 |
| Number of Detects | 8 | Number of Non-Detects | 316 |
| Number of Distinct Detects | 8 | Number of Distinct Non-Detects | 227 |
| Minimum Detect | 1.04 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 36.2 | Maximum Non-Detect | 235000 |
| Variance Detects | 174.5 | Percent Non-Detects | 97.53% |
| Mean Detects | 11.72 | SD Detects | 13.21 |
| Median Detects | 5.82 | CV Detects | 1.127 |
| Skewness Detects | 1.028 | Kurtosis Detects | -0.0653 |
| Mean of Logged Detects | 1.656 | SD of Logged Detects | 1.477 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.831 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.818 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.269 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.283 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 1.797 | KM Standard Error of Mean | 0.287 |
| KM SD | 3.025 | 95% KM (BCA) UCL | 2.394 |
| 95% KM (t) UCL | 2.271 | 95% KM (Percentile Bootstrap) UCL | 2.348 |
| 95% KM (z) UCL | 2.27 | 95% KM Bootstrap t UCL | 2.512 |
| 90% KM Chebyshev UCL | 2.659 | 95% KM Chebyshev UCL | 3.049 |
| 97.5% KM Chebyshev UCL | 3.591 | 99% KM Chebyshev UCL | 4.656 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.555 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.746 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.278 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.304 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.744 | k star (bias corrected MLE) | 0.548 |
| Theta hat (MLE) | 15.76 | Theta star (bias corrected MLE) | 21.38 |
| nu hat (MLE) | 11.9 | nu star (bias corrected) | 8.771 |
| Mean (detects) | 11.72 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.01 | Mean | 0.853 |
| Maximum | 36.2 | Median | 0.063 |
| SD | 2.822 | CV | 3.309 |
| k hat (MLE) | 0.349 | k star (bias corrected MLE) | 0.348 |
| Theta hat (MLE) | 2.441 | Theta star (bias corrected MLE) | 2.449 |
| nu hat (MLE) | 226.4 | nu star (bias corrected) | 225.6 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (225.61, α) | 191.8 | Adjusted Chi Square Value (225.61, β) | 191.7 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1.003 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1.003 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 1.797 | SD (KM) | 3.025 |
| Variance (KM) | 9.15 | SE of Mean (KM) | 0.287 |
| k hat (KM) | 0.353 | k star (KM) | 0.352 |
| nu hat (KM) | 228.7 | nu star (KM) | 227.9 |
| theta hat (KM) | 5.092 | theta star (KM) | 5.11 |
| 80% gamma percentile (KM) | 2.848 | 90% gamma percentile (KM) | 5.185 |
| 95% gamma percentile (KM) | 7.801 | 99% gamma percentile (KM) | 14.47 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (227.88, α) | 193.9 | Adjusted Chi Square Value (227.88, β) | 193.8 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 2.111 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 2.113 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.859 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.818 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|---|--|
| Lilliefors Test Statistic | 0.244 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.283 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 1.857 | Mean in Log Scale | 0.442 |
| SD in Original Scale | 2.57 | SD in Log Scale | 0.458 |
| 95% t UCL (assumes normality of ROS data) | 2.093 | 95% Percentile Bootstrap UCL | 2.112 |
| 95% BCA Bootstrap UCL | 2.224 | 95% Bootstrap t UCL | 2.333 |
| 95% H-UCL (Log ROS) | 1.807 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.375 | KM Geo Mean | 1.455 |
| KM SD (logged) | 0.433 | 95% Critical H Value (KM-Log) | 1.761 |
| KM Standard Error of Mean (logged) | 0.133 | 95% H-UCL (KM -Log) | 1.667 |
| KM SD (logged) | 0.433 | 95% Critical H Value (KM-Log) | 1.761 |
| KM Standard Error of Mean (logged) | 0.133 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 1571 |
| SD in Original Scale | 10172 |
| 95% t UCL (Assumes normality) | 2503 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.203 |
| SD in Log Scale | 2.378 |
| 95% H-Stat UCL | 243.1 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 2.271

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Toluene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 253 |
| Number of Detects | 63 | Number of Non-Detects | 261 |
| Number of Distinct Detects | 60 | Number of Distinct Non-Detects | 196 |
| Minimum Detect | 0.828 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 305000 | Maximum Non-Detect | 235000 |
| Variance Detects | 1.476E+9 | Percent Non-Detects | 80.56% |
| Mean Detects | 5043 | SD Detects | 38415 |
| Median Detects | 3.69 | CV Detects | 7.618 |
| Skewness Detects | 7.928 | Kurtosis Detects | 62.9 |
| Mean of Logged Detects | 2.278 | SD of Logged Detects | 2.622 |

Normal GOF Test on Detects Only

| | |
|------------------------------|-------|
| Shapiro Wilk Test Statistic | 0.134 |
| 5% Shapiro Wilk P Value | 0 |
| Lilliefors Test Statistic | 0.509 |
| 5% Lilliefors Critical Value | 0.111 |

Normal GOF Test on Detected Observations Only
 Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------------|
| KM Mean | 984.3 | KM Standard Error of Mean | 947.7 |
| KM SD | 16923 | 95% KM (BCA) UCL | 2864 |
| 95% KM (t) UCL | 2548 | 95% KM (Percentile Bootstrap) UCL | 2862 |
| 95% KM (z) UCL | 2543 | 95% KM Bootstrap t UCL | 195276 |
| 90% KM Chebyshev UCL | 3827 | 95% KM Chebyshev UCL | 5115 |
| 97.5% KM Chebyshev UCL | 6903 | 99% KM Chebyshev UCL | 10414 |

Gamma GOF Tests on Detected Observations Only

| | |
|-----------------------|-------|
| A-D Test Statistic | 14.1 |
| 5% A-D Critical Value | 0.986 |
| K-S Test Statistic | 0.359 |
| 5% K-S Critical Value | 0.128 |

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.126 | k star (bias corrected MLE) | 0.131 |
| Theta hat (MLE) | 39996 | Theta star (bias corrected MLE) | 38595 |
| nu hat (MLE) | 15.89 | nu star (bias corrected) | 16.46 |
| Mean (detects) | 5043 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.01 | Mean | 980.6 |
| Maximum | 305000 | Median | 0.01 |
| SD | 16949 | CV | 17.28 |
| k hat (MLE) | 0.0819 | k star (bias corrected MLE) | 0.0832 |
| Theta hat (MLE) | 11970 | Theta star (bias corrected MLE) | 11783 |
| nu hat (MLE) | 53.08 | nu star (bias corrected) | 53.93 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (53.93, α) | 38.05 | Adjusted Chi Square Value (53.93, β) | 38 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1390 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1392 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-----------|---------------------------|-----------|
| Mean (KM) | 984.3 | SD (KM) | 16923 |
| Variance (KM) | 2.864E+8 | SE of Mean (KM) | 947.7 |
| k hat (KM) | 0.00338 | k star (KM) | 0.00541 |
| nu hat (KM) | 2.192 | nu star (KM) | 3.505 |
| theta hat (KM) | 290956 | theta star (KM) | 181962 |
| 80% gamma percentile (KM) | 1.245E-13 | 90% gamma percentile (KM) | 3.5637E-4 |
| 95% gamma percentile (KM) | 7.815 | 99% gamma percentile (KM) | 17581 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (3.51, α) | 0.537 | Adjusted Chi Square Value (3.51, β) | 0.532 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 6430 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 6486 |

Lognormal GOF Test on Detected Observations Only

| | |
|---|-----------|
| Shapiro Wilk Approximate Test Statistic | 0.83 |
| 5% Shapiro Wilk P Value | 1.2750E-9 |

Shapiro Wilk GOF Test

Detected Data Not Lognormal at 5% Significance Level

| | | |
|------------------------------|-------|--|
| Lilliefors Test Statistic | 0.183 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.111 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 982.3 | Mean in Log Scale | 0.935 |
| SD in Original Scale | 16949 | SD in Log Scale | 1.423 |
| 95% t UCL (assumes normality of ROS data) | 2536 | 95% Percentile Bootstrap UCL | 2862 |
| 95% BCA Bootstrap UCL | 3893 | 95% Bootstrap t UCL | 194421 |
| 95% H-UCL (Log ROS) | 8.546 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.718 | KM Geo Mean | 2.05 |
| KM SD (logged) | 1.497 | 95% Critical H Value (KM-Log) | 2.569 |
| KM Standard Error of Mean (logged) | 0.103 | 95% H-UCL (KM -Log) | 7.788 |
| KM SD (logged) | 1.497 | 95% Critical H Value (KM-Log) | 2.569 |
| KM Standard Error of Mean (logged) | 0.103 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 2520 |
| SD in Original Scale | 19690 |
| 95% t UCL (Assumes normality) | 4324 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.211 |
| SD in Log Scale | 2.493 |
| 95% H-Stat UCL | 338.1 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 5115

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (trans-1,2-Dichloroethene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 242 |
| Number of Detects | 18 | Number of Non-Detects | 306 |
| Number of Distinct Detects | 18 | Number of Distinct Non-Detects | 224 |
| Minimum Detect | 1.22 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 1230 | Maximum Non-Detect | 235000 |
| Variance Detects | 82462 | Percent Non-Detects | 94.44% |
| Mean Detects | 127.8 | SD Detects | 287.2 |
| Median Detects | 35.35 | CV Detects | 2.246 |
| Skewness Detects | 3.712 | Kurtosis Detects | 14.61 |
| Mean of Logged Detects | 3.237 | SD of Logged Detects | 2.025 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.465 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.897 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.366 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.202 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 10.07 | KM Standard Error of Mean | 4.449 |
| KM SD | 74.62 | 95% KM (BCA) UCL | 18.91 |
| 95% KM (t) UCL | 17.4 | 95% KM (Percentile Bootstrap) UCL | 18.37 |
| 95% KM (z) UCL | 17.38 | 95% KM Bootstrap t UCL | 35.43 |
| 90% KM Chebyshev UCL | 23.41 | 95% KM Chebyshev UCL | 29.46 |
| 97.5% KM Chebyshev UCL | 37.85 | 99% KM Chebyshev UCL | 54.33 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.659 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.82 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.177 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.218 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.407 | k star (bias corrected MLE) | 0.376 |
| Theta hat (MLE) | 314.3 | Theta star (bias corrected MLE) | 340.1 |
| nu hat (MLE) | 14.64 | nu star (bias corrected) | 13.53 |
| Mean (detects) | 127.8 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 7.112 |
| Maximum | 1230 | Median | 0.01 |
| SD | 72.11 | CV | 10.14 |
| k hat (MLE) | 0.128 | k star (bias corrected MLE) | 0.129 |
| Theta hat (MLE) | 55.48 | Theta star (bias corrected MLE) | 55.11 |
| nu hat (MLE) | 83.06 | nu star (bias corrected) | 83.63 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (83.63, α) | 63.55 | Adjusted Chi Square Value (83.63, β) | 63.47 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 9.359 | 95% Gamma Adjusted UCL (use when $n < 50$) | 9.37 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|---------|---------------------------|--------|
| Mean (KM) | 10.07 | SD (KM) | 74.62 |
| Variance (KM) | 5568 | SE of Mean (KM) | 4.449 |
| k hat (KM) | 0.0182 | k star (KM) | 0.0201 |
| nu hat (KM) | 11.79 | nu star (KM) | 13.02 |
| theta hat (KM) | 553.2 | theta star (KM) | 501.1 |
| 80% gamma percentile (KM) | 0.00428 | 90% gamma percentile (KM) | 1.512 |
| 95% gamma percentile (KM) | 23.27 | 99% gamma percentile (KM) | 281.1 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (13.02, α) | 5.903 | Adjusted Chi Square Value (13.02, β) | 5.882 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 22.19 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 22.27 |

Lognormal GOF Test on Detected Observations Only

| | | |
|-----------------------------|-------|------------------------------|
| Shapiro Wilk Test Statistic | 0.943 | Shapiro Wilk GOF Test |
|-----------------------------|-------|------------------------------|

| | | |
|--------------------------------|-------|---|
| 5% Shapiro Wilk Critical Value | 0.897 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.154 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.202 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 9.442 | Mean in Log Scale | 0.895 |
| SD in Original Scale | 71.9 | SD in Log Scale | 0.909 |
| 95% t UCL (assumes normality of ROS data) | 16.03 | 95% Percentile Bootstrap UCL | 16.87 |
| 95% BCA Bootstrap UCL | 22.24 | 95% Bootstrap t UCL | 34.37 |
| 95% H-UCL (Log ROS) | 4.106 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.905 | KM Geo Mean | 2.473 |
| KM SD (logged) | 0.881 | 95% Critical H Value (KM-Log) | 2.028 |
| KM Standard Error of Mean (logged) | 0.16 | 95% H-UCL (KM -Log) | 4.024 |
| KM SD (logged) | 0.881 | 95% Critical H Value (KM-Log) | 2.028 |
| KM Standard Error of Mean (logged) | 0.16 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 1573 |
| SD in Original Scale | 10172 |
| 95% t UCL (Assumes normality) | 2505 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.217 |
| SD in Log Scale | 2.38 |
| 95% H-Stat UCL | 247.9 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 22.19

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Trichloroethene)

General Statistics

| | | | |
|------------------------------|-----------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 268 |
| Number of Detects | 138 | Number of Non-Detects | 186 |
| Number of Distinct Detects | 136 | Number of Distinct Non-Detects | 138 |
| Minimum Detect | 0.906 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 4380000 | Maximum Non-Detect | 9320 |
| Variance Detects | 4.008E+11 | Percent Non-Detects | 57.41% |
| Mean Detects | 144399 | SD Detects | 633106 |
| Median Detects | 70.35 | CV Detects | 4.384 |
| Skewness Detects | 5.306 | Kurtosis Detects | 28.67 |
| Mean of Logged Detects | 5.082 | SD of Logged Detects | 3.913 |

Normal GOF Test on Detects Only

| | |
|------------------------------|--------|
| Shapiro Wilk Test Statistic | 0.258 |
| 5% Shapiro Wilk P Value | 0 |
| Lilliefors Test Statistic | 0.445 |
| 5% Lilliefors Critical Value | 0.0758 |

Normal GOF Test on Detected Observations Only
 Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|--------|-----------------------------------|---------------|
| KM Mean | 61508 | KM Standard Error of Mean | 23297 |
| KM SD | 417830 | 95% KM (BCA) UCL | 102978 |
| 95% KM (t) UCL | 99939 | 95% KM (Percentile Bootstrap) UCL | 104384 |
| 95% KM (z) UCL | 99828 | 95% KM Bootstrap t UCL | 122385 |
| 90% KM Chebyshev UCL | 131400 | 95% KM Chebyshev UCL | 163058 |
| 97.5% KM Chebyshev UCL | 206999 | 99% KM Chebyshev UCL | 293313 |

Gamma GOF Tests on Detected Observations Only

| | |
|-----------------------|--------|
| A-D Test Statistic | 19.46 |
| 5% A-D Critical Value | 1 |
| K-S Test Statistic | 0.318 |
| 5% K-S Critical Value | 0.0909 |

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|---------|---------------------------------|---------|
| k hat (MLE) | 0.117 | k star (bias corrected MLE) | 0.119 |
| Theta hat (MLE) | 1233756 | Theta star (bias corrected MLE) | 1210115 |
| nu hat (MLE) | 32.3 | nu star (bias corrected) | 32.93 |
| Mean (detects) | 144399 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|---------|---|--------|
| Minimum | 0.01 | Mean | 61503 |
| Maximum | 4380000 | Median | 0.01 |
| SD | 418477 | CV | 6.804 |
| k hat (MLE) | 0.0732 | k star (bias corrected MLE) | 0.0746 |
| Theta hat (MLE) | 839984 | Theta star (bias corrected MLE) | 824449 |
| nu hat (MLE) | 47.45 | nu star (bias corrected) | 48.34 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (48.34, α) | 33.38 | Adjusted Chi Square Value (48.34, β) | 33.33 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 89065 | 95% Gamma Adjusted UCL (use when $n < 50$) | 89213 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-----------|---------------------------|---------|
| Mean (KM) | 61508 | SD (KM) | 417830 |
| Variance (KM) | 1.746E+11 | SE of Mean (KM) | 23297 |
| k hat (KM) | 0.0217 | k star (KM) | 0.0235 |
| nu hat (KM) | 14.04 | nu star (KM) | 15.25 |
| theta hat (KM) | 2838372 | theta star (KM) | 2614342 |
| 80% gamma percentile (KM) | 113.7 | 90% gamma percentile (KM) | 17095 |
| 95% gamma percentile (KM) | 180715 | 99% gamma percentile (KM) | 1677564 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|--------|--|--------|
| Approximate Chi Square Value (15.25, α) | 7.433 | Adjusted Chi Square Value (15.25, β) | 7.408 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 126162 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 126577 |

Lognormal GOF Test on Detected Observations Only

| | |
|---|-----------|
| Shapiro Wilk Approximate Test Statistic | 0.892 |
| 5% Shapiro Wilk P Value | 6.106E-15 |

Shapiro Wilk GOF Test

Detected Data Not Lognormal at 5% Significance Level

| | | |
|------------------------------|--------|--|
| Lilliefors Test Statistic | 0.103 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.0758 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|--------|------------------------------|--------|
| Mean in Original Scale | 61504 | Mean in Log Scale | 2.104 |
| SD in Original Scale | 418476 | SD in Log Scale | 3.719 |
| 95% t UCL (assumes normality of ROS data) | 99855 | 95% Percentile Bootstrap UCL | 102299 |
| 95% BCA Bootstrap UCL | 110904 | 95% Bootstrap t UCL | 121816 |
| 95% H-UCL (Log ROS) | 23868 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 2.626 | KM Geo Mean | 13.81 |
| KM SD (logged) | 3.365 | 95% Critical H Value (KM-Log) | 4.693 |
| KM Standard Error of Mean (logged) | 0.198 | 95% H-UCL (KM -Log) | 9555 |
| KM SD (logged) | 3.365 | 95% Critical H Value (KM-Log) | 4.693 |
| KM Standard Error of Mean (logged) | 0.198 | | |

DL/2 Statistics

DL/2 Normal

Mean in Original Scale 61553
 SD in Original Scale 418469
 95% t UCL (Assumes normality) 99903

DL/2 Log-Transformed

Mean in Log Scale 3.063
 SD in Log Scale 3.318
 95% H-Stat UCL 12373

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

99% KM (Chebyshev) UCL 293313

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Trichlorofluoromethane)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 235 |
| Number of Detects | 5 | Number of Non-Detects | 319 |
| Number of Distinct Detects | 5 | Number of Distinct Non-Detects | 230 |
| Minimum Detect | 1.05 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 33.6 | Maximum Non-Detect | 235000 |
| Variance Detects | 205.5 | Percent Non-Detects | 98.46% |
| Mean Detects | 7.978 | SD Detects | 14.34 |
| Median Detects | 1.45 | CV Detects | 1.797 |
| Skewness Detects | 2.225 | Kurtosis Detects | 4.961 |
| Mean of Logged Detects | 1.01 | SD of Logged Detects | 1.445 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.588 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.445 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 1.716 | KM Standard Error of Mean | 0.384 |
| KM SD | 2.23 | 95% KM (BCA) UCL | 2.63 |
| 95% KM (t) UCL | 2.35 | 95% KM (Percentile Bootstrap) UCL | 2.584 |
| 95% KM (z) UCL | 2.348 | 95% KM Bootstrap t UCL | 3.702 |
| 90% KM Chebyshev UCL | 2.869 | 95% KM Chebyshev UCL | 3.391 |
| 97.5% KM Chebyshev UCL | 4.116 | 99% KM Chebyshev UCL | 5.54 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 0.919 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.707 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.399 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.37 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.582 | k star (bias corrected MLE) | 0.366 |
| Theta hat (MLE) | 13.71 | Theta star (bias corrected MLE) | 21.79 |
| nu hat (MLE) | 5.819 | nu star (bias corrected) | 3.661 |
| Mean (detects) | 7.978 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.01 | Mean | 1.365 |
| Maximum | 33.6 | Median | 0.937 |
| SD | 2.19 | CV | 1.605 |
| k hat (MLE) | 0.638 | k star (bias corrected MLE) | 0.634 |
| Theta hat (MLE) | 2.14 | Theta star (bias corrected MLE) | 2.153 |
| nu hat (MLE) | 413.2 | nu star (bias corrected) | 410.7 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (410.73, α) | 364.7 | Adjusted Chi Square Value (410.73, β) | 364.6 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1.537 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1.537 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 1.716 | SD (KM) | 2.23 |
| Variance (KM) | 4.972 | SE of Mean (KM) | 0.384 |
| k hat (KM) | 0.592 | k star (KM) | 0.589 |
| nu hat (KM) | 383.9 | nu star (KM) | 381.6 |
| theta hat (KM) | 2.897 | theta star (KM) | 2.914 |
| 80% gamma percentile (KM) | 2.829 | 90% gamma percentile (KM) | 4.482 |
| 95% gamma percentile (KM) | 6.217 | 99% gamma percentile (KM) | 10.42 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (381.64, α) | 337.4 | Adjusted Chi Square Value (381.64, β) | 337.2 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 1.941 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 1.942 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.749 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data Not Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|---|--|
| Lilliefors Test Statistic | 0.312 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 1.76 | Mean in Log Scale | 0.456 |
| SD in Original Scale | 1.877 | SD in Log Scale | 0.389 |
| 95% t UCL (assumes normality of ROS data) | 1.932 | 95% Percentile Bootstrap UCL | 1.949 |
| 95% BCA Bootstrap UCL | 2.079 | 95% Bootstrap t UCL | 2.196 |
| 95% H-UCL (Log ROS) | 1.767 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|--------------|
| KM Mean (logged) | 0.398 | KM Geo Mean | 1.489 |
| KM SD (logged) | 0.412 | 95% Critical H Value (KM-Log) | 1.753 |
| KM Standard Error of Mean (logged) | 0.199 | 95% H-UCL (KM -Log) | 1.688 |
| KM SD (logged) | 0.412 | 95% Critical H Value (KM-Log) | 1.753 |
| KM Standard Error of Mean (logged) | 0.199 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 1571 |
| SD in Original Scale | 10172 |
| 95% t UCL (Assumes normality) | 2503 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.21 |
| SD in Log Scale | 2.379 |
| 95% H-Stat UCL | 245.6 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 1.688

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Vinyl chloride)

General Statistics

| | | | |
|------------------------------|---------|---------------------------------|--------|
| Total Number of Observations | 324 | Number of Distinct Observations | 252 |
| Number of Detects | 54 | Number of Non-Detects | 270 |
| Number of Distinct Detects | 54 | Number of Distinct Non-Detects | 200 |
| Minimum Detect | 0.661 | Minimum Non-Detect | 3.79 |
| Maximum Detect | 10200 | Maximum Non-Detect | 235000 |
| Variance Detects | 6943527 | Percent Non-Detects | 83.33% |
| Mean Detects | 1355 | SD Detects | 2635 |
| Median Detects | 63.5 | CV Detects | 1.945 |
| Skewness Detects | 2.134 | Kurtosis Detects | 3.733 |
| Mean of Logged Detects | 4.214 | SD of Logged Detects | 3.029 |

Normal GOF Test on Detects Only

| | |
|------------------------------|-------|
| Shapiro Wilk Test Statistic | 0.583 |
| 5% Shapiro Wilk P Value | 0 |
| Lilliefors Test Statistic | 0.365 |
| 5% Lilliefors Critical Value | 0.12 |

Normal GOF Test on Detected Observations Only
 Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 234.1 | KM Standard Error of Mean | 67.8 |
| KM SD | 1194 | 95% KM (BCA) UCL | 355.4 |
| 95% KM (t) UCL | 346 | 95% KM (Percentile Bootstrap) UCL | 352.2 |
| 95% KM (z) UCL | 345.7 | 95% KM Bootstrap t UCL | 385.4 |
| 90% KM Chebyshev UCL | 437.5 | 95% KM Chebyshev UCL | 529.7 |
| 97.5% KM Chebyshev UCL | 657.6 | 99% KM Chebyshev UCL | 908.7 |

Gamma GOF Tests on Detected Observations Only

| | |
|-----------------------|-------|
| A-D Test Statistic | 2.485 |
| 5% A-D Critical Value | 0.893 |
| K-S Test Statistic | 0.183 |
| 5% K-S Critical Value | 0.133 |

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.239 | k star (bias corrected MLE) | 0.238 |
| Theta hat (MLE) | 5674 | Theta star (bias corrected MLE) | 5696 |
| nu hat (MLE) | 25.79 | nu star (bias corrected) | 25.69 |
| Mean (detects) | 1355 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.01 | Mean | 225.8 |
| Maximum | 10200 | Median | 0.01 |
| SD | 1181 | CV | 5.231 |
| k hat (MLE) | 0.0955 | k star (bias corrected MLE) | 0.0967 |
| Theta hat (MLE) | 2365 | Theta star (bias corrected MLE) | 2336 |
| nu hat (MLE) | 61.87 | nu star (bias corrected) | 62.63 |
| Adjusted Level of Significance (β) | 0.0493 | | |
| Approximate Chi Square Value (62.63, α) | 45.43 | Adjusted Chi Square Value (62.63, β) | 45.36 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 311.3 | 95% Gamma Adjusted UCL (use when $n < 50$) | 311.8 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|---------|---------------------------|--------|
| Mean (KM) | 234.1 | SD (KM) | 1194 |
| Variance (KM) | 1424544 | SE of Mean (KM) | 67.8 |
| k hat (KM) | 0.0385 | k star (KM) | 0.0402 |
| nu hat (KM) | 24.94 | nu star (KM) | 26.04 |
| theta hat (KM) | 6084 | theta star (KM) | 5827 |
| 80% gamma percentile (KM) | 13.13 | 90% gamma percentile (KM) | 256 |
| 95% gamma percentile (KM) | 1126 | 99% gamma percentile (KM) | 5524 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (26.04, α) | 15.41 | Adjusted Chi Square Value (26.04, β) | 15.37 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 395.6 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 396.6 |

Lognormal GOF Test on Detected Observations Only

| | |
|---|---------|
| Shapiro Wilk Approximate Test Statistic | 0.92 |
| 5% Shapiro Wilk P Value | 0.00131 |

Shapiro Wilk GOF Test

Detected Data Not Lognormal at 5% Significance Level

| | | |
|--|--------|---|
| Lilliefors Test Statistic | 0.0976 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.12 | Detected Data appear Lognormal at 5% Significance Level |
| Detected Data appear Approximate Lognormal at 5% Significance Level | | |

| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 227.5 | Mean in Log Scale | 1.025 |
| SD in Original Scale | 1181 | SD in Log Scale | 2.036 |
| 95% t UCL (assumes normality of ROS data) | 335.7 | 95% Percentile Bootstrap UCL | 341.9 |
| 95% BCA Bootstrap UCL | 367 | 95% Bootstrap t UCL | 376 |
| 95% H-UCL (Log ROS) | 31.62 | | |

| Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution | | | |
|---|-------|-------------------------------|--------------|
| KM Mean (logged) | 1.114 | KM Geo Mean | 3.047 |
| KM SD (logged) | 1.978 | 95% Critical H Value (KM-Log) | 3.072 |
| KM Standard Error of Mean (logged) | 0.173 | 95% H-UCL (KM -Log) | 30.22 |
| KM SD (logged) | 1.978 | 95% Critical H Value (KM-Log) | 3.072 |
| KM Standard Error of Mean (logged) | 0.173 | | |

| DL/2 Statistics | | | |
|-------------------------------|------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 1525 | Mean in Log Scale | 2.328 |
| SD in Original Scale | 9970 | SD in Log Scale | 2.467 |
| 95% t UCL (Assumes normality) | 2439 | 95% H-Stat UCL | 352.6 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use
 KM H-UCL 30.22

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
 Recommendations are based upon data size, data distribution, and skewness.
 These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
 However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Xylenes (total))

| General Statistics | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 217 | Number of Distinct Observations | 175 |
| Number of Detects | 22 | Number of Non-Detects | 195 |
| Number of Distinct Detects | 22 | Number of Distinct Non-Detects | 155 |
| Minimum Detect | 2.73 | Minimum Non-Detect | 7.69 |
| Maximum Detect | 47400 | Maximum Non-Detect | 471000 |
| Variance Detects | 1.009E+8 | Percent Non-Detects | 89.86% |
| Mean Detects | 2747 | SD Detects | 10044 |
| Median Detects | 106.9 | CV Detects | 3.657 |
| Skewness Detects | 4.586 | Kurtosis Detects | 21.29 |
| Mean of Logged Detects | 4.716 | SD of Logged Detects | 2.587 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.291 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.911 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.404 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.184 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 299.9 | KM Standard Error of Mean | 235.6 |
| KM SD | 3310 | 95% KM (BCA) UCL | 745.7 |
| 95% KM (t) UCL | 689.1 | 95% KM (Percentile Bootstrap) UCL | 759.2 |
| 95% KM (z) UCL | 687.4 | 95% KM Bootstrap t UCL | 3806 |
| 90% KM Chebyshev UCL | 1007 | 95% KM Chebyshev UCL | 1327 |
| 97.5% KM Chebyshev UCL | 1771 | 99% KM Chebyshev UCL | 2644 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.968 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.884 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.262 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.205 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.225 | k star (bias corrected MLE) | 0.225 |
| Theta hat (MLE) | 12182 | Theta star (bias corrected MLE) | 12206 |
| nu hat (MLE) | 9.921 | nu star (bias corrected) | 9.902 |
| Mean (detects) | 2747 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.01 | Mean | 278.5 |
| Maximum | 47400 | Median | 0.01 |
| SD | 3240 | CV | 11.63 |
| k hat (MLE) | 0.0887 | k star (bias corrected MLE) | 0.0906 |
| Theta hat (MLE) | 3139 | Theta star (bias corrected MLE) | 3075 |
| nu hat (MLE) | 38.5 | nu star (bias corrected) | 39.3 |
| Adjusted Level of Significance (β) | 0.0489 | | |
| Approximate Chi Square Value (39.30, α) | 25.94 | Adjusted Chi Square Value (39.30, β) | 25.87 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 421.9 | 95% Gamma Adjusted UCL (use when $n < 50$) | 423.1 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-----------|---------------------------|--------|
| Mean (KM) | 299.9 | SD (KM) | 3310 |
| Variance (KM) | 10956935 | SE of Mean (KM) | 235.6 |
| k hat (KM) | 0.00821 | k star (KM) | 0.0112 |
| nu hat (KM) | 3.563 | nu star (KM) | 4.847 |
| theta hat (KM) | 36532 | theta star (KM) | 26854 |
| 80% gamma percentile (KM) | 3.2015E-5 | 90% gamma percentile (KM) | 1.217 |
| 95% gamma percentile (KM) | 155 | 99% gamma percentile (KM) | 8190 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (4.85, α) | 1.082 | Adjusted Chi Square Value (4.85, β) | 1.071 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 1343 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 1358 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.959 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.911 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|--|-------|---|--|
| Lilliefors Test Statistic | 0.117 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.184 | Detected Data appear Lognormal at 5% Significance Level | |
| Detected Data appear Lognormal at 5% Significance Level | | | |

| | | | |
|---|-------|------------------------------|-------|
| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
| Mean in Original Scale | 280 | Mean in Log Scale | 0.737 |
| SD in Original Scale | 3240 | SD in Log Scale | 1.718 |
| 95% t UCL (assumes normality of ROS data) | 643.4 | 95% Percentile Bootstrap UCL | 706.9 |
| 95% BCA Bootstrap UCL | 995.6 | 95% Bootstrap t UCL | 3799 |
| 95% H-UCL (Log ROS) | 12.74 | | |

| | | | |
|---|-------|-------------------------------|--------------|
| Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution | | | |
| KM Mean (logged) | 1.762 | KM Geo Mean | 5.823 |
| KM SD (logged) | 1.401 | 95% Critical H Value (KM-Log) | 2.516 |
| KM Standard Error of Mean (logged) | 0.174 | 95% H-UCL (KM -Log) | 19.75 |
| KM SD (logged) | 1.401 | 95% Critical H Value (KM-Log) | 2.516 |
| KM Standard Error of Mean (logged) | 0.174 | | |

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Statistics | | | |
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 4838 | Mean in Log Scale | 3.273 |
| SD in Original Scale | 24923 | SD in Log Scale | 2.738 |
| 95% t UCL (Assumes normality) | 7633 | 95% H-Stat UCL | 2378 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use
 KM H-UCL 19.75

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. Recommendations are based upon data size, data distribution, and skewness. These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

UCL Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation ProUCL 5.14/20/2017 4:45:16 PM
 From File HHRA Data for Review.xls
 Full Precision OFF
 Confidence Coefficient 95%
 Number of Bootstrap Operations 2000

Result (1,1-dichloroethane)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 120 | Number of Distinct Observations | 57 |
| Number of Detects | 41 | Number of Non-Detects | 79 |
| Number of Distinct Detects | 39 | Number of Distinct Non-Detects | 18 |
| Minimum Detect | 0.12 | Minimum Non-Detect | 1 |
| Maximum Detect | 2100 | Maximum Non-Detect | 5000 |
| Variance Detects | 147239 | Percent Non-Detects | 65.83% |
| Mean Detects | 127.5 | SD Detects | 383.7 |
| Median Detects | 1.78 | CV Detects | 3.01 |
| Skewness Detects | 4.124 | Kurtosis Detects | 18.52 |
| Mean of Logged Detects | 1.372 | SD of Logged Detects | 2.76 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.393 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.941 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.37 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.137 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 45.87 | KM Standard Error of Mean | 21.56 |
| KM SD | 231.2 | 95% KM (BCA) UCL | 83.44 |
| 95% KM (t) UCL | 81.61 | 95% KM (Percentile Bootstrap) UCL | 84.93 |
| 95% KM (z) UCL | 81.33 | 95% KM Bootstrap t UCL | 140.4 |
| 90% KM Chebyshev UCL | 110.5 | 95% KM Chebyshev UCL | 139.8 |
| 97.5% KM Chebyshev UCL | 180.5 | 99% KM Chebyshev UCL | 260.4 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 4.064 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.905 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.279 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.153 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.21 | k star (bias corrected MLE) | 0.211 |
| Theta hat (MLE) | 606.7 | Theta star (bias corrected MLE) | 604.2 |
| nu hat (MLE) | 17.23 | nu star (bias corrected) | 17.3 |
| Mean (detects) | 127.5 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|-------|---|-------|
| Minimum | 0.01 | Mean | 43.91 |
| Maximum | 2100 | Median | 0.01 |
| SD | 230.6 | CV | 5.25 |
| k hat (MLE) | 0.127 | k star (bias corrected MLE) | 0.13 |
| Theta hat (MLE) | 344.9 | Theta star (bias corrected MLE) | 338.6 |
| nu hat (MLE) | 30.56 | nu star (bias corrected) | 31.13 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (31.13, α) | 19.38 | Adjusted Chi Square Value (31.13, β) | 19.27 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 70.53 | 95% Gamma Adjusted UCL (use when $n < 50$) | 70.94 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 45.87 | SD (KM) | 231.2 |
| Variance (KM) | 53473 | SE of Mean (KM) | 21.56 |
| k hat (KM) | 0.0393 | k star (KM) | 0.0439 |
| nu hat (KM) | 9.442 | nu star (KM) | 10.54 |
| theta hat (KM) | 1166 | theta star (KM) | 1044 |
| 80% gamma percentile (KM) | 3.787 | 90% gamma percentile (KM) | 58.14 |
| 95% gamma percentile (KM) | 231.1 | 99% gamma percentile (KM) | 1048 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (10.54, α) | 4.282 | Adjusted Chi Square Value (10.54, β) | 4.233 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 112.9 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 114.2 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.888 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.941 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.168 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.137 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 44.34 | Mean in Log Scale | 0.0158 |
| SD in Original Scale | 230.5 | SD in Log Scale | 2.238 |
| 95% t UCL (assumes normality of ROS data) | 79.22 | 95% Percentile Bootstrap UCL | 82.01 |
| 95% BCA Bootstrap UCL | 97.85 | 95% Bootstrap t UCL | 138.1 |
| 95% H-UCL (Log ROS) | 26.22 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|----------|-------------------------------|-------|
| KM Mean (logged) | -0.00663 | KM Geo Mean | 0.993 |
| KM SD (logged) | 2.094 | 95% Critical H Value (KM-Log) | 3.454 |
| KM Standard Error of Mean (logged) | 0.227 | 95% H-UCL (KM -Log) | 17.26 |
| KM SD (logged) | 2.094 | 95% Critical H Value (KM-Log) | 3.454 |
| KM Standard Error of Mean (logged) | 0.227 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 109.6 |
| SD in Original Scale | 345.9 |
| 95% t UCL (Assumes normality) | 162 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.715 |
| SD in Log Scale | 2.556 |
| 95% H-Stat UCL | 375.8 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

| | |
|------------------------|-------|
| 95% KM (Chebyshev) UCL | 139.8 |
|------------------------|-------|

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (1,1-dichloroethene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 120 | Number of Distinct Observations | 46 |
| Number of Detects | 32 | Number of Non-Detects | 88 |
| Number of Distinct Detects | 30 | Number of Distinct Non-Detects | 17 |
| Minimum Detect | 0.23 | Minimum Non-Detect | 1 |
| Maximum Detect | 1950 | Maximum Non-Detect | 5000 |
| Variance Detects | 173427 | Percent Non-Detects | 73.33% |
| Mean Detects | 152.6 | SD Detects | 416.4 |
| Median Detects | 6.25 | CV Detects | 2.728 |
| Skewness Detects | 3.421 | Kurtosis Detects | 11.98 |
| Mean of Logged Detects | 1.869 | SD of Logged Detects | 2.796 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.423 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.93 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.422 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.154 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 42.85 | KM Standard Error of Mean | 20.97 |
| KM SD | 223.9 | 95% KM (BCA) UCL | 81.16 |
| 95% KM (t) UCL | 77.61 | 95% KM (Percentile Bootstrap) UCL | 82.07 |
| 95% KM (z) UCL | 77.34 | 95% KM Bootstrap t UCL | 117.6 |
| 90% KM Chebyshev UCL | 105.7 | 95% KM Chebyshev UCL | 134.2 |
| 97.5% KM Chebyshev UCL | 173.8 | 99% KM Chebyshev UCL | 251.5 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 2.519 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.891 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.214 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.171 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.228 | k star (bias corrected MLE) | 0.228 |
| Theta hat (MLE) | 669.1 | Theta star (bias corrected MLE) | 670.7 |
| nu hat (MLE) | 14.6 | nu star (bias corrected) | 14.57 |
| Mean (detects) | 152.6 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|--|-------|--|-------|
| Minimum | 0.01 | Mean | 41.06 |
| Maximum | 1950 | Median | 0.01 |
| SD | 223.1 | CV | 5.432 |
| k hat (MLE) | 0.122 | k star (bias corrected MLE) | 0.125 |
| Theta hat (MLE) | 335.8 | Theta star (bias corrected MLE) | 329.1 |
| nu hat (MLE) | 29.35 | nu star (bias corrected) | 29.95 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (29.95, α) | 18.45 | Adjusted Chi Square Value (29.95, β) | 18.34 |
| 95% Gamma Approximate UCL (use when n>=50) | 66.65 | 95% Gamma Adjusted UCL (use when n<50) | 67.04 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 42.85 | SD (KM) | 223.9 |
| Variance (KM) | 50144 | SE of Mean (KM) | 20.97 |
| k hat (KM) | 0.0366 | k star (KM) | 0.0413 |
| nu hat (KM) | 8.788 | nu star (KM) | 9.902 |
| theta hat (KM) | 1170 | theta star (KM) | 1039 |
| 80% gamma percentile (KM) | 2.706 | 90% gamma percentile (KM) | 49.05 |
| 95% gamma percentile (KM) | 209.1 | 99% gamma percentile (KM) | 1002 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|---|-------|---|-------|
| Approximate Chi Square Value (9.90, α) | 3.88 | Adjusted Chi Square Value (9.90, β) | 3.835 |
| 95% Gamma Approximate KM-UCL (use when n>=50) | 109.3 | 95% Gamma Adjusted KM-UCL (use when n<50) | 110.6 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.886 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.93 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.217 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.154 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 41.98 | Mean in Log Scale | 0.237 |
| SD in Original Scale | 222.9 | SD in Log Scale | 2.189 |
| 95% t UCL (assumes normality of ROS data) | 75.71 | 95% Percentile Bootstrap UCL | 77.38 |
| 95% BCA Bootstrap UCL | 93.71 | 95% Bootstrap t UCL | 109.9 |
| 95% H-UCL (Log ROS) | 28.53 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.081 | KM Geo Mean | 1.084 |
| KM SD (logged) | 1.957 | 95% Critical H Value (KM-Log) | 3.284 |

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Standard Error of Mean (logged) | 0.212 | 95% H-UCL (KM -Log) | 13.25 |
| KM SD (logged) | 1.957 | 95% Critical H Value (KM-Log) | 3.284 |
| KM Standard Error of Mean (logged) | 0.212 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 100.5 |
| SD in Original Scale | 332.6 |
| 95% t UCL (Assumes normality) | 150.8 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.62 |
| SD in Log Scale | 2.518 |
| 95% H-Stat UCL | 303.3 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

| | |
|------------------------|-------|
| 95% KM (Chebyshev) UCL | 134.2 |
|------------------------|-------|

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (1,2,4-trimethylbenzene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 120 | Number of Distinct Observations | 27 |
| Number of Detects | 8 | Number of Non-Detects | 112 |
| Number of Distinct Detects | 7 | Number of Distinct Non-Detects | 20 |
| Minimum Detect | 0.11 | Minimum Non-Detect | 1 |
| Maximum Detect | 28.8 | Maximum Non-Detect | 5000 |
| Variance Detects | 99.55 | Percent Non-Detects | 93.33% |
| Mean Detects | 4.126 | SD Detects | 9.977 |
| Median Detects | 0.44 | CV Detects | 2.418 |
| Skewness Detects | 2.82 | Kurtosis Detects | 7.963 |
| Mean of Logged Detects | -0.237 | SD of Logged Detects | 1.634 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.452 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.818 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.49 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.283 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 0.759 | KM Standard Error of Mean | 0.392 |
| KM SD | 3.202 | 95% KM (BCA) UCL | 1.577 |
| 95% KM (t) UCL | 1.408 | 95% KM (Percentile Bootstrap) UCL | 1.459 |
| 95% KM (z) UCL | 1.403 | 95% KM Bootstrap t UCL | 6.329 |
| 90% KM Chebyshev UCL | 1.934 | 95% KM Chebyshev UCL | 2.467 |
| 97.5% KM Chebyshev UCL | 3.206 | 99% KM Chebyshev UCL | 4.658 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.437 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.78 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.413 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.313 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.398 | k star (bias corrected MLE) | 0.332 |
| Theta hat (MLE) | 10.36 | Theta star (bias corrected MLE) | 12.42 |
| nu hat (MLE) | 6.37 | nu star (bias corrected) | 5.315 |
| Mean (detects) | 4.126 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|-------|---|-------|
| Minimum | 0.01 | Mean | 0.745 |
| Maximum | 28.8 | Median | 0.01 |
| SD | 2.828 | CV | 3.794 |
| k hat (MLE) | 0.242 | k star (bias corrected MLE) | 0.242 |
| Theta hat (MLE) | 3.08 | Theta star (bias corrected MLE) | 3.086 |
| nu hat (MLE) | 58.08 | nu star (bias corrected) | 57.96 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (57.96, α) | 41.46 | Adjusted Chi Square Value (57.96, β) | 41.29 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1.042 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1.046 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 0.759 | SD (KM) | 3.202 |
| Variance (KM) | 10.25 | SE of Mean (KM) | 0.392 |
| k hat (KM) | 0.0562 | k star (KM) | 0.0603 |
| nu hat (KM) | 13.48 | nu star (KM) | 14.48 |
| theta hat (KM) | 13.51 | theta star (KM) | 12.58 |
| 80% gamma percentile (KM) | 0.186 | 90% gamma percentile (KM) | 1.436 |
| 95% gamma percentile (KM) | 4.259 | 99% gamma percentile (KM) | 15.27 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (14.48, α) | 6.902 | Adjusted Chi Square Value (14.48, β) | 6.838 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 1.592 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 1.607 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.812 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.818 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.274 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.283 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 0.7 | Mean in Log Scale | -1.042 |
| SD in Original Scale | 2.613 | SD in Log Scale | 0.915 |
| 95% t UCL (assumes normality of ROS data) | 1.095 | 95% Percentile Bootstrap UCL | 1.173 |
| 95% BCA Bootstrap UCL | 1.459 | 95% Bootstrap t UCL | 2.759 |
| 95% H-UCL (Log ROS) | 0.642 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -1.017 | KM Geo Mean | 0.362 |
| KM SD (logged) | 0.768 | 95% Critical H Value (KM-Log) | 2.024 |

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Standard Error of Mean (logged) | 0.257 | 95% H-UCL (KM -Log) | 0.56 |
| KM SD (logged) | 0.768 | 95% Critical H Value (KM-Log) | 2.024 |
| KM Standard Error of Mean (logged) | 0.257 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 100.4 |
| SD in Original Scale | 350.8 |
| 95% t UCL (Assumes normality) | 153.5 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.616 |
| SD in Log Scale | 2.513 |
| 95% H-Stat UCL | 296.6 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

| | |
|----------|------|
| KM H-UCL | 0.56 |
|----------|------|

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (2-butanone)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 120 | Number of Distinct Observations | 27 |
| Number of Detects | 7 | Number of Non-Detects | 113 |
| Number of Distinct Detects | 7 | Number of Distinct Non-Detects | 20 |
| Minimum Detect | 0.94 | Minimum Non-Detect | 25 |
| Maximum Detect | 260 | Maximum Non-Detect | 125000 |
| Variance Detects | 8946 | Percent Non-Detects | 94.17% |
| Mean Detects | 47.27 | SD Detects | 94.58 |
| Median Detects | 12.3 | CV Detects | 2.001 |
| Skewness Detects | 2.559 | Kurtosis Detects | 6.629 |
| Mean of Logged Detects | 2.368 | SD of Logged Detects | 1.867 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.559 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.803 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.403 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.304 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 11.1 | KM Standard Error of Mean | 4.729 |
| KM SD | 30.92 | 95% KM (BCA) UCL | 21.05 |
| 95% KM (t) UCL | 18.94 | 95% KM (Percentile Bootstrap) UCL | 19.26 |
| 95% KM (z) UCL | 18.88 | 95% KM Bootstrap t UCL | 27.06 |
| 90% KM Chebyshev UCL | 25.29 | 95% KM Chebyshev UCL | 31.72 |
| 97.5% KM Chebyshev UCL | 40.64 | 99% KM Chebyshev UCL | 58.16 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.524 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.762 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.262 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.33 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.436 | k star (bias corrected MLE) | 0.345 |
| Theta hat (MLE) | 108.4 | Theta star (bias corrected MLE) | 137.2 |
| nu hat (MLE) | 6.108 | nu star (bias corrected) | 4.824 |
| Mean (detects) | 47.27 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|-------|---|-------|
| Minimum | 0.01 | Mean | 12 |
| Maximum | 260 | Median | 0.01 |
| SD | 28.9 | CV | 2.409 |
| k hat (MLE) | 0.189 | k star (bias corrected MLE) | 0.19 |
| Theta hat (MLE) | 63.58 | Theta star (bias corrected MLE) | 63.3 |
| nu hat (MLE) | 45.29 | nu star (bias corrected) | 45.5 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (45.50, α) | 31.02 | Adjusted Chi Square Value (45.50, β) | 30.88 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 17.6 | 95% Gamma Adjusted UCL (use when $n < 50$) | 17.68 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 11.1 | SD (KM) | 30.92 |
| Variance (KM) | 956 | SE of Mean (KM) | 4.729 |
| k hat (KM) | 0.129 | k star (KM) | 0.131 |
| nu hat (KM) | 30.96 | nu star (KM) | 31.52 |
| theta hat (KM) | 86.09 | theta star (KM) | 84.56 |
| 80% gamma percentile (KM) | 10.72 | 90% gamma percentile (KM) | 32.17 |
| 95% gamma percentile (KM) | 62.56 | 99% gamma percentile (KM) | 153.4 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (31.52, α) | 19.69 | Adjusted Chi Square Value (31.52, β) | 19.58 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 17.78 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 17.88 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.975 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.803 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.148 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.304 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 9.694 | Mean in Log Scale | 1.515 |
| SD in Original Scale | 24.55 | SD in Log Scale | 1.153 |
| 95% t UCL (assumes normality of ROS data) | 13.41 | 95% Percentile Bootstrap UCL | 13.84 |
| 95% BCA Bootstrap UCL | 16.59 | 95% Bootstrap t UCL | 19.71 |
| 95% H-UCL (Log ROS) | 11.37 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 1.582 | KM Geo Mean | 4.866 |
| KM SD (logged) | 1.158 | 95% Critical H Value (KM-Log) | 2.377 |

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Standard Error of Mean (logged) | 0.488 | 95% H-UCL (KM -Log) | 12.25 |
| KM SD (logged) | 1.158 | 95% Critical H Value (KM-Log) | 2.377 |
| KM Standard Error of Mean (logged) | 0.488 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|------|
| Mean in Original Scale | 2517 |
| SD in Original Scale | 8769 |
| 95% t UCL (Assumes normality) | 3844 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 4.805 |
| SD in Log Scale | 2.558 |
| 95% H-Stat UCL | 8336 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

| | |
|------------------------------|-------|
| 95% KM Approximate Gamma UCL | 17.78 |
|------------------------------|-------|

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (acetone)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 120 | Number of Distinct Observations | 42 |
| Number of Detects | 22 | Number of Non-Detects | 98 |
| Number of Distinct Detects | 22 | Number of Distinct Non-Detects | 20 |
| Minimum Detect | 1.21 | Minimum Non-Detect | 25 |
| Maximum Detect | 572 | Maximum Non-Detect | 125000 |
| Variance Detects | 14537 | Percent Non-Detects | 81.67% |
| Mean Detects | 36.59 | SD Detects | 120.6 |
| Median Detects | 3.525 | CV Detects | 3.295 |
| Skewness Detects | 4.569 | Kurtosis Detects | 21.18 |
| Mean of Logged Detects | 1.892 | SD of Logged Detects | 1.484 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.302 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.911 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.412 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.184 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 13.97 | KM Standard Error of Mean | 7.61 |
| KM SD | 64.82 | 95% KM (BCA) UCL | 28.8 |
| 95% KM (t) UCL | 26.58 | 95% KM (Percentile Bootstrap) UCL | 28.42 |
| 95% KM (z) UCL | 26.48 | 95% KM Bootstrap t UCL | 76.59 |
| 90% KM Chebyshev UCL | 36.8 | 95% KM Chebyshev UCL | 47.14 |
| 97.5% KM Chebyshev UCL | 61.49 | 99% KM Chebyshev UCL | 89.68 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 3.31 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.829 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.317 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.199 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.387 | k star (bias corrected MLE) | 0.365 |
| Theta hat (MLE) | 94.5 | Theta star (bias corrected MLE) | 100.3 |
| nu hat (MLE) | 17.04 | nu star (bias corrected) | 16.05 |
| Mean (detects) | 36.59 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|--|-------|--|-------|
| Minimum | 0.01 | Mean | 14.31 |
| Maximum | 572 | Median | 0.01 |
| SD | 54.74 | CV | 3.825 |
| k hat (MLE) | 0.182 | k star (bias corrected MLE) | 0.183 |
| Theta hat (MLE) | 78.59 | Theta star (bias corrected MLE) | 78.16 |
| nu hat (MLE) | 43.71 | nu star (bias corrected) | 43.95 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (43.95, α) | 29.75 | Adjusted Chi Square Value (43.95, β) | 29.6 |
| 95% Gamma Approximate UCL (use when n>=50) | 21.15 | 95% Gamma Adjusted UCL (use when n<50) | 21.25 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 13.97 | SD (KM) | 64.82 |
| Variance (KM) | 4202 | SE of Mean (KM) | 7.61 |
| k hat (KM) | 0.0464 | k star (KM) | 0.0508 |
| nu hat (KM) | 11.14 | nu star (KM) | 12.2 |
| theta hat (KM) | 300.9 | theta star (KM) | 274.8 |
| 80% gamma percentile (KM) | 2.005 | 90% gamma percentile (KM) | 21.77 |
| 95% gamma percentile (KM) | 74.71 | 99% gamma percentile (KM) | 301.9 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|---|-------|---|-------|
| Approximate Chi Square Value (12.20, α) | 5.356 | Adjusted Chi Square Value (12.20, β) | 5.301 |
| 95% Gamma Approximate KM-UCL (use when n>=50) | 31.8 | 95% Gamma Adjusted KM-UCL (use when n<50) | 32.13 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.817 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.911 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.266 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.184 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 11.57 | Mean in Log Scale | 1.526 |
| SD in Original Scale | 52.22 | SD in Log Scale | 1.017 |
| 95% t UCL (assumes normality of ROS data) | 19.48 | 95% Percentile Bootstrap UCL | 20.85 |
| 95% BCA Bootstrap UCL | 26.25 | 95% Bootstrap t UCL | 56.15 |
| 95% H-UCL (Log ROS) | 9.502 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 1.447 | KM Geo Mean | 4.251 |
| KM SD (logged) | 0.999 | 95% Critical H Value (KM-Log) | 2.222 |

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Standard Error of Mean (logged) | 0.164 | 95% H-UCL (KM -Log) | 8.584 |
| KM SD (logged) | 0.999 | 95% Critical H Value (KM-Log) | 2.222 |
| KM Standard Error of Mean (logged) | 0.164 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|------|
| Mean in Original Scale | 2522 |
| SD in Original Scale | 8768 |
| 95% t UCL (Assumes normality) | 3848 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 4.686 |
| SD in Log Scale | 2.715 |
| 95% H-Stat UCL | 12481 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

| | |
|------------------------|-------|
| 95% KM (Chebyshev) UCL | 47.14 |
|------------------------|-------|

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (benzene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 120 | Number of Distinct Observations | 41 |
| Number of Detects | 25 | Number of Non-Detects | 95 |
| Number of Distinct Detects | 21 | Number of Distinct Non-Detects | 20 |
| Minimum Detect | 0.12 | Minimum Non-Detect | 1 |
| Maximum Detect | 2.06 | Maximum Non-Detect | 5000 |
| Variance Detects | 0.213 | Percent Non-Detects | 79.17% |
| Mean Detects | 0.529 | SD Detects | 0.462 |
| Median Detects | 0.3 | CV Detects | 0.873 |
| Skewness Detects | 2.03 | Kurtosis Detects | 4.511 |
| Mean of Logged Detects | -0.917 | SD of Logged Detects | 0.734 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.764 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.918 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.21 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.173 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------|
| KM Mean | 0.453 | KM Standard Error of Mean | 0.0595 |
| KM SD | 0.352 | 95% KM (BCA) UCL | 0.556 |
| 95% KM (t) UCL | 0.552 | 95% KM (Percentile Bootstrap) UCL | 0.556 |
| 95% KM (z) UCL | 0.551 | 95% KM Bootstrap t UCL | 0.563 |
| 90% KM Chebyshev UCL | 0.632 | 95% KM Chebyshev UCL | 0.712 |
| 97.5% KM Chebyshev UCL | 0.825 | 99% KM Chebyshev UCL | 1.045 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 0.832 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.757 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.201 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.177 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 1.934 | k star (bias corrected MLE) | 1.729 |
| Theta hat (MLE) | 0.273 | Theta star (bias corrected MLE) | 0.306 |
| nu hat (MLE) | 96.7 | nu star (bias corrected) | 86.43 |
| Mean (detects) | 0.529 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|--|-------|--|-------|
| Minimum | 0.01 | Mean | 0.436 |
| Maximum | 2.06 | Median | 0.378 |
| SD | 0.309 | CV | 0.708 |
| k hat (MLE) | 2.065 | k star (bias corrected MLE) | 2.019 |
| Theta hat (MLE) | 0.211 | Theta star (bias corrected MLE) | 0.216 |
| nu hat (MLE) | 495.6 | nu star (bias corrected) | 484.6 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (484.55, α) | 434.5 | Adjusted Chi Square Value (484.55, β) | 433.9 |
| 95% Gamma Approximate UCL (use when n>=50) | 0.486 | 95% Gamma Adjusted UCL (use when n<50) | 0.487 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|--------|
| Mean (KM) | 0.453 | SD (KM) | 0.352 |
| Variance (KM) | 0.124 | SE of Mean (KM) | 0.0595 |
| k hat (KM) | 1.652 | k star (KM) | 1.617 |
| nu hat (KM) | 396.6 | nu star (KM) | 388 |
| theta hat (KM) | 0.274 | theta star (KM) | 0.28 |
| 80% gamma percentile (KM) | 0.695 | 90% gamma percentile (KM) | 0.927 |
| 95% gamma percentile (KM) | 1.151 | 99% gamma percentile (KM) | 1.655 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|---|-------|---|-------|
| Approximate Chi Square Value (388.01, α) | 343.4 | Adjusted Chi Square Value (388.01, β) | 342.8 |
| 95% Gamma Approximate KM-UCL (use when n>=50) | 0.512 | 95% Gamma Adjusted KM-UCL (use when n<50) | 0.513 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.951 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.918 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.172 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.173 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 0.424 | Mean in Log Scale | -1.017 |
| SD in Original Scale | 0.275 | SD in Log Scale | 0.554 |
| 95% t UCL (assumes normality of ROS data) | 0.466 | 95% Percentile Bootstrap UCL | 0.464 |
| 95% BCA Bootstrap UCL | 0.471 | 95% Bootstrap t UCL | 0.474 |
| 95% H-UCL (Log ROS) | 0.464 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -1.015 | KM Geo Mean | 0.362 |
| KM SD (logged) | 0.642 | 95% Critical H Value (KM-Log) | 1.929 |

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Standard Error of Mean (logged) | 0.124 | 95% H-UCL (KM -Log) | 0.499 |
| KM SD (logged) | 0.642 | 95% Critical H Value (KM-Log) | 1.929 |
| KM Standard Error of Mean (logged) | 0.124 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 100.8 |
| SD in Original Scale | 350.7 |
| 95% t UCL (Assumes normality) | 153.9 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.568 |
| SD in Log Scale | 2.584 |
| 95% H-Stat UCL | 356.1 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

| | |
|----------|-------|
| KM H-UCL | 0.499 |
|----------|-------|

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (carbon disulfide)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 120 | Number of Distinct Observations | 32 |
| Number of Detects | 14 | Number of Non-Detects | 106 |
| Number of Distinct Detects | 13 | Number of Distinct Non-Detects | 19 |
| Minimum Detect | 0.45 | Minimum Non-Detect | 1 |
| Maximum Detect | 35 | Maximum Non-Detect | 5000 |
| Variance Detects | 81.18 | Percent Non-Detects | 88.33% |
| Mean Detects | 3.931 | SD Detects | 9.01 |
| Median Detects | 1.32 | CV Detects | 2.292 |
| Skewness Detects | 3.646 | Kurtosis Detects | 13.48 |
| Mean of Logged Detects | 0.396 | SD of Logged Detects | 1.186 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.401 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.874 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.437 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.226 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 1.213 | KM Standard Error of Mean | 0.462 |
| KM SD | 3.907 | 95% KM (BCA) UCL | 2.163 |
| 95% KM (t) UCL | 1.98 | 95% KM (Percentile Bootstrap) UCL | 2.044 |
| 95% KM (z) UCL | 1.974 | 95% KM Bootstrap t UCL | 4.653 |
| 90% KM Chebyshev UCL | 2.6 | 95% KM Chebyshev UCL | 3.228 |
| 97.5% KM Chebyshev UCL | 4.1 | 99% KM Chebyshev UCL | 5.812 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.633 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.781 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.277 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.24 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.631 | k star (bias corrected MLE) | 0.543 |
| Theta hat (MLE) | 6.233 | Theta star (bias corrected MLE) | 7.238 |
| nu hat (MLE) | 17.66 | nu star (bias corrected) | 15.21 |
| Mean (detects) | 3.931 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|-------|---|-------|
| Minimum | 0.01 | Mean | 0.774 |
| Maximum | 35 | Median | 0.01 |
| SD | 3.308 | CV | 4.274 |
| k hat (MLE) | 0.24 | k star (bias corrected MLE) | 0.24 |
| Theta hat (MLE) | 3.22 | Theta star (bias corrected MLE) | 3.226 |
| nu hat (MLE) | 57.69 | nu star (bias corrected) | 57.58 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (57.58, α) | 41.14 | Adjusted Chi Square Value (57.58, β) | 40.97 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1.083 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1.088 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 1.213 | SD (KM) | 3.907 |
| Variance (KM) | 15.27 | SE of Mean (KM) | 0.462 |
| k hat (KM) | 0.0965 | k star (KM) | 0.0996 |
| nu hat (KM) | 23.15 | nu star (KM) | 23.9 |
| theta hat (KM) | 12.58 | theta star (KM) | 12.18 |
| 80% gamma percentile (KM) | 0.837 | 90% gamma percentile (KM) | 3.224 |
| 95% gamma percentile (KM) | 7.045 | 99% gamma percentile (KM) | 19.31 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (23.90, α) | 13.77 | Adjusted Chi Square Value (23.90, β) | 13.68 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 2.106 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 2.12 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.849 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.874 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.166 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.226 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 1.108 | Mean in Log Scale | -0.413 |
| SD in Original Scale | 3.182 | SD in Log Scale | 0.809 |
| 95% t UCL (assumes normality of ROS data) | 1.59 | 95% Percentile Bootstrap UCL | 1.671 |
| 95% BCA Bootstrap UCL | 2.023 | 95% Bootstrap t UCL | 3.068 |
| 95% H-UCL (Log ROS) | 1.069 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.382 | KM Geo Mean | 0.682 |
| KM SD (logged) | 0.667 | 95% Critical H Value (KM-Log) | 1.947 |

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Standard Error of Mean (logged) | 0.0992 | 95% H-UCL (KM -Log) | 0.96 |
| KM SD (logged) | 0.667 | 95% Critical H Value (KM-Log) | 1.947 |
| KM Standard Error of Mean (logged) | 0.0992 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 99.95 |
| SD in Original Scale | 350.8 |
| 95% t UCL (Assumes normality) | 153 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.626 |
| SD in Log Scale | 2.476 |
| 95% H-Stat UCL | 266.9 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

| | |
|----------|------|
| KM H-UCL | 0.96 |
|----------|------|

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (cis-1,2-dichloroethene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 120 | Number of Distinct Observations | 104 |
| Number of Detects | 98 | Number of Non-Detects | 22 |
| Number of Distinct Detects | 97 | Number of Distinct Non-Detects | 8 |
| Minimum Detect | 0.11 | Minimum Non-Detect | 1 |
| Maximum Detect | 109000 | Maximum Non-Detect | 500 |
| Variance Detects | 1.572E+8 | Percent Non-Detects | 18.33% |
| Mean Detects | 3398 | SD Detects | 12538 |
| Median Detects | 129 | CV Detects | 3.69 |
| Skewness Detects | 6.969 | Kurtosis Detects | 54.78 |
| Mean of Logged Detects | 4.748 | SD of Logged Detects | 3.218 |

Normal GOF Test on Detects Only

| | | |
|------------------------------|--------|--|
| Shapiro Wilk Test Statistic | 0.304 | Normal GOF Test on Detected Observations Only |
| 5% Shapiro Wilk P Value | 0 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.393 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.0897 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 2776 | KM Standard Error of Mean | 1041 |
| KM SD | 11349 | 95% KM (BCA) UCL | 4770 |
| 95% KM (t) UCL | 4503 | 95% KM (Percentile Bootstrap) UCL | 4740 |
| 95% KM (z) UCL | 4489 | 95% KM Bootstrap t UCL | 7868 |
| 90% KM Chebyshev UCL | 5900 | 95% KM Chebyshev UCL | 7315 |
| 97.5% KM Chebyshev UCL | 9279 | 99% KM Chebyshev UCL | 13137 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 3.424 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.91 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.147 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.1 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.215 | k star (bias corrected MLE) | 0.215 |
| Theta hat (MLE) | 15797 | Theta star (bias corrected MLE) | 15781 |
| nu hat (MLE) | 42.16 | nu star (bias corrected) | 42.2 |
| Mean (detects) | 3398 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|--|--------|--|-------|
| Minimum | 0.01 | Mean | 2775 |
| Maximum | 109000 | Median | 32.35 |
| SD | 11397 | CV | 4.107 |
| k hat (MLE) | 0.156 | k star (bias corrected MLE) | 0.158 |
| Theta hat (MLE) | 17776 | Theta star (bias corrected MLE) | 17589 |
| nu hat (MLE) | 37.47 | nu star (bias corrected) | 37.86 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (37.86, α) | 24.77 | Adjusted Chi Square Value (37.86, β) | 24.64 |
| 95% Gamma Approximate UCL (use when n>=50) | 4241 | 95% Gamma Adjusted UCL (use when n<50) | 4263 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|----------|---------------------------|--------|
| Mean (KM) | 2776 | SD (KM) | 11349 |
| Variance (KM) | 1.288E+8 | SE of Mean (KM) | 1041 |
| k hat (KM) | 0.0598 | k star (KM) | 0.0639 |
| nu hat (KM) | 14.36 | nu star (KM) | 15.34 |
| theta hat (KM) | 46392 | theta star (KM) | 43445 |
| 80% gamma percentile (KM) | 795 | 90% gamma percentile (KM) | 5546 |
| 95% gamma percentile (KM) | 15755 | 99% gamma percentile (KM) | 54494 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|---|-------|---|------|
| Approximate Chi Square Value (15.34, α) | 7.497 | Adjusted Chi Square Value (15.34, β) | 7.43 |
| 95% Gamma Approximate KM-UCL (use when n>=50) | 5680 | 95% Gamma Adjusted KM-UCL (use when n<50) | 5731 |

Lognormal GOF Test on Detected Observations Only

| | | |
|---|--------|---|
| Shapiro Wilk Approximate Test Statistic | 0.962 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk P Value | 0.0361 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.0875 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.0897 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|--------|------------------------------|-------|
| Mean in Original Scale | 2775 | Mean in Log Scale | 3.844 |
| SD in Original Scale | 11397 | SD in Log Scale | 3.559 |
| 95% t UCL (assumes normality of ROS data) | 4500 | 95% Percentile Bootstrap UCL | 4542 |
| 95% BCA Bootstrap UCL | 6046 | 95% Bootstrap t UCL | 7737 |
| 95% H-UCL (Log ROS) | 152663 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 3.857 | KM Geo Mean | 47.32 |
| KM SD (logged) | 3.511 | 95% Critical H Value (KM-Log) | 5.329 |

| | | | |
|------------------------------------|-------|-------------------------------|--------|
| KM Standard Error of Mean (logged) | 0.328 | 95% H-UCL (KM -Log) | 125070 |
| KM SD (logged) | 3.511 | 95% Critical H Value (KM-Log) | 5.329 |
| KM Standard Error of Mean (logged) | 0.328 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 2780 |
| SD in Original Scale | 11396 |
| 95% t UCL (Assumes normality) | 4505 |

DL/2 Log-Transformed

| | |
|-------------------|--------|
| Mean in Log Scale | 4.008 |
| SD in Log Scale | 3.439 |
| 95% H-Stat UCL | 105925 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 125070

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (ethylbenzene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 120 | Number of Distinct Observations | 27 |
| Number of Detects | 8 | Number of Non-Detects | 112 |
| Number of Distinct Detects | 7 | Number of Distinct Non-Detects | 20 |
| Minimum Detect | 0.16 | Minimum Non-Detect | 1 |
| Maximum Detect | 1.79 | Maximum Non-Detect | 5000 |
| Variance Detects | 0.262 | Percent Non-Detects | 93.33% |
| Mean Detects | 0.566 | SD Detects | 0.512 |
| Median Detects | 0.465 | CV Detects | 0.905 |
| Skewness Detects | 2.434 | Kurtosis Detects | 6.485 |
| Mean of Logged Detects | -0.818 | SD of Logged Detects | 0.711 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.66 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.818 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.411 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.283 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------|
| KM Mean | 0.417 | KM Standard Error of Mean | 0.0597 |
| KM SD | 0.23 | 95% KM (BCA) UCL | 0.518 |
| 95% KM (t) UCL | 0.516 | 95% KM (Percentile Bootstrap) UCL | 0.517 |
| 95% KM (z) UCL | 0.515 | 95% KM Bootstrap t UCL | 0.518 |
| 90% KM Chebyshev UCL | 0.596 | 95% KM Chebyshev UCL | 0.677 |
| 97.5% KM Chebyshev UCL | 0.79 | 99% KM Chebyshev UCL | 1.011 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.716 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.724 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.333 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.297 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 2.161 | k star (bias corrected MLE) | 1.434 |
| Theta hat (MLE) | 0.262 | Theta star (bias corrected MLE) | 0.395 |
| nu hat (MLE) | 34.58 | nu star (bias corrected) | 22.95 |
| Mean (detects) | 0.566 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|--|-------|--|-------|
| Minimum | 0.01 | Mean | 0.433 |
| Maximum | 1.79 | Median | 0.384 |
| SD | 0.275 | CV | 0.635 |
| k hat (MLE) | 2.377 | k star (bias corrected MLE) | 2.323 |
| Theta hat (MLE) | 0.182 | Theta star (bias corrected MLE) | 0.186 |
| nu hat (MLE) | 570.6 | nu star (bias corrected) | 557.6 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (557.64, α) | 503.9 | Adjusted Chi Square Value (557.64, β) | 503.3 |
| 95% Gamma Approximate UCL (use when n>=50) | 0.479 | 95% Gamma Adjusted UCL (use when n<50) | 0.479 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 0.417 | SD (KM) | 0.23 |
| Variance (KM) | 0.0531 | SE of Mean (KM) | 0.0597 |
| k hat (KM) | 3.282 | k star (KM) | 3.206 |
| nu hat (KM) | 787.7 | nu star (KM) | 769.4 |
| theta hat (KM) | 0.127 | theta star (KM) | 0.13 |
| 80% gamma percentile (KM) | 0.591 | 90% gamma percentile (KM) | 0.73 |
| 95% gamma percentile (KM) | 0.859 | 99% gamma percentile (KM) | 1.139 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|---|-------|---|-------|
| Approximate Chi Square Value (769.38, α) | 706 | Adjusted Chi Square Value (769.38, β) | 705.3 |
| 95% Gamma Approximate KM-UCL (use when n>=50) | 0.455 | 95% Gamma Adjusted KM-UCL (use when n<50) | 0.455 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.892 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.818 | Detected Data appear Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|--|--|
| Lilliefors Test Statistic | 0.284 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.283 | Detected Data Not Lognormal at 5% Significance Level | |

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 0.423 | Mean in Log Scale | -0.981 |
| SD in Original Scale | 0.229 | SD in Log Scale | 0.487 |
| 95% t UCL (assumes normality of ROS data) | 0.457 | 95% Percentile Bootstrap UCL | 0.456 |
| 95% BCA Bootstrap UCL | 0.465 | 95% Bootstrap t UCL | 0.464 |
| 95% H-UCL (Log ROS) | 0.458 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.988 | KM Geo Mean | 0.372 |
| KM SD (logged) | 0.478 | 95% Critical H Value (KM-Log) | 1.825 |
| KM Standard Error of Mean (logged) | 0.174 | 95% H-UCL (KM -Log) | 0.452 |
| KM SD (logged) | 0.478 | 95% Critical H Value (KM-Log) | 1.825 |
| KM Standard Error of Mean (logged) | 0.174 | | |

DL/2 Statistics

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 100.8 | Mean in Log Scale | 1.62 |
| SD in Original Scale | 350.7 | SD in Log Scale | 2.524 |
| 95% t UCL (Assumes normality) | 153.9 | 95% H-Stat UCL | 309.1 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

| | | | |
|------------------------------|-------|--------------------------------|-------|
| 95% KM Approximate Gamma UCL | 0.455 | 95% GROS Approximate Gamma UCL | 0.479 |
|------------------------------|-------|--------------------------------|-------|

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test
 When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
 Recommendations are based upon data size, data distribution, and skewness.
 These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
 However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (iron)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 8 | Number of Distinct Observations | 8 |
| | | Number of Missing Observations | 0 |
| Minimum | 180 | Mean | 5925 |
| Maximum | 17000 | Median | 3700 |
| SD | 6831 | Std. Error of Mean | 2415 |
| Coefficient of Variation | 1.153 | Skewness | 1.106 |

Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.

For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).

Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1

Normal GOF Test

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.789 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.818 | Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.275 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.283 | Data appear Normal at 5% Significance Level |

Data appear Approximate Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL

95% Student's-t UCL 10501

95% UCLs (Adjusted for Skewness)

95% Adjusted-CLT UCL (Chen-1995) 10906
 95% Modified-t UCL (Johnson-1978) 10658

Gamma GOF Test

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.288 | Anderson-Darling Gamma GOF Test |
| 5% A-D Critical Value | 0.75 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.164 | Kolmogorov-Smimov Gamma GOF Test |
| 5% K-S Critical Value | 0.305 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

| | | | |
|--------------------------------|--------|-------------------------------------|-------|
| k hat (MLE) | 0.686 | k star (bias corrected MLE) | 0.512 |
| Theta hat (MLE) | 8636 | Theta star (bias corrected MLE) | 11570 |
| nu hat (MLE) | 10.98 | nu star (bias corrected) | 8.194 |
| MLE Mean (bias corrected) | 5925 | MLE Sd (bias corrected) | 8280 |
| | | Approximate Chi Square Value (0.05) | 2.848 |
| Adjusted Level of Significance | 0.0195 | Adjusted Chi Square Value | 2.114 |

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50)) 17048

95% Adjusted Gamma UCL (use when n<50) 22968

Lognormal GOF Test

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.939 | Shapiro Wilk Lognormal GOF Test |
| 5% Shapiro Wilk Critical Value | 0.818 | Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.172 | Lilliefors Lognormal GOF Test |
| 5% Lilliefors Critical Value | 0.283 | Data appear Lognormal at 5% Significance Level |

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

| | | | |
|------------------------|-------|---------------------|-------|
| Minimum of Logged Data | 5.193 | Mean of logged Data | 7.804 |
| Maximum of Logged Data | 9.741 | SD of logged Data | 1.648 |

Assuming Lognormal Distribution

| | | | |
|--------------------------|--------|----------------------------|-------|
| 95% H-UCL | 235070 | 90% Chebyshev (MVUE) UCL | 19466 |
| 95% Chebyshev (MVUE) UCL | 25067 | 97.5% Chebyshev (MVUE) UCL | 32839 |
| 99% Chebyshev (MVUE) UCL | 48107 | | |

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

| | | | |
|-------------------------------|-------|------------------------------|-------|
| 95% CLT UCL | 9898 | 95% Jackknife UCL | 10501 |
| 95% Standard Bootstrap UCL | 9636 | 95% Bootstrap-t UCL | 17769 |
| 95% Hall's Bootstrap UCL | 36349 | 95% Percentile Bootstrap UCL | 9790 |
| 95% BCA Bootstrap UCL | 10618 | | |
| 90% Chebyshev(Mean, Sd) UCL | 13171 | 95% Chebyshev(Mean, Sd) UCL | 16453 |
| 97.5% Chebyshev(Mean, Sd) UCL | 21008 | 99% Chebyshev(Mean, Sd) UCL | 29956 |

Suggested UCL to Use

95% Student's-t UCL 10501

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (m-,p-xylene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 120 | Number of Distinct Observations | 35 |
| Number of Detects | 17 | Number of Non-Detects | 103 |
| Number of Distinct Detects | 15 | Number of Distinct Non-Detects | 20 |
| Minimum Detect | 0.13 | Minimum Non-Detect | 2 |
| Maximum Detect | 2.42 | Maximum Non-Detect | 10000 |
| Variance Detects | 0.431 | Percent Non-Detects | 85.83% |
| Mean Detects | 0.739 | SD Detects | 0.656 |
| Median Detects | 0.56 | CV Detects | 0.888 |
| Skewness Detects | 1.996 | Kurtosis Detects | 3.538 |
| Mean of Logged Detects | -0.607 | SD of Logged Detects | 0.811 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.715 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.892 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.294 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.207 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------|
| KM Mean | 0.59 | KM Standard Error of Mean | 0.0784 |
| KM SD | 0.421 | 95% KM (BCA) UCL | 0.715 |
| 95% KM (t) UCL | 0.72 | 95% KM (Percentile Bootstrap) UCL | 0.721 |
| 95% KM (z) UCL | 0.719 | 95% KM Bootstrap t UCL | 0.732 |
| 90% KM Chebyshev UCL | 0.825 | 95% KM Chebyshev UCL | 0.931 |
| 97.5% KM Chebyshev UCL | 1.079 | 99% KM Chebyshev UCL | 1.37 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.802 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.752 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.2 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.212 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 1.792 | k star (bias corrected MLE) | 1.515 |
| Theta hat (MLE) | 0.412 | Theta star (bias corrected MLE) | 0.488 |
| nu hat (MLE) | 60.93 | nu star (bias corrected) | 51.51 |
| Mean (detects) | 0.739 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|--|-------|--|-------|
| Minimum | 0.01 | Mean | 0.587 |
| Maximum | 2.42 | Median | 0.508 |
| SD | 0.404 | CV | 0.688 |
| k hat (MLE) | 2.119 | k star (bias corrected MLE) | 2.071 |
| Theta hat (MLE) | 0.277 | Theta star (bias corrected MLE) | 0.283 |
| nu hat (MLE) | 508.5 | nu star (bias corrected) | 497.1 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (497.11, α) | 446.4 | Adjusted Chi Square Value (497.11, β) | 445.8 |
| 95% Gamma Approximate UCL (use when n>=50) | 0.654 | 95% Gamma Adjusted UCL (use when n<50) | 0.655 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|--------|
| Mean (KM) | 0.59 | SD (KM) | 0.421 |
| Variance (KM) | 0.177 | SE of Mean (KM) | 0.0784 |
| k hat (KM) | 1.967 | k star (KM) | 1.923 |
| nu hat (KM) | 472 | nu star (KM) | 461.5 |
| theta hat (KM) | 0.3 | theta star (KM) | 0.307 |
| 80% gamma percentile (KM) | 0.887 | 90% gamma percentile (KM) | 1.158 |
| 95% gamma percentile (KM) | 1.417 | 99% gamma percentile (KM) | 1.992 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|---|-------|---|-------|
| Approximate Chi Square Value (461.53, α) | 412.7 | Adjusted Chi Square Value (461.53, β) | 412.2 |
| 95% Gamma Approximate KM-UCL (use when n>=50) | 0.66 | 95% Gamma Adjusted KM-UCL (use when n<50) | 0.66 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.917 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.892 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.21 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.207 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 0.564 | Mean in Log Scale | -0.743 |
| SD in Original Scale | 0.365 | SD in Log Scale | 0.586 |
| 95% t UCL (assumes normality of ROS data) | 0.619 | 95% Percentile Bootstrap UCL | 0.622 |
| 95% BCA Bootstrap UCL | 0.626 | 95% Bootstrap t UCL | 0.628 |
| 95% H-UCL (Log ROS) | 0.625 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.741 | KM Geo Mean | 0.477 |
| KM SD (logged) | 0.679 | 95% Critical H Value (KM-Log) | 1.956 |

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Standard Error of Mean (logged) | 0.163 | 95% H-UCL (KM -Log) | 0.678 |
| KM SD (logged) | 0.679 | 95% Critical H Value (KM-Log) | 1.956 |
| KM Standard Error of Mean (logged) | 0.163 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 201.6 |
| SD in Original Scale | 701.5 |
| 95% t UCL (Assumes normality) | 307.7 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.235 |
| SD in Log Scale | 2.615 |
| 95% H-Stat UCL | 768.2 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

| | | | |
|------------------------------|------|--------------------------------|-------|
| 95% KM Approximate Gamma UCL | 0.66 | 95% GROS Approximate Gamma UCL | 0.654 |
|------------------------------|------|--------------------------------|-------|

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test
 When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
 However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Manganese)

| General Statistics | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 8 | Number of Distinct Observations | 8 |
| | | Number of Missing Observations | 0 |
| Minimum | 13 | Mean | 151 |
| Maximum | 480 | Median | 63.5 |
| SD | 192.1 | Std. Error of Mean | 67.93 |
| Coefficient of Variation | 1.272 | Skewness | 1.403 |

Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.

For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).

Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1

| Normal GOF Test | | Shapiro Wilk GOF Test | |
|--------------------------------|-------|--|--|
| Shapiro Wilk Test Statistic | 0.674 | Data Not Normal at 5% Significance Level | |
| 5% Shapiro Wilk Critical Value | 0.818 | | |
| Lilliefors Test Statistic | 0.415 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.283 | Data Not Normal at 5% Significance Level | |

Data Not Normal at 5% Significance Level

| Assuming Normal Distribution | | | |
|------------------------------|-------|---|-------|
| 95% Normal UCL | | 95% UCLs (Adjusted for Skewness) | |
| 95% Student's-t UCL | 279.7 | 95% Adjusted-CLT UCL (Chen-1995) | 298.7 |
| | | 95% Modified-t UCL (Johnson-1978) | 285.3 |

| Gamma GOF Test | | Anderson-Darling Gamma GOF Test | |
|-----------------------|-------|---|--|
| A-D Test Statistic | 0.783 | Data Not Gamma Distributed at 5% Significance Level | |
| 5% A-D Critical Value | 0.742 | | |
| K-S Test Statistic | 0.347 | Kolmogorov-Smirnov Gamma GOF Test | |
| 5% K-S Critical Value | 0.303 | Data Not Gamma Distributed at 5% Significance Level | |

Data Not Gamma Distributed at 5% Significance Level

| Gamma Statistics | | | |
|--------------------------------|--------|-------------------------------------|-------|
| k hat (MLE) | 0.833 | k star (bias corrected MLE) | 0.604 |
| Theta hat (MLE) | 181.3 | Theta star (bias corrected MLE) | 250.1 |
| nu hat (MLE) | 13.32 | nu star (bias corrected) | 9.66 |
| MLE Mean (bias corrected) | 151 | MLE Sd (bias corrected) | 194.3 |
| | | Approximate Chi Square Value (0.05) | 3.731 |
| Adjusted Level of Significance | 0.0195 | Adjusted Chi Square Value | 2.859 |

| Assuming Gamma Distribution | | | |
|--|-----|--|-------|
| 95% Approximate Gamma UCL (use when n>=50) | 391 | 95% Adjusted Gamma UCL (use when n<50) | 510.2 |

| Lognormal GOF Test | | Shapiro Wilk Lognormal GOF Test | |
|--------------------------------|-------|--|--|
| Shapiro Wilk Test Statistic | 0.887 | Data appear Lognormal at 5% Significance Level | |
| 5% Shapiro Wilk Critical Value | 0.818 | | |
| Lilliefors Test Statistic | 0.273 | Lilliefors Lognormal GOF Test | |
| 5% Lilliefors Critical Value | 0.283 | Data appear Lognormal at 5% Significance Level | |

Data appear Lognormal at 5% Significance Level

| Lognormal Statistics | | | |
|------------------------|-------|---------------------|-------|
| Minimum of Logged Data | 2.565 | Mean of logged Data | 4.308 |
| Maximum of Logged Data | 6.174 | SD of logged Data | 1.276 |

| Assuming Lognormal Distribution | | | |
|---------------------------------|-------|----------------------------|-----|
| 95% H-UCL | 1233 | 90% Chebyshev (MVUE) UCL | 343 |
| 95% Chebyshev (MVUE) UCL | 433.1 | 97.5% Chebyshev (MVUE) UCL | 558 |
| 99% Chebyshev (MVUE) UCL | 803.4 | | |

Nonparametric Distribution Free UCL Statistics
 Data appear to follow a Discernible Distribution at 5% Significance Level

| Nonparametric Distribution Free UCLs | | | |
|--------------------------------------|-------|------------------------------|-------|
| 95% CLT UCL | 262.7 | 95% Jackknife UCL | 279.7 |
| 95% Standard Bootstrap UCL | 255.8 | 95% Bootstrap-t UCL | 1029 |
| 95% Hall's Bootstrap UCL | 1736 | 95% Percentile Bootstrap UCL | 256.5 |
| 95% BCA Bootstrap UCL | 293.9 | | |
| 90% Chebyshev(Mean, Sd) UCL | 354.8 | 95% Chebyshev(Mean, Sd) UCL | 447.1 |
| 97.5% Chebyshev(Mean, Sd) UCL | 575.2 | 99% Chebyshev(Mean, Sd) UCL | 826.9 |

Suggested UCL to Use
 95% Chebyshev (Mean, Sd) UCL 447.1

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Methyl tert-butyl ether)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 120 | Number of Distinct Observations | 27 |
| Number of Detects | 7 | Number of Non-Detects | 113 |
| Number of Distinct Detects | 7 | Number of Distinct Non-Detects | 20 |
| Minimum Detect | 0.13 | Minimum Non-Detect | 1 |
| Maximum Detect | 1.02 | Maximum Non-Detect | 5000 |
| Variance Detects | 0.0894 | Percent Non-Detects | 94.17% |
| Mean Detects | 0.451 | SD Detects | 0.299 |
| Median Detects | 0.37 | CV Detects | 0.662 |
| Skewness Detects | 1.326 | Kurtosis Detects | 1.546 |
| Mean of Logged Detects | -0.976 | SD of Logged Detects | 0.657 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.873 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.803 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.309 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.304 | Detected Data Not Normal at 5% Significance Level |

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------|
| KM Mean | 0.369 | KM Standard Error of Mean | 0.0717 |
| KM SD | 0.184 | 95% KM (BCA) UCL | 0.502 |
| 95% KM (t) UCL | 0.488 | 95% KM (Percentile Bootstrap) UCL | 0.495 |
| 95% KM (z) UCL | 0.487 | 95% KM Bootstrap t UCL | 0.545 |
| 90% KM Chebyshev UCL | 0.584 | 95% KM Chebyshev UCL | 0.681 |
| 97.5% KM Chebyshev UCL | 0.817 | 99% KM Chebyshev UCL | 1.082 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.294 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.712 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.249 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.314 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 2.925 | k star (bias corrected MLE) | 1.767 |
| Theta hat (MLE) | 0.154 | Theta star (bias corrected MLE) | 0.256 |
| nu hat (MLE) | 40.95 | nu star (bias corrected) | 24.73 |
| Mean (detects) | 0.451 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.0884 | Mean | 0.365 |
| Maximum | 1.02 | Median | 0.34 |
| SD | 0.162 | CV | 0.445 |
| k hat (MLE) | 5.256 | k star (bias corrected MLE) | 5.131 |
| Theta hat (MLE) | 0.0694 | Theta star (bias corrected MLE) | 0.0711 |
| nu hat (MLE) | 1262 | nu star (bias corrected) | 1231 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (N/A, α) | 1151 | Adjusted Chi Square Value (N/A, β) | 1150 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.39 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.39 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 0.369 | SD (KM) | 0.184 |
| Variance (KM) | 0.034 | SE of Mean (KM) | 0.0717 |
| k hat (KM) | 4 | k star (KM) | 3.906 |
| nu hat (KM) | 960.1 | nu star (KM) | 937.4 |
| theta hat (KM) | 0.0922 | theta star (KM) | 0.0945 |
| 80% gamma percentile (KM) | 0.51 | 90% gamma percentile (KM) | 0.619 |
| 95% gamma percentile (KM) | 0.72 | 99% gamma percentile (KM) | 0.935 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (937.41, α) | 867.3 | Adjusted Chi Square Value (937.41, β) | 866.5 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 0.399 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 0.399 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.967 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.803 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.209 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.304 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 0.349 | Mean in Log Scale | -1.147 |
| SD in Original Scale | 0.159 | SD in Log Scale | 0.44 |
| 95% t UCL (assumes normality of ROS data) | 0.373 | 95% Percentile Bootstrap UCL | 0.374 |
| 95% BCA Bootstrap UCL | 0.374 | 95% Bootstrap t UCL | 0.375 |
| 95% H-UCL (Log ROS) | 0.376 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|-------|-------------------------------|-------|
| KM Mean (logged) | -1.12 | KM Geo Mean | 0.326 |
| KM SD (logged) | 0.509 | 95% Critical H Value (KM-Log) | 1.843 |

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Standard Error of Mean (logged) | 0.213 | 95% H-UCL (KM -Log) | 0.405 |
| KM SD (logged) | 0.509 | 95% Critical H Value (KM-Log) | 1.843 |
| KM Standard Error of Mean (logged) | 0.213 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 100.8 |
| SD in Original Scale | 350.7 |
| 95% t UCL (Assumes normality) | 153.9 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.611 |
| SD in Log Scale | 2.531 |
| 95% H-Stat UCL | 313.2 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

| | |
|----------------|-------|
| 95% KM (t) UCL | 0.488 |
|----------------|-------|

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Naphthalene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|-------|
| Total Number of Observations | 120 | Number of Distinct Observations | 32 |
| Number of Detects | 12 | Number of Non-Detects | 108 |
| Number of Distinct Detects | 12 | Number of Distinct Non-Detects | 20 |
| Minimum Detect | 0.12 | Minimum Non-Detect | 1 |
| Maximum Detect | 1140 | Maximum Non-Detect | 5000 |
| Variance Detects | 111252 | Percent Non-Detects | 90% |
| Mean Detects | 137.5 | SD Detects | 333.5 |
| Median Detects | 5.27 | CV Detects | 2.425 |
| Skewness Detects | 2.945 | Kurtosis Detects | 8.903 |
| Mean of Logged Detects | 1.862 | SD of Logged Detects | 2.912 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.485 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.859 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.445 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.243 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 15.51 | KM Standard Error of Mean | 10.87 |
| KM SD | 111.4 | 95% KM (BCA) UCL | 33.19 |
| 95% KM (t) UCL | 33.52 | 95% KM (Percentile Bootstrap) UCL | 35.45 |
| 95% KM (z) UCL | 33.38 | 95% KM Bootstrap t UCL | 204.5 |
| 90% KM Chebyshev UCL | 48.11 | 95% KM Chebyshev UCL | 62.87 |
| 97.5% KM Chebyshev UCL | 83.37 | 99% KM Chebyshev UCL | 123.6 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.956 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.855 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.251 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.27 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.234 | k star (bias corrected MLE) | 0.231 |
| Theta hat (MLE) | 586.8 | Theta star (bias corrected MLE) | 594.6 |
| nu hat (MLE) | 5.625 | nu star (bias corrected) | 5.552 |
| Mean (detects) | 137.5 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|-------|---|-------|
| Minimum | 0.01 | Mean | 14.68 |
| Maximum | 1140 | Median | 0.01 |
| SD | 109.6 | CV | 7.467 |
| k hat (MLE) | 0.124 | k star (bias corrected MLE) | 0.127 |
| Theta hat (MLE) | 118.1 | Theta star (bias corrected MLE) | 115.8 |
| nu hat (MLE) | 29.82 | nu star (bias corrected) | 30.41 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (30.41, α) | 18.82 | Adjusted Chi Square Value (30.41, β) | 18.71 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 23.72 | 95% Gamma Adjusted UCL (use when $n < 50$) | 23.86 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 15.51 | SD (KM) | 111.4 |
| Variance (KM) | 12404 | SE of Mean (KM) | 10.87 |
| k hat (KM) | 0.0194 | k star (KM) | 0.0245 |
| nu hat (KM) | 4.654 | nu star (KM) | 5.871 |
| theta hat (KM) | 799.8 | theta star (KM) | 634 |
| 80% gamma percentile (KM) | 0.0397 | 90% gamma percentile (KM) | 4.929 |
| 95% gamma percentile (KM) | 47.96 | 99% gamma percentile (KM) | 419.9 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (5.87, α) | 1.574 | Adjusted Chi Square Value (5.87, β) | 1.548 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 57.84 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 58.83 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.914 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.859 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.234 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.243 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 14.94 | Mean in Log Scale | -0.483 |
| SD in Original Scale | 109.4 | SD in Log Scale | 1.927 |
| 95% t UCL (assumes normality of ROS data) | 31.5 | 95% Percentile Bootstrap UCL | 33.25 |
| 95% BCA Bootstrap UCL | 47.26 | 95% Bootstrap t UCL | 272.9 |
| 95% H-UCL (Log ROS) | 7.005 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.411 | KM Geo Mean | 0.663 |
| KM SD (logged) | 1.456 | 95% Critical H Value (KM-Log) | 2.693 |

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Standard Error of Mean (logged) | 0.325 | 95% H-UCL (KM -Log) | 2.74 |
| KM SD (logged) | 1.456 | 95% Critical H Value (KM-Log) | 2.693 |
| KM Standard Error of Mean (logged) | 0.325 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 113.5 |
| SD in Original Scale | 363.9 |
| 95% t UCL (Assumes normality) | 168.6 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.78 |
| SD in Log Scale | 2.563 |
| 95% H-Stat UCL | 410 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 57.84

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (o-Xylene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|-------|
| Total Number of Observations | 120 | Number of Distinct Observations | 29 |
| Number of Detects | 9 | Number of Non-Detects | 111 |
| Number of Distinct Detects | 9 | Number of Distinct Non-Detects | 20 |
| Minimum Detect | 0.11 | Minimum Non-Detect | 1 |
| Maximum Detect | 2.17 | Maximum Non-Detect | 5000 |
| Variance Detects | 0.392 | Percent Non-Detects | 92.5% |
| Mean Detects | 0.628 | SD Detects | 0.626 |
| Median Detects | 0.48 | CV Detects | 0.997 |
| Skewness Detects | 2.209 | Kurtosis Detects | 5.563 |
| Mean of Logged Detects | -0.826 | SD of Logged Detects | 0.899 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.745 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.829 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.257 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.274 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------|
| KM Mean | 0.467 | KM Standard Error of Mean | 0.0943 |
| KM SD | 0.333 | 95% KM (BCA) UCL | 0.618 |
| 95% KM (t) UCL | 0.623 | 95% KM (Percentile Bootstrap) UCL | 0.62 |
| 95% KM (z) UCL | 0.622 | 95% KM Bootstrap t UCL | 0.655 |
| 90% KM Chebyshev UCL | 0.75 | 95% KM Chebyshev UCL | 0.878 |
| 97.5% KM Chebyshev UCL | 1.056 | 99% KM Chebyshev UCL | 1.405 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.324 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.734 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.147 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.284 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 1.532 | k star (bias corrected MLE) | 1.096 |
| Theta hat (MLE) | 0.41 | Theta star (bias corrected MLE) | 0.573 |
| nu hat (MLE) | 27.58 | nu star (bias corrected) | 19.72 |
| Mean (detects) | 0.628 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|--|-------|--|-------|
| Minimum | 0.01 | Mean | 0.469 |
| Maximum | 2.17 | Median | 0.396 |
| SD | 0.344 | CV | 0.734 |
| k hat (MLE) | 1.762 | k star (bias corrected MLE) | 1.724 |
| Theta hat (MLE) | 0.266 | Theta star (bias corrected MLE) | 0.272 |
| nu hat (MLE) | 423 | nu star (bias corrected) | 413.7 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (413.74, α) | 367.6 | Adjusted Chi Square Value (413.74, β) | 367.1 |
| 95% Gamma Approximate UCL (use when n>=50) | 0.528 | 95% Gamma Adjusted UCL (use when n<50) | 0.528 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|--------|
| Mean (KM) | 0.467 | SD (KM) | 0.333 |
| Variance (KM) | 0.111 | SE of Mean (KM) | 0.0943 |
| k hat (KM) | 1.969 | k star (KM) | 1.925 |
| nu hat (KM) | 472.5 | nu star (KM) | 462.1 |
| theta hat (KM) | 0.237 | theta star (KM) | 0.243 |
| 80% gamma percentile (KM) | 0.703 | 90% gamma percentile (KM) | 0.917 |
| 95% gamma percentile (KM) | 1.121 | 99% gamma percentile (KM) | 1.577 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|---|-------|---|-------|
| Approximate Chi Square Value (462.05, α) | 413.2 | Adjusted Chi Square Value (462.05, β) | 412.7 |
| 95% Gamma Approximate KM-UCL (use when n>=50) | 0.522 | 95% Gamma Adjusted KM-UCL (use when n<50) | 0.523 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.969 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.829 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.179 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.274 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 0.444 | Mean in Log Scale | -1.014 |
| SD in Original Scale | 0.31 | SD in Log Scale | 0.64 |
| 95% t UCL (assumes normality of ROS data) | 0.491 | 95% Percentile Bootstrap UCL | 0.492 |
| 95% BCA Bootstrap UCL | 0.496 | 95% Bootstrap t UCL | 0.496 |
| 95% H-UCL (Log ROS) | 0.499 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.993 | KM Geo Mean | 0.371 |
| KM SD (logged) | 0.706 | 95% Critical H Value (KM-Log) | 1.977 |

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Standard Error of Mean (logged) | 0.249 | 95% H-UCL (KM -Log) | 0.54 |
| KM SD (logged) | 0.706 | 95% Critical H Value (KM-Log) | 1.977 |
| KM Standard Error of Mean (logged) | 0.249 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 100.8 |
| SD in Original Scale | 350.7 |
| 95% t UCL (Assumes normality) | 153.9 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.618 |
| SD in Log Scale | 2.531 |
| 95% H-Stat UCL | 315 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

| | |
|----------------|-------|
| 95% KM (t) UCL | 0.623 |
|----------------|-------|

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test
 When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
 Recommendations are based upon data size, data distribution, and skewness.
 These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
 However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (tert-Butylbenzene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 120 | Number of Distinct Observations | 27 |
| Number of Detects | 7 | Number of Non-Detects | 113 |
| Number of Distinct Detects | 7 | Number of Distinct Non-Detects | 20 |
| Minimum Detect | 0.16 | Minimum Non-Detect | 1 |
| Maximum Detect | 1.89 | Maximum Non-Detect | 5000 |
| Variance Detects | 0.351 | Percent Non-Detects | 94.17% |
| Mean Detects | 0.981 | SD Detects | 0.593 |
| Median Detects | 0.99 | CV Detects | 0.604 |
| Skewness Detects | 0.221 | Kurtosis Detects | -0.474 |
| Mean of Logged Detects | -0.25 | SD of Logged Detects | 0.835 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.979 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.803 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.168 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.304 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 0.652 | KM Standard Error of Mean | 0.167 |
| KM SD | 0.381 | 95% KM (BCA) UCL | 1.001 |
| 95% KM (t) UCL | 0.928 | 95% KM (Percentile Bootstrap) UCL | 0.993 |
| 95% KM (z) UCL | 0.926 | 95% KM Bootstrap t UCL | 1.221 |
| 90% KM Chebyshev UCL | 1.152 | 95% KM Chebyshev UCL | 1.379 |
| 97.5% KM Chebyshev UCL | 1.694 | 99% KM Chebyshev UCL | 2.312 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.254 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.714 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.191 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.315 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 2.318 | k star (bias corrected MLE) | 1.42 |
| Theta hat (MLE) | 0.423 | Theta star (bias corrected MLE) | 0.691 |
| nu hat (MLE) | 32.45 | nu star (bias corrected) | 19.88 |
| Mean (detects) | 0.981 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|-------|---|-------|
| Minimum | 0.154 | Mean | 0.609 |
| Maximum | 1.89 | Median | 0.559 |
| SD | 0.287 | CV | 0.472 |
| k hat (MLE) | 4.788 | k star (bias corrected MLE) | 4.674 |
| Theta hat (MLE) | 0.127 | Theta star (bias corrected MLE) | 0.13 |
| nu hat (MLE) | 1149 | nu star (bias corrected) | 1122 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (N/A, α) | 1045 | Adjusted Chi Square Value (N/A, β) | 1044 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.654 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.654 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 0.652 | SD (KM) | 0.381 |
| Variance (KM) | 0.145 | SE of Mean (KM) | 0.167 |
| k hat (KM) | 2.93 | k star (KM) | 2.862 |
| nu hat (KM) | 703.2 | nu star (KM) | 686.9 |
| theta hat (KM) | 0.222 | theta star (KM) | 0.228 |
| 80% gamma percentile (KM) | 0.935 | 90% gamma percentile (KM) | 1.168 |
| 95% gamma percentile (KM) | 1.386 | 99% gamma percentile (KM) | 1.86 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (686.92, α) | 627.1 | Adjusted Chi Square Value (686.92, β) | 626.4 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 0.714 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 0.715 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.903 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.803 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.233 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.304 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 0.536 | Mean in Log Scale | -0.753 |
| SD in Original Scale | 0.286 | SD in Log Scale | 0.513 |
| 95% t UCL (assumes normality of ROS data) | 0.579 | 95% Percentile Bootstrap UCL | 0.58 |
| 95% BCA Bootstrap UCL | 0.58 | 95% Bootstrap t UCL | 0.583 |
| 95% H-UCL (Log ROS) | 0.586 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.653 | KM Geo Mean | 0.521 |
| KM SD (logged) | 0.734 | 95% Critical H Value (KM-Log) | 1.998 |

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Standard Error of Mean (logged) | 0.363 | 95% H-UCL (KM -Log) | 0.779 |
| KM SD (logged) | 0.734 | 95% Critical H Value (KM-Log) | 1.998 |
| KM Standard Error of Mean (logged) | 0.363 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 100.8 |
| SD in Original Scale | 350.7 |
| 95% t UCL (Assumes normality) | 153.9 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.654 |
| SD in Log Scale | 2.496 |
| 95% H-Stat UCL | 291.9 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

| | |
|----------------|-------|
| 95% KM (t) UCL | 0.928 |
|----------------|-------|

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Toluene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|-------|
| Total Number of Observations | 120 | Number of Distinct Observations | 45 |
| Number of Detects | 27 | Number of Non-Detects | 93 |
| Number of Distinct Detects | 25 | Number of Distinct Non-Detects | 20 |
| Minimum Detect | 0.15 | Minimum Non-Detect | 1 |
| Maximum Detect | 110 | Maximum Non-Detect | 5000 |
| Variance Detects | 747.1 | Percent Non-Detects | 77.5% |
| Mean Detects | 9.911 | SD Detects | 27.33 |
| Median Detects | 0.45 | CV Detects | 2.758 |
| Skewness Detects | 3.077 | Kurtosis Detects | 8.824 |
| Mean of Logged Detects | -0.217 | SD of Logged Detects | 1.89 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.41 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.923 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.463 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.167 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 3.255 | KM Standard Error of Mean | 1.601 |
| KM SD | 15.1 | 95% KM (BCA) UCL | 6.185 |
| 95% KM (t) UCL | 5.909 | 95% KM (Percentile Bootstrap) UCL | 5.993 |
| 95% KM (z) UCL | 5.889 | 95% KM Bootstrap t UCL | 10.83 |
| 90% KM Chebyshev UCL | 8.058 | 95% KM Chebyshev UCL | 10.23 |
| 97.5% KM Chebyshev UCL | 13.25 | 99% KM Chebyshev UCL | 19.18 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 5.006 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.864 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.391 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.184 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.278 | k star (bias corrected MLE) | 0.272 |
| Theta hat (MLE) | 35.64 | Theta star (bias corrected MLE) | 36.45 |
| nu hat (MLE) | 15.02 | nu star (bias corrected) | 14.68 |
| Mean (detects) | 9.911 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|-------|---|-------|
| Minimum | 0.01 | Mean | 3.526 |
| Maximum | 110 | Median | 0.01 |
| SD | 13.69 | CV | 3.881 |
| k hat (MLE) | 0.202 | k star (bias corrected MLE) | 0.202 |
| Theta hat (MLE) | 17.46 | Theta star (bias corrected MLE) | 17.42 |
| nu hat (MLE) | 48.46 | nu star (bias corrected) | 48.59 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (48.59, α) | 33.59 | Adjusted Chi Square Value (48.59, β) | 33.43 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 5.101 | 95% Gamma Adjusted UCL (use when $n < 50$) | 5.124 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 3.255 | SD (KM) | 15.1 |
| Variance (KM) | 228 | SE of Mean (KM) | 1.601 |
| k hat (KM) | 0.0465 | k star (KM) | 0.0509 |
| nu hat (KM) | 11.16 | nu star (KM) | 12.21 |
| theta hat (KM) | 70.04 | theta star (KM) | 63.99 |
| 80% gamma percentile (KM) | 0.469 | 90% gamma percentile (KM) | 5.081 |
| 95% gamma percentile (KM) | 17.42 | 99% gamma percentile (KM) | 70.33 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (12.21, α) | 5.366 | Adjusted Chi Square Value (12.21, β) | 5.31 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 7.408 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 7.485 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.749 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.923 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.274 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.167 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 2.793 | Mean in Log Scale | -0.651 |
| SD in Original Scale | 13.36 | SD in Log Scale | 1.279 |
| 95% t UCL (assumes normality of ROS data) | 4.814 | 95% Percentile Bootstrap UCL | 4.895 |
| 95% BCA Bootstrap UCL | 6.121 | 95% Bootstrap t UCL | 8.762 |
| 95% H-UCL (Log ROS) | 1.583 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|--------|-------------|-------|
| KM Mean (logged) | -0.781 | KM Geo Mean | 0.458 |
|------------------|--------|-------------|-------|

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM SD (logged) | 1.199 | 95% Critical H Value (KM-Log) | 2.418 |
| KM Standard Error of Mean (logged) | 0.164 | 95% H-UCL (KM -Log) | 1.226 |
| KM SD (logged) | 1.199 | 95% Critical H Value (KM-Log) | 2.418 |
| KM Standard Error of Mean (logged) | 0.164 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 102.8 |
| SD in Original Scale | 350.4 |
| 95% t UCL (Assumes normality) | 155.8 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.683 |
| SD in Log Scale | 2.599 |
| 95% H-Stat UCL | 419 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

| | |
|------------------------|-------|
| 95% KM (Chebyshev) UCL | 10.23 |
|------------------------|-------|

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (trans-1,2-Dichloroethene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 120 | Number of Distinct Observations | 45 |
| Number of Detects | 30 | Number of Non-Detects | 90 |
| Number of Distinct Detects | 29 | Number of Distinct Non-Detects | 17 |
| Minimum Detect | 0.14 | Minimum Non-Detect | 1 |
| Maximum Detect | 142 | Maximum Non-Detect | 5000 |
| Variance Detects | 1405 | Percent Non-Detects | 75% |
| Mean Detects | 20.12 | SD Detects | 37.49 |
| Median Detects | 2.57 | CV Detects | 1.864 |
| Skewness Detects | 2.314 | Kurtosis Detects | 4.629 |
| Mean of Logged Detects | 1.085 | SD of Logged Detects | 2.234 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.596 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.927 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.336 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.159 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 6.685 | KM Standard Error of Mean | 2.286 |
| KM SD | 22.24 | 95% KM (BCA) UCL | 10.71 |
| 95% KM (t) UCL | 10.47 | 95% KM (Percentile Bootstrap) UCL | 10.58 |
| 95% KM (z) UCL | 10.44 | 95% KM Bootstrap t UCL | 13.06 |
| 90% KM Chebyshev UCL | 13.54 | 95% KM Chebyshev UCL | 16.65 |
| 97.5% KM Chebyshev UCL | 20.96 | 99% KM Chebyshev UCL | 29.43 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 1.189 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.842 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.153 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.172 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.351 | k star (bias corrected MLE) | 0.338 |
| Theta hat (MLE) | 57.34 | Theta star (bias corrected MLE) | 59.52 |
| nu hat (MLE) | 21.05 | nu star (bias corrected) | 20.28 |
| Mean (detects) | 20.12 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|-------|---|-------|
| Minimum | 0.01 | Mean | 5.748 |
| Maximum | 142 | Median | 0.01 |
| SD | 20.49 | CV | 3.564 |
| k hat (MLE) | 0.174 | k star (bias corrected MLE) | 0.176 |
| Theta hat (MLE) | 32.98 | Theta star (bias corrected MLE) | 32.75 |
| nu hat (MLE) | 41.84 | nu star (bias corrected) | 42.12 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (42.12, α) | 28.25 | Adjusted Chi Square Value (42.12, β) | 28.11 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 8.573 | 95% Gamma Adjusted UCL (use when $n < 50$) | 8.615 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 6.685 | SD (KM) | 22.24 |
| Variance (KM) | 494.6 | SE of Mean (KM) | 2.286 |
| k hat (KM) | 0.0904 | k star (KM) | 0.0937 |
| nu hat (KM) | 21.69 | nu star (KM) | 22.48 |
| theta hat (KM) | 73.98 | theta star (KM) | 71.38 |
| 80% gamma percentile (KM) | 4.2 | 90% gamma percentile (KM) | 17.28 |
| 95% gamma percentile (KM) | 38.92 | 99% gamma percentile (KM) | 109.7 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (22.48, α) | 12.7 | Adjusted Chi Square Value (22.48, β) | 12.61 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 11.83 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 11.92 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.927 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.927 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.103 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.159 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 5.752 | Mean in Log Scale | -0.321 |
| SD in Original Scale | 20.32 | SD in Log Scale | 1.814 |
| 95% t UCL (assumes normality of ROS data) | 8.827 | 95% Percentile Bootstrap UCL | 9.204 |
| 95% BCA Bootstrap UCL | 10.12 | 95% Bootstrap t UCL | 11.33 |
| 95% H-UCL (Log ROS) | 6.311 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.378 | KM Geo Mean | 0.685 |
| KM SD (logged) | 1.737 | 95% Critical H Value (KM-Log) | 3.019 |

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Standard Error of Mean (logged) | 0.231 | 95% H-UCL (KM -Log) | 5.012 |
| KM SD (logged) | 1.737 | 95% Critical H Value (KM-Log) | 3.019 |
| KM Standard Error of Mean (logged) | 0.231 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 98.26 |
| SD in Original Scale | 350.7 |
| 95% t UCL (Assumes normality) | 151.3 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.533 |
| SD in Log Scale | 2.537 |
| 95% H-Stat UCL | 295.4 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

| | |
|------------------------------|-------|
| 95% KM Approximate Gamma UCL | 11.83 |
|------------------------------|-------|

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test
 When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
 However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Trichloroethene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|-------|
| Total Number of Observations | 120 | Number of Distinct Observations | 87 |
| Number of Detects | 78 | Number of Non-Detects | 42 |
| Number of Distinct Detects | 73 | Number of Distinct Non-Detects | 14 |
| Minimum Detect | 0.23 | Minimum Non-Detect | 1 |
| Maximum Detect | 261000 | Maximum Non-Detect | 800 |
| Variance Detects | 1.267E+9 | Percent Non-Detects | 35% |
| Mean Detects | 7771 | SD Detects | 35590 |
| Median Detects | 44.05 | CV Detects | 4.58 |
| Skewness Detects | 5.99 | Kurtosis Detects | 38.18 |
| Mean of Logged Detects | 3.578 | SD of Logged Detects | 3.686 |

Normal GOF Test on Detects Only

| | | |
|------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.251 | Normal GOF Test on Detected Observations Only |
| 5% Shapiro Wilk P Value | 0 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.447 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.1 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 5053 | KM Standard Error of Mean | 2641 |
| KM SD | 28749 | 95% KM (BCA) UCL | 10767 |
| 95% KM (t) UCL | 9432 | 95% KM (Percentile Bootstrap) UCL | 9825 |
| 95% KM (z) UCL | 9398 | 95% KM Bootstrap t UCL | 22298 |
| 90% KM Chebyshev UCL | 12977 | 95% KM Chebyshev UCL | 16567 |
| 97.5% KM Chebyshev UCL | 21548 | 99% KM Chebyshev UCL | 31334 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 7.477 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.971 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.24 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.114 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.144 | k star (bias corrected MLE) | 0.147 |
| Theta hat (MLE) | 54064 | Theta star (bias corrected MLE) | 52952 |
| nu hat (MLE) | 22.42 | nu star (bias corrected) | 22.89 |
| Mean (detects) | 7771 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|--|--------|--|-------|
| Minimum | 0.01 | Mean | 5051 |
| Maximum | 261000 | Median | 1.015 |
| SD | 28869 | CV | 5.715 |
| k hat (MLE) | 0.103 | k star (bias corrected MLE) | 0.106 |
| Theta hat (MLE) | 48809 | Theta star (bias corrected MLE) | 47448 |
| nu hat (MLE) | 24.84 | nu star (bias corrected) | 25.55 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (25.55, α) | 15.03 | Adjusted Chi Square Value (25.55, β) | 14.93 |
| 95% Gamma Approximate UCL (use when n>=50) | 8585 | 95% Gamma Adjusted UCL (use when n<50) | 8641 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|----------|---------------------------|--------|
| Mean (KM) | 5053 | SD (KM) | 28749 |
| Variance (KM) | 8.265E+8 | SE of Mean (KM) | 2641 |
| k hat (KM) | 0.0309 | k star (KM) | 0.0357 |
| nu hat (KM) | 7.415 | nu star (KM) | 8.563 |
| theta hat (KM) | 163555 | theta star (KM) | 141629 |
| 80% gamma percentile (KM) | 157.5 | 90% gamma percentile (KM) | 4400 |
| 95% gamma percentile (KM) | 22539 | 99% gamma percentile (KM) | 124029 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|---|-------|---|-------|
| Approximate Chi Square Value (8.56, α) | 3.065 | Adjusted Chi Square Value (8.56, β) | 3.025 |
| 95% Gamma Approximate KM-UCL (use when n>=50) | 14117 | 95% Gamma Adjusted KM-UCL (use when n<50) | 14302 |

Lognormal GOF Test on Detected Observations Only

| | | |
|---|-----------|--|
| Shapiro Wilk Approximate Test Statistic | 0.928 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk P Value | 1.9505E-4 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.116 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.1 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 5052 | Mean in Log Scale | 2.196 |
| SD in Original Scale | 28869 | SD in Log Scale | 3.684 |
| 95% t UCL (assumes normality of ROS data) | 9421 | 95% Percentile Bootstrap UCL | 9698 |
| 95% BCA Bootstrap UCL | 12044 | 95% Bootstrap t UCL | 21083 |
| 95% H-UCL (Log ROS) | 52201 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 2.222 | KM Geo Mean | 9.225 |
| KM SD (logged) | 3.567 | 95% Critical H Value (KM-Log) | 5.405 |

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Standard Error of Mean (logged) | 0.336 | 95% H-UCL (KM -Log) | 31274 |
| KM SD (logged) | 3.567 | 95% Critical H Value (KM-Log) | 5.405 |
| KM Standard Error of Mean (logged) | 0.336 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 5063 |
| SD in Original Scale | 28867 |
| 95% t UCL (Assumes normality) | 9432 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.79 |
| SD in Log Scale | 3.414 |
| 95% H-Stat UCL | 28071 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

99% KM (Chebyshev) UCL 31334

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Vinyl chloride)

General Statistics

| | | | |
|------------------------------|---------|---------------------------------|--------|
| Total Number of Observations | 120 | Number of Distinct Observations | 91 |
| Number of Detects | 80 | Number of Non-Detects | 40 |
| Number of Distinct Detects | 79 | Number of Distinct Non-Detects | 13 |
| Minimum Detect | 0.25 | Minimum Non-Detect | 1 |
| Maximum Detect | 14900 | Maximum Non-Detect | 5000 |
| Variance Detects | 4284178 | Percent Non-Detects | 33.33% |
| Mean Detects | 799.7 | SD Detects | 2070 |
| Median Detects | 32.8 | CV Detects | 2.588 |
| Skewness Detects | 4.738 | Kurtosis Detects | 27.98 |
| Mean of Logged Detects | 3.59 | SD of Logged Detects | 2.999 |

Normal GOF Test on Detects Only

| | | |
|------------------------------|--------|--|
| Shapiro Wilk Test Statistic | 0.455 | Normal GOF Test on Detected Observations Only |
| 5% Shapiro Wilk P Value | 0 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.35 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.0991 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 537.6 | KM Standard Error of Mean | 158.4 |
| KM SD | 1722 | 95% KM (BCA) UCL | 844.8 |
| 95% KM (t) UCL | 800.3 | 95% KM (Percentile Bootstrap) UCL | 815.3 |
| 95% KM (z) UCL | 798.2 | 95% KM Bootstrap t UCL | 1006 |
| 90% KM Chebyshev UCL | 1013 | 95% KM Chebyshev UCL | 1228 |
| 97.5% KM Chebyshev UCL | 1527 | 99% KM Chebyshev UCL | 2114 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 3.476 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.899 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.168 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.11 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.232 | k star (bias corrected MLE) | 0.232 |
| Theta hat (MLE) | 3443 | Theta star (bias corrected MLE) | 3449 |
| nu hat (MLE) | 37.16 | nu star (bias corrected) | 37.1 |
| Mean (detects) | 799.7 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|-------|---|-------|
| Minimum | 0.01 | Mean | 533.1 |
| Maximum | 14900 | Median | 2.145 |
| SD | 1728 | CV | 3.242 |
| k hat (MLE) | 0.143 | k star (bias corrected MLE) | 0.145 |
| Theta hat (MLE) | 3733 | Theta star (bias corrected MLE) | 3682 |
| nu hat (MLE) | 34.27 | nu star (bias corrected) | 34.75 |
| Adjusted Level of Significance (β) | 0.048 | | |
| Approximate Chi Square Value (34.75, α) | 22.26 | Adjusted Chi Square Value (34.75, β) | 22.14 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 832.1 | 95% Gamma Adjusted UCL (use when $n < 50$) | 836.6 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|---------|---------------------------|-------|
| Mean (KM) | 537.6 | SD (KM) | 1722 |
| Variance (KM) | 2966359 | SE of Mean (KM) | 158.4 |
| k hat (KM) | 0.0974 | k star (KM) | 0.101 |
| nu hat (KM) | 23.39 | nu star (KM) | 24.14 |
| theta hat (KM) | 5517 | theta star (KM) | 5346 |
| 80% gamma percentile (KM) | 376.1 | 90% gamma percentile (KM) | 1434 |
| 95% gamma percentile (KM) | 3120 | 99% gamma percentile (KM) | 8516 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (24.14, α) | 13.95 | Adjusted Chi Square Value (24.14, β) | 13.86 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 930.1 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 936.4 |

Lognormal GOF Test on Detected Observations Only

| | | |
|---|-----------|---|
| Shapiro Wilk Approximate Test Statistic | 0.932 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk P Value | 3.3889E-4 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.0978 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.0991 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 533.7 | Mean in Log Scale | 2.209 |
| SD in Original Scale | 1728 | SD in Log Scale | 3.309 |
| 95% t UCL (assumes normality of ROS data) | 795.3 | 95% Percentile Bootstrap UCL | 829.4 |
| 95% BCA Bootstrap UCL | 881.4 | 95% Bootstrap t UCL | 998.1 |
| 95% H-UCL (Log ROS) | 10084 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 2.375 | KM Geo Mean | 10.75 |
| KM SD (logged) | 3.083 | 95% Critical H Value (KM-Log) | 4.75 |

| | | | |
|------------------------------------|-------|-------------------------------|------|
| KM Standard Error of Mean (logged) | 0.293 | 95% H-UCL (KM -Log) | 4766 |
| KM SD (logged) | 3.083 | 95% Critical H Value (KM-Log) | 4.75 |
| KM Standard Error of Mean (logged) | 0.293 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 562.8 |
| SD in Original Scale | 1735 |
| 95% t UCL (Assumes normality) | 825.3 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.809 |
| SD in Log Scale | 3.008 |
| 95% H-Stat UCL | 5505 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 4766

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

UCL Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation ProUCL 5.15/4/2017 4:15:02 PM
 From File HHRA Data for Review.xls
 Full Precision OFF
 Confidence Coefficient 95%
 Number of Bootstrap Operations 2000

Result (1,1-Dichloroethane)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 27 | Number of Distinct Observations | 15 |
| Number of Detects | 8 | Number of Non-Detects | 19 |
| Number of Distinct Detects | 8 | Number of Distinct Non-Detects | 7 |
| Minimum Detect | 0.12 | Minimum Non-Detect | 1 |
| Maximum Detect | 2100 | Maximum Non-Detect | 5000 |
| Variance Detects | 616446 | Percent Non-Detects | 70.37% |
| Mean Detects | 400.5 | SD Detects | 785.1 |
| Median Detects | 1.05 | CV Detects | 1.96 |
| Skewness Detects | 1.912 | Kurtosis Detects | 2.967 |
| Mean of Logged Detects | 1.433 | SD of Logged Detects | 3.914 |

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic 0.606
 5% Shapiro Wilk Critical Value 0.818
 Lilliefors Test Statistic 0.44
 5% Lilliefors Critical Value 0.283

Shapiro Wilk GOF Test

Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 123.5 | KM Standard Error of Mean | 93.78 |
| KM SD | 447.3 | 95% KM (BCA) UCL | 285.6 |
| 95% KM (t) UCL | 283.5 | 95% KM (Percentile Bootstrap) UCL | 285.4 |
| 95% KM (z) UCL | 277.8 | 95% KM Bootstrap t UCL | 21308 |
| 90% KM Chebyshev UCL | 404.9 | 95% KM Chebyshev UCL | 532.3 |
| 97.5% KM Chebyshev UCL | 709.2 | 99% KM Chebyshev UCL | 1057 |

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic 1.013
 5% A-D Critical Value 0.867
 K-S Test Statistic 0.309
 5% K-S Critical Value 0.327

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Aprpr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.166 | k star (bias corrected MLE) | 0.187 |
| Theta hat (MLE) | 2412 | Theta star (bias corrected MLE) | 2140 |
| nu hat (MLE) | 2.657 | nu star (bias corrected) | 2.994 |
| Mean (detects) | 400.5 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 118.7 |
| Maximum | 2100 | Median | 0.01 |
| SD | 448 | CV | 3.775 |
| k hat (MLE) | 0.106 | k star (bias corrected MLE) | 0.119 |
| Theta hat (MLE) | 1118 | Theta star (bias corrected MLE) | 996.8 |
| nu hat (MLE) | 5.732 | nu star (bias corrected) | 6.429 |
| Adjusted Level of Significance (β) | 0.0401 | | |
| Approximate Chi Square Value (6.43, α) | 1.863 | Adjusted Chi Square Value (6.43, β) | 1.71 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 409.6 | 95% Gamma Adjusted UCL (use when $n < 50$) | 446.1 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 123.5 | SD (KM) | 447.3 |
| Variance (KM) | 200058 | SE of Mean (KM) | 93.78 |
| k hat (KM) | 0.0763 | k star (KM) | 0.0925 |
| nu hat (KM) | 4.119 | nu star (KM) | 4.995 |
| theta hat (KM) | 1619 | theta star (KM) | 1336 |
| 80% gamma percentile (KM) | 76.08 | 90% gamma percentile (KM) | 317.5 |

Result (Acetone)

| General Statistics | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 27 | Number of Distinct Observations | 14 |
| Number of Detects | 5 | Number of Non-Detects | 22 |
| Number of Distinct Detects | 5 | Number of Distinct Non-Detects | 9 |
| Minimum Detect | 1.21 | Minimum Non-Detect | 25 |
| Maximum Detect | 8.16 | Maximum Non-Detect | 125000 |
| Variance Detects | 6.378 | Percent Non-Detects | 81.48% |
| Mean Detects | 4.126 | SD Detects | 2.526 |
| Median Detects | 3.9 | CV Detects | 0.612 |
| Skewness Detects | 1.042 | Kurtosis Detects | 2.372 |
| Mean of Logged Detects | 1.249 | SD of Logged Detects | 0.686 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.904 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.31 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 4.126 | KM Standard Error of Mean | 1.129 |
| KM SD | 2.259 | 95% KM (BCA) UCL | 6.11 |
| 95% KM (t) UCL | 6.052 | 95% KM (Percentile Bootstrap) UCL | 6.11 |
| 95% KM (z) UCL | 5.984 | 95% KM Bootstrap t UCL | 7.666 |
| 90% KM Chebyshev UCL | 7.514 | 95% KM Chebyshev UCL | 9.049 |
| 97.5% KM Chebyshev UCL | 11.18 | 99% KM Chebyshev UCL | 15.36 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.334 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.682 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.236 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.359 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 3.131 | k star (bias corrected MLE) | 1.386 |
| Theta hat (MLE) | 1.318 | Theta star (bias corrected MLE) | 2.978 |
| nu hat (MLE) | 31.31 | nu star (bias corrected) | 13.86 |
| Mean (detects) | 4.126 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.761 | Mean | 4.069 |
| Maximum | 8.978 | Median | 3.845 |
| SD | 1.985 | CV | 0.488 |
| k hat (MLE) | 3.966 | k star (bias corrected MLE) | 3.55 |
| Theta hat (MLE) | 1.026 | Theta star (bias corrected MLE) | 1.146 |
| nu hat (MLE) | 214.2 | nu star (bias corrected) | 191.7 |
| Adjusted Level of Significance (β) | 0.0401 | | |
| Approximate Chi Square Value (191.70, α) | 160.7 | Adjusted Chi Square Value (191.70, β) | 158.9 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 4.855 | 95% Gamma Adjusted UCL (use when $n < 50$) | 4.91 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 4.126 | SD (KM) | 2.259 |
| Variance (KM) | 5.103 | SE of Mean (KM) | 1.129 |
| k hat (KM) | 3.336 | k star (KM) | 2.99 |
| nu hat (KM) | 180.2 | nu star (KM) | 161.5 |
| theta hat (KM) | 1.237 | theta star (KM) | 1.38 |
| 80% gamma percentile (KM) | 5.887 | 90% gamma percentile (KM) | 7.325 |
| 95% gamma percentile (KM) | 8.667 | 99% gamma percentile (KM) | 11.58 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (161.47, α) | 133.1 | Adjusted Chi Square Value (161.47, β) | 131.4 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 5.006 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 5.068 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.924 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.268 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 3.984 | Mean in Log Scale | 1.249 |
| SD in Original Scale | 2.156 | SD in Log Scale | 0.533 |
| 95% t UCL (assumes normality of ROS data) | 4.692 | 95% Percentile Bootstrap UCL | 4.661 |
| 95% BCA Bootstrap UCL | 4.749 | 95% Bootstrap t UCL | 4.891 |
| 95% H-UCL (Log ROS) | 4.956 | | |

| Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution | | | |
|---|-------|-------------------------------|-------|
| KM Mean (logged) | 1.249 | KM Geo Mean | 3.488 |
| KM SD (logged) | 0.613 | 95% Critical H Value (KM-Log) | 2.075 |
| KM Standard Error of Mean (logged) | 0.307 | 95% H-UCL (KM -Log) | 5.403 |
| KM SD (logged) | 0.613 | 95% Critical H Value (KM-Log) | 2.075 |
| KM Standard Error of Mean (logged) | 0.307 | | |

| DL/2 Statistics | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 4901 | Mean in Log Scale | 4.268 |
| SD in Original Scale | 16613 | SD in Log Scale | 2.826 |
| 95% t UCL (Assumes normality) | 10354 | 95% H-Stat UCL | 78999 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics
Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use
 95% KM (t) UCL 6.052

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. Recommendations are based upon data size, data distribution, and skewness. These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (cis-1,2-Dichloroethene)

| General Statistics | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 27 | Number of Distinct Observations | 20 |
| Number of Detects | 18 | Number of Non-Detects | 9 |
| Number of Distinct Detects | 18 | Number of Distinct Non-Detects | 2 |
| Minimum Detect | 0.22 | Minimum Non-Detect | 1 |
| Maximum Detect | 109000 | Maximum Non-Detect | 160 |
| Variance Detects | 6.539E+8 | Percent Non-Detects | 33.33% |
| Mean Detects | 7097 | SD Detects | 25572 |
| Median Detects | 310 | CV Detects | 3.603 |
| Skewness Detects | 4.169 | Kurtosis Detects | 17.53 |
| Mean of Logged Detects | 4.871 | SD of Logged Detects | 3.505 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.303 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.897 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.471 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.202 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 4732 | KM Standard Error of Mean | 4072 |
| KM SD | 20565 | 95% KM (BCA) UCL | 13193 |
| 95% KM (t) UCL | 11678 | 95% KM (Percentile Bootstrap) UCL | 12721 |
| 95% KM (z) UCL | 11430 | 95% KM Bootstrap t UCL | 213739 |
| 90% KM Chebyshev UCL | 16949 | 95% KM Chebyshev UCL | 22483 |
| 97.5% KM Chebyshev UCL | 30164 | 99% KM Chebyshev UCL | 45252 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.322 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.902 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.28 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.227 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.186 | k star (bias corrected MLE) | 0.192 |
| Theta hat (MLE) | 38116 | Theta star (bias corrected MLE) | 36925 |
| nu hat (MLE) | 6.703 | nu star (bias corrected) | 6.919 |
| Mean (detects) | 7097 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 4731 |
| Maximum | 109000 | Median | 3.54 |
| SD | 20957 | CV | 4.43 |
| k hat (MLE) | 0.118 | k star (bias corrected MLE) | 0.129 |
| Theta hat (MLE) | 40168 | Theta star (bias corrected MLE) | 36566 |
| nu hat (MLE) | 6.36 | nu star (bias corrected) | 6.987 |
| Adjusted Level of Significance (β) | 0.0401 | | |
| Approximate Chi Square Value (6.99, α) | 2.163 | Adjusted Chi Square Value (6.99, β) | 1.996 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 15280 | 95% Gamma Adjusted UCL (use when $n < 50$) | 16561 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|----------|---------------------------|--------|
| Mean (KM) | 4732 | SD (KM) | 20565 |
| Variance (KM) | 4.229E+8 | SE of Mean (KM) | 4072 |
| k hat (KM) | 0.0529 | k star (KM) | 0.0717 |
| nu hat (KM) | 2.859 | nu star (KM) | 3.874 |
| theta hat (KM) | 89379 | theta star (KM) | 65948 |
| 80% gamma percentile (KM) | 1793 | 90% gamma percentile (KM) | 10406 |
| 95% gamma percentile (KM) | 27292 | 99% gamma percentile (KM) | 88164 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (3.87, α) | 0.673 | Adjusted Chi Square Value (3.87, β) | 0.596 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 27251 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 30757 |

95% Gamma Adjusted KM-UCL (use when $k \leq 1$ and $15 < n < 50$)

Lognormal GOF Test on Detected Observations Only

| | | |
|-----------------------------|-------|------------------------------|
| Shapiro Wilk Test Statistic | 0.949 | Shapiro Wilk GOF Test |
|-----------------------------|-------|------------------------------|

| | | |
|--------------------------------|-------|---|
| 5% Shapiro Wilk Critical Value | 0.897 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.161 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.202 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|----------|------------------------------|--------|
| Mean in Original Scale | 4731 | Mean in Log Scale | 2.837 |
| SD in Original Scale | 20957 | SD in Log Scale | 4.226 |
| 95% t UCL (assumes normality of ROS data) | 11610 | 95% Percentile Bootstrap UCL | 12460 |
| 95% BCA Bootstrap UCL | 20501 | 95% Bootstrap t UCL | 219900 |
| 95% H-UCL (Log ROS) | 91177650 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|---------|
| KM Mean (logged) | 3.002 | KM Geo Mean | 20.13 |
| KM SD (logged) | 3.873 | 95% Critical H Value (KM-Log) | 7.284 |
| KM Standard Error of Mean (logged) | 0.789 | 95% H-UCL (KM -Log) | 9186896 |
| KM SD (logged) | 3.873 | 95% Critical H Value (KM-Log) | 7.284 |
| KM Standard Error of Mean (logged) | 0.789 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 4734 |
| SD in Original Scale | 20956 |
| 95% t UCL (Assumes normality) | 11613 |

DL/2 Log-Transformed

| | |
|-------------------|---------|
| Mean in Log Scale | 3.204 |
| SD in Log Scale | 3.832 |
| 95% H-Stat UCL | 8587603 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

99% KM (Chebyshev) UCL 45252

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Naphthalene)

| General Statistics | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 27 | Number of Distinct Observations | 13 |
| Number of Detects | 5 | Number of Non-Detects | 22 |
| Number of Distinct Detects | 5 | Number of Distinct Non-Detects | 8 |
| Minimum Detect | 0.53 | Minimum Non-Detect | 1 |
| Maximum Detect | 1140 | Maximum Non-Detect | 5000 |
| Variance Detects | 249757 | Percent Non-Detects | 81.48% |
| Mean Detects | 246.6 | SD Detects | 499.8 |
| Median Detects | 39.8 | CV Detects | 2.026 |
| Skewness Detects | 2.228 | Kurtosis Detects | 4.972 |
| Mean of Logged Detects | 3.221 | SD of Logged Detects | 2.779 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.586 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.458 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 50.55 | KM Standard Error of Mean | 49.81 |
| KM SD | 222.7 | 95% KM (BCA) UCL | 144.1 |
| 95% KM (t) UCL | 135.5 | 95% KM (Percentile Bootstrap) UCL | 140.1 |
| 95% KM (z) UCL | 132.5 | 95% KM Bootstrap t UCL | 930.3 |
| 90% KM Chebyshev UCL | 200 | 95% KM Chebyshev UCL | 267.7 |
| 97.5% KM Chebyshev UCL | 361.6 | 99% KM Chebyshev UCL | 546.2 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.439 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.739 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.346 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.38 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.301 | k star (bias corrected MLE) | 0.254 |
| Theta hat (MLE) | 818.4 | Theta star (bias corrected MLE) | 971.4 |
| nu hat (MLE) | 3.014 | nu star (bias corrected) | 2.539 |
| Mean (detects) | 246.6 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 45.68 |
| Maximum | 1140 | Median | 0.01 |
| SD | 219 | CV | 4.794 |
| k hat (MLE) | 0.114 | k star (bias corrected MLE) | 0.126 |
| Theta hat (MLE) | 399.3 | Theta star (bias corrected MLE) | 361.5 |
| nu hat (MLE) | 6.177 | nu star (bias corrected) | 6.824 |
| Adjusted Level of Significance (β) | 0.0401 | | |
| Approximate Chi Square Value (6.82, α) | 2.074 | Adjusted Chi Square Value (6.82, β) | 1.911 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 150.3 | 95% Gamma Adjusted UCL (use when $n < 50$) | 163.1 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 50.55 | SD (KM) | 222.7 |
| Variance (KM) | 49597 | SE of Mean (KM) | 49.81 |
| k hat (KM) | 0.0515 | k star (KM) | 0.0705 |
| nu hat (KM) | 2.782 | nu star (KM) | 3.807 |
| theta hat (KM) | 981.1 | theta star (KM) | 717.1 |
| 80% gamma percentile (KM) | 18.4 | 90% gamma percentile (KM) | 109.7 |
| 95% gamma percentile (KM) | 291 | 99% gamma percentile (KM) | 949.6 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (3.81, α) | 0.647 | Adjusted Chi Square Value (3.81, β) | 0.572 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 297.5 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 336.2 |
| 95% Gamma Adjusted KM-UCL (use when $k \leq 1$ and $15 < n < 50$) | | | |

Lognormal GOF Test on Detected Observations Only

| | | |
|-----------------------------|-------|------------------------------|
| Shapiro Wilk Test Statistic | 0.967 | Shapiro Wilk GOF Test |
|-----------------------------|-------|------------------------------|

| | | |
|--------------------------------|-------|---|
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.222 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 46.54 | Mean in Log Scale | -0.132 |
| SD in Original Scale | 218.8 | SD in Log Scale | 2.46 |
| 95% t UCL (assumes normality of ROS data) | 118.4 | 95% Percentile Bootstrap UCL | 130.7 |
| 95% BCA Bootstrap UCL | 174 | 95% Bootstrap t UCL | 1316 |
| 95% H-UCL (Log ROS) | 183.9 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.273 | KM Geo Mean | 1.315 |
| KM SD (logged) | 1.967 | 95% Critical H Value (KM-Log) | 3.983 |
| KM Standard Error of Mean (logged) | 0.472 | 95% H-UCL (KM -Log) | 42.29 |
| KM SD (logged) | 1.967 | 95% Critical H Value (KM-Log) | 3.983 |
| KM Standard Error of Mean (logged) | 0.472 | | |

DL/2 Statistics

| DL/2 Normal | | DL/2 Log-Transformed | |
|-------------------------------|-------|----------------------|-------|
| Mean in Original Scale | 238.7 | Mean in Log Scale | 1.823 |
| SD in Original Scale | 687.1 | SD in Log Scale | 2.706 |
| 95% t UCL (Assumes normality) | 464.3 | 95% H-Stat UCL | 3881 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

nma Adjusted KM-UCL (use when $k \leq 1$ and $15 < n < 50$ but $k \leq 1$) 336.2

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Toluene)

| General Statistics | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 27 | Number of Distinct Observations | 15 |
| Number of Detects | 6 | Number of Non-Detects | 21 |
| Number of Distinct Detects | 6 | Number of Distinct Non-Detects | 9 |
| Minimum Detect | 0.15 | Minimum Non-Detect | 1 |
| Maximum Detect | 0.73 | Maximum Non-Detect | 5000 |
| Variance Detects | 0.063 | Percent Non-Detects | 77.78% |
| Mean Detects | 0.4 | SD Detects | 0.251 |
| Median Detects | 0.295 | CV Detects | 0.627 |
| Skewness Detects | 0.747 | Kurtosis Detects | -1.816 |
| Mean of Logged Detects | -1.082 | SD of Logged Detects | 0.633 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.829 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.788 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.277 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.325 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 0.4 | KM Standard Error of Mean | 0.102 |
| KM SD | 0.229 | 95% KM (BCA) UCL | 0.596 |
| 95% KM (t) UCL | 0.575 | 95% KM (Percentile Bootstrap) UCL | 0.573 |
| 95% KM (z) UCL | 0.568 | 95% KM Bootstrap t UCL | 0.961 |
| 90% KM Chebyshev UCL | 0.707 | 95% KM Chebyshev UCL | 0.847 |
| 97.5% KM Chebyshev UCL | 1.04 | 99% KM Chebyshev UCL | 1.419 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.436 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.701 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.233 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.334 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 3.168 | k star (bias corrected MLE) | 1.695 |
| Theta hat (MLE) | 0.126 | Theta star (bias corrected MLE) | 0.236 |
| nu hat (MLE) | 38.02 | nu star (bias corrected) | 20.34 |
| Mean (detects) | 0.4 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.0859 | Mean | 0.392 |
| Maximum | 0.831 | Median | 0.371 |
| SD | 0.19 | CV | 0.484 |
| k hat (MLE) | 4.221 | k star (bias corrected MLE) | 3.776 |
| Theta hat (MLE) | 0.0928 | Theta star (bias corrected MLE) | 0.104 |
| nu hat (MLE) | 227.9 | nu star (bias corrected) | 203.9 |
| Adjusted Level of Significance (β) | 0.0401 | | |
| Approximate Chi Square Value (203.92, α) | 171.9 | Adjusted Chi Square Value (203.92, β) | 170 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.465 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.47 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|-------|
| Mean (KM) | 0.4 | SD (KM) | 0.229 |
| Variance (KM) | 0.0525 | SE of Mean (KM) | 0.102 |
| k hat (KM) | 3.05 | k star (KM) | 2.735 |
| nu hat (KM) | 164.7 | nu star (KM) | 147.7 |
| theta hat (KM) | 0.131 | theta star (KM) | 0.146 |
| 80% gamma percentile (KM) | 0.577 | 90% gamma percentile (KM) | 0.724 |
| 95% gamma percentile (KM) | 0.862 | 99% gamma percentile (KM) | 1.163 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (147.71, α) | 120.6 | Adjusted Chi Square Value (147.71, β) | 119.1 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 0.49 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 0.496 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.912 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.788 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.208 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.325 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 0.379 | Mean in Log Scale | -1.082 |
| SD in Original Scale | 0.19 | SD in Log Scale | 0.485 |
| 95% t UCL (assumes normality of ROS data) | 0.442 | 95% Percentile Bootstrap UCL | 0.441 |
| 95% BCA Bootstrap UCL | 0.452 | 95% Bootstrap t UCL | 0.452 |
| 95% H-UCL (Log ROS) | 0.459 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -1.082 | KM Geo Mean | 0.339 |
| KM SD (logged) | 0.577 | 95% Critical H Value (KM-Log) | 2.04 |
| KM Standard Error of Mean (logged) | 0.258 | 95% H-UCL (KM -Log) | 0.504 |
| KM SD (logged) | 0.577 | 95% Critical H Value (KM-Log) | 2.04 |
| KM Standard Error of Mean (logged) | 0.258 | | |

DL/2 Statistics

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 196.1 | Mean in Log Scale | 1.199 |
| SD in Original Scale | 664.5 | SD in Log Scale | 2.673 |
| 95% t UCL (Assumes normality) | 414.2 | 95% H-Stat UCL | 1785 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.575

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (trans-1,2-Dichloroethene)

| General Statistics | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 27 | Number of Distinct Observations | 12 |
| Number of Detects | 5 | Number of Non-Detects | 22 |
| Number of Distinct Detects | 5 | Number of Distinct Non-Detects | 7 |
| Minimum Detect | 0.35 | Minimum Non-Detect | 1 |
| Maximum Detect | 13.6 | Maximum Non-Detect | 5000 |
| Variance Detects | 30.96 | Percent Non-Detects | 81.48% |
| Mean Detects | 6.2 | SD Detects | 5.564 |
| Median Detects | 5.8 | CV Detects | 0.897 |
| Skewness Detects | 0.353 | Kurtosis Detects | -1.718 |
| Mean of Logged Detects | 1.2 | SD of Logged Detects | 1.513 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.941 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.201 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|--------------|-----------------------------------|-------|
| KM Mean | 1.907 | KM Standard Error of Mean | 0.926 |
| KM SD | 3.609 | 95% KM (BCA) UCL | 4.227 |
| 95% KM (t) UCL | 3.486 | 95% KM (Percentile Bootstrap) UCL | 3.689 |
| 95% KM (z) UCL | 3.429 | 95% KM Bootstrap t UCL | 3.632 |
| 90% KM Chebyshev UCL | 4.684 | 95% KM Chebyshev UCL | 5.942 |
| 97.5% KM Chebyshev UCL | 7.688 | 99% KM Chebyshev UCL | 11.12 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.275 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.693 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.213 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.365 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.932 | k star (bias corrected MLE) | 0.506 |
| Theta hat (MLE) | 6.651 | Theta star (bias corrected MLE) | 12.25 |
| nu hat (MLE) | 9.323 | nu star (bias corrected) | 5.062 |
| Mean (detects) | 6.2 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.01 | Mean | 1.584 |
| Maximum | 13.6 | Median | 0.0403 |
| SD | 3.221 | CV | 2.034 |
| k hat (MLE) | 0.282 | k star (bias corrected MLE) | 0.276 |
| Theta hat (MLE) | 5.608 | Theta star (bias corrected MLE) | 5.744 |
| nu hat (MLE) | 15.25 | nu star (bias corrected) | 14.89 |
| Adjusted Level of Significance (β) | 0.0401 | | |
| Approximate Chi Square Value (14.89, α) | 7.184 | Adjusted Chi Square Value (14.89, β) | 6.843 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 3.282 | 95% Gamma Adjusted UCL (use when $n < 50$) | 3.446 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 1.907 | SD (KM) | 3.609 |
| Variance (KM) | 13.03 | SE of Mean (KM) | 0.926 |
| k hat (KM) | 0.279 | k star (KM) | 0.273 |
| nu hat (KM) | 15.07 | nu star (KM) | 14.73 |
| theta hat (KM) | 6.832 | theta star (KM) | 6.99 |
| 80% gamma percentile (KM) | 2.849 | 90% gamma percentile (KM) | 5.681 |
| 95% gamma percentile (KM) | 8.988 | 99% gamma percentile (KM) | 17.69 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (14.73, α) | 7.073 | Adjusted Chi Square Value (14.73, β) | 6.735 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 3.97 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 4.17 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.909 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Lognormal at 5% Significance Level |

| | | |
|------------------------------|-------|---|
| Lilliefors Test Statistic | 0.244 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 1.614 | Mean in Log Scale | -0.544 |
| SD in Original Scale | 3.144 | SD in Log Scale | 1.375 |
| 95% t UCL (assumes normality of ROS data) | 2.647 | 95% Percentile Bootstrap UCL | 2.673 |
| 95% BCA Bootstrap UCL | 3.071 | 95% Bootstrap t UCL | 4.144 |
| 95% H-UCL (Log ROS) | 3.397 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.443 | KM Geo Mean | 0.642 |
| KM SD (logged) | 1.216 | 95% Critical H Value (KM-Log) | 2.815 |
| KM Standard Error of Mean (logged) | 0.316 | 95% H-UCL (KM -Log) | 2.633 |
| KM SD (logged) | 1.216 | 95% Critical H Value (KM-Log) | 2.815 |
| KM Standard Error of Mean (logged) | 0.316 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 195.8 |
| SD in Original Scale | 664.6 |
| 95% t UCL (Assumes normality) | 414 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.244 |
| SD in Log Scale | 2.593 |
| 95% H-Stat UCL | 1301 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 3.486

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Trichloroethene)

| General Statistics | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 27 | Number of Distinct Observations | 19 |
| Number of Detects | 14 | Number of Non-Detects | 13 |
| Number of Distinct Detects | 14 | Number of Distinct Non-Detects | 5 |
| Minimum Detect | 0.38 | Minimum Non-Detect | 1 |
| Maximum Detect | 261000 | Maximum Non-Detect | 200 |
| Variance Detects | 6.310E+9 | Percent Non-Detects | 48.15% |
| Mean Detects | 30455 | SD Detects | 79437 |
| Median Detects | 62.35 | CV Detects | 2.608 |
| Skewness Detects | 2.56 | Kurtosis Detects | 5.85 |
| Mean of Logged Detects | 4.163 | SD of Logged Detects | 4.247 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.448 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.874 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.504 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.226 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|---------------|
| KM Mean | 15794 | KM Standard Error of Mean | 11420 |
| KM SD | 57182 | 95% KM (BCA) UCL | 37644 |
| 95% KM (t) UCL | 35272 | 95% KM (Percentile Bootstrap) UCL | 35154 |
| 95% KM (z) UCL | 34578 | 95% KM Bootstrap t UCL | 7728360 |
| 90% KM Chebyshev UCL | 50054 | 95% KM Chebyshev UCL | 65572 |
| 97.5% KM Chebyshev UCL | 87111 | 99% KM Chebyshev UCL | 129421 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.831 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.944 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.377 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.259 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|--------|---------------------------------|--------|
| k hat (MLE) | 0.128 | k star (bias corrected MLE) | 0.148 |
| Theta hat (MLE) | 238615 | Theta star (bias corrected MLE) | 205914 |
| nu hat (MLE) | 3.574 | nu star (bias corrected) | 4.141 |
| Mean (detects) | 30455 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.01 | Mean | 15792 |
| Maximum | 261000 | Median | 0.38 |
| SD | 58271 | CV | 3.69 |
| k hat (MLE) | 0.0851 | k star (bias corrected MLE) | 0.1 |
| Theta hat (MLE) | 185459 | Theta star (bias corrected MLE) | 157319 |
| nu hat (MLE) | 4.598 | nu star (bias corrected) | 5.42 |
| Adjusted Level of Significance (β) | 0.0401 | | |
| Approximate Chi Square Value (5.42, α) | 1.351 | Adjusted Chi Square Value (5.42, β) | 1.227 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 63347 | 95% Gamma Adjusted UCL (use when $n < 50$) | 69751 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|----------|---------------------------|--------|
| Mean (KM) | 15794 | SD (KM) | 57182 |
| Variance (KM) | 3.270E+9 | SE of Mean (KM) | 11420 |
| k hat (KM) | 0.0763 | k star (KM) | 0.0925 |
| nu hat (KM) | 4.119 | nu star (KM) | 4.995 |
| theta hat (KM) | 207029 | theta star (KM) | 170738 |
| 80% gamma percentile (KM) | 9728 | 90% gamma percentile (KM) | 40590 |
| 95% gamma percentile (KM) | 91969 | 99% gamma percentile (KM) | 260769 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (5.00, α) | 1.15 | Adjusted Chi Square Value (5.00, β) | 1.038 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 68605 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 75972 |

95% Gamma Adjusted KM-UCL (use when $k \leq 1$ and $15 < n < 50$)

Lognormal GOF Test on Detected Observations Only

| | | |
|-----------------------------|-------|------------------------------|
| Shapiro Wilk Test Statistic | 0.893 | Shapiro Wilk GOF Test |
|-----------------------------|-------|------------------------------|

| | | |
|--------------------------------|-------|---|
| 5% Shapiro Wilk Critical Value | 0.874 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.176 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.226 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|----------|------------------------------|---------|
| Mean in Original Scale | 15792 | Mean in Log Scale | 1.565 |
| SD in Original Scale | 58271 | SD in Log Scale | 4.34 |
| 95% t UCL (assumes normality of ROS data) | 34919 | 95% Percentile Bootstrap UCL | 35151 |
| 95% BCA Bootstrap UCL | 44829 | 95% Bootstrap t UCL | 8225477 |
| 95% H-UCL (Log ROS) | 59020321 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|---------|
| KM Mean (logged) | 1.963 | KM Geo Mean | 7.117 |
| KM SD (logged) | 3.797 | 95% Critical H Value (KM-Log) | 7.15 |
| KM Standard Error of Mean (logged) | 0.776 | 95% H-UCL (KM -Log) | 1978366 |
| KM SD (logged) | 3.797 | 95% Critical H Value (KM-Log) | 7.15 |
| KM Standard Error of Mean (logged) | 0.776 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 15800 |
| SD in Original Scale | 58269 |
| 95% t UCL (Assumes normality) | 34926 |

DL/2 Log-Transformed

| | |
|-------------------|---------|
| Mean in Log Scale | 2.439 |
| SD in Log Scale | 3.794 |
| 95% H-Stat UCL | 3105875 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

99% KM (Chebyshev) UCL 129421

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Vinyl chloride)

| General Statistics | | | |
|------------------------------|---------|---------------------------------|--------|
| Total Number of Observations | 27 | Number of Distinct Observations | 19 |
| Number of Detects | 11 | Number of Non-Detects | 16 |
| Number of Distinct Detects | 11 | Number of Distinct Non-Detects | 8 |
| Minimum Detect | 0.3 | Minimum Non-Detect | 1 |
| Maximum Detect | 4620 | Maximum Non-Detect | 5000 |
| Variance Detects | 2575090 | Percent Non-Detects | 59.26% |
| Mean Detects | 729.1 | SD Detects | 1605 |
| Median Detects | 6.69 | CV Detects | 2.201 |
| Skewness Detects | 2.094 | Kurtosis Detects | 3.263 |
| Mean of Logged Detects | 2.881 | SD of Logged Detects | 3.203 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.525 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.85 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.474 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.251 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------------|
| KM Mean | 309.3 | KM Standard Error of Mean | 217.7 |
| KM SD | 1058 | 95% KM (BCA) UCL | 751.1 |
| 95% KM (t) UCL | 680.5 | 95% KM (Percentile Bootstrap) UCL | 686 |
| 95% KM (z) UCL | 667.3 | 95% KM Bootstrap t UCL | 15244 |
| 90% KM Chebyshev UCL | 962.3 | 95% KM Chebyshev UCL | 1258 |
| 97.5% KM Chebyshev UCL | 1669 | 99% KM Chebyshev UCL | 2475 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.128 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.863 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.304 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.282 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.199 | k star (bias corrected MLE) | 0.205 |
| Theta hat (MLE) | 3673 | Theta star (bias corrected MLE) | 3557 |
| nu hat (MLE) | 4.368 | nu star (bias corrected) | 4.51 |
| Mean (detects) | 729.1 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 297 |
| Maximum | 4620 | Median | 0.01 |
| SD | 1060 | CV | 3.569 |
| k hat (MLE) | 0.111 | k star (bias corrected MLE) | 0.123 |
| Theta hat (MLE) | 2686 | Theta star (bias corrected MLE) | 2415 |
| nu hat (MLE) | 5.972 | nu star (bias corrected) | 6.642 |
| Adjusted Level of Significance (β) | 0.0401 | | |
| Approximate Chi Square Value (6.64, α) | 1.976 | Adjusted Chi Square Value (6.64, β) | 1.818 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 998.4 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1085 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|---------|---------------------------|-------|
| Mean (KM) | 309.3 | SD (KM) | 1058 |
| Variance (KM) | 1119681 | SE of Mean (KM) | 217.7 |
| k hat (KM) | 0.0854 | k star (KM) | 0.101 |
| nu hat (KM) | 4.614 | nu star (KM) | 5.435 |
| theta hat (KM) | 3620 | theta star (KM) | 3073 |
| 80% gamma percentile (KM) | 216.6 | 90% gamma percentile (KM) | 825.4 |
| 95% gamma percentile (KM) | 1795 | 99% gamma percentile (KM) | 4898 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (5.43, α) | 1.358 | Adjusted Chi Square Value (5.43, β) | 1.234 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 1238 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 1363 |

95% Gamma Adjusted KM-UCL (use when $k \leq 1$ and $15 < n < 50$)

Lognormal GOF Test on Detected Observations Only

| | | |
|-----------------------------|------|------------------------------|
| Shapiro Wilk Test Statistic | 0.92 | Shapiro Wilk GOF Test |
|-----------------------------|------|------------------------------|

| | | |
|--------------------------------|-------|---|
| 5% Shapiro Wilk Critical Value | 0.85 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.166 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.251 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 297.4 | Mean in Log Scale | 0.355 |
| SD in Original Scale | 1060 | SD in Log Scale | 3.191 |
| 95% t UCL (assumes normality of ROS data) | 645.3 | 95% Percentile Bootstrap UCL | 645.7 |
| 95% BCA Bootstrap UCL | 823.5 | 95% Bootstrap t UCL | 14414 |
| 95% H-UCL (Log ROS) | 10384 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.83 | KM Geo Mean | 2.293 |
| KM SD (logged) | 2.742 | 95% Critical H Value (KM-Log) | 5.296 |
| KM Standard Error of Mean (logged) | 0.589 | 95% H-UCL (KM -Log) | 1696 |
| KM SD (logged) | 2.742 | 95% Critical H Value (KM-Log) | 5.296 |
| KM Standard Error of Mean (logged) | 0.589 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 395.1 |
| SD in Original Scale | 1138 |
| 95% t UCL (Assumes normality) | 768.5 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.804 |
| SD in Log Scale | 2.901 |
| 95% H-Stat UCL | 9734 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

99% KM (Chebyshev) UCL 2475

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

UCL Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation ProUCL 5.14/20/2017 4:33:01 PM
 From File HHRA Data for Review.xls
 Full Precision OFF
 Confidence Coefficient 95%
 Number of Bootstrap Operations 2000

Result (1,1-Dichloroethane)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 47 |
| Number of Detects | 33 | Number of Non-Detects | 61 |
| Number of Distinct Detects | 31 | Number of Distinct Non-Detects | 16 |
| Minimum Detect | 0.17 | Minimum Non-Detect | 1 |
| Maximum Detect | 810 | Maximum Non-Detect | 2000 |
| Variance Detects | 26051 | Percent Non-Detects | 64.89% |
| Mean Detects | 61.29 | SD Detects | 161.4 |
| Median Detects | 1.85 | CV Detects | 2.633 |
| Skewness Detects | 3.839 | Kurtosis Detects | 15.74 |
| Mean of Logged Detects | 1.357 | SD of Logged Detects | 2.484 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.438 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.931 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.352 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.152 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 24.06 | KM Standard Error of Mean | 10.79 |
| KM SD | 100.5 | 95% KM (BCA) UCL | 45.89 |
| 95% KM (t) UCL | 41.99 | 95% KM (Percentile Bootstrap) UCL | 44.18 |
| 95% KM (z) UCL | 41.81 | 95% KM Bootstrap t UCL | 73.96 |
| 90% KM Chebyshev UCL | 56.43 | 95% KM Chebyshev UCL | 71.09 |
| 97.5% KM Chebyshev UCL | 91.44 | 99% KM Chebyshev UCL | 131.4 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 2.81 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.877 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.281 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.168 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.256 | k star (bias corrected MLE) | 0.253 |
| Theta hat (MLE) | 239 | Theta star (bias corrected MLE) | 241.9 |
| nu hat (MLE) | 16.93 | nu star (bias corrected) | 16.72 |
| Mean (detects) | 61.29 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 22.1 |
| Maximum | 810 | Median | 0.01 |
| SD | 99.08 | CV | 4.483 |
| k hat (MLE) | 0.145 | k star (bias corrected MLE) | 0.147 |
| Theta hat (MLE) | 152.5 | Theta star (bias corrected MLE) | 149.9 |
| nu hat (MLE) | 27.24 | nu star (bias corrected) | 27.71 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (27.71, α) | 16.7 | Adjusted Chi Square Value (27.71, β) | 16.57 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 36.66 | 95% Gamma Adjusted UCL (use when $n < 50$) | 36.96 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 24.06 | SD (KM) | 100.5 |
| Variance (KM) | 10104 | SE of Mean (KM) | 10.79 |
| k hat (KM) | 0.0573 | k star (KM) | 0.0626 |
| nu hat (KM) | 10.77 | nu star (KM) | 11.76 |
| theta hat (KM) | 419.9 | theta star (KM) | 384.6 |
| 80% gamma percentile (KM) | 6.517 | 90% gamma percentile (KM) | 47.15 |
| 95% gamma percentile (KM) | 136 | 99% gamma percentile (KM) | 476.7 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (11.76, α) | 5.071 | Adjusted Chi Square Value (11.76, β) | 5.003 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 55.81 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 56.58 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.892 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.931 | Detected Data Not Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|--|--|
| Lilliefors Test Statistic | 0.162 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.152 | Detected Data Not Lognormal at 5% Significance Level | |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 22.32 | Mean in Log Scale | 0.14 |
| SD in Original Scale | 98.97 | SD in Log Scale | 2.027 |
| 95% t UCL (assumes normality of ROS data) | 39.28 | 95% Percentile Bootstrap UCL | 40.65 |
| 95% BCA Bootstrap UCL | 53.13 | 95% Bootstrap t UCL | 78.21 |
| 95% H-UCL (Log ROS) | 18.45 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.14 | KM Geo Mean | 1.15 |
| KM SD (logged) | 1.95 | 95% Critical H Value (KM-Log) | 3.337 |
| KM Standard Error of Mean (logged) | 0.243 | 95% H-UCL (KM -Log) | 15.12 |
| KM SD (logged) | 1.95 | 95% Critical H Value (KM-Log) | 3.337 |
| KM Standard Error of Mean (logged) | 0.243 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 77.45 |
| SD in Original Scale | 187.3 |
| 95% t UCL (Assumes normality) | 109.5 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.819 |
| SD in Log Scale | 2.479 |
| 95% H-Stat UCL | 375.1 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

| | |
|------------------------|-------|
| 95% KM (Chebyshev) UCL | 71.09 |
|------------------------|-------|

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (1,1-Dichloroethene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 41 |
| Number of Detects | 29 | Number of Non-Detects | 65 |
| Number of Distinct Detects | 27 | Number of Distinct Non-Detects | 15 |
| Minimum Detect | 0.23 | Minimum Non-Detect | 1 |
| Maximum Detect | 1030 | Maximum Non-Detect | 2000 |
| Variance Detects | 37698 | Percent Non-Detects | 69.15% |
| Mean Detects | 64.02 | SD Detects | 194.2 |
| Median Detects | 1.12 | CV Detects | 3.033 |
| Skewness Detects | 4.753 | Kurtosis Detects | 23.84 |
| Mean of Logged Detects | 1.488 | SD of Logged Detects | 2.531 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.356 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.926 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.372 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.161 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 21.86 | KM Standard Error of Mean | 11.78 |
| KM SD | 110.9 | 95% KM (BCA) UCL | 44.45 |
| 95% KM (t) UCL | 41.44 | 95% KM (Percentile Bootstrap) UCL | 45.22 |
| 95% KM (z) UCL | 41.24 | 95% KM Bootstrap t UCL | 97.53 |
| 90% KM Chebyshev UCL | 57.21 | 95% KM Chebyshev UCL | 73.22 |
| 97.5% KM Chebyshev UCL | 95.44 | 99% KM Chebyshev UCL | 139.1 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 2.16 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.873 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.25 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.178 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.264 | k star (bias corrected MLE) | 0.259 |
| Theta hat (MLE) | 242.8 | Theta star (bias corrected MLE) | 246.8 |
| nu hat (MLE) | 15.29 | nu star (bias corrected) | 15.04 |
| Mean (detects) | 64.02 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 20.45 |
| Maximum | 1030 | Median | 0.01 |
| SD | 110.6 | CV | 5.408 |
| k hat (MLE) | 0.142 | k star (bias corrected MLE) | 0.145 |
| Theta hat (MLE) | 143.7 | Theta star (bias corrected MLE) | 141.2 |
| nu hat (MLE) | 26.75 | nu star (bias corrected) | 27.23 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (27.23, α) | 16.33 | Adjusted Chi Square Value (27.23, β) | 16.19 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 34.09 | 95% Gamma Adjusted UCL (use when $n < 50$) | 34.37 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 21.86 | SD (KM) | 110.9 |
| Variance (KM) | 12305 | SE of Mean (KM) | 11.78 |
| k hat (KM) | 0.0389 | k star (KM) | 0.0447 |
| nu hat (KM) | 7.304 | nu star (KM) | 8.404 |
| theta hat (KM) | 562.8 | theta star (KM) | 489.1 |
| 80% gamma percentile (KM) | 1.942 | 90% gamma percentile (KM) | 28.49 |
| 95% gamma percentile (KM) | 111.1 | 99% gamma percentile (KM) | 496.5 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (8.40, α) | 2.971 | Adjusted Chi Square Value (8.40, β) | 2.921 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 61.84 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 62.9 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.872 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.926 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.241 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.161 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 20.85 | Mean in Log Scale | 0.276 |
| SD in Original Scale | 110.4 | SD in Log Scale | 1.964 |
| 95% t UCL (assumes normality of ROS data) | 39.77 | 95% Percentile Bootstrap UCL | 41.18 |
| 95% BCA Bootstrap UCL | 57.55 | 95% Bootstrap t UCL | 117.3 |

95% H-UCL (Log ROS) 17.97

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.104 | KM Geo Mean | 1.109 |
| KM SD (logged) | 1.876 | 95% Critical H Value (KM-Log) | 3.243 |
| KM Standard Error of Mean (logged) | 0.23 | 95% H-UCL (KM -Log) | 12.11 |
| KM SD (logged) | 1.876 | 95% Critical H Value (KM-Log) | 3.243 |
| KM Standard Error of Mean (logged) | 0.23 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 67.47 |
| SD in Original Scale | 171.7 |
| 95% t UCL (Assumes normality) | 96.89 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.664 |
| SD in Log Scale | 2.467 |
| 95% H-Stat UCL | 309.1 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 73.22

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (1,2,4-Trimethylbenzene)

| General Statistics | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 23 |
| Number of Detects | 5 | Number of Non-Detects | 89 |
| Number of Distinct Detects | 4 | Number of Distinct Non-Detects | 19 |
| Minimum Detect | 0.11 | Minimum Non-Detect | 1 |
| Maximum Detect | 1.2 | Maximum Non-Detect | 2000 |
| Variance Detects | 0.166 | Percent Non-Detects | 94.68% |
| Mean Detects | 0.512 | SD Detects | 0.407 |
| Median Detects | 0.42 | CV Detects | 0.795 |
| Skewness Detects | 1.596 | Kurtosis Detects | 3.419 |
| Mean of Logged Detects | -0.93 | SD of Logged Detects | 0.848 |

| Normal GOF Test on Detects Only | | Shapiro Wilk GOF Test | |
|---------------------------------|-------|--|--|
| Shapiro Wilk Test Statistic | 0.798 | Detected Data appear Normal at 5% Significance Level | |
| 5% Shapiro Wilk Critical Value | 0.762 | Lilliefors GOF Test | |
| Lilliefors Test Statistic | 0.389 | Detected Data Not Normal at 5% Significance Level | |
| 5% Lilliefors Critical Value | 0.343 | | |

Detected Data appear Approximate Normal at 5% Significance Level

| Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs | | | |
|--|-------|-----------------------------------|--------|
| KM Mean | 0.361 | KM Standard Error of Mean | 0.0761 |
| KM SD | 0.187 | 95% KM (BCA) UCL | N/A |
| 95% KM (t) UCL | 0.487 | 95% KM (Percentile Bootstrap) UCL | N/A |
| 95% KM (z) UCL | 0.486 | 95% KM Bootstrap t UCL | N/A |
| 90% KM Chebyshev UCL | 0.589 | 95% KM Chebyshev UCL | 0.693 |
| 97.5% KM Chebyshev UCL | 0.836 | 99% KM Chebyshev UCL | 1.118 |

| Gamma GOF Tests on Detected Observations Only | | Anderson-Darling GOF Test | |
|---|-------|---|--|
| A-D Test Statistic | 0.502 | Detected data appear Gamma Distributed at 5% Significance Level | |
| 5% A-D Critical Value | 0.684 | Kolmogorov-Smirnov GOF | |
| K-S Test Statistic | 0.315 | Detected data appear Gamma Distributed at 5% Significance Level | |
| 5% K-S Critical Value | 0.36 | | |

Detected data appear Gamma Distributed at 5% Significance Level

| Gamma Statistics on Detected Data Only | | | |
|--|-------|---------------------------------|-------|
| k hat (MLE) | 2.068 | k star (bias corrected MLE) | 0.96 |
| Theta hat (MLE) | 0.248 | Theta star (bias corrected MLE) | 0.533 |
| nu hat (MLE) | 20.68 | nu star (bias corrected) | 9.604 |
| Mean (detects) | 0.512 | | |

Gamma ROS Statistics using Imputed Non-Detects
 GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|--------|
| Minimum | 0.076 | Mean | 0.368 |
| Maximum | 1.2 | Median | 0.334 |
| SD | 0.188 | CV | 0.512 |
| k hat (MLE) | 4.099 | k star (bias corrected MLE) | 3.975 |
| Theta hat (MLE) | 0.0897 | Theta star (bias corrected MLE) | 0.0925 |
| nu hat (MLE) | 770.6 | nu star (bias corrected) | 747.4 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (747.39, α) | 685 | Adjusted Chi Square Value (747.39, β) | 684 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.401 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.402 |

| Estimates of Gamma Parameters using KM Estimates | | | |
|--|--------|---------------------------|--------|
| Mean (KM) | 0.361 | SD (KM) | 0.187 |
| Variance (KM) | 0.0348 | SE of Mean (KM) | 0.0761 |
| k hat (KM) | 3.742 | k star (KM) | 3.63 |
| nu hat (KM) | 703.6 | nu star (KM) | 682.4 |
| theta hat (KM) | 0.0965 | theta star (KM) | 0.0994 |
| 80% gamma percentile (KM) | 0.503 | 90% gamma percentile (KM) | 0.615 |
| 95% gamma percentile (KM) | 0.718 | 99% gamma percentile (KM) | 0.94 |

| Gamma Kaplan-Meier (KM) Statistics | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (682.44, α) | 622.8 | Adjusted Chi Square Value (682.44, β) | 622 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 0.396 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 0.396 |

| Lognormal GOF Test on Detected Observations Only | | Shapiro Wilk GOF Test | |
|--|-------|---|--|
| Shapiro Wilk Test Statistic | 0.883 | Detected Data appear Lognormal at 5% Significance Level | |
| 5% Shapiro Wilk Critical Value | 0.762 | Lilliefors GOF Test | |
| Lilliefors Test Statistic | 0.318 | Detected Data appear Lognormal at 5% Significance Level | |
| 5% Lilliefors Critical Value | 0.343 | | |

Detected Data appear Lognormal at 5% Significance Level

| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
|--|-------|------------------------------|-------|
| Mean in Original Scale | 0.34 | Mean in Log Scale | -1.2 |
| SD in Original Scale | 0.179 | SD in Log Scale | 0.496 |
| 95% t UCL (assumes normality of ROS data) | 0.371 | 95% Percentile Bootstrap UCL | 0.372 |
| 95% BCA Bootstrap UCL | 0.375 | 95% Bootstrap t UCL | 0.374 |

95% H-UCL (Log ROS) 0.374

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -1.175 | KM Geo Mean | 0.309 |
| KM SD (logged) | 0.609 | 95% Critical H Value (KM-Log) | 1.923 |
| KM Standard Error of Mean (logged) | 0.317 | 95% H-UCL (KM -Log) | 0.42 |
| KM SD (logged) | 0.609 | 95% Critical H Value (KM-Log) | 1.923 |
| KM Standard Error of Mean (logged) | 0.317 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 72.36 |
| SD in Original Scale | 175 |
| 95% t UCL (Assumes normality) | 102.3 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.689 |
| SD in Log Scale | 2.512 |
| 95% H-Stat UCL | 366.7 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.487

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (2-Butanone)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 25 |
| Number of Detects | 6 | Number of Non-Detects | 88 |
| Number of Distinct Detects | 6 | Number of Distinct Non-Detects | 19 |
| Minimum Detect | 0.94 | Minimum Non-Detect | 25 |
| Maximum Detect | 260 | Maximum Non-Detect | 50000 |
| Variance Detects | 10262 | Percent Non-Detects | 93.62% |
| Mean Detects | 54.77 | SD Detects | 101.3 |
| Median Detects | 13.45 | CV Detects | 1.85 |
| Skewness Detects | 2.37 | Kurtosis Detects | 5.68 |
| Mean of Logged Detects | 2.627 | SD of Logged Detects | 1.903 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.602 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.788 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.405 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.325 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 13.58 | KM Standard Error of Mean | 6.049 |
| KM SD | 35.2 | 95% KM (BCA) UCL | 25.91 |
| 95% KM (t) UCL | 23.63 | 95% KM (Percentile Bootstrap) UCL | 24.22 |
| 95% KM (z) UCL | 23.53 | 95% KM Bootstrap t UCL | 32.51 |
| 90% KM Chebyshev UCL | 31.73 | 95% KM Chebyshev UCL | 39.95 |
| 97.5% KM Chebyshev UCL | 51.36 | 99% KM Chebyshev UCL | 73.77 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.419 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.741 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.256 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.35 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.467 | k star (bias corrected MLE) | 0.344 |
| Theta hat (MLE) | 117.4 | Theta star (bias corrected MLE) | 159 |
| nu hat (MLE) | 5.6 | nu star (bias corrected) | 4.133 |
| Mean (detects) | 54.77 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 13.07 |
| Maximum | 260 | Median | 0.01 |
| SD | 31.47 | CV | 2.408 |
| k hat (MLE) | 0.188 | k star (bias corrected MLE) | 0.189 |
| Theta hat (MLE) | 69.63 | Theta star (bias corrected MLE) | 69.22 |
| nu hat (MLE) | 35.28 | nu star (bias corrected) | 35.49 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (35.49, α) | 22.86 | Adjusted Chi Square Value (35.49, β) | 22.7 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 20.29 | 95% Gamma Adjusted UCL (use when $n < 50$) | 20.43 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 13.58 | SD (KM) | 35.2 |
| Variance (KM) | 1239 | SE of Mean (KM) | 6.049 |
| k hat (KM) | 0.149 | k star (KM) | 0.151 |
| nu hat (KM) | 27.98 | nu star (KM) | 28.42 |
| theta hat (KM) | 91.25 | theta star (KM) | 89.84 |
| 80% gamma percentile (KM) | 14.88 | 90% gamma percentile (KM) | 40.31 |
| 95% gamma percentile (KM) | 74.63 | 99% gamma percentile (KM) | 174.1 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (28.42, α) | 17.25 | Adjusted Chi Square Value (28.42, β) | 17.12 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 22.37 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 22.54 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.986 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.788 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.155 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.325 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 11.19 | Mean in Log Scale | 1.674 |
| SD in Original Scale | 27.45 | SD in Log Scale | 1.135 |
| 95% t UCL (assumes normality of ROS data) | 15.89 | 95% Percentile Bootstrap UCL | 16.31 |
| 95% BCA Bootstrap UCL | 20.43 | 95% Bootstrap t UCL | 24.01 |

95% H-UCL (Log ROS) 13.44

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 1.774 | KM Geo Mean | 5.892 |
| KM SD (logged) | 1.228 | 95% Critical H Value (KM-Log) | 2.483 |
| KM Standard Error of Mean (logged) | 0.58 | 95% H-UCL (KM -Log) | 17.18 |
| KM SD (logged) | 1.228 | 95% Critical H Value (KM-Log) | 2.483 |
| KM Standard Error of Mean (logged) | 0.58 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|------|
| Mean in Original Scale | 1805 |
| SD in Original Scale | 4376 |
| 95% t UCL (Assumes normality) | 2555 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 4.885 |
| SD in Log Scale | 2.533 |
| 95% H-Stat UCL | 9599 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 22.37

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Acetone)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 36 |
| Number of Detects | 17 | Number of Non-Detects | 77 |
| Number of Distinct Detects | 17 | Number of Distinct Non-Detects | 19 |
| Minimum Detect | 2.03 | Minimum Non-Detect | 25 |
| Maximum Detect | 572 | Maximum Non-Detect | 50000 |
| Variance Detects | 18652 | Percent Non-Detects | 81.91% |
| Mean Detects | 46.14 | SD Detects | 136.6 |
| Median Detects | 3.46 | CV Detects | 2.96 |
| Skewness Detects | 4.018 | Kurtosis Detects | 16.37 |
| Mean of Logged Detects | 2.081 | SD of Logged Detects | 1.615 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.35 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.892 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.431 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.207 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 17.11 | KM Standard Error of Mean | 10.13 |
| KM SD | 74.39 | 95% KM (BCA) UCL | 36.42 |
| 95% KM (t) UCL | 33.94 | 95% KM (Percentile Bootstrap) UCL | 35 |
| 95% KM (z) UCL | 33.77 | 95% KM Bootstrap t UCL | 95.9 |
| 90% KM Chebyshev UCL | 47.49 | 95% KM Chebyshev UCL | 61.25 |
| 97.5% KM Chebyshev UCL | 80.35 | 99% KM Chebyshev UCL | 117.9 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 2.341 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.824 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.295 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.224 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.379 | k star (bias corrected MLE) | 0.351 |
| Theta hat (MLE) | 121.7 | Theta star (bias corrected MLE) | 131.3 |
| nu hat (MLE) | 12.89 | nu star (bias corrected) | 11.95 |
| Mean (detects) | 46.14 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 15.3 |
| Maximum | 572 | Median | 0.01 |
| SD | 61.05 | CV | 3.99 |
| k hat (MLE) | 0.173 | k star (bias corrected MLE) | 0.175 |
| Theta hat (MLE) | 88.44 | Theta star (bias corrected MLE) | 87.64 |
| nu hat (MLE) | 32.53 | nu star (bias corrected) | 32.82 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (32.82, α) | 20.73 | Adjusted Chi Square Value (32.82, β) | 20.58 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 24.23 | 95% Gamma Adjusted UCL (use when $n < 50$) | 24.41 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 17.11 | SD (KM) | 74.39 |
| Variance (KM) | 5534 | SE of Mean (KM) | 10.13 |
| k hat (KM) | 0.0529 | k star (KM) | 0.0583 |
| nu hat (KM) | 9.949 | nu star (KM) | 10.97 |
| theta hat (KM) | 323.4 | theta star (KM) | 293.4 |
| 80% gamma percentile (KM) | 3.809 | 90% gamma percentile (KM) | 31.28 |
| 95% gamma percentile (KM) | 95.3 | 99% gamma percentile (KM) | 349.5 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (10.97, α) | 4.554 | Adjusted Chi Square Value (10.97, β) | 4.489 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 41.21 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 41.8 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.804 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.892 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.279 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.207 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 13.5 | Mean in Log Scale | 1.589 |
| SD in Original Scale | 58.91 | SD in Log Scale | 1.077 |
| 95% t UCL (assumes normality of ROS data) | 23.6 | 95% Percentile Bootstrap UCL | 25.82 |
| 95% BCA Bootstrap UCL | 32.59 | 95% Bootstrap t UCL | 69.48 |

95% H-UCL (Log ROS) 11.34

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 1.506 | KM Geo Mean | 4.507 |
| KM SD (logged) | 1.084 | 95% Critical H Value (KM-Log) | 2.332 |
| KM Standard Error of Mean (logged) | 0.195 | 95% H-UCL (KM -Log) | 10.54 |
| KM SD (logged) | 1.084 | 95% Critical H Value (KM-Log) | 2.332 |
| KM Standard Error of Mean (logged) | 0.195 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|------|
| Mean in Original Scale | 1811 |
| SD in Original Scale | 4374 |
| 95% t UCL (Assumes normality) | 2561 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 4.784 |
| SD in Log Scale | 2.681 |
| 95% H-Stat UCL | 14390 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 61.25

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Benzene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 36 |
| Number of Detects | 21 | Number of Non-Detects | 73 |
| Number of Distinct Detects | 17 | Number of Distinct Non-Detects | 19 |
| Minimum Detect | 0.12 | Minimum Non-Detect | 1 |
| Maximum Detect | 1.05 | Maximum Non-Detect | 2000 |
| Variance Detects | 0.0671 | Percent Non-Detects | 77.66% |
| Mean Detects | 0.409 | SD Detects | 0.259 |
| Median Detects | 0.3 | CV Detects | 0.634 |
| Skewness Detects | 1.062 | Kurtosis Detects | 0.23 |
| Mean of Logged Detects | -1.074 | SD of Logged Detects | 0.607 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.868 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.908 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.234 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.188 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------|
| KM Mean | 0.393 | KM Standard Error of Mean | 0.0504 |
| KM SD | 0.234 | 95% KM (BCA) UCL | 0.479 |
| 95% KM (t) UCL | 0.476 | 95% KM (Percentile Bootstrap) UCL | 0.476 |
| 95% KM (z) UCL | 0.475 | 95% KM Bootstrap t UCL | 0.497 |
| 90% KM Chebyshev UCL | 0.544 | 95% KM Chebyshev UCL | 0.612 |
| 97.5% KM Chebyshev UCL | 0.707 | 99% KM Chebyshev UCL | 0.894 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.655 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.75 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.191 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.191 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 2.954 | k star (bias corrected MLE) | 2.564 |
| Theta hat (MLE) | 0.138 | Theta star (bias corrected MLE) | 0.159 |
| nu hat (MLE) | 124.1 | nu star (bias corrected) | 107.7 |
| Mean (detects) | 0.409 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|--|--------------|--|--------------|
| Minimum | 0.0832 | Mean | 0.378 |
| Maximum | 1.05 | Median | 0.351 |
| SD | 0.185 | CV | 0.488 |
| k hat (MLE) | 4.424 | k star (bias corrected MLE) | 4.29 |
| Theta hat (MLE) | 0.0854 | Theta star (bias corrected MLE) | 0.0881 |
| nu hat (MLE) | 831.7 | nu star (bias corrected) | 806.5 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (806.50, α) | 741.6 | Adjusted Chi Square Value (806.50, β) | 740.6 |
| 95% Gamma Approximate UCL (use when n>=50) | 0.411 | 95% Gamma Adjusted UCL (use when n<50) | 0.411 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 0.393 | SD (KM) | 0.234 |
| Variance (KM) | 0.0549 | SE of Mean (KM) | 0.0504 |
| k hat (KM) | 2.805 | k star (KM) | 2.723 |
| nu hat (KM) | 527.4 | nu star (KM) | 511.9 |
| theta hat (KM) | 0.14 | theta star (KM) | 0.144 |
| 80% gamma percentile (KM) | 0.566 | 90% gamma percentile (KM) | 0.711 |
| 95% gamma percentile (KM) | 0.847 | 99% gamma percentile (KM) | 1.143 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|---|--------------|---|--------------|
| Approximate Chi Square Value (511.93, α) | 460.5 | Adjusted Chi Square Value (511.93, β) | 459.7 |
| 95% Gamma Approximate KM-UCL (use when n>=50) | 0.436 | 95% Gamma Adjusted KM-UCL (use when n<50) | 0.437 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.953 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.908 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.156 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.188 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 0.367 | Mean in Log Scale | -1.11 |
| SD in Original Scale | 0.179 | SD in Log Scale | 0.463 |
| 95% t UCL (assumes normality of ROS data) | 0.397 | 95% Percentile Bootstrap UCL | 0.397 |
| 95% BCA Bootstrap UCL | 0.399 | 95% Bootstrap t UCL | 0.4 |

95% H-UCL (Log ROS) 0.4

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -1.102 | KM Geo Mean | 0.332 |
| KM SD (logged) | 0.572 | 95% Critical H Value (KM-Log) | 1.896 |
| KM Standard Error of Mean (logged) | 0.126 | 95% H-UCL (KM -Log) | 0.438 |
| KM SD (logged) | 0.572 | 95% Critical H Value (KM-Log) | 1.896 |
| KM Standard Error of Mean (logged) | 0.126 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 72.32 |
| SD in Original Scale | 175 |
| 95% t UCL (Assumes normality) | 102.3 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.599 |
| SD in Log Scale | 2.604 |
| 95% H-Stat UCL | 456.8 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

| | | | |
|------------------------------|-------|--------------------------------|-------|
| 95% KM Approximate Gamma UCL | 0.436 | 95% GROS Approximate Gamma UCL | 0.411 |
|------------------------------|-------|--------------------------------|-------|

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Carbon disulfide)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 28 |
| Number of Detects | 10 | Number of Non-Detects | 84 |
| Number of Distinct Detects | 10 | Number of Distinct Non-Detects | 18 |
| Minimum Detect | 0.45 | Minimum Non-Detect | 1 |
| Maximum Detect | 35 | Maximum Non-Detect | 2000 |
| Variance Detects | 112.8 | Percent Non-Detects | 89.36% |
| Mean Detects | 4.952 | SD Detects | 10.62 |
| Median Detects | 1.57 | CV Detects | 2.145 |
| Skewness Detects | 3.091 | Kurtosis Detects | 9.666 |
| Mean of Logged Detects | 0.514 | SD of Logged Detects | 1.335 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.463 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.842 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.445 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.262 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 1.335 | KM Standard Error of Mean | 0.617 |
| KM SD | 4.474 | 95% KM (BCA) UCL | 2.709 |
| 95% KM (t) UCL | 2.361 | 95% KM (Percentile Bootstrap) UCL | 2.495 |
| 95% KM (z) UCL | 2.35 | 95% KM Bootstrap t UCL | 6.788 |
| 90% KM Chebyshev UCL | 3.187 | 95% KM Chebyshev UCL | 4.025 |
| 97.5% KM Chebyshev UCL | 5.189 | 99% KM Chebyshev UCL | 7.476 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.167 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.771 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.301 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.279 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.573 | k star (bias corrected MLE) | 0.468 |
| Theta hat (MLE) | 8.642 | Theta star (bias corrected MLE) | 10.59 |
| nu hat (MLE) | 11.46 | nu star (bias corrected) | 9.355 |
| Mean (detects) | 4.952 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 0.819 |
| Maximum | 35 | Median | 0.01 |
| SD | 3.708 | CV | 4.526 |
| k hat (MLE) | 0.234 | k star (bias corrected MLE) | 0.234 |
| Theta hat (MLE) | 3.498 | Theta star (bias corrected MLE) | 3.504 |
| nu hat (MLE) | 44.02 | nu star (bias corrected) | 43.95 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (43.95, α) | 29.74 | Adjusted Chi Square Value (43.95, β) | 29.56 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1.21 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1.218 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 1.335 | SD (KM) | 4.474 |
| Variance (KM) | 20.02 | SE of Mean (KM) | 0.617 |
| k hat (KM) | 0.0891 | k star (KM) | 0.0933 |
| nu hat (KM) | 16.74 | nu star (KM) | 17.54 |
| theta hat (KM) | 14.99 | theta star (KM) | 14.31 |
| 80% gamma percentile (KM) | 0.834 | 90% gamma percentile (KM) | 3.446 |
| 95% gamma percentile (KM) | 7.773 | 99% gamma percentile (KM) | 21.95 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (17.54, α) | 9.061 | Adjusted Chi Square Value (17.54, β) | 8.966 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 2.585 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 2.612 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.863 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.842 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.173 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.262 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 1.163 | Mean in Log Scale | -0.479 |
| SD in Original Scale | 3.588 | SD in Log Scale | 0.897 |
| 95% t UCL (assumes normality of ROS data) | 1.778 | 95% Percentile Bootstrap UCL | 1.896 |
| 95% BCA Bootstrap UCL | 2.277 | 95% Bootstrap t UCL | 3.922 |

95% H-UCL (Log ROS) 1.13

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|--------------|
| KM Mean (logged) | -0.406 | KM Geo Mean | 0.666 |
| KM SD (logged) | 0.724 | 95% Critical H Value (KM-Log) | 2.038 |
| KM Standard Error of Mean (logged) | 0.119 | 95% H-UCL (KM -Log) | 1.008 |
| KM SD (logged) | 0.724 | 95% Critical H Value (KM-Log) | 2.038 |
| KM Standard Error of Mean (logged) | 0.119 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 71.39 |
| SD in Original Scale | 174.9 |
| 95% t UCL (Assumes normality) | 101.4 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.722 |
| SD in Log Scale | 2.448 |
| 95% H-Stat UCL | 307.8 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 1.008

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (cis-1,2-Dichloroethene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 85 |
| Number of Detects | 80 | Number of Non-Detects | 14 |
| Number of Distinct Detects | 79 | Number of Distinct Non-Detects | 7 |
| Minimum Detect | 0.11 | Minimum Non-Detect | 1 |
| Maximum Detect | 52700 | Maximum Non-Detect | 500 |
| Variance Detects | 48494074 | Percent Non-Detects | 14.89% |
| Mean Detects | 2566 | SD Detects | 6964 |
| Median Detects | 86.7 | CV Detects | 2.714 |
| Skewness Detects | 5.272 | Kurtosis Detects | 34.53 |
| Mean of Logged Detects | 4.721 | SD of Logged Detects | 3.172 |

Normal GOF Test on Detects Only

| | |
|------------------------------|--------|
| Shapiro Wilk Test Statistic | 0.428 |
| 5% Shapiro Wilk P Value | 0 |
| Lilliefors Test Statistic | 0.356 |
| 5% Lilliefors Critical Value | 0.0991 |

Normal GOF Test on Detected Observations Only

Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|------|-----------------------------------|-------|
| KM Mean | 2185 | KM Standard Error of Mean | 669.3 |
| KM SD | 6449 | 95% KM (BCA) UCL | 3368 |
| 95% KM (t) UCL | 3297 | 95% KM (Percentile Bootstrap) UCL | 3343 |
| 95% KM (z) UCL | 3286 | 95% KM Bootstrap t UCL | 4136 |
| 90% KM Chebyshev UCL | 4193 | 95% KM Chebyshev UCL | 5103 |
| 97.5% KM Chebyshev UCL | 6365 | 99% KM Chebyshev UCL | 8845 |

Gamma GOF Tests on Detected Observations Only

| | |
|-----------------------|-------|
| A-D Test Statistic | 2.407 |
| 5% A-D Critical Value | 0.9 |
| K-S Test Statistic | 0.15 |
| 5% K-S Critical Value | 0.11 |

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.23 | k star (bias corrected MLE) | 0.23 |
| Theta hat (MLE) | 11153 | Theta star (bias corrected MLE) | 11167 |
| nu hat (MLE) | 36.81 | nu star (bias corrected) | 36.76 |
| Mean (detects) | 2566 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 2183 |
| Maximum | 52700 | Median | 33.65 |
| SD | 6484 | CV | 2.969 |
| k hat (MLE) | 0.173 | k star (bias corrected MLE) | 0.174 |
| Theta hat (MLE) | 12639 | Theta star (bias corrected MLE) | 12525 |
| nu hat (MLE) | 32.48 | nu star (bias corrected) | 32.77 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (32.77, α) | 20.69 | Adjusted Chi Square Value (32.77, β) | 20.54 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 3459 | 95% Gamma Adjusted UCL (use when $n < 50$) | 3484 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|----------|---------------------------|-------|
| Mean (KM) | 2185 | SD (KM) | 6449 |
| Variance (KM) | 41583290 | SE of Mean (KM) | 669.3 |
| k hat (KM) | 0.115 | k star (KM) | 0.118 |
| nu hat (KM) | 21.59 | nu star (KM) | 22.23 |
| theta hat (KM) | 19031 | theta star (KM) | 18479 |
| 80% gamma percentile (KM) | 1884 | 90% gamma percentile (KM) | 6165 |
| 95% gamma percentile (KM) | 12491 | 99% gamma percentile (KM) | 31872 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|------|
| Approximate Chi Square Value (22.23, α) | 12.51 | Adjusted Chi Square Value (22.23, β) | 12.4 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 3883 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 3918 |

Lognormal GOF Test on Detected Observations Only

| | |
|---|--------|
| Shapiro Wilk Approximate Test Statistic | 0.958 |
| 5% Shapiro Wilk P Value | 0.0374 |
| Lilliefors Test Statistic | 0.0875 |
| 5% Lilliefors Critical Value | 0.0991 |

Shapiro Wilk GOF Test

Detected Data Not Lognormal at 5% Significance Level

Lilliefors GOF Test

Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|------|------------------------------|-------|
| Mean in Original Scale | 2184 | Mean in Log Scale | 4.043 |
| SD in Original Scale | 6483 | SD in Log Scale | 3.409 |
| 95% t UCL (assumes normality of ROS data) | 3295 | 95% Percentile Bootstrap UCL | 3428 |
| 95% BCA Bootstrap UCL | 3837 | 95% Bootstrap t UCL | 4266 |

95% H-UCL (Log ROS) 124354

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|--------|
| KM Mean (logged) | 4.044 | KM Geo Mean | 57.04 |
| KM SD (logged) | 3.39 | 95% Critical H Value (KM-Log) | 5.278 |
| KM Standard Error of Mean (logged) | 0.357 | 95% H-UCL (KM -Log) | 114123 |
| KM SD (logged) | 3.39 | 95% Critical H Value (KM-Log) | 5.278 |
| KM Standard Error of Mean (logged) | 0.357 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|------|
| Mean in Original Scale | 2190 |
| SD in Original Scale | 6482 |
| 95% t UCL (Assumes normality) | 3300 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 4.189 |
| SD in Log Scale | 3.323 |
| 95% H-Stat UCL | 98560 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

97.5% KM (Chebyshev) UCL 6365

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Ethylbenzene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 23 |
| Number of Detects | 5 | Number of Non-Detects | 89 |
| Number of Distinct Detects | 4 | Number of Distinct Non-Detects | 19 |
| Minimum Detect | 0.16 | Minimum Non-Detect | 1 |
| Maximum Detect | 0.5 | Maximum Non-Detect | 2000 |
| Variance Detects | 0.0259 | Percent Non-Detects | 94.68% |
| Mean Detects | 0.362 | SD Detects | 0.161 |
| Median Detects | 0.43 | CV Detects | 0.445 |
| Skewness Detects | -0.553 | Kurtosis Detects | -2.756 |
| Mean of Logged Detects | -1.115 | SD of Logged Detects | 0.525 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.831 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.264 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 0.362 | KM Standard Error of Mean | 0.072 |
| KM SD | 0.144 | 95% KM (BCA) UCL | N/A |
| 95% KM (t) UCL | 0.482 | 95% KM (Percentile Bootstrap) UCL | N/A |
| 95% KM (z) UCL | 0.48 | 95% KM Bootstrap t UCL | N/A |
| 90% KM Chebyshev UCL | 0.578 | 95% KM Chebyshev UCL | 0.676 |
| 97.5% KM Chebyshev UCL | 0.812 | 99% KM Chebyshev UCL | 1.078 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.547 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.681 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.308 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.358 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|--------|---------------------------------|-------|
| k hat (MLE) | 5.197 | k star (bias corrected MLE) | 2.212 |
| Theta hat (MLE) | 0.0697 | Theta star (bias corrected MLE) | 0.164 |
| nu hat (MLE) | 51.97 | nu star (bias corrected) | 22.12 |
| Mean (detects) | 0.362 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|--------|
| Minimum | 0.0753 | Mean | 0.365 |
| Maximum | 0.838 | Median | 0.349 |
| SD | 0.148 | CV | 0.406 |
| k hat (MLE) | 5.78 | k star (bias corrected MLE) | 5.603 |
| Theta hat (MLE) | 0.0631 | Theta star (bias corrected MLE) | 0.0651 |
| nu hat (MLE) | 1087 | nu star (bias corrected) | 1053 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (N/A, α) | 979 | Adjusted Chi Square Value (N/A, β) | 977.9 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.393 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.393 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 0.362 | SD (KM) | 0.144 |
| Variance (KM) | 0.0207 | SE of Mean (KM) | 0.072 |
| k hat (KM) | 6.32 | k star (KM) | 6.125 |
| nu hat (KM) | 1188 | nu star (KM) | 1152 |
| theta hat (KM) | 0.0573 | theta star (KM) | 0.0591 |
| 80% gamma percentile (KM) | 0.476 | 90% gamma percentile (KM) | 0.558 |
| 95% gamma percentile (KM) | 0.631 | 99% gamma percentile (KM) | 0.786 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (N/A, α) | 1074 | Adjusted Chi Square Value (N/A, β) | 1073 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 0.388 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 0.389 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.827 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.297 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 0.368 | Mean in Log Scale | -1.115 |
| SD in Original Scale | 0.186 | SD in Log Scale | 0.486 |
| 95% t UCL (assumes normality of ROS data) | 0.4 | 95% Percentile Bootstrap UCL | 0.399 |
| 95% BCA Bootstrap UCL | 0.403 | 95% Bootstrap t UCL | 0.405 |

95% H-UCL (Log ROS) 0.405

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -1.115 | KM Geo Mean | 0.328 |
| KM SD (logged) | 0.47 | 95% Critical H Value (KM-Log) | 1.832 |
| KM Standard Error of Mean (logged) | 0.235 | 95% H-UCL (KM -Log) | 0.4 |
| KM SD (logged) | 0.47 | 95% Critical H Value (KM-Log) | 1.832 |
| KM Standard Error of Mean (logged) | 0.235 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 72.35 |
| SD in Original Scale | 175 |
| 95% t UCL (Assumes normality) | 102.3 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.679 |
| SD in Log Scale | 2.519 |
| 95% H-Stat UCL | 371.5 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.482

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Iron)

| General Statistics | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 8 | Number of Distinct Observations | 8 |
| | | Number of Missing Observations | 0 |
| Minimum | 180 | Mean | 5925 |
| Maximum | 17000 | Median | 3700 |
| SD | 6831 | Std. Error of Mean | 2415 |
| Coefficient of Variation | 1.153 | Skewness | 1.106 |

Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.

For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).

Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1

| Normal GOF Test | | Shapiro Wilk GOF Test | |
|--------------------------------|-------|---|--|
| Shapiro Wilk Test Statistic | 0.789 | Data Not Normal at 5% Significance Level | |
| 5% Shapiro Wilk Critical Value | 0.818 | Lilliefors GOF Test | |
| Lilliefors Test Statistic | 0.275 | Data appear Normal at 5% Significance Level | |
| 5% Lilliefors Critical Value | 0.283 | | |

Data appear Approximate Normal at 5% Significance Level

| Assuming Normal Distribution | | 95% UCLs (Adjusted for Skewness) | |
|------------------------------|-------|-----------------------------------|-------|
| 95% Normal UCL | | 95% Adjusted-CLT UCL (Chen-1995) | 10906 |
| 95% Student's-t UCL | 10501 | 95% Modified-t UCL (Johnson-1978) | 10658 |

| Gamma GOF Test | | Anderson-Darling Gamma GOF Test | |
|-----------------------|-------|---|--|
| A-D Test Statistic | 0.288 | Detected data appear Gamma Distributed at 5% Significance Level | |
| 5% A-D Critical Value | 0.75 | Kolmogorov-Smirnov Gamma GOF Test | |
| K-S Test Statistic | 0.164 | Detected data appear Gamma Distributed at 5% Significance Level | |
| 5% K-S Critical Value | 0.305 | | |

Detected data appear Gamma Distributed at 5% Significance Level

| Gamma Statistics | | | |
|--------------------------------|--------|-------------------------------------|-------|
| k hat (MLE) | 0.686 | k star (bias corrected MLE) | 0.512 |
| Theta hat (MLE) | 8636 | Theta star (bias corrected MLE) | 11570 |
| nu hat (MLE) | 10.98 | nu star (bias corrected) | 8.194 |
| MLE Mean (bias corrected) | 5925 | MLE Sd (bias corrected) | 8280 |
| Adjusted Level of Significance | 0.0195 | Approximate Chi Square Value (0.05) | 2.848 |
| | | Adjusted Chi Square Value | 2.114 |

| Assuming Gamma Distribution | |
|---|-------|
| 95% Approximate Gamma UCL (use when n>=50)) | 17048 |
| 95% Adjusted Gamma UCL (use when n<50) | 22968 |

| Lognormal GOF Test | | Shapiro Wilk Lognormal GOF Test | |
|--------------------------------|-------|--|--|
| Shapiro Wilk Test Statistic | 0.939 | Data appear Lognormal at 5% Significance Level | |
| 5% Shapiro Wilk Critical Value | 0.818 | Lilliefors Lognormal GOF Test | |
| Lilliefors Test Statistic | 0.172 | Data appear Lognormal at 5% Significance Level | |
| 5% Lilliefors Critical Value | 0.283 | | |

Data appear Lognormal at 5% Significance Level

| Lognormal Statistics | | | |
|------------------------|-------|---------------------|-------|
| Minimum of Logged Data | 5.193 | Mean of logged Data | 7.804 |
| Maximum of Logged Data | 9.741 | SD of logged Data | 1.648 |

| Assuming Lognormal Distribution | |
|---------------------------------|--------|
| 95% H-UCL | 235070 |
| 95% Chebyshev (MVUE) UCL | 25067 |
| 99% Chebyshev (MVUE) UCL | 48107 |
| 90% Chebyshev (MVUE) UCL | 19466 |
| 97.5% Chebyshev (MVUE) UCL | 32839 |

Nonparametric Distribution Free UCL Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

| Nonparametric Distribution Free UCLs | |
|--------------------------------------|-------|
| 95% CLT UCL | 9898 |
| 95% Standard Bootstrap UCL | 9614 |
| 95% Hall's Bootstrap UCL | 36408 |
| 95% BCA Bootstrap UCL | 10450 |
| 90% Chebyshev(Mean, Sd) UCL | 13171 |
| 97.5% Chebyshev(Mean, Sd) UCL | 21008 |
| 95% Jackknife UCL | 10501 |
| 95% Bootstrap-t UCL | 16035 |
| 95% Percentile Bootstrap UCL | 9965 |
| 95% Chebyshev(Mean, Sd) UCL | 16453 |
| 99% Chebyshev(Mean, Sd) UCL | 29956 |

Suggested UCL to Use
 95% Student's-t UCL 10501

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test
 When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
 Recommendations are based upon data size, data distribution, and skewness.
 These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
 However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (m,p-Xylene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 32 |
| Number of Detects | 14 | Number of Non-Detects | 80 |
| Number of Distinct Detects | 13 | Number of Distinct Non-Detects | 19 |
| Minimum Detect | 0.13 | Minimum Non-Detect | 2 |
| Maximum Detect | 2.32 | Maximum Non-Detect | 4000 |
| Variance Detects | 0.289 | Percent Non-Detects | 85.11% |
| Mean Detects | 0.615 | SD Detects | 0.538 |
| Median Detects | 0.56 | CV Detects | 0.874 |
| Skewness Detects | 2.673 | Kurtosis Detects | 8.773 |
| Mean of Logged Detects | -0.756 | SD of Logged Detects | 0.767 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.682 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.874 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.302 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.226 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------|
| KM Mean | 0.529 | KM Standard Error of Mean | 0.0768 |
| KM SD | 0.357 | 95% KM (BCA) UCL | 0.659 |
| 95% KM (t) UCL | 0.656 | 95% KM (Percentile Bootstrap) UCL | 0.653 |
| 95% KM (z) UCL | 0.655 | 95% KM Bootstrap t UCL | 0.672 |
| 90% KM Chebyshev UCL | 0.759 | 95% KM Chebyshev UCL | 0.864 |
| 97.5% KM Chebyshev UCL | 1.008 | 99% KM Chebyshev UCL | 1.293 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.704 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.746 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.201 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.232 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 2.003 | k star (bias corrected MLE) | 1.622 |
| Theta hat (MLE) | 0.307 | Theta star (bias corrected MLE) | 0.379 |
| nu hat (MLE) | 56.1 | nu star (bias corrected) | 45.41 |
| Mean (detects) | 0.615 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.0226 | Mean | 0.524 |
| Maximum | 2.32 | Median | 0.465 |
| SD | 0.338 | CV | 0.644 |
| k hat (MLE) | 2.497 | k star (bias corrected MLE) | 2.424 |
| Theta hat (MLE) | 0.21 | Theta star (bias corrected MLE) | 0.216 |
| nu hat (MLE) | 469.4 | nu star (bias corrected) | 455.8 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (455.78, α) | 407.3 | Adjusted Chi Square Value (455.78, β) | 406.6 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.587 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.588 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|--------|
| Mean (KM) | 0.529 | SD (KM) | 0.357 |
| Variance (KM) | 0.127 | SE of Mean (KM) | 0.0768 |
| k hat (KM) | 2.197 | k star (KM) | 2.134 |
| nu hat (KM) | 413.1 | nu star (KM) | 401.2 |
| theta hat (KM) | 0.241 | theta star (KM) | 0.248 |
| 80% gamma percentile (KM) | 0.785 | 90% gamma percentile (KM) | 1.013 |
| 95% gamma percentile (KM) | 1.229 | 99% gamma percentile (KM) | 1.706 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (401.23, α) | 355.8 | Adjusted Chi Square Value (401.23, β) | 355.1 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 0.596 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 0.597 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.904 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.874 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.225 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.226 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 0.502 | Mean in Log Scale | -0.84 |
| SD in Original Scale | 0.308 | SD in Log Scale | 0.554 |
| 95% t UCL (assumes normality of ROS data) | 0.555 | 95% Percentile Bootstrap UCL | 0.555 |
| 95% BCA Bootstrap UCL | 0.568 | 95% Bootstrap t UCL | 0.566 |

95% H-UCL (Log ROS) 0.561

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.837 | KM Geo Mean | 0.433 |
| KM SD (logged) | 0.662 | 95% Critical H Value (KM-Log) | 1.976 |
| KM Standard Error of Mean (logged) | 0.178 | 95% H-UCL (KM -Log) | 0.617 |
| KM SD (logged) | 0.662 | 95% Critical H Value (KM-Log) | 1.976 |
| KM Standard Error of Mean (logged) | 0.178 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 144.7 |
| SD in Original Scale | 350 |
| 95% t UCL (Assumes normality) | 204.6 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.282 |
| SD in Log Scale | 2.63 |
| 95% H-Stat UCL | 985.8 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

| | | | |
|------------------------------|-------|--------------------------------|-------|
| 95% KM Approximate Gamma UCL | 0.596 | 95% GROS Approximate Gamma UCL | 0.587 |
|------------------------------|-------|--------------------------------|-------|

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Manganese)

| General Statistics | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 8 | Number of Distinct Observations | 8 |
| | | Number of Missing Observations | 0 |
| Minimum | 13 | Mean | 151 |
| Maximum | 480 | Median | 63.5 |
| SD | 192.1 | Std. Error of Mean | 67.93 |
| Coefficient of Variation | 1.272 | Skewness | 1.403 |

Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest.

For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012).

Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1

| Normal GOF Test | | Shapiro Wilk GOF Test | |
|--------------------------------|-------|--|--|
| Shapiro Wilk Test Statistic | 0.674 | Data Not Normal at 5% Significance Level | |
| 5% Shapiro Wilk Critical Value | 0.818 | | |
| Lilliefors Test Statistic | 0.415 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.283 | Data Not Normal at 5% Significance Level | |

Data Not Normal at 5% Significance Level

| Assuming Normal Distribution | | 95% UCLs (Adjusted for Skewness) | |
|------------------------------|-------|-----------------------------------|-------|
| 95% Normal UCL | | 95% Adjusted-CLT UCL (Chen-1995) | 298.7 |
| 95% Student's-t UCL | 279.7 | 95% Modified-t UCL (Johnson-1978) | 285.3 |

| Gamma GOF Test | | Anderson-Darling Gamma GOF Test | |
|-----------------------|-------|---|--|
| A-D Test Statistic | 0.783 | Data Not Gamma Distributed at 5% Significance Level | |
| 5% A-D Critical Value | 0.742 | | |
| K-S Test Statistic | 0.347 | Kolmogorov-Smirnov Gamma GOF Test | |
| 5% K-S Critical Value | 0.303 | Data Not Gamma Distributed at 5% Significance Level | |

Data Not Gamma Distributed at 5% Significance Level

| Gamma Statistics | | | |
|--------------------------------|--------|-------------------------------------|-------|
| k hat (MLE) | 0.833 | k star (bias corrected MLE) | 0.604 |
| Theta hat (MLE) | 181.3 | Theta star (bias corrected MLE) | 250.1 |
| nu hat (MLE) | 13.32 | nu star (bias corrected) | 9.66 |
| MLE Mean (bias corrected) | 151 | MLE Sd (bias corrected) | 194.3 |
| | | Approximate Chi Square Value (0.05) | 3.731 |
| Adjusted Level of Significance | 0.0195 | Adjusted Chi Square Value | 2.859 |

| Assuming Gamma Distribution | | 95% Adjusted Gamma UCL (use when n<50) | |
|---|-----|--|-------|
| 95% Approximate Gamma UCL (use when n>=50)) | 391 | 95% Adjusted Gamma UCL (use when n<50) | 510.2 |

| Lognormal GOF Test | | Shapiro Wilk Lognormal GOF Test | |
|--------------------------------|-------|--|--|
| Shapiro Wilk Test Statistic | 0.887 | Data appear Lognormal at 5% Significance Level | |
| 5% Shapiro Wilk Critical Value | 0.818 | | |
| Lilliefors Test Statistic | 0.273 | Lilliefors Lognormal GOF Test | |
| 5% Lilliefors Critical Value | 0.283 | Data appear Lognormal at 5% Significance Level | |

Data appear Lognormal at 5% Significance Level

| Lognormal Statistics | | | |
|------------------------|-------|---------------------|-------|
| Minimum of Logged Data | 2.565 | Mean of logged Data | 4.308 |
| Maximum of Logged Data | 6.174 | SD of logged Data | 1.276 |

| Assuming Lognormal Distribution | | | |
|---------------------------------|-------|----------------------------|-----|
| 95% H-UCL | 1233 | 90% Chebyshev (MVUE) UCL | 343 |
| 95% Chebyshev (MVUE) UCL | 433.1 | 97.5% Chebyshev (MVUE) UCL | 558 |
| 99% Chebyshev (MVUE) UCL | 803.4 | | |

Nonparametric Distribution Free UCL Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

| Nonparametric Distribution Free UCLs | | | |
|--------------------------------------|-------|------------------------------------|--------------|
| 95% CLT UCL | 262.7 | 95% Jackknife UCL | 279.7 |
| 95% Standard Bootstrap UCL | 256.4 | 95% Bootstrap-t UCL | 1010 |
| 95% Hall's Bootstrap UCL | 1523 | 95% Percentile Bootstrap UCL | 261.3 |
| 95% BCA Bootstrap UCL | 296.9 | | |
| 90% Chebyshev(Mean, Sd) UCL | 354.8 | 95% Chebyshev(Mean, Sd) UCL | 447.1 |
| 97.5% Chebyshev(Mean, Sd) UCL | 575.2 | 99% Chebyshev(Mean, Sd) UCL | 826.9 |

Suggested UCL to Use
95% Chebyshev (Mean, Sd) UCL 447.1

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. Recommendations are based upon data size, data distribution, and skewness. These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Methyl tert-butyl ether)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 26 |
| Number of Detects | 7 | Number of Non-Detects | 87 |
| Number of Distinct Detects | 7 | Number of Distinct Non-Detects | 19 |
| Minimum Detect | 0.13 | Minimum Non-Detect | 1 |
| Maximum Detect | 1.02 | Maximum Non-Detect | 2000 |
| Variance Detects | 0.0894 | Percent Non-Detects | 92.55% |
| Mean Detects | 0.451 | SD Detects | 0.299 |
| Median Detects | 0.37 | CV Detects | 0.662 |
| Skewness Detects | 1.326 | Kurtosis Detects | 1.546 |
| Mean of Logged Detects | -0.976 | SD of Logged Detects | 0.657 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.873 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.803 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.309 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.304 | Detected Data Not Normal at 5% Significance Level |

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------|
| KM Mean | 0.373 | KM Standard Error of Mean | 0.0722 |
| KM SD | 0.191 | 95% KM (BCA) UCL | 0.508 |
| 95% KM (t) UCL | 0.493 | 95% KM (Percentile Bootstrap) UCL | 0.496 |
| 95% KM (z) UCL | 0.492 | 95% KM Bootstrap t UCL | 0.552 |
| 90% KM Chebyshev UCL | 0.589 | 95% KM Chebyshev UCL | 0.687 |
| 97.5% KM Chebyshev UCL | 0.823 | 99% KM Chebyshev UCL | 1.091 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.294 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.712 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.249 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.314 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 2.925 | k star (bias corrected MLE) | 1.767 |
| Theta hat (MLE) | 0.154 | Theta star (bias corrected MLE) | 0.256 |
| nu hat (MLE) | 40.95 | nu star (bias corrected) | 24.73 |
| Mean (detects) | 0.451 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.0869 | Mean | 0.367 |
| Maximum | 1.02 | Median | 0.342 |
| SD | 0.164 | CV | 0.449 |
| k hat (MLE) | 5.176 | k star (bias corrected MLE) | 5.018 |
| Theta hat (MLE) | 0.0708 | Theta star (bias corrected MLE) | 0.073 |
| nu hat (MLE) | 973.1 | nu star (bias corrected) | 943.4 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (943.37, α) | 873.1 | Adjusted Chi Square Value (943.37, β) | 872 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.396 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.397 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 0.373 | SD (KM) | 0.191 |
| Variance (KM) | 0.0363 | SE of Mean (KM) | 0.0722 |
| k hat (KM) | 3.825 | k star (KM) | 3.71 |
| nu hat (KM) | 719.1 | nu star (KM) | 697.4 |
| theta hat (KM) | 0.0975 | theta star (KM) | 0.101 |
| 80% gamma percentile (KM) | 0.519 | 90% gamma percentile (KM) | 0.632 |
| 95% gamma percentile (KM) | 0.737 | 99% gamma percentile (KM) | 0.963 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (697.44, α) | 637.2 | Adjusted Chi Square Value (697.44, β) | 636.3 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 0.408 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 0.409 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.967 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.803 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.209 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.304 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 0.352 | Mean in Log Scale | -1.139 |
| SD in Original Scale | 0.16 | SD in Log Scale | 0.436 |
| 95% t UCL (assumes normality of ROS data) | 0.379 | 95% Percentile Bootstrap UCL | 0.38 |
| 95% BCA Bootstrap UCL | 0.383 | 95% Bootstrap t UCL | 0.38 |

95% H-UCL (Log ROS) 0.382

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -1.114 | KM Geo Mean | 0.328 |
| KM SD (logged) | 0.516 | 95% Critical H Value (KM-Log) | 1.859 |
| KM Standard Error of Mean (logged) | 0.213 | 95% H-UCL (KM -Log) | 0.414 |
| KM SD (logged) | 0.516 | 95% Critical H Value (KM-Log) | 1.859 |
| KM Standard Error of Mean (logged) | 0.213 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 72.36 |
| SD in Original Scale | 175 |
| 95% t UCL (Assumes normality) | 102.3 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.681 |
| SD in Log Scale | 2.52 |
| 95% H-Stat UCL | 373.4 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.493

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Naphthalene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 26 |
| Number of Detects | 7 | Number of Non-Detects | 87 |
| Number of Distinct Detects | 7 | Number of Distinct Non-Detects | 19 |
| Minimum Detect | 0.12 | Minimum Non-Detect | 1 |
| Maximum Detect | 383 | Maximum Non-Detect | 2000 |
| Variance Detects | 20461 | Percent Non-Detects | 92.55% |
| Mean Detects | 59.64 | SD Detects | 143 |
| Median Detects | 0.71 | CV Detects | 2.399 |
| Skewness Detects | 2.612 | Kurtosis Detects | 6.855 |
| Mean of Logged Detects | 0.891 | SD of Logged Detects | 2.785 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.501 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.803 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.436 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.304 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 5.744 | KM Standard Error of Mean | 5.032 |
| KM SD | 42.1 | 95% KM (BCA) UCL | 15.87 |
| 95% KM (t) UCL | 14.1 | 95% KM (Percentile Bootstrap) UCL | 14.95 |
| 95% KM (z) UCL | 14.02 | 95% KM Bootstrap t UCL | 241.5 |
| 90% KM Chebyshev UCL | 20.84 | 95% KM Chebyshev UCL | 27.68 |
| 97.5% KM Chebyshev UCL | 37.17 | 99% KM Chebyshev UCL | 55.81 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.034 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.813 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.4 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.341 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.226 | k star (bias corrected MLE) | 0.224 |
| Theta hat (MLE) | 264.1 | Theta star (bias corrected MLE) | 265.9 |
| nu hat (MLE) | 3.161 | nu star (bias corrected) | 3.14 |
| Mean (detects) | 59.64 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 6.537 |
| Maximum | 383 | Median | 0.01 |
| SD | 40.16 | CV | 6.143 |
| k hat (MLE) | 0.144 | k star (bias corrected MLE) | 0.147 |
| Theta hat (MLE) | 45.32 | Theta star (bias corrected MLE) | 44.55 |
| nu hat (MLE) | 27.12 | nu star (bias corrected) | 27.59 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (27.59, α) | 16.61 | Adjusted Chi Square Value (27.59, β) | 16.48 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 10.86 | 95% Gamma Adjusted UCL (use when $n < 50$) | 10.95 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 5.744 | SD (KM) | 42.1 |
| Variance (KM) | 1773 | SE of Mean (KM) | 5.032 |
| k hat (KM) | 0.0186 | k star (KM) | 0.0251 |
| nu hat (KM) | 3.499 | nu star (KM) | 4.72 |
| theta hat (KM) | 308.6 | theta star (KM) | 228.7 |
| 80% gamma percentile (KM) | 0.0181 | 90% gamma percentile (KM) | 1.99 |
| 95% gamma percentile (KM) | 18.35 | 99% gamma percentile (KM) | 154.7 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (4.72, α) | 1.025 | Adjusted Chi Square Value (4.72, β) | 1 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 26.44 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 27.12 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.837 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.803 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.334 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.304 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 5.307 | Mean in Log Scale | -0.689 |
| SD in Original Scale | 39.52 | SD in Log Scale | 1.521 |
| 95% t UCL (assumes normality of ROS data) | 12.08 | 95% Percentile Bootstrap UCL | 13.27 |
| 95% BCA Bootstrap UCL | 18.48 | 95% Bootstrap t UCL | 162.5 |

95% H-UCL (Log ROS) 2.486

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.625 | KM Geo Mean | 0.535 |
| KM SD (logged) | 1.181 | 95% Critical H Value (KM-Log) | 2.432 |
| KM Standard Error of Mean (logged) | 0.408 | 95% H-UCL (KM -Log) | 1.449 |
| KM SD (logged) | 1.181 | 95% Critical H Value (KM-Log) | 2.432 |
| KM Standard Error of Mean (logged) | 0.408 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 76.35 |
| SD in Original Scale | 177.8 |
| 95% t UCL (Assumes normality) | 106.8 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.741 |
| SD in Log Scale | 2.533 |
| 95% H-Stat UCL | 414.8 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 27.68

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (o-Xylene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 24 |
| Number of Detects | 5 | Number of Non-Detects | 89 |
| Number of Distinct Detects | 5 | Number of Distinct Non-Detects | 19 |
| Minimum Detect | 0.11 | Minimum Non-Detect | 1 |
| Maximum Detect | 0.54 | Maximum Non-Detect | 2000 |
| Variance Detects | 0.0374 | Percent Non-Detects | 94.68% |
| Mean Detects | 0.352 | SD Detects | 0.193 |
| Median Detects | 0.45 | CV Detects | 0.549 |
| Skewness Detects | -0.552 | Kurtosis Detects | -2.706 |
| Mean of Logged Detects | -1.214 | SD of Logged Detects | 0.707 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.858 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.294 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------|
| KM Mean | 0.352 | KM Standard Error of Mean | 0.0865 |
| KM SD | 0.173 | 95% KM (BCA) UCL | 0.488 |
| 95% KM (t) UCL | 0.496 | 95% KM (Percentile Bootstrap) UCL | 0.495 |
| 95% KM (z) UCL | 0.494 | 95% KM Bootstrap t UCL | 0.501 |
| 90% KM Chebyshev UCL | 0.611 | 95% KM Chebyshev UCL | 0.729 |
| 97.5% KM Chebyshev UCL | 0.892 | 99% KM Chebyshev UCL | 1.212 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.53 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.682 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.338 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.359 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 3.097 | k star (bias corrected MLE) | 1.372 |
| Theta hat (MLE) | 0.114 | Theta star (bias corrected MLE) | 0.257 |
| nu hat (MLE) | 30.97 | nu star (bias corrected) | 13.72 |
| Mean (detects) | 0.352 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.0363 | Mean | 0.357 |
| Maximum | 0.967 | Median | 0.331 |
| SD | 0.18 | CV | 0.505 |
| k hat (MLE) | 3.625 | k star (bias corrected MLE) | 3.517 |
| Theta hat (MLE) | 0.0984 | Theta star (bias corrected MLE) | 0.101 |
| nu hat (MLE) | 681.6 | nu star (bias corrected) | 661.2 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (661.15, α) | 602.5 | Adjusted Chi Square Value (661.15, β) | 601.6 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.391 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.392 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 0.352 | SD (KM) | 0.173 |
| Variance (KM) | 0.0299 | SE of Mean (KM) | 0.0865 |
| k hat (KM) | 4.145 | k star (KM) | 4.019 |
| nu hat (KM) | 779.2 | nu star (KM) | 755.6 |
| theta hat (KM) | 0.0849 | theta star (KM) | 0.0876 |
| 80% gamma percentile (KM) | 0.485 | 90% gamma percentile (KM) | 0.587 |
| 95% gamma percentile (KM) | 0.681 | 99% gamma percentile (KM) | 0.882 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (755.63, α) | 692.8 | Adjusted Chi Square Value (755.63, β) | 691.9 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 0.384 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 0.384 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.838 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.322 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 0.366 | Mean in Log Scale | -1.214 |
| SD in Original Scale | 0.257 | SD in Log Scale | 0.655 |
| 95% t UCL (assumes normality of ROS data) | 0.41 | 95% Percentile Bootstrap UCL | 0.413 |
| 95% BCA Bootstrap UCL | 0.418 | 95% Bootstrap t UCL | 0.416 |

95% H-UCL (Log ROS) 0.421

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -1.214 | KM Geo Mean | 0.297 |
| KM SD (logged) | 0.632 | 95% Critical H Value (KM-Log) | 1.945 |
| KM Standard Error of Mean (logged) | 0.316 | 95% H-UCL (KM -Log) | 0.412 |
| KM SD (logged) | 0.632 | 95% Critical H Value (KM-Log) | 1.945 |
| KM Standard Error of Mean (logged) | 0.316 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 72.35 |
| SD in Original Scale | 175 |
| 95% t UCL (Assumes normality) | 102.3 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.674 |
| SD in Log Scale | 2.527 |
| 95% H-Stat UCL | 379.2 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.496

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (tert-Butylbenzene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 25 |
| Number of Detects | 6 | Number of Non-Detects | 88 |
| Number of Distinct Detects | 6 | Number of Distinct Non-Detects | 19 |
| Minimum Detect | 0.16 | Minimum Non-Detect | 1 |
| Maximum Detect | 1.89 | Maximum Non-Detect | 2000 |
| Variance Detects | 0.355 | Percent Non-Detects | 93.62% |
| Mean Detects | 1.07 | SD Detects | 0.596 |
| Median Detects | 1.02 | CV Detects | 0.557 |
| Skewness Detects | -0.183 | Kurtosis Detects | 0.306 |
| Mean of Logged Detects | -0.158 | SD of Logged Detects | 0.876 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.976 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.788 | Detected Data appear Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.18 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.325 | Detected Data appear Normal at 5% Significance Level |

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 0.714 | KM Standard Error of Mean | 0.213 |
| KM SD | 0.417 | 95% KM (BCA) UCL | 1.045 |
| 95% KM (t) UCL | 1.068 | 95% KM (Percentile Bootstrap) UCL | 1.039 |
| 95% KM (z) UCL | 1.064 | 95% KM Bootstrap t UCL | 1.798 |
| 90% KM Chebyshev UCL | 1.353 | 95% KM Chebyshev UCL | 1.642 |
| 97.5% KM Chebyshev UCL | 2.043 | 99% KM Chebyshev UCL | 2.832 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.427 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.703 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.259 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.335 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 2.367 | k star (bias corrected MLE) | 1.295 |
| Theta hat (MLE) | 0.452 | Theta star (bias corrected MLE) | 0.827 |
| nu hat (MLE) | 28.4 | nu star (bias corrected) | 15.53 |
| Mean (detects) | 1.07 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.16 | Mean | 0.659 |
| Maximum | 1.89 | Median | 0.611 |
| SD | 0.289 | CV | 0.439 |
| k hat (MLE) | 5.521 | k star (bias corrected MLE) | 5.352 |
| Theta hat (MLE) | 0.119 | Theta star (bias corrected MLE) | 0.123 |
| nu hat (MLE) | 1038 | nu star (bias corrected) | 1006 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (N/A, α) | 933.5 | Adjusted Chi Square Value (N/A, β) | 932.5 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.71 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.711 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 0.714 | SD (KM) | 0.417 |
| Variance (KM) | 0.174 | SE of Mean (KM) | 0.213 |
| k hat (KM) | 2.94 | k star (KM) | 2.854 |
| nu hat (KM) | 552.8 | nu star (KM) | 536.5 |
| theta hat (KM) | 0.243 | theta star (KM) | 0.25 |
| 80% gamma percentile (KM) | 1.025 | 90% gamma percentile (KM) | 1.281 |
| 95% gamma percentile (KM) | 1.521 | 99% gamma percentile (KM) | 2.042 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (536.47, α) | 483.8 | Adjusted Chi Square Value (536.47, β) | 483 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 0.792 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 0.793 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.817 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.788 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.309 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.325 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 0.55 | Mean in Log Scale | -0.73 |
| SD in Original Scale | 0.297 | SD in Log Scale | 0.519 |
| 95% t UCL (assumes normality of ROS data) | 0.6 | 95% Percentile Bootstrap UCL | 0.6 |
| 95% BCA Bootstrap UCL | 0.607 | 95% Bootstrap t UCL | 0.607 |

95% H-UCL (Log ROS) 0.609

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.607 | KM Geo Mean | 0.545 |
| KM SD (logged) | 0.835 | 95% Critical H Value (KM-Log) | 2.095 |
| KM Standard Error of Mean (logged) | 0.481 | 95% H-UCL (KM -Log) | 0.925 |
| KM SD (logged) | 0.835 | 95% Critical H Value (KM-Log) | 2.095 |
| KM Standard Error of Mean (logged) | 0.481 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 72.4 |
| SD in Original Scale | 175 |
| 95% t UCL (Assumes normality) | 102.4 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.736 |
| SD in Log Scale | 2.471 |
| 95% H-Stat UCL | 336.8 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 1.068

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Toluene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 40 |
| Number of Detects | 21 | Number of Non-Detects | 73 |
| Number of Distinct Detects | 21 | Number of Distinct Non-Detects | 19 |
| Minimum Detect | 0.15 | Minimum Non-Detect | 1 |
| Maximum Detect | 110 | Maximum Non-Detect | 2000 |
| Variance Detects | 936.3 | Percent Non-Detects | 77.66% |
| Mean Detects | 12.63 | SD Detects | 30.6 |
| Median Detects | 0.49 | CV Detects | 2.423 |
| Skewness Detects | 2.632 | Kurtosis Detects | 6.11 |
| Mean of Logged Detects | 0.0307 | SD of Logged Detects | 2.062 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.47 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.908 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.443 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.188 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 4.136 | KM Standard Error of Mean | 2.093 |
| KM SD | 17.17 | 95% KM (BCA) UCL | 8.222 |
| 95% KM (t) UCL | 7.613 | 95% KM (Percentile Bootstrap) UCL | 8.004 |
| 95% KM (z) UCL | 7.578 | 95% KM Bootstrap t UCL | 13.96 |
| 90% KM Chebyshev UCL | 10.41 | 95% KM Chebyshev UCL | 13.26 |
| 97.5% KM Chebyshev UCL | 17.21 | 99% KM Chebyshev UCL | 24.96 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 3.34 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.857 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.353 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.206 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.279 | k star (bias corrected MLE) | 0.271 |
| Theta hat (MLE) | 45.33 | Theta star (bias corrected MLE) | 46.68 |
| nu hat (MLE) | 11.7 | nu star (bias corrected) | 11.36 |
| Mean (detects) | 12.63 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 4.021 |
| Maximum | 110 | Median | 0.01 |
| SD | 15.3 | CV | 3.805 |
| k hat (MLE) | 0.193 | k star (bias corrected MLE) | 0.194 |
| Theta hat (MLE) | 20.86 | Theta star (bias corrected MLE) | 20.75 |
| nu hat (MLE) | 36.25 | nu star (bias corrected) | 36.42 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (36.42, α) | 23.61 | Adjusted Chi Square Value (36.42, β) | 23.45 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 6.203 | 95% Gamma Adjusted UCL (use when $n < 50$) | 6.246 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|--------|
| Mean (KM) | 4.136 | SD (KM) | 17.17 |
| Variance (KM) | 294.7 | SE of Mean (KM) | 2.093 |
| k hat (KM) | 0.058 | k star (KM) | 0.0633 |
| nu hat (KM) | 10.91 | nu star (KM) | 11.9 |
| theta hat (KM) | 71.26 | theta star (KM) | 65.36 |
| 80% gamma percentile (KM) | 1.154 | 90% gamma percentile (KM) | 8.19 |
| 95% gamma percentile (KM) | 23.43 | 99% gamma percentile (KM) | 81.53 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (11.90, α) | 5.16 | Adjusted Chi Square Value (11.90, β) | 5.09 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 9.538 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 9.667 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.783 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.908 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.259 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.188 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 3.434 | Mean in Log Scale | -0.56 |
| SD in Original Scale | 15.05 | SD in Log Scale | 1.375 |
| 95% t UCL (assumes normality of ROS data) | 6.013 | 95% Percentile Bootstrap UCL | 6.213 |
| 95% BCA Bootstrap UCL | 7.234 | 95% Bootstrap t UCL | 15.96 |

95% H-UCL (Log ROS) 2.145

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.686 | KM Geo Mean | 0.503 |
| KM SD (logged) | 1.319 | 95% Critical H Value (KM-Log) | 2.582 |
| KM Standard Error of Mean (logged) | 0.201 | 95% H-UCL (KM -Log) | 1.712 |
| KM SD (logged) | 1.319 | 95% Critical H Value (KM-Log) | 2.582 |
| KM Standard Error of Mean (logged) | 0.201 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 74.93 |
| SD in Original Scale | 174.6 |
| 95% t UCL (Assumes normality) | 104.8 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.797 |
| SD in Log Scale | 2.574 |
| 95% H-Stat UCL | 501.6 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 13.26

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (trans-1,2-Dichloroethene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|-------|
| Total Number of Observations | 94 | Number of Distinct Observations | 39 |
| Number of Detects | 25 | Number of Non-Detects | 69 |
| Number of Distinct Detects | 24 | Number of Distinct Non-Detects | 16 |
| Minimum Detect | 0.14 | Minimum Non-Detect | 1 |
| Maximum Detect | 142 | Maximum Non-Detect | 2000 |
| Variance Detects | 1645 | Percent Non-Detects | 73.4% |
| Mean Detects | 22.9 | SD Detects | 40.55 |
| Median Detects | 2.16 | CV Detects | 1.771 |
| Skewness Detects | 2.029 | Kurtosis Detects | 3.225 |
| Mean of Logged Detects | 1.062 | SD of Logged Detects | 2.376 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.63 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.918 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.326 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.173 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 8.018 | KM Standard Error of Mean | 2.918 |
| KM SD | 24.98 | 95% KM (BCA) UCL | 12.99 |
| 95% KM (t) UCL | 12.87 | 95% KM (Percentile Bootstrap) UCL | 13.16 |
| 95% KM (z) UCL | 12.82 | 95% KM Bootstrap t UCL | 15.9 |
| 90% KM Chebyshev UCL | 16.77 | 95% KM Chebyshev UCL | 20.74 |
| 97.5% KM Chebyshev UCL | 26.24 | 99% KM Chebyshev UCL | 37.06 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 1.15 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.845 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.172 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.189 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.328 | k star (bias corrected MLE) | 0.316 |
| Theta hat (MLE) | 69.72 | Theta star (bias corrected MLE) | 72.54 |
| nu hat (MLE) | 16.42 | nu star (bias corrected) | 15.78 |
| Mean (detects) | 22.9 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 6.967 |
| Maximum | 142 | Median | 0.01 |
| SD | 22.99 | CV | 3.3 |
| k hat (MLE) | 0.175 | k star (bias corrected MLE) | 0.177 |
| Theta hat (MLE) | 39.72 | Theta star (bias corrected MLE) | 39.39 |
| nu hat (MLE) | 32.98 | nu star (bias corrected) | 33.26 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (33.26, α) | 21.07 | Adjusted Chi Square Value (33.26, β) | 20.92 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 11 | 95% Gamma Adjusted UCL (use when $n < 50$) | 11.08 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 8.018 | SD (KM) | 24.98 |
| Variance (KM) | 623.8 | SE of Mean (KM) | 2.918 |
| k hat (KM) | 0.103 | k star (KM) | 0.107 |
| nu hat (KM) | 19.38 | nu star (KM) | 20.09 |
| theta hat (KM) | 77.8 | theta star (KM) | 75.03 |
| 80% gamma percentile (KM) | 6.102 | 90% gamma percentile (KM) | 21.9 |
| 95% gamma percentile (KM) | 46.32 | 99% gamma percentile (KM) | 123.2 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (20.09, α) | 10.92 | Adjusted Chi Square Value (20.09, β) | 10.81 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 14.75 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 14.9 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.91 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.918 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.133 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.173 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 6.833 | Mean in Log Scale | -0.266 |
| SD in Original Scale | 22.81 | SD in Log Scale | 1.869 |
| 95% t UCL (assumes normality of ROS data) | 10.74 | 95% Percentile Bootstrap UCL | 11.08 |
| 95% BCA Bootstrap UCL | 12.33 | 95% Bootstrap t UCL | 14.17 |

95% H-UCL (Log ROS) 8.219

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.351 | KM Geo Mean | 0.704 |
| KM SD (logged) | 1.83 | 95% Critical H Value (KM-Log) | 3.186 |
| KM Standard Error of Mean (logged) | 0.267 | 95% H-UCL (KM -Log) | 6.871 |
| KM SD (logged) | 1.83 | 95% Critical H Value (KM-Log) | 3.186 |
| KM Standard Error of Mean (logged) | 0.267 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 69.19 |
| SD in Original Scale | 174.2 |
| 95% t UCL (Assumes normality) | 99.05 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.592 |
| SD in Log Scale | 2.526 |
| 95% H-Stat UCL | 349.4 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 14.75

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Trichloroethene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 94 | Number of Distinct Observations | 73 |
| Number of Detects | 64 | Number of Non-Detects | 30 |
| Number of Distinct Detects | 60 | Number of Distinct Non-Detects | 13 |
| Minimum Detect | 0.23 | Minimum Non-Detect | 1 |
| Maximum Detect | 64200 | Maximum Non-Detect | 800 |
| Variance Detects | 1.067E+8 | Percent Non-Detects | 31.91% |
| Mean Detects | 2809 | SD Detects | 10327 |
| Median Detects | 30.4 | CV Detects | 3.677 |
| Skewness Detects | 4.782 | Kurtosis Detects | 23.74 |
| Mean of Logged Detects | 3.45 | SD of Logged Detects | 3.577 |

Normal GOF Test on Detects Only

| | |
|------------------------------|-------|
| Shapiro Wilk Test Statistic | 0.313 |
| 5% Shapiro Wilk P Value | 0 |
| Lilliefors Test Statistic | 0.416 |
| 5% Lilliefors Critical Value | 0.111 |

Normal GOF Test on Detected Observations Only

Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|------|-----------------------------------|-------|
| KM Mean | 1915 | KM Standard Error of Mean | 889.3 |
| KM SD | 8555 | 95% KM (BCA) UCL | 3762 |
| 95% KM (t) UCL | 3392 | 95% KM (Percentile Bootstrap) UCL | 3495 |
| 95% KM (z) UCL | 3377 | 95% KM Bootstrap t UCL | 8829 |
| 90% KM Chebyshev UCL | 4583 | 95% KM Chebyshev UCL | 5791 |
| 97.5% KM Chebyshev UCL | 7469 | 99% KM Chebyshev UCL | 10763 |

Gamma GOF Tests on Detected Observations Only

| | |
|-----------------------|-------|
| A-D Test Statistic | 4.306 |
| 5% A-D Critical Value | 0.945 |
| K-S Test Statistic | 0.172 |
| 5% K-S Critical Value | 0.125 |

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.168 | k star (bias corrected MLE) | 0.171 |
| Theta hat (MLE) | 16692 | Theta star (bias corrected MLE) | 16445 |
| nu hat (MLE) | 21.54 | nu star (bias corrected) | 21.86 |
| Mean (detects) | 2809 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 1912 |
| Maximum | 64200 | Median | 1.3 |
| SD | 8601 | CV | 4.498 |
| k hat (MLE) | 0.119 | k star (bias corrected MLE) | 0.122 |
| Theta hat (MLE) | 16082 | Theta star (bias corrected MLE) | 15648 |
| nu hat (MLE) | 22.36 | nu star (bias corrected) | 22.98 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (22.98, α) | 13.07 | Adjusted Chi Square Value (22.98, β) | 12.96 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 3361 | 95% Gamma Adjusted UCL (use when $n < 50$) | 3391 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|----------|---------------------------|--------|
| Mean (KM) | 1915 | SD (KM) | 8555 |
| Variance (KM) | 73185147 | SE of Mean (KM) | 889.3 |
| k hat (KM) | 0.0501 | k star (KM) | 0.0556 |
| nu hat (KM) | 9.417 | nu star (KM) | 10.45 |
| theta hat (KM) | 38224 | theta star (KM) | 34446 |
| 80% gamma percentile (KM) | 368.7 | 90% gamma percentile (KM) | 3322 |
| 95% gamma percentile (KM) | 10530 | 99% gamma percentile (KM) | 39896 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (10.45, α) | 4.225 | Adjusted Chi Square Value (10.45, β) | 4.163 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 4736 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 4806 |

Lognormal GOF Test on Detected Observations Only

| | |
|---|-----------|
| Shapiro Wilk Approximate Test Statistic | 0.923 |
| 5% Shapiro Wilk P Value | 5.2276E-4 |
| Lilliefors Test Statistic | 0.119 |
| 5% Lilliefors Critical Value | 0.111 |

Shapiro Wilk GOF Test

Detected Data Not Lognormal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Lognormal at 5% Significance Level

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|------|------------------------------|-------|
| Mean in Original Scale | 1913 | Mean in Log Scale | 2.307 |
| SD in Original Scale | 8601 | SD in Log Scale | 3.515 |
| 95% t UCL (assumes normality of ROS data) | 3387 | 95% Percentile Bootstrap UCL | 3594 |
| 95% BCA Bootstrap UCL | 4128 | 95% Bootstrap t UCL | 5307 |

95% H-UCL (Log ROS) 35309

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 2.283 | KM Geo Mean | 9.802 |
| KM SD (logged) | 3.477 | 95% Critical H Value (KM-Log) | 5.401 |
| KM Standard Error of Mean (logged) | 0.371 | 95% H-UCL (KM -Log) | 29015 |
| KM SD (logged) | 3.477 | 95% Critical H Value (KM-Log) | 5.401 |
| KM Standard Error of Mean (logged) | 0.371 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|------|
| Mean in Original Scale | 1925 |
| SD in Original Scale | 8598 |
| 95% t UCL (Assumes normality) | 3399 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.853 |
| SD in Log Scale | 3.313 |
| 95% H-Stat UCL | 24825 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

99% KM (Chebyshev) UCL 10763

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Vinyl chloride)

General Statistics

| | | | |
|------------------------------|---------|---------------------------------|-------|
| Total Number of Observations | 94 | Number of Distinct Observations | 76 |
| Number of Detects | 69 | Number of Non-Detects | 25 |
| Number of Distinct Detects | 68 | Number of Distinct Non-Detects | 9 |
| Minimum Detect | 0.25 | Minimum Non-Detect | 1 |
| Maximum Detect | 14900 | Maximum Non-Detect | 800 |
| Variance Detects | 4597584 | Percent Non-Detects | 26.6% |
| Mean Detects | 810.9 | SD Detects | 2144 |
| Median Detects | 36 | CV Detects | 2.644 |
| Skewness Detects | 4.855 | Kurtosis Detects | 28.33 |
| Mean of Logged Detects | 3.703 | SD of Logged Detects | 2.975 |

Normal GOF Test on Detects Only

| | | |
|------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.44 | Normal GOF Test on Detected Observations Only |
| 5% Shapiro Wilk P Value | 0 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.353 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.107 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------------|
| KM Mean | 597.1 | KM Standard Error of Mean | 193.1 |
| KM SD | 1858 | 95% KM (BCA) UCL | 1005 |
| 95% KM (t) UCL | 917.9 | 95% KM (Percentile Bootstrap) UCL | 962.1 |
| 95% KM (z) UCL | 914.7 | 95% KM Bootstrap t UCL | 1167 |
| 90% KM Chebyshev UCL | 1176 | 95% KM Chebyshev UCL | 1439 |
| 97.5% KM Chebyshev UCL | 1803 | 99% KM Chebyshev UCL | 2518 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 2.698 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.896 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.169 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.118 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.239 | k star (bias corrected MLE) | 0.238 |
| Theta hat (MLE) | 3395 | Theta star (bias corrected MLE) | 3405 |
| nu hat (MLE) | 32.96 | nu star (bias corrected) | 32.86 |
| Mean (detects) | 810.9 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 595.2 |
| Maximum | 14900 | Median | 3.62 |
| SD | 1869 | CV | 3.139 |
| k hat (MLE) | 0.156 | k star (bias corrected MLE) | 0.158 |
| Theta hat (MLE) | 3814 | Theta star (bias corrected MLE) | 3763 |
| nu hat (MLE) | 29.34 | nu star (bias corrected) | 29.74 |
| Adjusted Level of Significance (β) | 0.0474 | | |
| Approximate Chi Square Value (29.74, α) | 18.29 | Adjusted Chi Square Value (29.74, β) | 18.15 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 968 | 95% Gamma Adjusted UCL (use when $n < 50$) | 975.4 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|---------|---------------------------|-------|
| Mean (KM) | 597.1 | SD (KM) | 1858 |
| Variance (KM) | 3452445 | SE of Mean (KM) | 193.1 |
| k hat (KM) | 0.103 | k star (KM) | 0.107 |
| nu hat (KM) | 19.41 | nu star (KM) | 20.13 |
| theta hat (KM) | 5782 | theta star (KM) | 5577 |
| 80% gamma percentile (KM) | 455.4 | 90% gamma percentile (KM) | 1632 |
| 95% gamma percentile (KM) | 3449 | 99% gamma percentile (KM) | 9164 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (20.13, α) | 10.95 | Adjusted Chi Square Value (20.13, β) | 10.84 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 1098 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 1109 |

Lognormal GOF Test on Detected Observations Only

| | | |
|---|---------|--|
| Shapiro Wilk Approximate Test Statistic | 0.932 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk P Value | 0.00117 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.119 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.107 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 595.8 | Mean in Log Scale | 2.609 |
| SD in Original Scale | 1868 | SD in Log Scale | 3.267 |
| 95% t UCL (assumes normality of ROS data) | 916 | 95% Percentile Bootstrap UCL | 936.6 |
| 95% BCA Bootstrap UCL | 1111 | 95% Bootstrap t UCL | 1179 |

95% H-UCL (Log ROS) 15936

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 2.742 | KM Geo Mean | 15.52 |
| KM SD (logged) | 3.073 | 95% Critical H Value (KM-Log) | 4.838 |
| KM Standard Error of Mean (logged) | 0.327 | 95% H-UCL (KM -Log) | 8145 |
| KM SD (logged) | 3.073 | 95% Critical H Value (KM-Log) | 4.838 |
| KM Standard Error of Mean (logged) | 0.327 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 604.9 |
| SD in Original Scale | 1866 |
| 95% t UCL (Assumes normality) | 924.7 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 3.061 |
| SD in Log Scale | 2.999 |
| 95% H-Stat UCL | 8361 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 1439

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

UCL Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation ProUCL 5.14/25/2017 3:37:18 PM
 From File Book1.xls
 Full Precision OFF
 Confidence Coefficient 95%
 Number of Bootstrap Operations 2000

Result (1,1-Dichloroethane)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 45 |
| Number of Detects | 33 | Number of Non-Detects | 41 |
| Number of Distinct Detects | 31 | Number of Distinct Non-Detects | 14 |
| Minimum Detect | 0.12 | Minimum Non-Detect | 1 |
| Maximum Detect | 2100 | Maximum Non-Detect | 5000 |
| Variance Detects | 179126 | Percent Non-Detects | 55.41% |
| Mean Detects | 158 | SD Detects | 423.2 |
| Median Detects | 1.87 | CV Detects | 2.679 |
| Skewness Detects | 3.666 | Kurtosis Detects | 14.54 |
| Mean of Logged Detects | 1.707 | SD of Logged Detects | 2.941 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.439 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.931 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.373 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.152 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 73.31 | KM Standard Error of Mean | 34.77 |
| KM SD | 291.6 | 95% KM (BCA) UCL | 135.3 |
| 95% KM (t) UCL | 131.2 | 95% KM (Percentile Bootstrap) UCL | 136.4 |
| 95% KM (z) UCL | 130.5 | 95% KM Bootstrap t UCL | 222.5 |
| 90% KM Chebyshev UCL | 177.6 | 95% KM Chebyshev UCL | 224.9 |
| 97.5% KM Chebyshev UCL | 290.4 | 99% KM Chebyshev UCL | 419.2 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 2.459 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.898 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.225 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.169 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.217 | k star (bias corrected MLE) | 0.217 |
| Theta hat (MLE) | 729.5 | Theta star (bias corrected MLE) | 727.7 |
| nu hat (MLE) | 14.29 | nu star (bias corrected) | 14.33 |
| Mean (detects) | 158 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 70.46 |
| Maximum | 2100 | Median | 0.01 |
| SD | 291.2 | CV | 4.132 |
| k hat (MLE) | 0.13 | k star (bias corrected MLE) | 0.134 |
| Theta hat (MLE) | 542.9 | Theta star (bias corrected MLE) | 527.7 |
| nu hat (MLE) | 19.21 | nu star (bias corrected) | 19.76 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (19.76, α) | 10.68 | Adjusted Chi Square Value (19.76, β) | 10.54 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 130.4 | 95% Gamma Adjusted UCL (use when $n < 50$) | 132.1 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 73.31 | SD (KM) | 291.6 |
| Variance (KM) | 85009 | SE of Mean (KM) | 34.77 |
| k hat (KM) | 0.0632 | k star (KM) | 0.0697 |
| nu hat (KM) | 9.356 | nu star (KM) | 10.31 |
| theta hat (KM) | 1160 | theta star (KM) | 1052 |
| 80% gamma percentile (KM) | 25.96 | 90% gamma percentile (KM) | 157.6 |
| 95% gamma percentile (KM) | 421.4 | 99% gamma percentile (KM) | 1384 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (10.31, α) | 4.136 | Adjusted Chi Square Value (10.31, β) | 4.059 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 182.7 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 186.2 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.899 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.931 | Detected Data Not Lognormal at 5% Significance Level |

| | | | |
|------------------------------|-------|--|--|
| Lilliefors Test Statistic | 0.159 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.152 | Detected Data Not Lognormal at 5% Significance Level | |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 71.07 | Mean in Log Scale | 0.43 |
| SD in Original Scale | 291 | SD in Log Scale | 2.504 |
| 95% t UCL (assumes normality of ROS data) | 127.4 | 95% Percentile Bootstrap UCL | 130 |
| 95% BCA Bootstrap UCL | 170.6 | 95% Bootstrap t UCL | 215.4 |
| 95% H-UCL (Log ROS) | 116.9 | | |

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.359 | KM Geo Mean | 1.432 |
| KM SD (logged) | 2.448 | 95% Critical H Value (KM-Log) | 4.005 |
| KM Standard Error of Mean (logged) | 0.316 | 95% H-UCL (KM -Log) | 90.27 |
| KM SD (logged) | 2.448 | 95% Critical H Value (KM-Log) | 4.005 |
| KM Standard Error of Mean (logged) | 0.316 | | |

DL/2 Statistics

| | | | |
|-------------------------------|-------|-----------------------------|-------|
| DL/2 Normal | | DL/2 Log-Transformed | |
| Mean in Original Scale | 134.6 | Mean in Log Scale | 1.582 |
| SD in Original Scale | 418.9 | SD in Log Scale | 2.677 |
| 95% t UCL (Assumes normality) | 215.7 | 95% H-Stat UCL | 675.7 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 224.9

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (1,1-Dichloroethene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 34 |
| Number of Detects | 22 | Number of Non-Detects | 52 |
| Number of Distinct Detects | 21 | Number of Distinct Non-Detects | 13 |
| Minimum Detect | 0.25 | Minimum Non-Detect | 1 |
| Maximum Detect | 1950 | Maximum Non-Detect | 5000 |
| Variance Detects | 243613 | Percent Non-Detects | 70.27% |
| Mean Detects | 204.7 | SD Detects | 493.6 |
| Median Detects | 9.65 | CV Detects | 2.412 |
| Skewness Detects | 2.79 | Kurtosis Detects | 7.552 |
| Mean of Logged Detects | 2.213 | SD of Logged Detects | 2.91 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.473 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.911 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.445 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.184 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 63.78 | KM Standard Error of Mean | 34.09 |
| KM SD | 282.6 | 95% KM (BCA) UCL | 128.6 |
| 95% KM (t) UCL | 120.6 | 95% KM (Percentile Bootstrap) UCL | 122.2 |
| 95% KM (z) UCL | 119.9 | 95% KM Bootstrap t UCL | 168.8 |
| 90% KM Chebyshev UCL | 166.1 | 95% KM Chebyshev UCL | 212.4 |
| 97.5% KM Chebyshev UCL | 276.7 | 99% KM Chebyshev UCL | 403 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.683 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.881 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.22 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.204 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.231 | k star (bias corrected MLE) | 0.23 |
| Theta hat (MLE) | 884.5 | Theta star (bias corrected MLE) | 889.3 |
| nu hat (MLE) | 10.18 | nu star (bias corrected) | 10.13 |
| Mean (detects) | 204.7 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 60.86 |
| Maximum | 1950 | Median | 0.01 |
| SD | 281 | CV | 4.617 |
| k hat (MLE) | 0.119 | k star (bias corrected MLE) | 0.123 |
| Theta hat (MLE) | 512.4 | Theta star (bias corrected MLE) | 494.9 |
| nu hat (MLE) | 17.58 | nu star (bias corrected) | 18.2 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (18.20, α) | 9.534 | Adjusted Chi Square Value (18.20, β) | 9.409 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 116.2 | 95% Gamma Adjusted UCL (use when $n < 50$) | 117.7 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 63.78 | SD (KM) | 282.6 |
| Variance (KM) | 79835 | SE of Mean (KM) | 34.09 |
| k hat (KM) | 0.0509 | k star (KM) | 0.0579 |
| nu hat (KM) | 7.54 | nu star (KM) | 8.568 |
| theta hat (KM) | 1252 | theta star (KM) | 1102 |
| 80% gamma percentile (KM) | 13.89 | 90% gamma percentile (KM) | 115.7 |
| 95% gamma percentile (KM) | 354.5 | 99% gamma percentile (KM) | 1306 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (8.57, α) | 3.068 | Adjusted Chi Square Value (8.57, β) | 3.003 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 178.1 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 182 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.887 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.911 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.219 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.184 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 62.1 | Mean in Log Scale | 0.449 |
| SD in Original Scale | 280.7 | SD in Log Scale | 2.345 |
| 95% t UCL (assumes normality of ROS data) | 116.5 | 95% Percentile Bootstrap UCL | 125.3 |
| 95% BCA Bootstrap UCL | 151.2 | 95% Bootstrap t UCL | 522.5 |

95% H-UCL (Log ROS) 70.73

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 0.325 | KM Geo Mean | 1.384 |
| KM SD (logged) | 2.122 | 95% Critical H Value (KM-Log) | 3.574 |
| KM Standard Error of Mean (logged) | 0.283 | 95% H-UCL (KM -Log) | 31.99 |
| KM SD (logged) | 2.122 | 95% Critical H Value (KM-Log) | 3.574 |
| KM Standard Error of Mean (logged) | 0.283 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 131.5 |
| SD in Original Scale | 414.1 |
| 95% t UCL (Assumes normality) | 211.7 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.535 |
| SD in Log Scale | 2.628 |
| 95% H-Stat UCL | 542.5 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 212.4

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (1,2,4-Trimethylbenzene)

| General Statistics | | | |
|------------------------------|---------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 22 |
| Number of Detects | 5 | Number of Non-Detects | 69 |
| Number of Distinct Detects | 5 | Number of Distinct Non-Detects | 17 |
| Minimum Detect | 0.11 | Minimum Non-Detect | 1 |
| Maximum Detect | 28.8 | Maximum Non-Detect | 5000 |
| Variance Detects | 159.8 | Percent Non-Detects | 93.24% |
| Mean Detects | 6.196 | SD Detects | 12.64 |
| Median Detects | 0.46 | CV Detects | 2.04 |
| Skewness Detects | 2.231 | Kurtosis Detects | 4.98 |
| Mean of Logged Detects | -0.0634 | SD of Logged Detects | 2.093 |

| Normal GOF Test on Detects Only | | Shapiro Wilk GOF Test | |
|---------------------------------|-------|---|--|
| Shapiro Wilk Test Statistic | 0.58 | Detected Data Not Normal at 5% Significance Level | |
| 5% Shapiro Wilk Critical Value | 0.762 | Lilliefors GOF Test | |
| Lilliefors Test Statistic | 0.454 | Detected Data Not Normal at 5% Significance Level | |
| 5% Lilliefors Critical Value | 0.343 | | |

Detected Data Not Normal at 5% Significance Level

| Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs | | | |
|--|-------|-----------------------------------|-------|
| KM Mean | 0.911 | KM Standard Error of Mean | 0.625 |
| KM SD | 3.949 | 95% KM (BCA) UCL | 2.245 |
| 95% KM (t) UCL | 1.953 | 95% KM (Percentile Bootstrap) UCL | 2.049 |
| 95% KM (z) UCL | 1.94 | 95% KM Bootstrap t UCL | 10.14 |
| 90% KM Chebyshev UCL | 2.787 | 95% KM Chebyshev UCL | 3.637 |
| 97.5% KM Chebyshev UCL | 4.817 | 99% KM Chebyshev UCL | 7.134 |

| Gamma GOF Tests on Detected Observations Only | | Anderson-Darling GOF Test | |
|---|-------|---|--|
| A-D Test Statistic | 0.715 | Detected data appear Gamma Distributed at 5% Significance Level | |
| 5% A-D Critical Value | 0.731 | Kolmogorov-Smirnov GOF | |
| K-S Test Statistic | 0.375 | Detected data appear Gamma Distributed at 5% Significance Level | |
| 5% K-S Critical Value | 0.378 | | |

Detected data appear Gamma Distributed at 5% Significance Level

| Gamma Statistics on Detected Data Only | | | |
|--|-------|---------------------------------|-------|
| k hat (MLE) | 0.355 | k star (bias corrected MLE) | 0.275 |
| Theta hat (MLE) | 17.43 | Theta star (bias corrected MLE) | 22.49 |
| nu hat (MLE) | 3.554 | nu star (bias corrected) | 2.755 |
| Mean (detects) | 6.196 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 0.995 |
| Maximum | 28.8 | Median | 0.01 |
| SD | 3.57 | CV | 3.588 |
| k hat (MLE) | 0.233 | k star (bias corrected MLE) | 0.233 |
| Theta hat (MLE) | 4.263 | Theta star (bias corrected MLE) | 4.271 |
| nu hat (MLE) | 34.55 | nu star (bias corrected) | 34.48 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (34.48, α) | 22.05 | Adjusted Chi Square Value (34.48, β) | 21.85 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1.556 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1.57 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 0.911 | SD (KM) | 3.949 |
| Variance (KM) | 15.6 | SE of Mean (KM) | 0.625 |
| k hat (KM) | 0.0532 | k star (KM) | 0.0601 |
| nu hat (KM) | 7.875 | nu star (KM) | 8.889 |
| theta hat (KM) | 17.12 | theta star (KM) | 15.17 |
| 80% gamma percentile (KM) | 0.221 | 90% gamma percentile (KM) | 1.716 |
| 95% gamma percentile (KM) | 5.107 | 99% gamma percentile (KM) | 18.37 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (8.89, α) | 3.26 | Adjusted Chi Square Value (8.89, β) | 3.193 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 2.484 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 2.537 |

Lognormal GOF Test on Detected Observations Only

| Lognormal GOF Test on Detected Observations Only | | Shapiro Wilk GOF Test | |
|--|-------|---|--|
| Shapiro Wilk Test Statistic | 0.891 | Detected Data appear Lognormal at 5% Significance Level | |
| 5% Shapiro Wilk Critical Value | 0.762 | Lilliefors GOF Test | |
| Lilliefors Test Statistic | 0.255 | Detected Data appear Lognormal at 5% Significance Level | |
| 5% Lilliefors Critical Value | 0.343 | | |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 0.825 | Mean in Log Scale | -1.222 |
| SD in Original Scale | 3.327 | SD in Log Scale | 1.152 |
| 95% t UCL (assumes normality of ROS data) | 1.469 | 95% Percentile Bootstrap UCL | 1.588 |
| 95% BCA Bootstrap UCL | 2.075 | 95% Bootstrap t UCL | 4.7 |

95% H-UCL (Log ROS) 0.791

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -1.154 | KM Geo Mean | 0.315 |
| KM SD (logged) | 0.933 | 95% Critical H Value (KM-Log) | 2.192 |
| KM Standard Error of Mean (logged) | 0.417 | 95% H-UCL (KM -Log) | 0.619 |
| KM SD (logged) | 0.933 | 95% Critical H Value (KM-Log) | 2.192 |
| KM Standard Error of Mean (logged) | 0.417 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 119.7 |
| SD in Original Scale | 426.2 |
| 95% t UCL (Assumes normality) | 202.2 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.457 |
| SD in Log Scale | 2.587 |
| 95% H-Stat UCL | 433.2 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 2.484

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Acetone)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 31 |
| Number of Detects | 14 | Number of Non-Detects | 60 |
| Number of Distinct Detects | 14 | Number of Distinct Non-Detects | 17 |
| Minimum Detect | 1.21 | Minimum Non-Detect | 25 |
| Maximum Detect | 32 | Maximum Non-Detect | 125000 |
| Variance Detects | 61.68 | Percent Non-Detects | 81.08% |
| Mean Detects | 5.652 | SD Detects | 7.854 |
| Median Detects | 3.35 | CV Detects | 1.39 |
| Skewness Detects | 3.334 | Kurtosis Detects | 11.7 |
| Mean of Logged Detects | 1.318 | SD of Logged Detects | 0.8 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.509 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.874 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.366 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.226 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 4.392 | KM Standard Error of Mean | 0.971 |
| KM SD | 5.023 | 95% KM (BCA) UCL | 6.13 |
| 95% KM (t) UCL | 6.011 | 95% KM (Percentile Bootstrap) UCL | 6.185 |
| 95% KM (z) UCL | 5.99 | 95% KM Bootstrap t UCL | 8.264 |
| 90% KM Chebyshev UCL | 7.306 | 95% KM Chebyshev UCL | 8.627 |
| 97.5% KM Chebyshev UCL | 10.46 | 99% KM Chebyshev UCL | 14.06 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.396 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.753 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.313 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.233 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 1.351 | k star (bias corrected MLE) | 1.109 |
| Theta hat (MLE) | 4.183 | Theta star (bias corrected MLE) | 5.095 |
| nu hat (MLE) | 37.84 | nu star (bias corrected) | 31.06 |
| Mean (detects) | 5.652 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 4.377 |
| Maximum | 32 | Median | 3.325 |
| SD | 4.716 | CV | 1.078 |
| k hat (MLE) | 0.682 | k star (bias corrected MLE) | 0.663 |
| Theta hat (MLE) | 6.418 | Theta star (bias corrected MLE) | 6.598 |
| nu hat (MLE) | 100.9 | nu star (bias corrected) | 98.18 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (98.18, α) | 76.32 | Adjusted Chi Square Value (98.18, β) | 75.94 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 5.631 | 95% Gamma Adjusted UCL (use when $n < 50$) | 5.659 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|-------|
| Mean (KM) | 4.392 | SD (KM) | 5.023 |
| Variance (KM) | 25.23 | SE of Mean (KM) | 0.971 |
| k hat (KM) | 0.765 | k star (KM) | 0.743 |
| nu hat (KM) | 113.2 | nu star (KM) | 109.9 |
| theta hat (KM) | 5.745 | theta star (KM) | 5.915 |
| 80% gamma percentile (KM) | 7.204 | 90% gamma percentile (KM) | 10.87 |
| 95% gamma percentile (KM) | 14.64 | 99% gamma percentile (KM) | 23.57 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (109.90, α) | 86.7 | Adjusted Chi Square Value (109.90, β) | 86.29 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 5.567 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 5.594 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|--|
| Shapiro Wilk Test Statistic | 0.869 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.874 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.244 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.226 | Detected Data Not Lognormal at 5% Significance Level |

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 4.18 | Mean in Log Scale | 1.236 |
| SD in Original Scale | 3.838 | SD in Log Scale | 0.576 |
| 95% t UCL (assumes normality of ROS data) | 4.923 | 95% Percentile Bootstrap UCL | 4.996 |
| 95% BCA Bootstrap UCL | 5.235 | 95% Bootstrap t UCL | 5.461 |

95% H-UCL (Log ROS) 4.618

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 1.216 | KM Geo Mean | 3.373 |
| KM SD (logged) | 0.625 | 95% Critical H Value (KM-Log) | 1.936 |
| KM Standard Error of Mean (logged) | 0.156 | 95% H-UCL (KM -Log) | 4.725 |
| KM SD (logged) | 0.625 | 95% Critical H Value (KM-Log) | 1.936 |
| KM Standard Error of Mean (logged) | 0.156 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 3007 |
| SD in Original Scale | 10653 |
| 95% t UCL (Assumes normality) | 5071 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 4.473 |
| SD in Log Scale | 2.83 |
| 95% H-Stat UCL | 21528 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 8.627

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Benzene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 30 |
| Number of Detects | 13 | Number of Non-Detects | 61 |
| Number of Distinct Detects | 13 | Number of Distinct Non-Detects | 17 |
| Minimum Detect | 0.12 | Minimum Non-Detect | 1 |
| Maximum Detect | 2.06 | Maximum Non-Detect | 5000 |
| Variance Detects | 0.331 | Percent Non-Detects | 82.43% |
| Mean Detects | 0.614 | SD Detects | 0.576 |
| Median Detects | 0.36 | CV Detects | 0.938 |
| Skewness Detects | 1.758 | Kurtosis Detects | 2.657 |
| Mean of Logged Detects | -0.824 | SD of Logged Detects | 0.833 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.774 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.866 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.239 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.234 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------|
| KM Mean | 0.475 | KM Standard Error of Mean | 0.0856 |
| KM SD | 0.387 | 95% KM (BCA) UCL | 0.629 |
| 95% KM (t) UCL | 0.617 | 95% KM (Percentile Bootstrap) UCL | 0.615 |
| 95% KM (z) UCL | 0.615 | 95% KM Bootstrap t UCL | 0.653 |
| 90% KM Chebyshev UCL | 0.731 | 95% KM Chebyshev UCL | 0.848 |
| 97.5% KM Chebyshev UCL | 1.009 | 99% KM Chebyshev UCL | 1.327 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.504 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.748 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.191 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.241 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 1.633 | k star (bias corrected MLE) | 1.307 |
| Theta hat (MLE) | 0.376 | Theta star (bias corrected MLE) | 0.47 |
| nu hat (MLE) | 42.45 | nu star (bias corrected) | 33.99 |
| Mean (detects) | 0.614 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.01 | Mean | 0.457 |
| Maximum | 2.06 | Median | 0.389 |
| SD | 0.345 | CV | 0.755 |
| k hat (MLE) | 1.767 | k star (bias corrected MLE) | 1.705 |
| Theta hat (MLE) | 0.259 | Theta star (bias corrected MLE) | 0.268 |
| nu hat (MLE) | 261.6 | nu star (bias corrected) | 252.3 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (252.31, α) | 216.5 | Adjusted Chi Square Value (252.31, β) | 215.9 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.533 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.534 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|-------|---------------------------|--------|
| Mean (KM) | 0.475 | SD (KM) | 0.387 |
| Variance (KM) | 0.15 | SE of Mean (KM) | 0.0856 |
| k hat (KM) | 1.505 | k star (KM) | 1.453 |
| nu hat (KM) | 222.7 | nu star (KM) | 215 |
| theta hat (KM) | 0.315 | theta star (KM) | 0.327 |
| 80% gamma percentile (KM) | 0.737 | 90% gamma percentile (KM) | 0.997 |
| 95% gamma percentile (KM) | 1.249 | 99% gamma percentile (KM) | 1.822 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (215.04, α) | 182.1 | Adjusted Chi Square Value (215.04, β) | 181.5 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 0.56 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 0.562 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.957 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.866 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.166 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.234 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 0.442 | Mean in Log Scale | -0.994 |
| SD in Original Scale | 0.31 | SD in Log Scale | 0.587 |
| 95% t UCL (assumes normality of ROS data) | 0.502 | 95% Percentile Bootstrap UCL | 0.501 |
| 95% BCA Bootstrap UCL | 0.52 | 95% Bootstrap t UCL | 0.518 |

95% H-UCL (Log ROS) 0.501

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.989 | KM Geo Mean | 0.372 |
| KM SD (logged) | 0.674 | 95% Critical H Value (KM-Log) | 1.969 |
| KM Standard Error of Mean (logged) | 0.183 | 95% H-UCL (KM -Log) | 0.545 |
| KM SD (logged) | 0.674 | 95% Critical H Value (KM-Log) | 1.969 |
| KM Standard Error of Mean (logged) | 0.183 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 120.4 |
| SD in Original Scale | 426.1 |
| 95% t UCL (Assumes normality) | 202.9 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.46 |
| SD in Log Scale | 2.623 |
| 95% H-Stat UCL | 493.7 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

| | | | |
|------------------------------|------|--------------------------------|-------|
| 95% KM Approximate Gamma UCL | 0.56 | 95% GROS Approximate Gamma UCL | 0.533 |
|------------------------------|------|--------------------------------|-------|

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Carbon disulfide)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 27 |
| Number of Detects | 11 | Number of Non-Detects | 63 |
| Number of Distinct Detects | 11 | Number of Distinct Non-Detects | 16 |
| Minimum Detect | 0.45 | Minimum Non-Detect | 1 |
| Maximum Detect | 35 | Maximum Non-Detect | 5000 |
| Variance Detects | 102.4 | Percent Non-Detects | 85.14% |
| Mean Detects | 4.673 | SD Detects | 10.12 |
| Median Detects | 1.5 | CV Detects | 2.166 |
| Skewness Detects | 3.244 | Kurtosis Detects | 10.64 |
| Mean of Logged Detects | 0.538 | SD of Logged Detects | 1.245 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.443 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.85 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.445 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.251 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 1.509 | KM Standard Error of Mean | 0.707 |
| KM SD | 4.791 | 95% KM (BCA) UCL | 3.009 |
| 95% KM (t) UCL | 2.687 | 95% KM (Percentile Bootstrap) UCL | 2.836 |
| 95% KM (z) UCL | 2.672 | 95% KM Bootstrap t UCL | 7.875 |
| 90% KM Chebyshev UCL | 3.629 | 95% KM Chebyshev UCL | 4.59 |
| 97.5% KM Chebyshev UCL | 5.923 | 99% KM Chebyshev UCL | 8.541 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 1.286 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.773 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.303 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.267 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.614 | k star (bias corrected MLE) | 0.507 |
| Theta hat (MLE) | 7.616 | Theta star (bias corrected MLE) | 9.22 |
| nu hat (MLE) | 13.5 | nu star (bias corrected) | 11.15 |
| Mean (detects) | 4.673 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 0.863 |
| Maximum | 35 | Median | 0.01 |
| SD | 4.114 | CV | 4.765 |
| k hat (MLE) | 0.233 | k star (bias corrected MLE) | 0.233 |
| Theta hat (MLE) | 3.706 | Theta star (bias corrected MLE) | 3.712 |
| nu hat (MLE) | 34.48 | nu star (bias corrected) | 34.41 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (34.41, α) | 22 | Adjusted Chi Square Value (34.41, β) | 21.8 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 1.351 | 95% Gamma Adjusted UCL (use when $n < 50$) | 1.363 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|-------|
| Mean (KM) | 1.509 | SD (KM) | 4.791 |
| Variance (KM) | 22.95 | SE of Mean (KM) | 0.707 |
| k hat (KM) | 0.0992 | k star (KM) | 0.104 |
| nu hat (KM) | 14.69 | nu star (KM) | 15.42 |
| theta hat (KM) | 15.21 | theta star (KM) | 14.48 |
| 80% gamma percentile (KM) | 1.11 | 90% gamma percentile (KM) | 4.083 |
| 95% gamma percentile (KM) | 8.736 | 99% gamma percentile (KM) | 23.48 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (15.42, α) | 7.557 | Adjusted Chi Square Value (15.42, β) | 7.447 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 3.08 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 3.126 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.875 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.85 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.174 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.251 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 1.293 | Mean in Log Scale | -0.406 |
| SD in Original Scale | 4.027 | SD in Log Scale | 0.892 |
| 95% t UCL (assumes normality of ROS data) | 2.073 | 95% Percentile Bootstrap UCL | 2.203 |
| 95% BCA Bootstrap UCL | 2.751 | 95% Bootstrap t UCL | 5.282 |

95% H-UCL (Log ROS) 1.242

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|--------------|
| KM Mean (logged) | -0.293 | KM Geo Mean | 0.746 |
| KM SD (logged) | 0.757 | 95% Critical H Value (KM-Log) | 2.034 |
| KM Standard Error of Mean (logged) | 0.138 | 95% H-UCL (KM -Log) | 1.189 |
| KM SD (logged) | 0.757 | 95% Critical H Value (KM-Log) | 2.034 |
| KM Standard Error of Mean (logged) | 0.138 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 119.1 |
| SD in Original Scale | 426.2 |
| 95% t UCL (Assumes normality) | 201.6 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.498 |
| SD in Log Scale | 2.527 |
| 95% H-Stat UCL | 367.9 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 1.189

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (cis-1,2-Dichloroethene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 61 |
| Number of Detects | 58 | Number of Non-Detects | 16 |
| Number of Distinct Detects | 58 | Number of Distinct Non-Detects | 3 |
| Minimum Detect | 0.22 | Minimum Non-Detect | 1 |
| Maximum Detect | 109000 | Maximum Non-Detect | 160 |
| Variance Detects | 2.518E+8 | Percent Non-Detects | 21.62% |
| Mean Detects | 4579 | SD Detects | 15867 |
| Median Detects | 207.5 | CV Detects | 3.465 |
| Skewness Detects | 5.681 | Kurtosis Detects | 35.06 |
| Mean of Logged Detects | 4.769 | SD of Logged Detects | 3.499 |

Normal GOF Test on Detects Only

| | |
|------------------------------|-------|
| Shapiro Wilk Test Statistic | 0.323 |
| 5% Shapiro Wilk P Value | 0 |
| Lilliefors Test Statistic | 0.386 |
| 5% Lilliefors Critical Value | 0.116 |

Normal GOF Test on Detected Observations Only

Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 3589 | KM Standard Error of Mean | 1648 |
| KM SD | 14052 | 95% KM (BCA) UCL | 6887 |
| 95% KM (t) UCL | 6335 | 95% KM (Percentile Bootstrap) UCL | 6454 |
| 95% KM (z) UCL | 6300 | 95% KM Bootstrap t UCL | 14060 |
| 90% KM Chebyshev UCL | 8533 | 95% KM Chebyshev UCL | 10772 |
| 97.5% KM Chebyshev UCL | 13880 | 99% KM Chebyshev UCL | 19985 |

Gamma GOF Tests on Detected Observations Only

| | |
|-----------------------|-------|
| A-D Test Statistic | 1.937 |
| 5% A-D Critical Value | 0.913 |
| K-S Test Statistic | 0.155 |
| 5% K-S Critical Value | 0.13 |

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.201 | k star (bias corrected MLE) | 0.202 |
| Theta hat (MLE) | 22790 | Theta star (bias corrected MLE) | 22666 |
| nu hat (MLE) | 23.31 | nu star (bias corrected) | 23.43 |
| Mean (detects) | 4579 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 3589 |
| Maximum | 109000 | Median | 26.75 |
| SD | 14148 | CV | 3.942 |
| k hat (MLE) | 0.142 | k star (bias corrected MLE) | 0.146 |
| Theta hat (MLE) | 25225 | Theta star (bias corrected MLE) | 24663 |
| nu hat (MLE) | 21.06 | nu star (bias corrected) | 21.54 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (21.54, α) | 11.99 | Adjusted Chi Square Value (21.54, β) | 11.85 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 6446 | 95% Gamma Adjusted UCL (use when $n < 50$) | 6523 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|----------|---------------------------|--------|
| Mean (KM) | 3589 | SD (KM) | 14052 |
| Variance (KM) | 1.975E+8 | SE of Mean (KM) | 1648 |
| k hat (KM) | 0.0652 | k star (KM) | 0.0716 |
| nu hat (KM) | 9.656 | nu star (KM) | 10.6 |
| theta hat (KM) | 55016 | theta star (KM) | 50127 |
| 80% gamma percentile (KM) | 1354 | 90% gamma percentile (KM) | 7882 |
| 95% gamma percentile (KM) | 20698 | 99% gamma percentile (KM) | 66940 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (10.60, α) | 4.319 | Adjusted Chi Square Value (10.60, β) | 4.239 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 8808 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 8973 |

Lognormal GOF Test on Detected Observations Only

| | |
|---|--------|
| Shapiro Wilk Approximate Test Statistic | 0.942 |
| 5% Shapiro Wilk P Value | 0.0132 |
| Lilliefors Test Statistic | 0.111 |
| 5% Lilliefors Critical Value | 0.116 |

Shapiro Wilk GOF Test

Detected Data Not Lognormal at 5% Significance Level

Lilliefors GOF Test

Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 3589 | Mean in Log Scale | 3.615 |
| SD in Original Scale | 14148 | SD in Log Scale | 3.892 |
| 95% t UCL (assumes normality of ROS data) | 6329 | 95% Percentile Bootstrap UCL | 6354 |
| 95% BCA Bootstrap UCL | 8416 | 95% Bootstrap t UCL | 14303 |

95% H-UCL (Log ROS) 1119860

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|--------|
| KM Mean (logged) | 3.668 | KM Geo Mean | 39.17 |
| KM SD (logged) | 3.74 | 95% Critical H Value (KM-Log) | 5.798 |
| KM Standard Error of Mean (logged) | 0.442 | 95% H-UCL (KM -Log) | 539678 |
| KM SD (logged) | 3.74 | 95% Critical H Value (KM-Log) | 5.798 |
| KM Standard Error of Mean (logged) | 0.442 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 3590 |
| SD in Original Scale | 14148 |
| 95% t UCL (Assumes normality) | 6330 |

DL/2 Log-Transformed

| | |
|-------------------|--------|
| Mean in Log Scale | 3.707 |
| SD in Log Scale | 3.766 |
| 95% H-Stat UCL | 641374 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

97.5% KM (Chebyshev) UCL 13880

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Ethylbenzene)

| General Statistics | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 22 |
| Number of Detects | 5 | Number of Non-Detects | 69 |
| Number of Distinct Detects | 5 | Number of Distinct Non-Detects | 17 |
| Minimum Detect | 0.22 | Minimum Non-Detect | 1 |
| Maximum Detect | 1.79 | Maximum Non-Detect | 5000 |
| Variance Detects | 0.401 | Percent Non-Detects | 93.24% |
| Mean Detects | 0.674 | SD Detects | 0.633 |
| Median Detects | 0.43 | CV Detects | 0.94 |
| Skewness Detects | 2.066 | Kurtosis Detects | 4.45 |
| Mean of Logged Detects | -0.664 | SD of Logged Detects | 0.768 |

| Normal GOF Test on Detects Only | | | |
|---------------------------------|-------|---|--|
| Shapiro Wilk Test Statistic | 0.714 | Shapiro Wilk GOF Test | |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data Not Normal at 5% Significance Level | |
| Lilliefors Test Statistic | 0.396 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.343 | Detected Data Not Normal at 5% Significance Level | |

Detected Data Not Normal at 5% Significance Level

| Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs | | | |
|--|-------|-----------------------------------|--------|
| KM Mean | 0.433 | KM Standard Error of Mean | 0.0725 |
| KM SD | 0.251 | 95% KM (BCA) UCL | 0.559 |
| 95% KM (t) UCL | 0.553 | 95% KM (Percentile Bootstrap) UCL | 0.556 |
| 95% KM (z) UCL | 0.552 | 95% KM Bootstrap t UCL | 0.567 |
| 90% KM Chebyshev UCL | 0.65 | 95% KM Chebyshev UCL | 0.749 |
| 97.5% KM Chebyshev UCL | 0.885 | 99% KM Chebyshev UCL | 1.154 |

| Gamma GOF Tests on Detected Observations Only | | | |
|---|-------|---|--|
| A-D Test Statistic | 0.573 | Anderson-Darling GOF Test | |
| 5% A-D Critical Value | 0.684 | Detected data appear Gamma Distributed at 5% Significance Level | |
| K-S Test Statistic | 0.344 | Kolmogorov-Smirnov GOF | |
| 5% K-S Critical Value | 0.36 | Detected data appear Gamma Distributed at 5% Significance Level | |

Detected data appear Gamma Distributed at 5% Significance Level

| Gamma Statistics on Detected Data Only | | | |
|--|-------|---------------------------------|-------|
| k hat (MLE) | 2.004 | k star (bias corrected MLE) | 0.935 |
| Theta hat (MLE) | 0.336 | Theta star (bias corrected MLE) | 0.721 |
| nu hat (MLE) | 20.04 | nu star (bias corrected) | 9.35 |
| Mean (detects) | 0.674 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.01 | Mean | 0.449 |
| Maximum | 1.79 | Median | 0.396 |
| SD | 0.298 | CV | 0.664 |
| k hat (MLE) | 2.151 | k star (bias corrected MLE) | 2.073 |
| Theta hat (MLE) | 0.209 | Theta star (bias corrected MLE) | 0.216 |
| nu hat (MLE) | 318.4 | nu star (bias corrected) | 306.8 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (306.84, α) | 267.3 | Adjusted Chi Square Value (306.84, β) | 266.5 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.515 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.517 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 0.433 | SD (KM) | 0.251 |
| Variance (KM) | 0.0628 | SE of Mean (KM) | 0.0725 |
| k hat (KM) | 2.983 | k star (KM) | 2.871 |
| nu hat (KM) | 441.4 | nu star (KM) | 424.9 |
| theta hat (KM) | 0.145 | theta star (KM) | 0.151 |
| 80% gamma percentile (KM) | 0.62 | 90% gamma percentile (KM) | 0.775 |
| 95% gamma percentile (KM) | 0.92 | 99% gamma percentile (KM) | 1.234 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (424.85, α) | 378.1 | Adjusted Chi Square Value (424.85, β) | 377.2 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 0.486 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 0.487 |

Lognormal GOF Test on Detected Observations Only

| | | | |
|--------------------------------|-------|---|--|
| Shapiro Wilk Test Statistic | 0.892 | Shapiro Wilk GOF Test | |
| 5% Shapiro Wilk Critical Value | 0.762 | Detected Data appear Lognormal at 5% Significance Level | |
| Lilliefors Test Statistic | 0.295 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.343 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 0.447 | Mean in Log Scale | -0.924 |
| SD in Original Scale | 0.248 | SD in Log Scale | 0.479 |
| 95% t UCL (assumes normality of ROS data) | 0.495 | 95% Percentile Bootstrap UCL | 0.495 |
| 95% BCA Bootstrap UCL | 0.502 | 95% Bootstrap t UCL | 0.507 |

95% H-UCL (Log ROS) 0.494

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.934 | KM Geo Mean | 0.393 |
| KM SD (logged) | 0.407 | 95% Critical H Value (KM-Log) | 1.8 |
| KM Standard Error of Mean (logged) | 0.182 | 95% H-UCL (KM -Log) | 0.465 |
| KM SD (logged) | 0.407 | 95% Critical H Value (KM-Log) | 1.8 |
| KM Standard Error of Mean (logged) | 0.182 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 120.4 |
| SD in Original Scale | 426.1 |
| 95% t UCL (Assumes normality) | 202.9 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.485 |
| SD in Log Scale | 2.586 |
| 95% H-Stat UCL | 444 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 0.486

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (m-p-Xylene)

| General Statistics | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 25 |
| Number of Detects | 8 | Number of Non-Detects | 66 |
| Number of Distinct Detects | 8 | Number of Distinct Non-Detects | 17 |
| Minimum Detect | 0.13 | Minimum Non-Detect | 2 |
| Maximum Detect | 2.42 | Maximum Non-Detect | 10000 |
| Variance Detects | 0.543 | Percent Non-Detects | 89.19% |
| Mean Detects | 0.735 | SD Detects | 0.737 |
| Median Detects | 0.585 | CV Detects | 1.002 |
| Skewness Detects | 2.056 | Kurtosis Detects | 4.801 |
| Mean of Logged Detects | -0.696 | SD of Logged Detects | 0.96 |

| Normal GOF Test on Detects Only | | | |
|---------------------------------|-------|---|--|
| Shapiro Wilk Test Statistic | 0.766 | Shapiro Wilk GOF Test | |
| 5% Shapiro Wilk Critical Value | 0.818 | Detected Data Not Normal at 5% Significance Level | |
| Lilliefors Test Statistic | 0.285 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.283 | Detected Data Not Normal at 5% Significance Level | |

Detected Data Not Normal at 5% Significance Level

| Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs | | | |
|--|-------|-----------------------------------|-------|
| KM Mean | 0.546 | KM Standard Error of Mean | 0.124 |
| KM SD | 0.418 | 95% KM (BCA) UCL | 0.771 |
| 95% KM (t) UCL | 0.752 | 95% KM (Percentile Bootstrap) UCL | 0.743 |
| 95% KM (z) UCL | 0.75 | 95% KM Bootstrap t UCL | 0.8 |
| 90% KM Chebyshev UCL | 0.917 | 95% KM Chebyshev UCL | 1.085 |
| 97.5% KM Chebyshev UCL | 1.318 | 99% KM Chebyshev UCL | 1.776 |

| Gamma GOF Tests on Detected Observations Only | | | |
|---|-------|---|--|
| A-D Test Statistic | 0.305 | Anderson-Darling GOF Test | |
| 5% A-D Critical Value | 0.729 | Detected data appear Gamma Distributed at 5% Significance Level | |
| K-S Test Statistic | 0.181 | Kolmogorov-Smirnov GOF | |
| 5% K-S Critical Value | 0.299 | Detected data appear Gamma Distributed at 5% Significance Level | |

Detected data appear Gamma Distributed at 5% Significance Level

| Gamma Statistics on Detected Data Only | | | |
|--|-------|---------------------------------|-------|
| k hat (MLE) | 1.43 | k star (bias corrected MLE) | 0.977 |
| Theta hat (MLE) | 0.514 | Theta star (bias corrected MLE) | 0.752 |
| nu hat (MLE) | 22.89 | nu star (bias corrected) | 15.64 |
| Mean (detects) | 0.735 | | |

Gamma ROS Statistics using Imputed Non-Detects
 GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.01 | Mean | 0.537 |
| Maximum | 2.42 | Median | 0.454 |
| SD | 0.4 | CV | 0.744 |
| k hat (MLE) | 1.796 | k star (bias corrected MLE) | 1.732 |
| Theta hat (MLE) | 0.299 | Theta star (bias corrected MLE) | 0.31 |
| nu hat (MLE) | 265.8 | nu star (bias corrected) | 256.3 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (256.34, α) | 220.3 | Adjusted Chi Square Value (256.34, β) | 219.6 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.625 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.627 |

| Estimates of Gamma Parameters using KM Estimates | | | |
|--|-------|---------------------------|-------|
| Mean (KM) | 0.546 | SD (KM) | 0.418 |
| Variance (KM) | 0.175 | SE of Mean (KM) | 0.124 |
| k hat (KM) | 1.709 | k star (KM) | 1.649 |
| nu hat (KM) | 252.9 | nu star (KM) | 244 |
| theta hat (KM) | 0.32 | theta star (KM) | 0.331 |
| 80% gamma percentile (KM) | 0.836 | 90% gamma percentile (KM) | 1.113 |
| 95% gamma percentile (KM) | 1.379 | 99% gamma percentile (KM) | 1.978 |

| Gamma Kaplan-Meier (KM) Statistics | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (244.00, α) | 208.8 | Adjusted Chi Square Value (244.00, β) | 208.2 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 0.638 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 0.64 |

| Lognormal GOF Test on Detected Observations Only | | | |
|--|-------|---|--|
| Shapiro Wilk Test Statistic | 0.952 | Shapiro Wilk GOF Test | |
| 5% Shapiro Wilk Critical Value | 0.818 | Detected Data appear Lognormal at 5% Significance Level | |
| Lilliefors Test Statistic | 0.166 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.283 | Detected Data appear Lognormal at 5% Significance Level | |

Detected Data appear Lognormal at 5% Significance Level

| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
|--|-------|------------------------------|-------|
| Mean in Original Scale | 0.502 | Mean in Log Scale | -0.9 |
| SD in Original Scale | 0.369 | SD in Log Scale | 0.653 |
| 95% t UCL (assumes normality of ROS data) | 0.573 | 95% Percentile Bootstrap UCL | 0.575 |
| 95% BCA Bootstrap UCL | 0.588 | 95% Bootstrap t UCL | 0.592 |

95% H-UCL (Log ROS) 0.584

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.873 | KM Geo Mean | 0.418 |
| KM SD (logged) | 0.765 | 95% Critical H Value (KM-Log) | 2.042 |
| KM Standard Error of Mean (logged) | 0.287 | 95% H-UCL (KM -Log) | 0.672 |
| KM SD (logged) | 0.765 | 95% Critical H Value (KM-Log) | 2.042 |
| KM Standard Error of Mean (logged) | 0.287 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 240.7 |
| SD in Original Scale | 852.2 |
| 95% t UCL (Assumes normality) | 405.7 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.101 |
| SD in Log Scale | 2.67 |
| 95% H-Stat UCL | 1109 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 0.638

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Naphthalene)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 23 |
| Number of Detects | 6 | Number of Non-Detects | 68 |
| Number of Distinct Detects | 6 | Number of Distinct Non-Detects | 17 |
| Minimum Detect | 0.53 | Minimum Non-Detect | 1 |
| Maximum Detect | 1140 | Maximum Non-Detect | 5000 |
| Variance Detects | 209858 | Percent Non-Detects | 91.89% |
| Mean Detects | 205.7 | SD Detects | 458.1 |
| Median Detects | 24.65 | CV Detects | 2.227 |
| Skewness Detects | 2.44 | Kurtosis Detects | 5.964 |
| Mean of Logged Detects | 2.691 | SD of Logged Detects | 2.805 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.532 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.788 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.472 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.325 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 18.38 | KM Standard Error of Mean | 17.47 |
| KM SD | 134.3 | 95% KM (BCA) UCL | 53.16 |
| 95% KM (t) UCL | 47.49 | 95% KM (Percentile Bootstrap) UCL | 50.29 |
| 95% KM (z) UCL | 47.12 | 95% KM Bootstrap t UCL | 350 |
| 90% KM Chebyshev UCL | 70.79 | 95% KM Chebyshev UCL | 94.53 |
| 97.5% KM Chebyshev UCL | 127.5 | 99% KM Chebyshev UCL | 192.2 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|---|
| A-D Test Statistic | 0.53 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.778 | Detected data appear Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.326 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.359 | Detected data appear Gamma Distributed at 5% Significance Level |

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.267 | k star (bias corrected MLE) | 0.244 |
| Theta hat (MLE) | 771.2 | Theta star (bias corrected MLE) | 841.4 |
| nu hat (MLE) | 3.201 | nu star (bias corrected) | 2.934 |
| Mean (detects) | 205.7 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 16.69 |
| Maximum | 1140 | Median | 0.01 |
| SD | 132.5 | CV | 7.943 |
| k hat (MLE) | 0.117 | k star (bias corrected MLE) | 0.121 |
| Theta hat (MLE) | 143.1 | Theta star (bias corrected MLE) | 138.1 |
| nu hat (MLE) | 17.26 | nu star (bias corrected) | 17.89 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (17.89, α) | 9.311 | Adjusted Chi Square Value (17.89, β) | 9.188 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 32.06 | 95% Gamma Adjusted UCL (use when $n < 50$) | 32.49 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|-------|
| Mean (KM) | 18.38 | SD (KM) | 134.3 |
| Variance (KM) | 18035 | SE of Mean (KM) | 17.47 |
| k hat (KM) | 0.0187 | k star (KM) | 0.027 |
| nu hat (KM) | 2.773 | nu star (KM) | 3.994 |
| theta hat (KM) | 981.1 | theta star (KM) | 681.2 |
| 80% gamma percentile (KM) | 0.1 | 90% gamma percentile (KM) | 7.968 |
| 95% gamma percentile (KM) | 63.88 | 99% gamma percentile (KM) | 487.3 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (3.99, α) | 0.719 | Adjusted Chi Square Value (3.99, β) | 0.694 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 102.1 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 105.9 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.948 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.788 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.184 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.325 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 17.25 | Mean in Log Scale | -1.359 |
| SD in Original Scale | 132.5 | SD in Log Scale | 2.247 |
| 95% t UCL (assumes normality of ROS data) | 42.91 | 95% Percentile Bootstrap UCL | 47.58 |
| 95% BCA Bootstrap UCL | 65.11 | 95% Bootstrap t UCL | 473 |

95% H-UCL (Log ROS) 8.576

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.271 | KM Geo Mean | 0.762 |
| KM SD (logged) | 1.281 | 95% Critical H Value (KM-Log) | 2.548 |
| KM Standard Error of Mean (logged) | 0.185 | 95% H-UCL (KM -Log) | 2.537 |
| KM SD (logged) | 1.281 | 95% Critical H Value (KM-Log) | 2.548 |
| KM Standard Error of Mean (logged) | 0.185 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 135.9 |
| SD in Original Scale | 441.9 |
| 95% t UCL (Assumes normality) | 221.5 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.689 |
| SD in Log Scale | 2.615 |
| 95% H-Stat UCL | 603.4 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL 102.1

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (o-Xylene)

| General Statistics | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 23 |
| Number of Detects | 6 | Number of Non-Detects | 68 |
| Number of Distinct Detects | 6 | Number of Distinct Non-Detects | 17 |
| Minimum Detect | 0.11 | Minimum Non-Detect | 1 |
| Maximum Detect | 2.17 | Maximum Non-Detect | 5000 |
| Variance Detects | 0.562 | Percent Non-Detects | 91.89% |
| Mean Detects | 0.747 | SD Detects | 0.749 |
| Median Detects | 0.57 | CV Detects | 1.004 |
| Skewness Detects | 1.748 | Kurtosis Detects | 3.416 |
| Mean of Logged Detects | -0.718 | SD of Logged Detects | 1.054 |

| Normal GOF Test on Detects Only | | Shapiro Wilk GOF Test | |
|---------------------------------|-------|--|--|
| Shapiro Wilk Test Statistic | 0.823 | Detected Data appear Normal at 5% Significance Level | |
| 5% Shapiro Wilk Critical Value | 0.788 | Lilliefors GOF Test | |
| Lilliefors Test Statistic | 0.279 | Detected Data appear Normal at 5% Significance Level | |
| 5% Lilliefors Critical Value | 0.325 | | |

Detected Data appear Normal at 5% Significance Level

| Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs | | | |
|--|-------|-----------------------------------|-------|
| KM Mean | 0.508 | KM Standard Error of Mean | 0.14 |
| KM SD | 0.388 | 95% KM (BCA) UCL | 0.758 |
| 95% KM (t) UCL | 0.742 | 95% KM (Percentile Bootstrap) UCL | 0.756 |
| 95% KM (z) UCL | 0.739 | 95% KM Bootstrap t UCL | 0.803 |
| 90% KM Chebyshev UCL | 0.929 | 95% KM Chebyshev UCL | 1.119 |
| 97.5% KM Chebyshev UCL | 1.383 | 99% KM Chebyshev UCL | 1.903 |

| Gamma GOF Tests on Detected Observations Only | | Anderson-Darling GOF Test | |
|---|-------|---|--|
| A-D Test Statistic | 0.208 | Detected data appear Gamma Distributed at 5% Significance Level | |
| 5% A-D Critical Value | 0.71 | Kolmogorov-Smirnov GOF | |
| K-S Test Statistic | 0.162 | Detected data appear Gamma Distributed at 5% Significance Level | |
| 5% K-S Critical Value | 0.339 | | |

Detected data appear Gamma Distributed at 5% Significance Level

| Gamma Statistics on Detected Data Only | | | |
|--|-------|---------------------------------|-------|
| k hat (MLE) | 1.317 | k star (bias corrected MLE) | 0.77 |
| Theta hat (MLE) | 0.567 | Theta star (bias corrected MLE) | 0.97 |
| nu hat (MLE) | 15.81 | nu star (bias corrected) | 9.236 |
| Mean (detects) | 0.747 | | |

Gamma ROS Statistics using Imputed Non-Detects
 GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|-------|
| Minimum | 0.0204 | Mean | 0.502 |
| Maximum | 2.17 | Median | 0.423 |
| SD | 0.364 | CV | 0.726 |
| k hat (MLE) | 1.996 | k star (bias corrected MLE) | 1.924 |
| Theta hat (MLE) | 0.251 | Theta star (bias corrected MLE) | 0.261 |
| nu hat (MLE) | 295.4 | nu star (bias corrected) | 284.8 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (284.79, α) | 246.7 | Adjusted Chi Square Value (284.79, β) | 246 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.579 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.581 |

| Estimates of Gamma Parameters using KM Estimates | | | |
|--|-------|---------------------------|-------|
| Mean (KM) | 0.508 | SD (KM) | 0.388 |
| Variance (KM) | 0.15 | SE of Mean (KM) | 0.14 |
| k hat (KM) | 1.72 | k star (KM) | 1.659 |
| nu hat (KM) | 254.5 | nu star (KM) | 245.5 |
| theta hat (KM) | 0.296 | theta star (KM) | 0.306 |
| 80% gamma percentile (KM) | 0.777 | 90% gamma percentile (KM) | 1.033 |
| 95% gamma percentile (KM) | 1.28 | 99% gamma percentile (KM) | 1.834 |

| Gamma Kaplan-Meier (KM) Statistics | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (245.51, α) | 210.2 | Adjusted Chi Square Value (245.51, β) | 209.6 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 0.593 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 0.595 |

| Lognormal GOF Test on Detected Observations Only | | Shapiro Wilk GOF Test | |
|--|-------|---|--|
| Shapiro Wilk Test Statistic | 0.984 | Detected Data appear Lognormal at 5% Significance Level | |
| 5% Shapiro Wilk Critical Value | 0.788 | Lilliefors GOF Test | |
| Lilliefors Test Statistic | 0.16 | Detected Data appear Lognormal at 5% Significance Level | |
| 5% Lilliefors Critical Value | 0.325 | | |

Detected Data appear Lognormal at 5% Significance Level

| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
|--|-------|------------------------------|--------|
| Mean in Original Scale | 0.454 | Mean in Log Scale | -1.017 |
| SD in Original Scale | 0.344 | SD in Log Scale | 0.681 |
| 95% t UCL (assumes normality of ROS data) | 0.521 | 95% Percentile Bootstrap UCL | 0.525 |
| 95% BCA Bootstrap UCL | 0.531 | 95% Bootstrap t UCL | 0.537 |

95% H-UCL (Log ROS) 0.534

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -0.968 | KM Geo Mean | 0.38 |
| KM SD (logged) | 0.803 | 95% Critical H Value (KM-Log) | 2.077 |
| KM Standard Error of Mean (logged) | 0.366 | 95% H-UCL (KM -Log) | 0.638 |
| KM SD (logged) | 0.803 | 95% Critical H Value (KM-Log) | 2.077 |
| KM Standard Error of Mean (logged) | 0.366 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 120.4 |
| SD in Original Scale | 426.1 |
| 95% t UCL (Assumes normality) | 202.9 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.481 |
| SD in Log Scale | 2.597 |
| 95% H-Stat UCL | 460.8 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.742

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulation results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Toluene)

| General Statistics | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 31 |
| Number of Detects | 15 | Number of Non-Detects | 59 |
| Number of Distinct Detects | 14 | Number of Distinct Non-Detects | 17 |
| Minimum Detect | 0.15 | Minimum Non-Detect | 1 |
| Maximum Detect | 0.73 | Maximum Non-Detect | 5000 |
| Variance Detects | 0.0412 | Percent Non-Detects | 79.73% |
| Mean Detects | 0.362 | SD Detects | 0.203 |
| Median Detects | 0.27 | CV Detects | 0.56 |
| Skewness Detects | 0.839 | Kurtosis Detects | -0.791 |
| Mean of Logged Detects | -1.156 | SD of Logged Detects | 0.543 |

| Normal GOF Test on Detects Only | | | |
|---|-------|--|--|
| Shapiro Wilk Test Statistic | 0.858 | Shapiro Wilk GOF Test | |
| 5% Shapiro Wilk Critical Value | 0.881 | Detected Data Not Normal at 5% Significance Level | |
| Lilliefors Test Statistic | 0.21 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.22 | Detected Data appear Normal at 5% Significance Level | |
| Detected Data appear Approximate Normal at 5% Significance Level | | | |

| Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs | | | |
|--|-------|-----------------------------------|--------|
| KM Mean | 0.362 | KM Standard Error of Mean | 0.0524 |
| KM SD | 0.196 | 95% KM (BCA) UCL | 0.454 |
| 95% KM (t) UCL | 0.449 | 95% KM (Percentile Bootstrap) UCL | 0.446 |
| 95% KM (z) UCL | 0.448 | 95% KM Bootstrap t UCL | 0.472 |
| 90% KM Chebyshev UCL | 0.519 | 95% KM Chebyshev UCL | 0.59 |
| 97.5% KM Chebyshev UCL | 0.689 | 99% KM Chebyshev UCL | 0.883 |

| Gamma GOF Tests on Detected Observations Only | | | |
|--|-------|---|--|
| A-D Test Statistic | 0.553 | Anderson-Darling GOF Test | |
| 5% A-D Critical Value | 0.741 | Detected data appear Gamma Distributed at 5% Significance Level | |
| K-S Test Statistic | 0.175 | Kolmogorov-Smirnov GOF | |
| 5% K-S Critical Value | 0.223 | Detected data appear Gamma Distributed at 5% Significance Level | |
| Detected data appear Gamma Distributed at 5% Significance Level | | | |

| Gamma Statistics on Detected Data Only | | | |
|--|--------|---------------------------------|-------|
| k hat (MLE) | 3.73 | k star (bias corrected MLE) | 3.028 |
| Theta hat (MLE) | 0.0971 | Theta star (bias corrected MLE) | 0.12 |
| nu hat (MLE) | 111.9 | nu star (bias corrected) | 90.84 |
| Mean (detects) | 0.362 | | |

Gamma ROS Statistics using Imputed Non-Detects
 GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|--|--------|
| Minimum | 0.0607 | Mean | 0.355 |
| Maximum | 0.844 | Median | 0.334 |
| SD | 0.166 | CV | 0.467 |
| k hat (MLE) | 4.562 | k star (bias corrected MLE) | 4.387 |
| Theta hat (MLE) | 0.0777 | Theta star (bias corrected MLE) | 0.0808 |
| nu hat (MLE) | 675.2 | nu star (bias corrected) | 649.2 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (649.20, α) | 591.1 | Adjusted Chi Square Value (649.20, β) | 590 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 0.389 | 95% Gamma Adjusted UCL (use when $n < 50$) | 0.39 |

| Estimates of Gamma Parameters using KM Estimates | | | |
|--|--------|---------------------------|--------|
| Mean (KM) | 0.362 | SD (KM) | 0.196 |
| Variance (KM) | 0.0384 | SE of Mean (KM) | 0.0524 |
| k hat (KM) | 3.411 | k star (KM) | 3.282 |
| nu hat (KM) | 504.9 | nu star (KM) | 485.7 |
| theta hat (KM) | 0.106 | theta star (KM) | 0.11 |
| 80% gamma percentile (KM) | 0.511 | 90% gamma percentile (KM) | 0.63 |
| 95% gamma percentile (KM) | 0.741 | 99% gamma percentile (KM) | 0.979 |

| Gamma Kaplan-Meier (KM) Statistics | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (485.72, α) | 435.6 | Adjusted Chi Square Value (485.72, β) | 434.7 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 0.404 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 0.405 |

| Lognormal GOF Test on Detected Observations Only | | | |
|--|-------|---|--|
| Shapiro Wilk Test Statistic | 0.925 | Shapiro Wilk GOF Test | |
| 5% Shapiro Wilk Critical Value | 0.881 | Detected Data appear Lognormal at 5% Significance Level | |
| Lilliefors Test Statistic | 0.144 | Lilliefors GOF Test | |
| 5% Lilliefors Critical Value | 0.22 | Detected Data appear Lognormal at 5% Significance Level | |
| Detected Data appear Lognormal at 5% Significance Level | | | |

| Lognormal ROS Statistics Using Imputed Non-Detects | | | |
|--|-------|------------------------------|--------|
| Mean in Original Scale | 0.347 | Mean in Log Scale | -1.156 |
| SD in Original Scale | 0.161 | SD in Log Scale | 0.445 |
| 95% t UCL (assumes normality of ROS data) | 0.379 | 95% Percentile Bootstrap UCL | 0.378 |
| 95% BCA Bootstrap UCL | 0.382 | 95% Bootstrap t UCL | 0.383 |

95% H-UCL (Log ROS) 0.382

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|-------|
| KM Mean (logged) | -1.156 | KM Geo Mean | 0.315 |
| KM SD (logged) | 0.524 | 95% Critical H Value (KM-Log) | 1.869 |
| KM Standard Error of Mean (logged) | 0.14 | 95% H-UCL (KM -Log) | 0.405 |
| KM SD (logged) | 0.524 | 95% Critical H Value (KM-Log) | 1.869 |
| KM Standard Error of Mean (logged) | 0.14 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 120.3 |
| SD in Original Scale | 426.1 |
| 95% t UCL (Assumes normality) | 202.8 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.367 |
| SD in Log Scale | 2.688 |
| 95% H-Stat UCL | 567.2 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.449

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (trans-1,2-Dichloroethene)

General Statistics

| | | | |
|------------------------------|-------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 31 |
| Number of Detects | 19 | Number of Non-Detects | 55 |
| Number of Distinct Detects | 19 | Number of Distinct Non-Detects | 12 |
| Minimum Detect | 0.14 | Minimum Non-Detect | 1 |
| Maximum Detect | 142 | Maximum Non-Detect | 5000 |
| Variance Detects | 1385 | Percent Non-Detects | 74.32% |
| Mean Detects | 18.59 | SD Detects | 37.21 |
| Median Detects | 1.55 | CV Detects | 2.002 |
| Skewness Detects | 2.644 | Kurtosis Detects | 6.93 |
| Mean of Logged Detects | 1.016 | SD of Logged Detects | 2.151 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.567 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.901 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.343 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.197 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 6.485 | KM Standard Error of Mean | 2.962 |
| KM SD | 22.15 | 95% KM (BCA) UCL | 12.39 |
| 95% KM (t) UCL | 11.42 | 95% KM (Percentile Bootstrap) UCL | 11.69 |
| 95% KM (z) UCL | 11.36 | 95% KM Bootstrap t UCL | 20.23 |
| 90% KM Chebyshev UCL | 15.37 | 95% KM Chebyshev UCL | 19.4 |
| 97.5% KM Chebyshev UCL | 24.98 | 99% KM Chebyshev UCL | 35.96 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 0.977 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.832 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.219 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.214 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.352 | k star (bias corrected MLE) | 0.332 |
| Theta hat (MLE) | 52.77 | Theta star (bias corrected MLE) | 56.04 |
| nu hat (MLE) | 13.39 | nu star (bias corrected) | 12.61 |
| Mean (detects) | 18.59 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 5.188 |
| Maximum | 142 | Median | 0.01 |
| SD | 20.2 | CV | 3.893 |
| k hat (MLE) | 0.174 | k star (bias corrected MLE) | 0.176 |
| Theta hat (MLE) | 29.89 | Theta star (bias corrected MLE) | 29.55 |
| nu hat (MLE) | 25.69 | nu star (bias corrected) | 25.98 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (25.98, α) | 15.37 | Adjusted Chi Square Value (25.98, β) | 15.2 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 8.773 | 95% Gamma Adjusted UCL (use when $n < 50$) | 8.866 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|--------|
| Mean (KM) | 6.485 | SD (KM) | 22.15 |
| Variance (KM) | 490.8 | SE of Mean (KM) | 2.962 |
| k hat (KM) | 0.0857 | k star (KM) | 0.0912 |
| nu hat (KM) | 12.68 | nu star (KM) | 13.5 |
| theta hat (KM) | 75.69 | theta star (KM) | 71.09 |
| 80% gamma percentile (KM) | 3.905 | 90% gamma percentile (KM) | 16.55 |
| 95% gamma percentile (KM) | 37.78 | 99% gamma percentile (KM) | 107.8 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (13.50, α) | 6.231 | Adjusted Chi Square Value (13.50, β) | 6.133 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 14.05 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 14.28 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.947 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.901 | Detected Data appear Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.132 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.197 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|--------|
| Mean in Original Scale | 5.438 | Mean in Log Scale | -0.294 |
| SD in Original Scale | 20.07 | SD in Log Scale | 1.721 |
| 95% t UCL (assumes normality of ROS data) | 9.325 | 95% Percentile Bootstrap UCL | 9.445 |
| 95% BCA Bootstrap UCL | 11.92 | 95% Bootstrap t UCL | 18.94 |

95% H-UCL (Log ROS) 6.081

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|--------|-------------------------------|--------------|
| KM Mean (logged) | -0.265 | KM Geo Mean | 0.767 |
| KM SD (logged) | 1.639 | 95% Critical H Value (KM-Log) | 2.964 |
| KM Standard Error of Mean (logged) | 0.287 | 95% H-UCL (KM -Log) | 5.187 |
| KM SD (logged) | 1.639 | 95% Critical H Value (KM-Log) | 2.964 |
| KM Standard Error of Mean (logged) | 0.287 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 120.7 |
| SD in Original Scale | 426.1 |
| 95% t UCL (Assumes normality) | 203.2 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 1.433 |
| SD in Log Scale | 2.641 |
| 95% H-Stat UCL | 511.6 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 5.187

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Trichloroethene)

General Statistics

| | | | |
|------------------------------|----------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 57 |
| Number of Detects | 55 | Number of Non-Detects | 19 |
| Number of Distinct Detects | 51 | Number of Distinct Non-Detects | 6 |
| Minimum Detect | 0.23 | Minimum Non-Detect | 1 |
| Maximum Detect | 261000 | Maximum Non-Detect | 200 |
| Variance Detects | 1.758E+9 | Percent Non-Detects | 25.68% |
| Mean Detects | 9984 | SD Detects | 41931 |
| Median Detects | 46.8 | CV Detects | 4.2 |
| Skewness Detects | 5.109 | Kurtosis Detects | 27.24 |
| Mean of Logged Detects | 3.547 | SD of Logged Detects | 3.857 |

Normal GOF Test on Detects Only

| | |
|------------------------------|-------|
| Shapiro Wilk Test Statistic | 0.274 |
| 5% Shapiro Wilk P Value | 0 |
| Lilliefors Test Statistic | 0.465 |
| 5% Lilliefors Critical Value | 0.119 |

Normal GOF Test on Detected Observations Only

Detected Data Not Normal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|-------|
| KM Mean | 7421 | KM Standard Error of Mean | 4233 |
| KM SD | 36084 | 95% KM (BCA) UCL | 15322 |
| 95% KM (t) UCL | 14474 | 95% KM (Percentile Bootstrap) UCL | 15135 |
| 95% KM (z) UCL | 14384 | 95% KM Bootstrap t UCL | 37695 |
| 90% KM Chebyshev UCL | 20121 | 95% KM Chebyshev UCL | 25874 |
| 97.5% KM Chebyshev UCL | 33858 | 99% KM Chebyshev UCL | 49542 |

Gamma GOF Tests on Detected Observations Only

| | |
|-----------------------|-------|
| A-D Test Statistic | 5.487 |
| 5% A-D Critical Value | 0.973 |
| K-S Test Statistic | 0.247 |
| 5% K-S Critical Value | 0.136 |

Anderson-Darling GOF Test

Detected Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov GOF

Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.137 | k star (bias corrected MLE) | 0.142 |
| Theta hat (MLE) | 72627 | Theta star (bias corrected MLE) | 70264 |
| nu hat (MLE) | 15.12 | nu star (bias corrected) | 15.63 |
| Mean (detects) | 9984 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 7421 |
| Maximum | 261000 | Median | 1.495 |
| SD | 36330 | CV | 4.896 |
| k hat (MLE) | 0.108 | k star (bias corrected MLE) | 0.112 |
| Theta hat (MLE) | 68805 | Theta star (bias corrected MLE) | 65969 |
| nu hat (MLE) | 15.96 | nu star (bias corrected) | 16.65 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (16.65, α) | 8.421 | Adjusted Chi Square Value (16.65, β) | 8.305 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 14670 | 95% Gamma Adjusted UCL (use when $n < 50$) | 14876 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|----------|---------------------------|--------|
| Mean (KM) | 7421 | SD (KM) | 36084 |
| Variance (KM) | 1.302E+9 | SE of Mean (KM) | 4233 |
| k hat (KM) | 0.0423 | k star (KM) | 0.0496 |
| nu hat (KM) | 6.26 | nu star (KM) | 7.34 |
| theta hat (KM) | 175446 | theta star (KM) | 149641 |
| 80% gamma percentile (KM) | 977.8 | 90% gamma percentile (KM) | 11206 |
| 95% gamma percentile (KM) | 39354 | 99% gamma percentile (KM) | 161951 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (7.34, α) | 2.359 | Adjusted Chi Square Value (7.34, β) | 2.303 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 23091 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 23648 |

Lognormal GOF Test on Detected Observations Only

| | |
|---|-----------|
| Shapiro Wilk Approximate Test Statistic | 0.916 |
| 5% Shapiro Wilk P Value | 7.4205E-4 |
| Lilliefors Test Statistic | 0.157 |
| 5% Lilliefors Critical Value | 0.119 |

Shapiro Wilk GOF Test

Detected Data Not Lognormal at 5% Significance Level

Lilliefors GOF Test

Detected Data Not Lognormal at 5% Significance Level

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 7421 | Mean in Log Scale | 2.472 |
| SD in Original Scale | 36330 | SD in Log Scale | 3.907 |
| 95% t UCL (assumes normality of ROS data) | 14457 | 95% Percentile Bootstrap UCL | 14900 |
| 95% BCA Bootstrap UCL | 18821 | 95% Bootstrap t UCL | 37653 |

95% H-UCL (Log ROS) 386700

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|--------|
| KM Mean (logged) | 2.495 | KM Geo Mean | 12.12 |
| KM SD (logged) | 3.783 | 95% Critical H Value (KM-Log) | 5.86 |
| KM Standard Error of Mean (logged) | 0.448 | 95% H-UCL (KM -Log) | 207856 |
| KM SD (logged) | 3.783 | 95% Critical H Value (KM-Log) | 5.86 |
| KM Standard Error of Mean (logged) | 0.448 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 7424 |
| SD in Original Scale | 36329 |
| 95% t UCL (Assumes normality) | 14459 |

DL/2 Log-Transformed

| | |
|-------------------|--------|
| Mean in Log Scale | 2.723 |
| SD in Log Scale | 3.723 |
| 95% H-Stat UCL | 193148 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

99% KM (Chebyshev) UCL 49542

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Result (Vinyl chloride)

General Statistics

| | | | |
|------------------------------|--------|---------------------------------|--------|
| Total Number of Observations | 74 | Number of Distinct Observations | 55 |
| Number of Detects | 47 | Number of Non-Detects | 27 |
| Number of Distinct Detects | 46 | Number of Distinct Non-Detects | 9 |
| Minimum Detect | 0.25 | Minimum Non-Detect | 1 |
| Maximum Detect | 4620 | Maximum Non-Detect | 5000 |
| Variance Detects | 877746 | Percent Non-Detects | 36.49% |
| Mean Detects | 450 | SD Detects | 936.9 |
| Median Detects | 17.8 | CV Detects | 2.082 |
| Skewness Detects | 2.903 | Kurtosis Detects | 9.253 |
| Mean of Logged Detects | 3.271 | SD of Logged Detects | 2.895 |

Normal GOF Test on Detects Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.562 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.946 | Detected Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.332 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.128 | Detected Data Not Normal at 5% Significance Level |

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

| | | | |
|------------------------|-------|-----------------------------------|--------------|
| KM Mean | 290.5 | KM Standard Error of Mean | 91.57 |
| KM SD | 774 | 95% KM (BCA) UCL | 462.3 |
| 95% KM (t) UCL | 443.1 | 95% KM (Percentile Bootstrap) UCL | 449.8 |
| 95% KM (z) UCL | 441.2 | 95% KM Bootstrap t UCL | 524.9 |
| 90% KM Chebyshev UCL | 565.3 | 95% KM Chebyshev UCL | 689.7 |
| 97.5% KM Chebyshev UCL | 862.4 | 99% KM Chebyshev UCL | 1202 |

Gamma GOF Tests on Detected Observations Only

| | | |
|-----------------------|-------|--|
| A-D Test Statistic | 2.114 | Anderson-Darling GOF Test |
| 5% A-D Critical Value | 0.887 | Detected Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.19 | Kolmogorov-Smirnov GOF |
| 5% K-S Critical Value | 0.142 | Detected Data Not Gamma Distributed at 5% Significance Level |

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

| | | | |
|-----------------|-------|---------------------------------|-------|
| k hat (MLE) | 0.25 | k star (bias corrected MLE) | 0.248 |
| Theta hat (MLE) | 1799 | Theta star (bias corrected MLE) | 1812 |
| nu hat (MLE) | 23.52 | nu star (bias corrected) | 23.35 |
| Mean (detects) | 450 | | |

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.
 For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

| | | | |
|---|--------|---|-------|
| Minimum | 0.01 | Mean | 285.8 |
| Maximum | 4620 | Median | 1.59 |
| SD | 775 | CV | 2.712 |
| k hat (MLE) | 0.147 | k star (bias corrected MLE) | 0.15 |
| Theta hat (MLE) | 1949 | Theta star (bias corrected MLE) | 1909 |
| nu hat (MLE) | 21.7 | nu star (bias corrected) | 22.16 |
| Adjusted Level of Significance (β) | 0.0468 | | |
| Approximate Chi Square Value (22.16, α) | 12.46 | Adjusted Chi Square Value (22.16, β) | 12.31 |
| 95% Gamma Approximate UCL (use when $n \geq 50$) | 508.4 | 95% Gamma Adjusted UCL (use when $n < 50$) | 514.4 |

Estimates of Gamma Parameters using KM Estimates

| | | | |
|---------------------------|--------|---------------------------|-------|
| Mean (KM) | 290.5 | SD (KM) | 774 |
| Variance (KM) | 599089 | SE of Mean (KM) | 91.57 |
| k hat (KM) | 0.141 | k star (KM) | 0.144 |
| nu hat (KM) | 20.85 | nu star (KM) | 21.34 |
| theta hat (KM) | 2062 | theta star (KM) | 2015 |
| 80% gamma percentile (KM) | 305.9 | 90% gamma percentile (KM) | 856.5 |
| 95% gamma percentile (KM) | 1611 | 99% gamma percentile (KM) | 3819 |

Gamma Kaplan-Meier (KM) Statistics

| | | | |
|--|-------|--|-------|
| Approximate Chi Square Value (21.34, α) | 11.85 | Adjusted Chi Square Value (21.34, β) | 11.71 |
| 95% Gamma Approximate KM-UCL (use when $n \geq 50$) | 523.4 | 95% Gamma Adjusted KM-UCL (use when $n < 50$) | 529.7 |

Lognormal GOF Test on Detected Observations Only

| | | |
|--------------------------------|-------|---|
| Shapiro Wilk Test Statistic | 0.933 | Shapiro Wilk GOF Test |
| 5% Shapiro Wilk Critical Value | 0.946 | Detected Data Not Lognormal at 5% Significance Level |
| Lilliefors Test Statistic | 0.115 | Lilliefors GOF Test |
| 5% Lilliefors Critical Value | 0.128 | Detected Data appear Lognormal at 5% Significance Level |

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

| | | | |
|---|-------|------------------------------|-------|
| Mean in Original Scale | 286.4 | Mean in Log Scale | 1.889 |
| SD in Original Scale | 774.8 | SD in Log Scale | 3.108 |
| 95% t UCL (assumes normality of ROS data) | 436.4 | 95% Percentile Bootstrap UCL | 440.6 |
| 95% BCA Bootstrap UCL | 470.5 | 95% Bootstrap t UCL | 533 |

95% H-UCL (Log ROS) 4937

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

| | | | |
|------------------------------------|-------|-------------------------------|-------|
| KM Mean (logged) | 2.003 | KM Geo Mean | 7.414 |
| KM SD (logged) | 2.934 | 95% Critical H Value (KM-Log) | 4.669 |
| KM Standard Error of Mean (logged) | 0.358 | 95% H-UCL (KM -Log) | 2731 |
| KM SD (logged) | 2.934 | 95% Critical H Value (KM-Log) | 4.669 |
| KM Standard Error of Mean (logged) | 0.358 | | |

DL/2 Statistics

DL/2 Normal

| | |
|-------------------------------|-------|
| Mean in Original Scale | 323.6 |
| SD in Original Scale | 814.4 |
| 95% t UCL (Assumes normality) | 481.3 |

DL/2 Log-Transformed

| | |
|-------------------|-------|
| Mean in Log Scale | 2.428 |
| SD in Log Scale | 2.889 |
| 95% H-Stat UCL | 3493 |

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 689.7

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

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A decorative graphic consisting of three thin orange lines. One line is horizontal, extending across the bottom of the page. Two other lines are diagonal, starting from the bottom left and extending towards the top right, crossing the horizontal line.

APPENDIX C

Costing Details



APPENDIX C-1

Costing Tables



| TARGET ZONES FOR REMEDIATION | REMEDIAL ALTERNATIVE NUMBER | | | | | |
|--|-----------------------------|---------------------|---------------------|---------------------|----------------------|----------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Source Vadose Zone (VZ) | NA | EXC | EXC | EXC | IST | IST |
| Source Saturated Zone (SZ) | NA | ERD | P&T | DGR | IST | IST |
| Dissolved Phase Area - Downgradient (DPA) | NA | ERD | P&T | DGR | ERD | DGR |
| Total Estimated Capital Costs | \$0 | \$ 2,618,961 | \$ 1,483,299 | \$ 2,796,065 | \$ 11,423,491 | \$ 11,997,007 |
| Total Estimated Operating Costs (Not Discounted) | \$0 | \$ 2,618,560 | \$ 2,894,400 | \$ 3,272,000 | \$ 1,918,060 | \$ 3,272,000 |
| Total Estimated Costs (Not Discounted) | \$0 | \$ 5,237,521 | \$ 4,377,699 | \$ 6,068,065 | \$ 13,341,551 | \$ 15,269,007 |
| Total Estimated Net Present Value Costs | \$0 | \$ 5,009,611 | \$ 2,777,047 | \$ 4,640,170 | \$ 13,197,583 | \$ 13,841,112 |
| Total Estimated Net Present Value Costs (Rounded to Nearest \$1000) | \$0 | \$ 5,010,000 | \$ 2,777,000 | \$ 4,640,000 | \$ 13,198,000 | \$ 13,841,000 |
| Time Years | 0 | 5 (+10 for MNA) | 30 | 20 (+10 For MNA) | 5 (+10 for MNA) | 20 (+10 For MNA) |

| REMEDIAL COMPONENT OPTIONS |
|---|
| No Further Action (NFA) |
| Excavation (EXC) |
| In-Situ Thermal (IST) |
| Enhanced Reductive Dechlorination (ERD) |
| Pump and Treat (P&T) |
| Dynamic Groundwater Recirculation (DGR) |

Notes

1. Total Estimated Net Present Value Costs are representative of remediation time at a discount rate of 7%.
 2. Assumes a maximum project life of 30 years. For Total Estimated Net Present Value Costs, a 7% discount rate was applied per *A Guide to Developing and Documenting Cost Estimates During the Feasibility Study*, EPA 540-R-00-002 OSWER 9355.0-75; July 2000.
 3. All costs are based on an accuracy of +50/-30% (USEPA 2000).
 4. Cost estimates were prepared in 2019 and are expressed in 2019 dollars.
- MNA = monitored natural attenuation

Source Vadose Zone - Excavation
 Feasibility Study
 AVX Corporation
 Myrtle Beach, South Carolina



| Source Vadose Zone - Excavation | Unit | Unit Price | Quantity | Extension |
|--------------------------------------|------------|--------------|----------|---------------------|
| Mobilization/Demobilization | Lump Sum | \$ 40,000 | 1 | \$ 40,000 |
| Pre-Characterization | Lump Sum | \$ 45,000 | 1 | \$ 45,000 |
| Excavation to Depth | Cubic Yard | \$ 40 | 4,241 | \$ 169,630 |
| Excavation Protection | Allowance | \$ 15,000 | 1 | \$ 15,000 |
| Air Monitoring & Mitigation | Allowance | \$ 25,000 | 1 | \$ 25,000 |
| Backfill with Structural Fill | Cubic Yard | \$ 45 | 4,241 | \$ 190,833 |
| Site Restoration | 1000 Feet | \$ 1,500 | 11 | \$ 17,175 |
| T&D Landfill Non-Hazardous | Ton | \$ 100 | 6,043 | \$ 604,306 |
| T&D Landfill Hazardous <60 mg/kg | Ton | \$ 575 | 318 | \$ 182,882 |
| T&D Incineration Hazardous >60 mg/kg | Ton | \$ 1,300 | 0 | \$ - |
| Project Management | Lump Sum | \$ 1,289,825 | 0.05 | \$ 64,491 |
| Engineering | Lump Sum | \$ 1,289,825 | 0.05 | \$ 64,491 |
| Construction Management | Lump Sum | \$ 2,453,823 | 0.05 | \$ 64,491 |
| Total | | | | \$ 1,483,299 |

Assumptions

1. Cost estimate is based on Arcadis' past experience and vendor estimates using 2018 costs.
2. Mobile lab will not be needed for screening of excavated lifts prior to separation for disposal.
3. Dewatering will not be needed at these specified depths.
4. Transportation & Disposal (T&D) costs are provided based on T&D for excavated remediation activities at AVX's facility in Conway, SC in 2018.
5. Assume T&D costs include direct loading into highway trucks.
6. Assume fraction splits for non-hazardous, hazardous (landfill), and hazardous (incineration) are consistent across all excavation areas.
7. Milligrams per kilogram (mg/kg).
8. Assume safety procedures/infrastructure systems are included in excavation protection.

| 7% | Discount Rate | Capital Cost | Operating Cost | Total Costs | Total Net Present Value Costs |
|--------------|-----------------|---------------------|----------------|---------------------|-------------------------------|
| Year | Discount Factor | | | | |
| 0 | 1.000 | \$ 1,483,299 | \$ - | \$ 1,483,299 | \$ 1,483,299 |
| 1 | 0.966 | \$ - | \$ - | \$ - | \$ - |
| 2 | 0.901 | \$ - | \$ - | \$ - | \$ - |
| 3 | 0.840 | \$ - | \$ - | \$ - | \$ - |
| 4 | 0.783 | \$ - | \$ - | \$ - | \$ - |
| 5 | 0.730 | \$ - | \$ - | \$ - | \$ - |
| 6 | 0.681 | \$ - | \$ - | \$ - | \$ - |
| 7 | 0.635 | \$ - | \$ - | \$ - | \$ - |
| 8 | 0.592 | \$ - | \$ - | \$ - | \$ - |
| 9 | 0.552 | \$ - | \$ - | \$ - | \$ - |
| 10 | 0.514 | \$ - | \$ - | \$ - | \$ - |
| 11 | 0.480 | \$ - | \$ - | \$ - | \$ - |
| 12 | 0.447 | \$ - | \$ - | \$ - | \$ - |
| 13 | 0.417 | \$ - | \$ - | \$ - | \$ - |
| 14 | 0.389 | \$ - | \$ - | \$ - | \$ - |
| 15 | 0.362 | \$ - | \$ - | \$ - | \$ - |
| 16 | 0.338 | \$ - | \$ - | \$ - | \$ - |
| 17 | 0.315 | \$ - | \$ - | \$ - | \$ - |
| 18 | 0.294 | \$ - | \$ - | \$ - | \$ - |
| 19 | 0.274 | \$ - | \$ - | \$ - | \$ - |
| 20 | 0.255 | \$ - | \$ - | \$ - | \$ - |
| 21 | 0.238 | \$ - | \$ - | \$ - | \$ - |
| 22 | 0.222 | \$ - | \$ - | \$ - | \$ - |
| 23 | 0.207 | \$ - | \$ - | \$ - | \$ - |
| 24 | 0.193 | \$ - | \$ - | \$ - | \$ - |
| 25 | 0.180 | \$ - | \$ - | \$ - | \$ - |
| 26 | 0.168 | \$ - | \$ - | \$ - | \$ - |
| 27 | 0.156 | \$ - | \$ - | \$ - | \$ - |
| 28 | 0.146 | \$ - | \$ - | \$ - | \$ - |
| 29 | 0.136 | \$ - | \$ - | \$ - | \$ - |
| 30 | 0.127 | \$ - | \$ - | \$ - | \$ - |
| Total | | \$ 1,483,299 | \$ - | \$ 1,483,299 | \$ 1,483,299 |

| Source Vadose & Saturated Zone - Thermal | Unit | Unit Price | Quantity | Extension |
|---|-------------|--------------|------------|----------------------|
| Arcadis | | | | |
| Arcadis Procurement of Thermal Subcontractor | Hour | \$ 135 | 80 | \$ 10,800 |
| Arcadis Reporting & Permitting | Hour | \$ 135 | 400 | \$ 54,000 |
| Arcadis Construction Oversight - Construction | Hour | \$ 125 | 1,600 | \$ 200,000 |
| Arcadis PM - Construction | Hour | \$ 165 | 240 | \$ 39,600 |
| Per diem - Construction | Day | \$ 150 | 160 | \$ 24,000 |
| Arcadis Construction Oversight - Operation | Hour | \$ 125 | 1,750 | \$ 218,750 |
| Arcadis PM - Operation | Hour | \$ 165 | 560 | \$ 92,400 |
| Per diem - Operation | Day | \$ 125 | 175 | \$ 21,875 |
| Expendables - Operation | Day | \$ 100 | 175 | \$ 17,500 |
| Arcadis Construction Oversight - Demobilization | Hour | \$ 125 | 300 | \$ 37,500 |
| Arcadis PM - Demobilization | Hour | \$ 165 | 60 | \$ 9,900 |
| Arcadis - Sample collection | Hour | \$ 80 | 120 | \$ 9,600 |
| Arcadis - Validation | Hour | \$ 110 | 60 | \$ 6,600 |
| Subcontractor | | | | |
| Basis of Design | Lump Sum | \$ 25,000 | 1 | \$ 25,000 |
| Full-Scale Design Report | Lump Sum | \$ 200,000 | 1 | \$ 200,000 |
| Pre-purchase of expendable equipment | Lump Sum | \$ 160,000 | 1 | \$ 160,000 |
| Multi-phase Extraction Wells | Well | \$ 2,100 | 15 | \$ 31,500 |
| Horizontal Soil Vapor Extraction Wells | Well | \$ 5,000 | 34 | \$ 170,000 |
| Steam Injection Wells | Well | \$ 1,000 | 50 | \$ 50,000 |
| Electrode Wells | Well | \$ 3,300 | 272 | \$ 897,600 |
| Temperature Sensor Wells | Well | \$ 2,000 | 43 | \$ 86,000 |
| Pressure Monitoring Wells | Well | \$ 1,100 | 12 | \$ 13,200 |
| T&D Landfill Non-Hazardous | Ton | \$ 100 | 408 | \$ 40,753 |
| T&D Landfill Hazardous <60 mg/kg | Ton | \$ 575 | 21 | \$ 12,333 |
| T&D Incineration Hazardous >60 mg/kg | Ton | \$ 1,300 | 0 | \$ - |
| Vapor Cap Installation | Square Foot | \$ 10 | 84,350 | \$ 843,500 |
| Treatment System construction/install | Lump Sum | \$ 1,200,000 | 1 | \$ 1,200,000 |
| Labor oversight | Hour | \$ 250 | 4,000 | \$ 1,000,000 |
| Electrical and Field Piping Connections | Lump Sum | \$ 1,200,000 | 1 | \$ 1,200,000 |
| Equipment rental and labor | Week | \$ 40,000 | 35 | \$ 1,400,000 |
| Expendables (media, field monitors, etc.) | Week | \$ 3,000 | 35 | \$ 105,000 |
| Well Abandonment | Well | \$ 225 | 426 | \$ 95,850 |
| Vapor Cap Removal | Square Foot | \$ 1.5 | 84,350 | \$ 126,525 |
| Remove Equipment, piping, electrical systems | Lump Sum | \$ 225,000 | 1 | \$ 225,000 |
| Thermal contractor oversight | Hour | \$ 225 | 300 | \$ 67,500 |
| Groundwater Samples | Sample | \$ 65 | 105 | \$ 6,825 |
| Treatment System Water Samples | Sample | \$ 65 | 72 | \$ 4,680 |
| Treatment System Vapor Samples | Sample | \$ 100 | 72 | \$ 7,200 |
| Waste Characterization & Soil Samples | Sample | \$ 65 | 130 | \$ 8,450 |
| Utilities | | | | |
| Power Drop | Lump Sum | \$ 100,000 | 1 | \$ 100,000 |
| Total Power Usage | kWh | \$ 0.12 | 14,500,000 | \$ 1,740,000 |
| Total Gas Usage | MMBtu | \$ 3.12 | 40,000 | \$ 124,800 |
| Total | | | | \$ 10,684,241 |

| 7% Year | Discount Rate Discount Factor | Capital Cost | Operating Cost | Total Costs | Total Net Present Value Costs |
|--------------|----------------------------------|----------------------|-------------------|----------------------|----------------------------------|
| 0 | 1.000 | \$ 10,684,241 | \$ - | \$ 10,684,241 | \$ 10,684,241 |
| 1 | 0.966 | \$ - | \$ - | \$ - | \$ - |
| 2 | 0.901 | \$ - | \$ - | \$ - | \$ - |
| 3 | 0.840 | \$ - | \$ - | \$ - | \$ - |
| 4 | 0.783 | \$ - | \$ - | \$ - | \$ - |
| 5 | 0.730 | \$ - | \$ - | \$ - | \$ - |
| 6 | 0.681 | \$ - | \$ - | \$ - | \$ - |
| 7 | 0.635 | \$ - | \$ - | \$ - | \$ - |
| 8 | 0.592 | \$ - | \$ - | \$ - | \$ - |
| 9 | 0.552 | \$ - | \$ - | \$ - | \$ - |
| 10 | 0.514 | \$ - | \$ - | \$ - | \$ - |
| 11 | 0.480 | \$ - | \$ - | \$ - | \$ - |
| 12 | 0.447 | \$ - | \$ - | \$ - | \$ - |
| 13 | 0.417 | \$ - | \$ - | \$ - | \$ - |
| 14 | 0.389 | \$ - | \$ - | \$ - | \$ - |
| 15 | 0.362 | \$ - | \$ - | \$ - | \$ - |
| 16 | 0.338 | \$ - | \$ - | \$ - | \$ - |
| 17 | 0.315 | \$ - | \$ - | \$ - | \$ - |
| 18 | 0.294 | \$ - | \$ - | \$ - | \$ - |
| 19 | 0.274 | \$ - | \$ - | \$ - | \$ - |
| 20 | 0.255 | \$ - | \$ - | \$ - | \$ - |
| 21 | 0.238 | \$ - | \$ - | \$ - | \$ - |
| 22 | 0.222 | \$ - | \$ - | \$ - | \$ - |
| 23 | 0.207 | \$ - | \$ - | \$ - | \$ - |
| 24 | 0.193 | \$ - | \$ - | \$ - | \$ - |
| 25 | 0.180 | \$ - | \$ - | \$ - | \$ - |
| 26 | 0.168 | \$ - | \$ - | \$ - | \$ - |
| 27 | 0.156 | \$ - | \$ - | \$ - | \$ - |
| 28 | 0.146 | \$ - | \$ - | \$ - | \$ - |
| 29 | 0.136 | \$ - | \$ - | \$ - | \$ - |
| 30 | 0.127 | \$ - | \$ - | \$ - | \$ - |
| Total | | \$ 10,684,241 | \$ - | \$ 10,684,241 | \$ 10,684,241 |

Assumptions

1. Cost estimate is based on Arcadis U.S., Inc. (Arcadis) past experience and vendor estimates using 2018 costs.
2. Well quantities and associated numbers provided by Cascade in 2018.
3. Assume thermal design takes 8 to 10 weeks.
4. Assume construction takes 16 weeks and operation takes an additional 35 weeks.
5. Assume demobilization takes 5 weeks.
6. Assume Arcadis Construction Oversight includes 2 people at 50 hours per week.
7. Assume Arcadis PM includes 15 hours per week.
8. Transportation & Disposal (T&D) costs are provided based on T&D for excavated remediation activities at AVX's facility in Conway, SC in 2018.
9. Assume T&D costs include direct loading into highway trucks.
10. Assume fraction splits for non-hazardous, hazardous (landfill), and hazardous (incineration) are consistent across all thermal areas.
11. Milligram per kilogram (mg/kg).

| Source Saturated Zone - ERD | Unit | Unit Price | Quantity | Extension |
|--|-------------|------------|-----------|---------------------|
| Mobilization/demobilization - Track mounted Geoprobe, support vehicle and two man crew | Lump Sum | \$ 4,400 | 1 | \$ 4,400 |
| Mobilization/demobilization - ATV mounted rotary drill rig, support vehicle and three man crew | Lump Sum | \$ 9,200 | 1 | \$ 9,200 |
| Temporary decontamination pad installed | Each | \$ 200 | 1 | \$ 200 |
| Geoprobe Direct Push rig & two man crew | Day | \$ 2,150 | 20 | \$ 43,000 |
| Per Diem - two man crew | Day | \$ 300 | 20 | \$ 6,000 |
| Hand augering - Performance Monitoring Wells | Each | \$ 125 | 14 | \$ 1,750 |
| 4 1/4" hollow stem auger drilling | Linear Foot | \$ 22 | 490 | \$ 10,780 |
| 2" x 15' x .010" stainless steel well screen installed | Each | \$ 450 | 14 | \$ 6,300 |
| 2" PVC Schedule 40 well riser installed | Linear Foot | \$ 21 | 280 | \$ 5,880 |
| 4" steel protective casing installed with a 2' x 2' x 4' wire reinforced concrete pad | Each | \$ 275 | 14 | \$ 3,850 |
| Well development - one hour per well | Hour | \$ 125 | 14 | \$ 1,750 |
| Decontamination | Hour | \$ 275 | 10 | \$ 2,750 |
| 55 gallon drums filled and staged on site | Each | \$ 65 | 40 | \$ 2,600 |
| Per Diem - two man crew | Day | \$ 300 | 10 | \$ 3,000 |
| Hand augering - Injection Wells | Each | \$ 125 | 19 | \$ 2,375 |
| 6 5/8" hollow stem auger drilling | Linear Foot | \$ 28 | 675 | \$ 18,900 |
| 4" x 15' x .010" stainless steel well screen installed | Each | \$ 610 | 19 | \$ 11,590 |
| 4" PVC Schedule 40 well riser installed | Linear Foot | \$ 28 | 390 | \$ 10,920 |
| 6" steel protective casing installed with a 2' x 2' x 4' wire reinforced concrete pad | Each | \$ 325 | 19 | \$ 6,175 |
| Well development - one hour per well | Hour | \$ 225 | 19 | \$ 4,275 |
| Decontamination | Hour | \$ 250 | 43 | \$ 10,750 |
| 55 gallon drums filled and staged on site | Each | \$ 65 | 280 | \$ 18,200 |
| Per Diem - two man crew | Day | \$ 300 | 45 | \$ 13,500 |
| Additional crew member for pads and IDW management | Day | \$ 950 | 10 | \$ 9,500 |
| T&D Landfill Non-Hazardous | Ton | \$ 100 | 11 | \$ 1,108 |
| T&D Landfill Hazardous <60 mg/kg | Ton | \$ 575 | 0.6 | \$ 335 |
| T&D Incineration Hazardous >60 mg/kg | Ton | \$ 1,300 | 0.0 | \$ - |
| Baseline Sampling - Equipment Rental | Week | \$ 3,000 | 1 | \$ 3,000 |
| Baseline Sampling - Analytical | Event | \$ 1,000 | 1 | \$ 1,000 |
| Baseline Sampling - Labor & Miscellaneous | Event | \$ 8,000 | 1 | \$ 8,000 |
| Local Contractor Support | Event | \$ 5,000 | 6 | \$ 30,000 |
| Building/Equipment/Utility Installation | Lump Sum | \$ 125,000 | 0.25 | \$ 31,250 |
| Piping | Foot | \$ 24 | 500 | \$ 12,205 |
| Injection Field Equipment | Week | \$ 500 | 24 | \$ 12,000 |
| Molasses Storage Tank install & setup | Each | \$ 7,000 | 0.25 | \$ 1,750 |
| Molasses Storage Tank | Month | \$ 1,000 | 9 | \$ 9,000 |
| Molasses - per 4000 gallon delivery | Delivery | \$ 9,000 | 29 | \$ 256,500 |
| Lodging | Day | \$ 125 | 72 | \$ 9,000 |
| Per Diem | Day | \$ 50 | 72 | \$ 3,600 |
| Transportation (rental + gas and/or mileage) | Day | \$ 125 | 72 | \$ 9,000 |
| Tolls/Parking | Day | \$ 20 | 72 | \$ 1,440 |
| Semi-Annual Sampling - Equipment Rental | Week | \$ 1,000 | 10 | \$ 10,000 |
| Semi-Annual Sampling - Analytical | Event | \$ 1,000 | 10 | \$ 10,000 |
| Semi-Annual Sampling - Labor & Miscellaneous | Event | \$ 8,000 | 10 | \$ 80,000 |
| Water Use | Gallon | \$ 0.003 | 5,700,000 | \$ 15,960 |
| Well Back flush/Maintenance | Year | \$ 6,000 | 3 | \$ 18,000 |
| Miscellaneous Equipment/Supplies | Day | \$ 500 | 72 | \$ 36,000 |
| Reporting | Year | \$ 20,000 | 5 | \$ 100,000 |
| Monitored Natural Attenuation | Year | \$ 10,000 | 10 | \$ 100,000 |
| Project Management | Lump Sum | \$ 868,793 | 0.05 | \$ 43,440 |
| Engineering | Lump Sum | \$ 866,793 | 0.05 | \$ 43,340 |
| Construction Management | Lump Sum | \$ 866,793 | 0.05 | \$ 43,340 |
| Total | | | | \$ 1,096,912 |

| 7% | Discount Rate | Capital Cost | Operating Cost | Total Costs | Total Net Present Value Costs |
|--------------|-----------------|-------------------|-------------------|---------------------|-------------------------------|
| Year | Discount Factor | | | | |
| 0 | 1.000 | \$ 396,412 | \$ 173,500 | \$ 569,912 | \$ 569,912 |
| 1 | 0.966 | \$ - | \$ 173,500 | \$ 173,500 | \$ 167,567 |
| 2 | 0.901 | \$ - | \$ 173,500 | \$ 173,500 | \$ 156,238 |
| 3 | 0.840 | \$ - | \$ 40,000 | \$ 40,000 | \$ 33,585 |
| 4 | 0.783 | \$ - | \$ 40,000 | \$ 40,000 | \$ 31,315 |
| 5 | 0.730 | \$ - | \$ 10,000 | \$ 10,000 | \$ 7,299 |
| 6 | 0.681 | \$ - | \$ 10,000 | \$ 10,000 | \$ 6,806 |
| 7 | 0.635 | \$ - | \$ 10,000 | \$ 10,000 | \$ 6,346 |
| 8 | 0.592 | \$ - | \$ 10,000 | \$ 10,000 | \$ 5,917 |
| 9 | 0.552 | \$ - | \$ 10,000 | \$ 10,000 | \$ 5,517 |
| 10 | 0.514 | \$ - | \$ 10,000 | \$ 10,000 | \$ 5,144 |
| 11 | 0.480 | \$ - | \$ 10,000 | \$ 10,000 | \$ 4,796 |
| 12 | 0.447 | \$ - | \$ 10,000 | \$ 10,000 | \$ 4,472 |
| 13 | 0.417 | \$ - | \$ 10,000 | \$ 10,000 | \$ 4,169 |
| 14 | 0.389 | \$ - | \$ 10,000 | \$ 10,000 | \$ 3,888 |
| 15 | 0.362 | \$ - | \$ - | \$ - | \$ - |
| 16 | 0.338 | \$ - | \$ - | \$ - | \$ - |
| 17 | 0.315 | \$ - | \$ - | \$ - | \$ - |
| 18 | 0.294 | \$ - | \$ - | \$ - | \$ - |
| 19 | 0.274 | \$ - | \$ - | \$ - | \$ - |
| 20 | 0.255 | \$ - | \$ - | \$ - | \$ - |
| 21 | 0.238 | \$ - | \$ - | \$ - | \$ - |
| 22 | 0.222 | \$ - | \$ - | \$ - | \$ - |
| 23 | 0.207 | \$ - | \$ - | \$ - | \$ - |
| 24 | 0.193 | \$ - | \$ - | \$ - | \$ - |
| 25 | 0.180 | \$ - | \$ - | \$ - | \$ - |
| 26 | 0.168 | \$ - | \$ - | \$ - | \$ - |
| 27 | 0.156 | \$ - | \$ - | \$ - | \$ - |
| 28 | 0.146 | \$ - | \$ - | \$ - | \$ - |
| 29 | 0.136 | \$ - | \$ - | \$ - | \$ - |
| 30 | 0.127 | \$ - | \$ - | \$ - | \$ - |
| Total | | \$ 396,412 | \$ 700,500 | \$ 1,096,912 | \$ 1,012,970 |

Total NPV Operating Costs \$ 616,558

Assumptions

1. Cost estimate is based on Arcadis U.S., Inc. (Arcadis') past experience and vendor estimates using 2018 costs.
2. Well quantities and associated numbers provided by Parratt Wolf in 2018 cost estimate.
3. Assume "active" portion of ERD is 5 years (6 injections spread out over 4 years with the 5th year required to burn out the TOC).
4. Assume it will take 2 weeks to complete injections across 10 wells and an injection event for Transect No. 4 takes 4 weeks total.
5. Assume 1 full injection event in Transect 4 initially spaced out 6 months apart with time between events lengthening over the course of the active remedy so that the last injection is at year 4.
6. Assume 2 crew per 1 injection for 4 events per injection and 6 days per event for lodging, per diem, transportation, and tolls/parking. Unit costs based on rates/cost for ERD in OU-2.
7. Assume 2% Molasses by v/v injection and 50,000 gallons solution per well.
8. Assume \$2.80 per thousand gallon for water use.
9. Assume 1 week to baseline sample and each semi-annual sampling event for 14 performance monitoring wells.
10. Building/Equipment/Utility installation from Beyond Contracting cost estimate.
11. Transportation & Disposal (T&D) costs are provided based on T&D for excavated remediation activities at AVX's facility in Conway, SC in 2018.
12. Assume T&D costs include direct loading into highway trucks.
13. Assume fraction splits for non-hazardous, hazardous (landfill), and hazardous (incineration) are consistent across all ERD areas.
14. Milligram per kilogram (mg/kg).
15. Unit cost for Piping provided by 2013 RSMMeans with 7.79% inflation to reflect 2019 costs.

| Downgradient Groundwater - ERD | Unit | Unit Price | Quantity | Extension |
|--|-------------|--------------|------------|--------------------|
| Mobilization/demobilization - Track mounted Geoprobe, support vehicle and two man crew | Lump Sum | \$ 4,400 | 1 | \$ 4,400 |
| Mobilization/demobilization - ATV mounted rotary drill rig, support vehicle and three man crew | Lump Sum | \$ 9,200 | 1 | \$ 9,200 |
| Temporary decontamination pad installed | Each | \$ 200 | 1 | \$ 200 |
| Geoprobe Direct Push rig & two man crew | Day | \$ 2,150 | 20 | \$ 43,000 |
| Per Diem - two man crew | Day | \$ 300 | 20 | \$ 6,000 |
| Hand augering - Performance Monitoring Wells | Each | \$ 125 | 14 | \$ 1,750 |
| 4 1/4" hollow stem auger drilling | Linear Foot | \$ 22 | 490 | \$ 10,780 |
| 2" x 15' x .010" stainless steel well screen installed | Each | \$ 450 | 14 | \$ 6,300 |
| 2" PVC Schedule 40 well riser installed | Linear Foot | \$ 21 | 280 | \$ 5,880 |
| 4" steel protective casing installed with a 2' x 2' x 4" wire reinforced concrete pad | Each | \$ 275 | 14 | \$ 3,850 |
| Well development - one hour per well | Hour | \$ 125 | 14 | \$ 1,750 |
| Decontamination | Hour | \$ 275 | 10 | \$ 2,750 |
| 55 gallon drums filled and staged on site | Each | \$ 65 | 40 | \$ 2,600 |
| Per Diem - two man crew | Day | \$ 300 | 10 | \$ 3,000 |
| Hand augering - Injection Wells | Each | \$ 125 | 39 | \$ 4,875 |
| 6 5/8" hollow stem auger drilling | Linear Foot | \$ 28 | 1335 | \$ 37,380 |
| 4" x 15' x .010" stainless steel well screen installed | Each | \$ 610 | 39 | \$ 23,790 |
| 4" PVC Schedule 40 well riser installed | Linear Foot | \$ 28 | 750 | \$ 21,000 |
| 6" steel protective casing installed with a 2' x 2' x 4" wire reinforced concrete pad | Each | \$ 325 | 39 | \$ 12,675 |
| Well development - one hour per well | Hour | \$ 225 | 39 | \$ 8,775 |
| Decontamination | Hour | \$ 250 | 43 | \$ 10,750 |
| 55 gallon drums filled and staged on site | Each | \$ 65 | 280 | \$ 18,200 |
| Per Diem - two man crew | Day | \$ 300 | 45 | \$ 13,500 |
| Additional crew member for pads and IDW management | Day | \$ 950 | 10 | \$ 9,500 |
| T&D Landfill Non-Hazardous | Ton | \$ 100 | 19 | \$ 1,941 |
| T&D Landfill Hazardous <60 mg/kg | Ton | \$ 575 | 1 | \$ 588 |
| T&D Incineration Hazardous >60 mg/kg | Ton | \$ 1,300 | 0.0 | \$ - |
| Baseline Sampling - Equipment Rental | Week | \$ 3,000 | 2 | \$ 6,000 |
| Baseline Sampling - Analytical | Event | \$ 1,000 | 1 | \$ 1,000 |
| Baseline Sampling - Labor & Miscellaneous | Event | \$ 8,000 | 1 | \$ 8,000 |
| Local Contractor Support | Event | \$ 5,000 | 54 | \$ 270,000 |
| Building/Equipment/Utility Installation | Lump Sum | \$ 125,000 | 0.75 | \$ 93,750 |
| Piping | Foot | \$ 21 | 1,300 | \$ 27,167 |
| Injection Field Equipment | Week | \$ 500 | 72 | \$ 36,000 |
| Molasses Storage Tank install & setup | Each | \$ 7,000 | 0.75 | \$ 5,250 |
| Molasses Storage Tank | Month | \$ 1,000 | 27 | \$ 27,000 |
| Molasses - per 4000 gallon delivery | Delivery | \$ 9,000 | 59 | \$ 526,500 |
| Lodging | Day | \$ 125 | 648 | \$ 81,000 |
| Per Diem | Day | \$ 50 | 648 | \$ 32,400 |
| Transportation (rental + gas and/or mileage) | Day | \$ 125 | 648 | \$ 81,000 |
| Tolls/Parking | Day | \$ 20 | 648 | \$ 12,960 |
| Semi-Annual Sampling - Equipment Rental | Week | \$ 1,000 | 20 | \$ 20,000 |
| Semi-Annual Sampling - Analytical | Event | \$ 1,000 | 20 | \$ 20,000 |
| Semi-Annual Sampling - Labor & Miscellaneous | Event | \$ 8,000 | 20 | \$ 160,000 |
| Water Use | Gallon | \$ 0.003 | 39,000,000 | \$ 109,200 |
| Well Back flush/Maintenance | Year | \$ 6,000 | 3 | \$ 18,000 |
| Miscellaneous Equipment/Supplies | Day | \$ 500 | 648 | \$ 324,000 |
| Reporting | Year | \$ 20,000 | 5 | \$ 100,000 |
| Monitored Natural Attenuation | Year | \$ 10,000 | 10 | \$ 100,000 |
| Project Management | Lump Sum | \$ 2,225,661 | 0.05 | \$ 111,283 |
| Engineering | Lump Sum | \$ 2,223,661 | 0.05 | \$ 111,183 |
| Construction Management | Lump Sum | \$ 2,223,661 | 0.05 | \$ 111,183 |
| Total | | | | \$2,657,310 |

| 7% | Discount Rate | Capital Cost | Operating Cost | Total Costs | Total Net Present Value Costs |
|--------------|-----------------|-------------------|---------------------|---------------------|-------------------------------|
| Year | Discount Factor | | | | |
| 0 | 1.000 | \$ 739,250 | \$ 566,020 | \$ 1,305,270 | \$ 1,305,270 |
| 1 | 0.966 | \$ - | \$ 566,020 | \$ 566,020 | \$ 546,664 |
| 2 | 0.901 | \$ - | \$ 566,020 | \$ 566,020 | \$ 509,706 |
| 3 | 0.840 | \$ - | \$ 60,000 | \$ 60,000 | \$ 50,378 |
| 4 | 0.783 | \$ - | \$ 60,000 | \$ 60,000 | \$ 46,972 |
| 5 | 0.730 | \$ - | \$ 10,000 | \$ 10,000 | \$ 7,299 |
| 6 | 0.681 | \$ - | \$ 10,000 | \$ 10,000 | \$ 6,806 |
| 7 | 0.635 | \$ - | \$ 10,000 | \$ 10,000 | \$ 6,346 |
| 8 | 0.592 | \$ - | \$ 10,000 | \$ 10,000 | \$ 5,917 |
| 9 | 0.552 | \$ - | \$ 10,000 | \$ 10,000 | \$ 5,517 |
| 10 | 0.514 | \$ - | \$ 10,000 | \$ 10,000 | \$ 5,144 |
| 11 | 0.480 | \$ - | \$ 10,000 | \$ 10,000 | \$ 4,796 |
| 12 | 0.447 | \$ - | \$ 10,000 | \$ 10,000 | \$ 4,472 |
| 13 | 0.417 | \$ - | \$ 10,000 | \$ 10,000 | \$ 4,169 |
| 14 | 0.389 | \$ - | \$ 10,000 | \$ 10,000 | \$ 3,888 |
| 15 | 0.362 | \$ - | \$ - | \$ - | \$ - |
| 16 | 0.338 | \$ - | \$ - | \$ - | \$ - |
| 17 | 0.315 | \$ - | \$ - | \$ - | \$ - |
| 18 | 0.294 | \$ - | \$ - | \$ - | \$ - |
| 19 | 0.274 | \$ - | \$ - | \$ - | \$ - |
| 20 | 0.255 | \$ - | \$ - | \$ - | \$ - |
| 21 | 0.238 | \$ - | \$ - | \$ - | \$ - |
| 22 | 0.222 | \$ - | \$ - | \$ - | \$ - |
| 23 | 0.207 | \$ - | \$ - | \$ - | \$ - |
| 24 | 0.193 | \$ - | \$ - | \$ - | \$ - |
| 25 | 0.180 | \$ - | \$ - | \$ - | \$ - |
| 26 | 0.168 | \$ - | \$ - | \$ - | \$ - |
| 27 | 0.156 | \$ - | \$ - | \$ - | \$ - |
| 28 | 0.146 | \$ - | \$ - | \$ - | \$ - |
| 29 | 0.136 | \$ - | \$ - | \$ - | \$ - |
| 30 | 0.127 | \$ - | \$ - | \$ - | \$ - |
| Total | | \$ 739,250 | \$ 1,918,060 | \$ 2,657,310 | \$ 2,513,342 |

Total NPV Operating Costs \$ 1,774,092

Assumptions

1. Cost estimate is based on Arcadis U.S., Inc. (Arcadis') past experience and vendor estimates using 2018 costs.
2. Well quantities and associated numbers provided by Parratt Wolf in 2018 cost estimate.
3. Assume "active" portion of ERD is 5 years (6 injections spread out over 4 years with the 5th year required to burn out the TOC).
4. Assume it will take 2 weeks to complete injections across 10 wells and an injection event for Transect No. 1, 2, and 3 will take 12 weeks total.
5. Assume 1 full injection event in Transects 1, 2 and 3 initially spaced out 6 months apart with time between events lengthening over the course of the active remedy so that the last injection is at year 4.
6. Assume 2 crew per 1 injection for 4 events per injection and 6 days per event for lodging, per diem, transportation, and tolls/parking. Unit costs based on OU-2 rates.
7. Assume 2% Molasses by v/v injection and 50,000 gallons solution per well.
8. Assume \$2.80 per gallon for water use.
9. Assume 2 weeks to baseline sample and each semi-annual sampling event for 39 performance monitoring wells.
10. Building/Equipment/Utility installation from Beyond Contracting cost estimate.
11. Transportation & Disposal (T&D) costs are provided based on T&D for excavated remediation activities at AVX's facility in Conway, SC in 2018.
12. Assume T&D costs include direct loading into highway trucks.
13. Assume fraction splits for non-hazardous, hazardous (landfill), and hazardous (incineration) are consistent across all ERD areas.
14. Milligram per kilogram (mg/kg).
15. Unit cost for Piping provided by 2013 RSMMeans with 7.79% inflation to reflect 2019 costs.

Downgradient Groundwater - Pump and Treat
 Feasibility Study
 AVX Corporation
 Myrtle Beach, South Carolina



| Downgradient GW - Pump and Treat | Unit | Unit Price | Quantity | Extension |
|----------------------------------|------------|------------|-----------|---------------------|
| Routine Operation & Maintenance | Month | \$ 5,000 | 360 | \$ 1,800,000 |
| Laboratory Analytical | Month | \$ 1,000 | 360 | \$ 360,000 |
| Reporting | Year | \$ 6,000 | 30 | \$ 180,000 |
| Permit Renewal | Five Years | \$ 5,000 | 6 | \$ 30,000 |
| Consumables/Equipment | Year | \$ 5,000 | 30 | \$ 150,000 |
| Electricity | kWh | \$ 0.12 | 3,120,000 | \$ 374,400 |
| Total | | | | \$ 2,894,400 |

Assumptions

1. Cost estimate is based on Arcadis U.S., Inc. (Arcadis') past experience and vendor estimates using 2018 costs.
2. Assume Routine Operation & Maintenance is \$5,000 a month for 1 technician/operator twice a week.
3. Assume Pump and Treat system to operate for 30 years.
4. Assume 16 horsepower total for blower and pumps.

| 7% | Discount Rate | Capital Cost | Operating Cost | Total Costs | Total Net Present Value Costs |
|--------------|-----------------|--------------|---------------------|---------------------|-------------------------------|
| Year | Discount Factor | | | | |
| 0 | 1.000 | \$ - | \$ 96,480 | \$ 96,480 | \$ 96,480 |
| 1 | 0.966 | \$ - | \$ 96,480 | \$ 96,480 | \$ 93,181 |
| 2 | 0.901 | \$ - | \$ 96,480 | \$ 96,480 | \$ 86,881 |
| 3 | 0.840 | \$ - | \$ 96,480 | \$ 96,480 | \$ 81,007 |
| 4 | 0.783 | \$ - | \$ 96,480 | \$ 96,480 | \$ 75,531 |
| 5 | 0.730 | \$ - | \$ 96,480 | \$ 96,480 | \$ 70,424 |
| 6 | 0.681 | \$ - | \$ 96,480 | \$ 96,480 | \$ 65,663 |
| 7 | 0.635 | \$ - | \$ 96,480 | \$ 96,480 | \$ 61,224 |
| 8 | 0.592 | \$ - | \$ 96,480 | \$ 96,480 | \$ 57,085 |
| 9 | 0.552 | \$ - | \$ 96,480 | \$ 96,480 | \$ 53,226 |
| 10 | 0.514 | \$ - | \$ 96,480 | \$ 96,480 | \$ 49,627 |
| 11 | 0.480 | \$ - | \$ 96,480 | \$ 96,480 | \$ 46,272 |
| 12 | 0.447 | \$ - | \$ 96,480 | \$ 96,480 | \$ 43,144 |
| 13 | 0.417 | \$ - | \$ 96,480 | \$ 96,480 | \$ 40,227 |
| 14 | 0.389 | \$ - | \$ 96,480 | \$ 96,480 | \$ 37,507 |
| 15 | 0.362 | \$ - | \$ 96,480 | \$ 96,480 | \$ 34,972 |
| 16 | 0.338 | \$ - | \$ 96,480 | \$ 96,480 | \$ 32,607 |
| 17 | 0.315 | \$ - | \$ 96,480 | \$ 96,480 | \$ 30,403 |
| 18 | 0.294 | \$ - | \$ 96,480 | \$ 96,480 | \$ 28,348 |
| 19 | 0.274 | \$ - | \$ 96,480 | \$ 96,480 | \$ 26,431 |
| 20 | 0.255 | \$ - | \$ 96,480 | \$ 96,480 | \$ 24,644 |
| 21 | 0.238 | \$ - | \$ 96,480 | \$ 96,480 | \$ 22,978 |
| 22 | 0.222 | \$ - | \$ 96,480 | \$ 96,480 | \$ 21,425 |
| 23 | 0.207 | \$ - | \$ 96,480 | \$ 96,480 | \$ 19,976 |
| 24 | 0.193 | \$ - | \$ 96,480 | \$ 96,480 | \$ 18,626 |
| 25 | 0.180 | \$ - | \$ 96,480 | \$ 96,480 | \$ 17,366 |
| 26 | 0.168 | \$ - | \$ 96,480 | \$ 96,480 | \$ 16,192 |
| 27 | 0.156 | \$ - | \$ 96,480 | \$ 96,480 | \$ 15,098 |
| 28 | 0.146 | \$ - | \$ 96,480 | \$ 96,480 | \$ 14,077 |
| 29 | 0.136 | \$ - | \$ 96,480 | \$ 96,480 | \$ 13,125 |
| 30 | 0.127 | \$ - | \$ - | \$ - | \$ - |
| Total | | \$ - | \$ 2,894,400 | \$ 2,894,400 | \$ 1,293,748 |

Source Saturated Zone Downgradient Groundwater - Dynamic Groundwater Recirculation
 Feasibility Study
 AVX Corporation
 Myrtle Beach, South Carolina



| Source Area Saturated Zone & Downgradient - DGR | Unit | Unit Price | Quantity | Extension |
|---|-------------|--------------|-----------|---------------------|
| Mobilization/Demobilization | Lump Sum | \$ 30,000 | 1 | \$ 30,000 |
| Demolish Concrete Slab for saw cuts | Square Foot | \$ 20 | 22,700 | \$ 454,000 |
| Excavate to Depth for Trenching | Cubic Yard | \$ 40 | 681 | \$ 27,259 |
| Air Monitoring & Mitigation | Allowance | \$ 100,000 | 1 | \$ 100,000 |
| Backfill with Structural Fill | Cubic Yard | \$ 45 | 681 | \$ 30,667 |
| Site Restoration | 1000 Feet | \$ 1,500 | 11 | \$ 17,025 |
| Hand augering | Location | \$ 75 | 7 | \$ 525 |
| Drilling - 8"Borehole Hollow Stem Auger | Linear Foot | \$ 18 | 405 | \$ 7,290 |
| Split Spoon 1.5" Outer Diameter | Spoon | \$ 15 | 63 | \$ 945 |
| 6" 304 Stainless Steel screen | Foot | \$ 80 | 70 | \$ 5,600 |
| 6" Schedule 80 Riser | Foot | \$ 8 | 245 | \$ 1,955 |
| Sand Pack for 6" Well in 8" Borehole | Linear Foot | \$ 8 | 84 | \$ 672 |
| Riser backfill neat cement grout 6" Well in 8" Borehole | Linear Foot | \$ 5 | 105 | \$ 525 |
| Choker Sand for 6" Well in 8" Borehole | Linear Foot | \$ 10 | 126 | \$ 1,260 |
| 24"x24" surface vault completion | Each | \$ 1,000 | 7 | \$ 7,000 |
| Well development - one hour per well | Hour | \$ 225 | 7 | \$ 1,575 |
| Personal Protective Equipment | Per/Day | \$ 10 | 5 | \$ 45 |
| Per Diem | Crew/Day | \$ 250 | 5 | \$ 1,125 |
| Load cuttings into Truck | Hour | \$ 150 | 4 | \$ 600 |
| Decon Pad Construction | Pad | \$ 200 | 2 | \$ 400 |
| Decontamination Labor | Hour | \$ 150 | 8 | \$ 1,200 |
| Skid steer rental | Day | \$ 500 | 5 | \$ 2,250 |
| T&D Landfill Non-Hazardous | Ton | \$ 100 | 4.2 | \$ 420 |
| T&D Landfill Hazardous <60 mg/kg | Ton | \$ 575 | 0.2 | \$ 127 |
| T&D Incineration Hazardous >60 mg/kg | Ton | \$ 1,300 | 0.0 | \$ - |
| Routine Operation & Maintenance | Month | \$ 5,000 | 240 | \$ 1,200,000 |
| Sampling/Laboratory | Month | \$ 5,000 | 240 | \$ 1,200,000 |
| Electricity | kWh | \$ 0.12 | 2,600,000 | \$ 312,000 |
| Consumables/Equipment | Year | \$ 3,000 | 20 | \$ 60,000 |
| Piping | 100 Feet | \$ 775 | 23 | \$ 17,832 |
| Pumps | Each | \$ 2,500 | 7 | \$ 17,500 |
| Reporting | Year | \$ 20,000 | 20 | \$ 400,000 |
| Monitored Natural Attenuation | Year | \$ 10,000 | 10 | \$ 100,000 |
| Project Management | Lump Sum | \$ 3,901,797 | 0.05 | \$ 194,990 |
| Engineering | Lump Sum | \$ 3,899,797 | 0.05 | \$ 194,990 |
| Construction Management | Lump Sum | \$ 3,899,797 | 0.05 | \$ 194,990 |
| Total | | | | \$ 4,584,766 |

| 7% Year | Discount Rate Discount Factor | Capital Cost | Operating Cost | Total Costs | Total Net Present Value Costs |
|--------------|-------------------------------|---------------------|---------------------|---------------------|-------------------------------|
| 0 | 1.000 | \$ 1,312,766 | \$ 158,600 | \$ 1,471,366 | \$ 1,471,366 |
| 1 | 0.966 | \$ - | \$ 158,600 | \$ 158,600 | \$ 153,176 |
| 2 | 0.901 | \$ - | \$ 158,600 | \$ 158,600 | \$ 142,821 |
| 3 | 0.840 | \$ - | \$ 158,600 | \$ 158,600 | \$ 133,165 |
| 4 | 0.783 | \$ - | \$ 158,600 | \$ 158,600 | \$ 124,162 |
| 5 | 0.730 | \$ - | \$ 158,600 | \$ 158,600 | \$ 115,768 |
| 6 | 0.681 | \$ - | \$ 158,600 | \$ 158,600 | \$ 107,942 |
| 7 | 0.635 | \$ - | \$ 158,600 | \$ 158,600 | \$ 100,644 |
| 8 | 0.592 | \$ - | \$ 158,600 | \$ 158,600 | \$ 93,840 |
| 9 | 0.552 | \$ - | \$ 158,600 | \$ 158,600 | \$ 87,496 |
| 10 | 0.514 | \$ - | \$ 158,600 | \$ 158,600 | \$ 81,580 |
| 11 | 0.480 | \$ - | \$ 158,600 | \$ 158,600 | \$ 76,065 |
| 12 | 0.447 | \$ - | \$ 158,600 | \$ 158,600 | \$ 70,923 |
| 13 | 0.417 | \$ - | \$ 158,600 | \$ 158,600 | \$ 66,128 |
| 14 | 0.389 | \$ - | \$ 158,600 | \$ 158,600 | \$ 61,657 |
| 15 | 0.362 | \$ - | \$ 158,600 | \$ 158,600 | \$ 57,489 |
| 16 | 0.338 | \$ - | \$ 158,600 | \$ 158,600 | \$ 53,602 |
| 17 | 0.315 | \$ - | \$ 158,600 | \$ 158,600 | \$ 49,978 |
| 18 | 0.294 | \$ - | \$ 158,600 | \$ 158,600 | \$ 46,599 |
| 19 | 0.274 | \$ - | \$ 158,600 | \$ 158,600 | \$ 43,449 |
| 20 | 0.255 | \$ - | \$ 10,000 | \$ 10,000 | \$ 2,554 |
| 21 | 0.238 | \$ - | \$ 10,000 | \$ 10,000 | \$ 2,382 |
| 22 | 0.222 | \$ - | \$ 10,000 | \$ 10,000 | \$ 2,221 |
| 23 | 0.207 | \$ - | \$ 10,000 | \$ 10,000 | \$ 2,070 |
| 24 | 0.193 | \$ - | \$ 10,000 | \$ 10,000 | \$ 1,931 |
| 25 | 0.180 | \$ - | \$ 10,000 | \$ 10,000 | \$ 1,800 |
| 26 | 0.168 | \$ - | \$ 10,000 | \$ 10,000 | \$ 1,678 |
| 27 | 0.156 | \$ - | \$ 10,000 | \$ 10,000 | \$ 1,565 |
| 28 | 0.146 | \$ - | \$ 10,000 | \$ 10,000 | \$ 1,459 |
| 29 | 0.136 | \$ - | \$ 10,000 | \$ 10,000 | \$ 1,360 |
| 30 | 0.127 | \$ - | \$ - | \$ - | \$ - |
| Total | | \$ 1,312,766 | \$ 3,272,000 | \$ 4,584,766 | \$ 3,156,871 |

Total NPV Operating Costs \$ 1,844,105

Assumptions

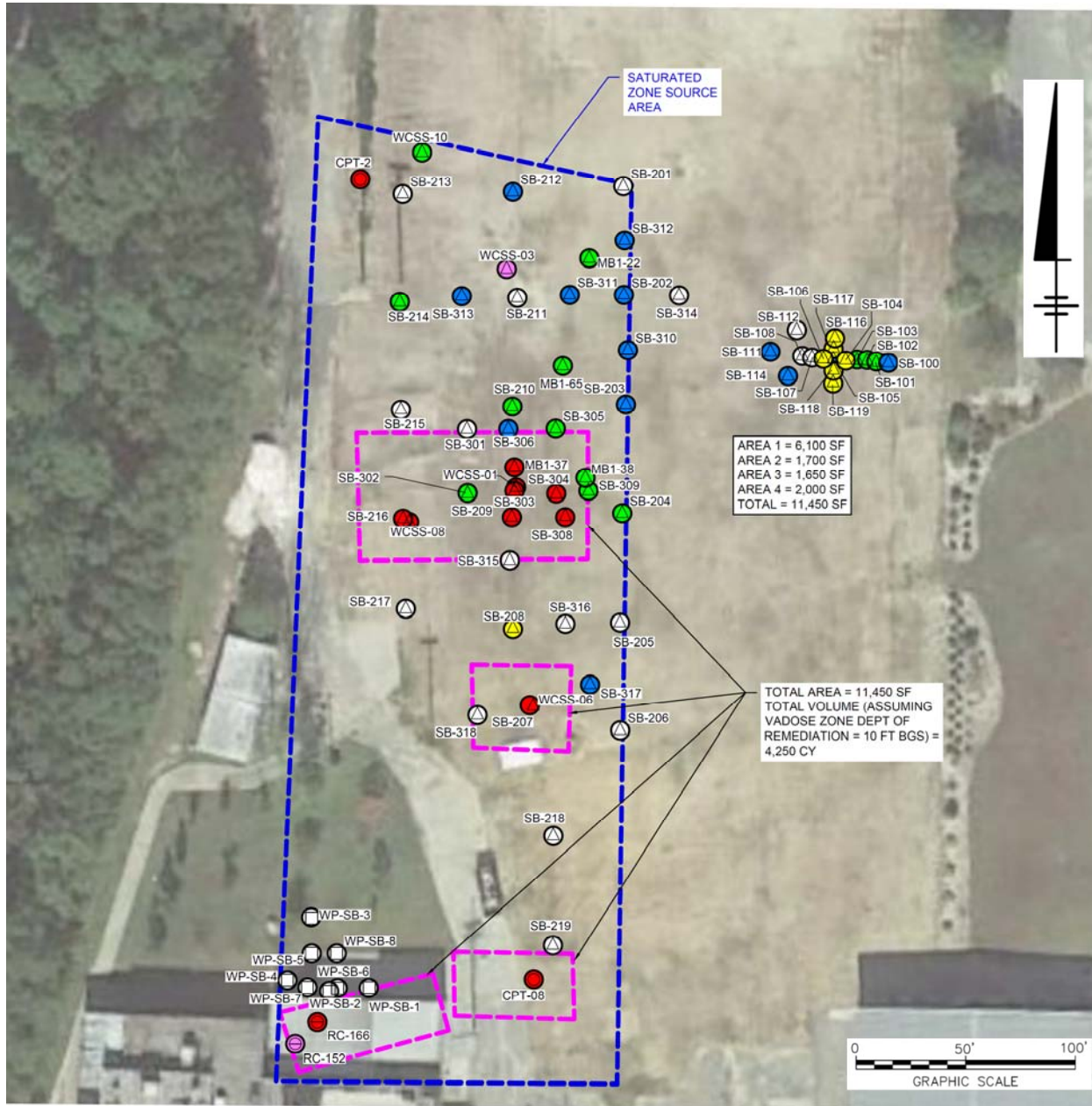
1. Cost estimate is based on Arcadis U.S., Inc. (Arcadis') past experience and vendor estimates using 2018 costs.
2. Well quantities and associated numbers provided by Parratt-Wolff in 2018 cost estimate.
3. Assume Dynamic Groundwater Recirculation to operate for 20 years.
4. Transportation & Disposal (T&D) costs are provided based on T&D for excavated remediation activities at AVX's facility in Conway, SC in 2018.
5. Assume T&D costs include direct loading into highway trucks.
6. Milligram per kilogram (mg/kg).
7. Unit cost for Piping provided by 2013 RSMeans with 7.79% inflation to reflect 2019 costs.

APPENDIX C-2

Remedial Alternative Conceptual Layout and Supporting Information



FS Target Area Soil



IN-SITU THERMAL CONCEPTUAL LAYOUT AND COSTS

AVX-Myrtle Beach

Site Background

Site Name: AVX Myrtle Beach

Remedial Objectives: Treatment of CVOC/TVOC source area impacts. (TCE and daughter products primary COCs)

Approximate Contaminant Mass: 10,000 lbs assumed as max. However, it appears that mass may be less than 2,000 lbs assuming representative concentration of 10 mg/kg across treatment zones.

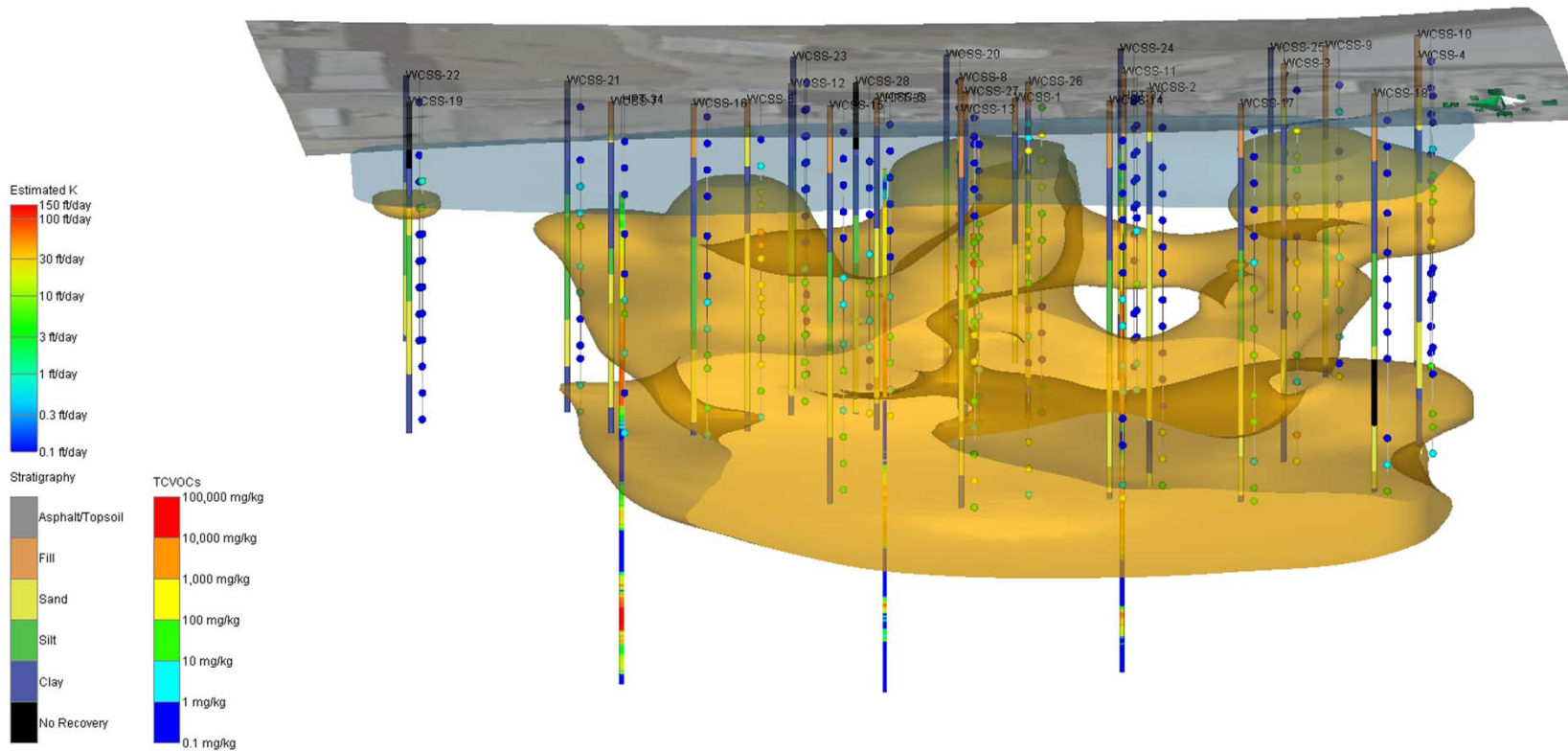
Target Treatment Area Footprint:

Treatment Depth: 5 – 25 ft bgs

Generalized Geology

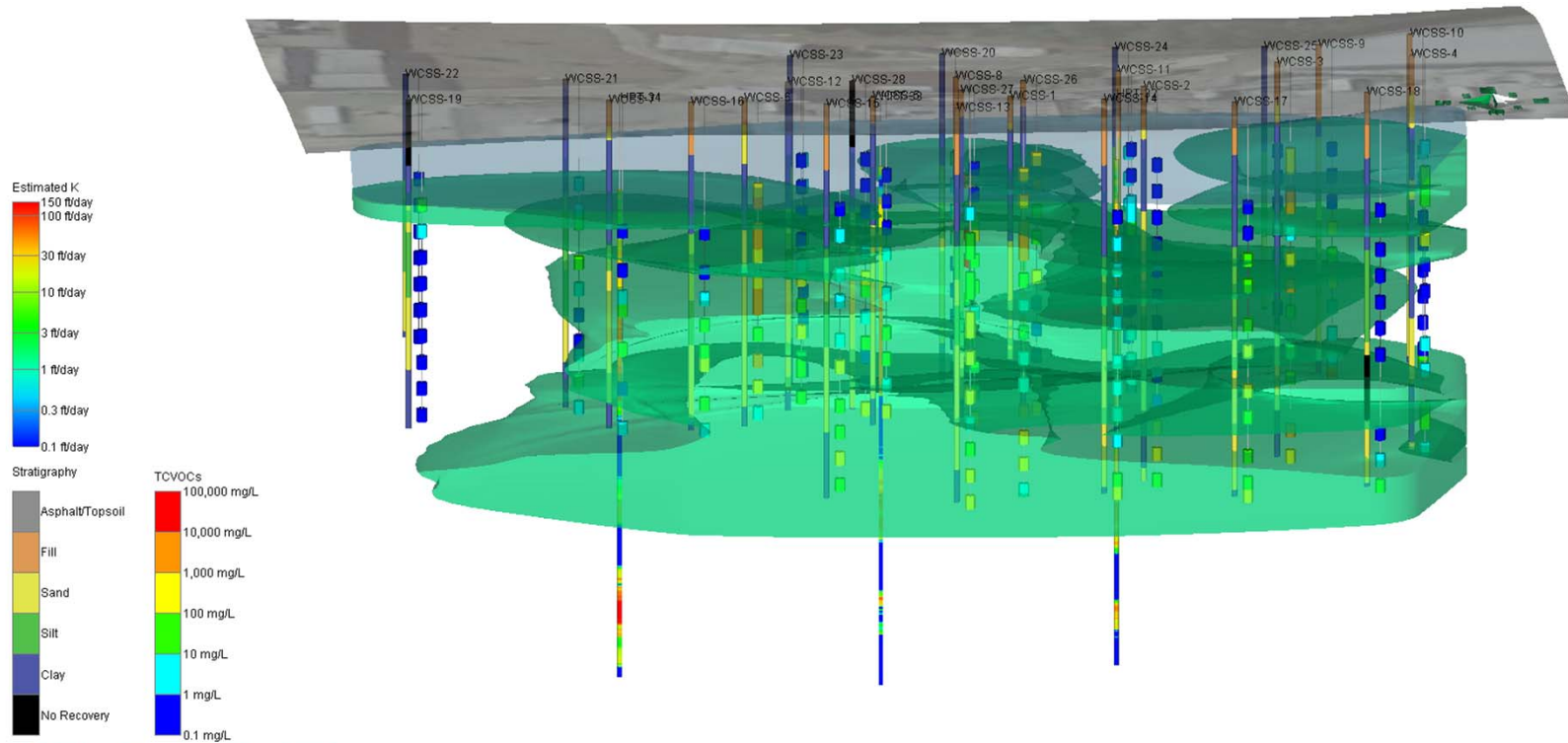
| Unit | Depth (ft bgs) | Estimated Hydraulic Conductivity (ft/day) |
|------------|----------------|---|
| Fill | 0-2 | NA |
| “Clay” 1 | 2-6 | 0.1-0.3 |
| “Silt” | 6-10 | 1-3 |
| Sand | 10-25 | 30-100 |
| Lower Clay | 25-30 | 0.1-1 |

Soil Impacts in Source Area



The light blue surface represents the water table
The orange plume represents TCVOCs above 5 mg/kg in soil.

Groundwater in Source Area



The light blue surface represents the water table
The green plume represents TCVOcs in groundwater above 5 mg/L.

Thermal Approach - Scenario 1

Thermal Treatment Approach

- Thermal treatment of entire ~58,000 ft² source area from 5-45 ft bgs – see next slide
- Combination of Electrical Resistance Heating (ERH) and Steam Enhanced Extraction (SEE)
 - ERH electrodes placed on 16 ft centers (272 total)
 - SEE injection points placed on 32 ft centers (50 total)
 - Horizontal extraction wells used as primary steam / vapor collection points (34 total)
 - MPE wells for pneumatic/hydraulic control (15 total)

Ex-situ Vapor and Liquid Treatment Approach:

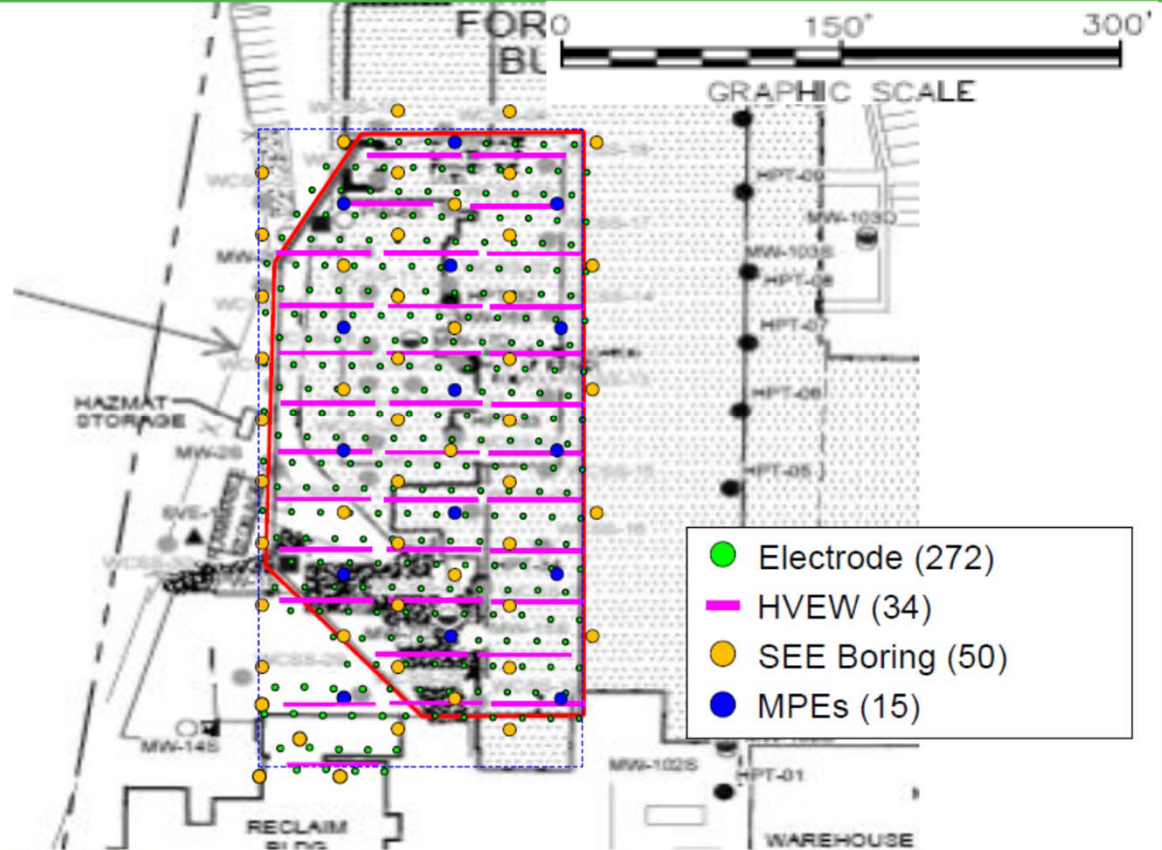
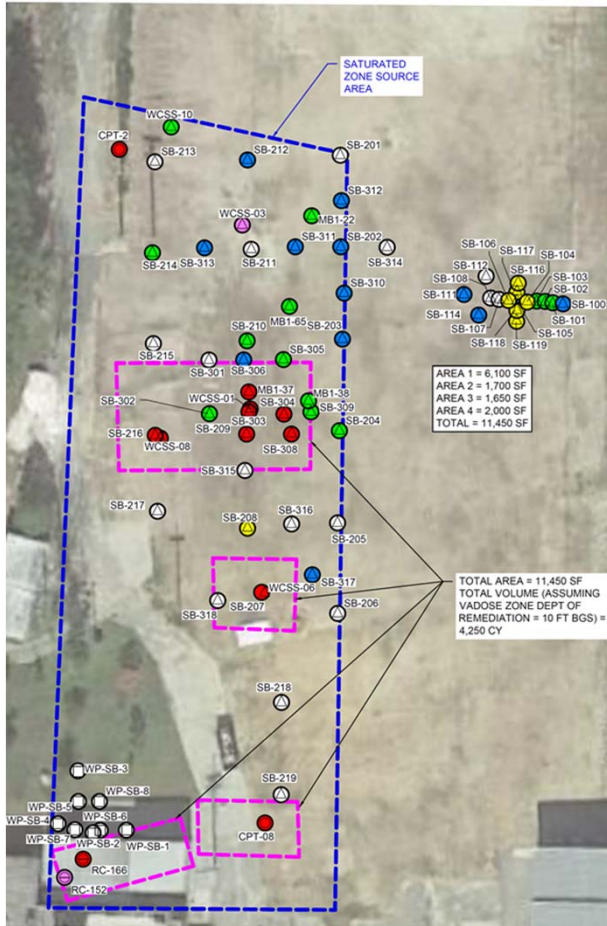
- Vapor treatment using Granular Activated Carbon (GAC),
- Extracted liquid and condensate treated using Granular Activated Carbon (GAC).

Monitoring:

- Temperature monitoring wells (40 wells) and pressure monitoring wells (11 wells) to track subsurface heating, pneumatic, and hydraulic control.
- Vapor and liquid treatment system monitoring for mass removal and discharge compliance.

Scenario 1 Source Zone and Treatment Area

Conceptual Wellfield Layout (Treatment Scenario 1)



Thermal Approach - Scenario 2

Thermal Treatment Approach

- Thermal treatment of 4 smaller/high mass areas (plus expanded footprint for better treatment) to 25 ft bgs +: Area 1 (6,100 ft²), Area 2 (1,700 ft²) and Area 3 (1,650 ft²) and Area 4 (2,000 ft²) – see next slide
- Combination of Electrical Resistance Heating (ERH) and Steam Enhanced Extraction (SEE) (more SEE/less ERH than Scenario 1)
 - ERH electrodes placed on 16 ft centers (196 total)
 - SEE injection points placed on 32 ft centers (59 total)
 - Horizontal extraction wells used as primary steam / vapor collection points (35 total)
 - MPE wells for pneumatic/hydraulic control (12 total)

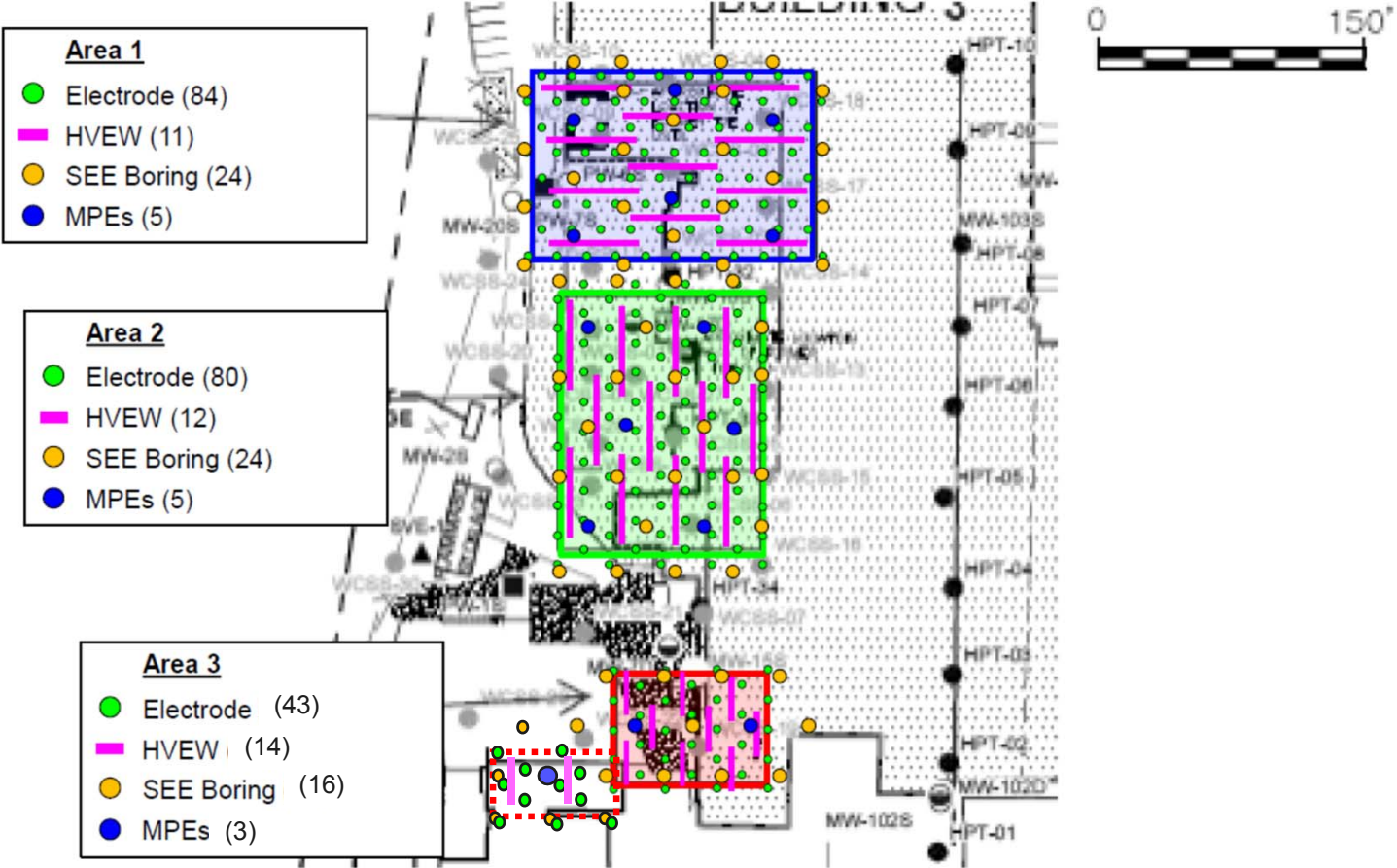
Ex-situ Vapor and Liquid Treatment Approach:

- Vapor treatment using Granular Activated Carbon (GAC),
- Extracted liquid and condensate treated using Granular Activated Carbon (GAC).

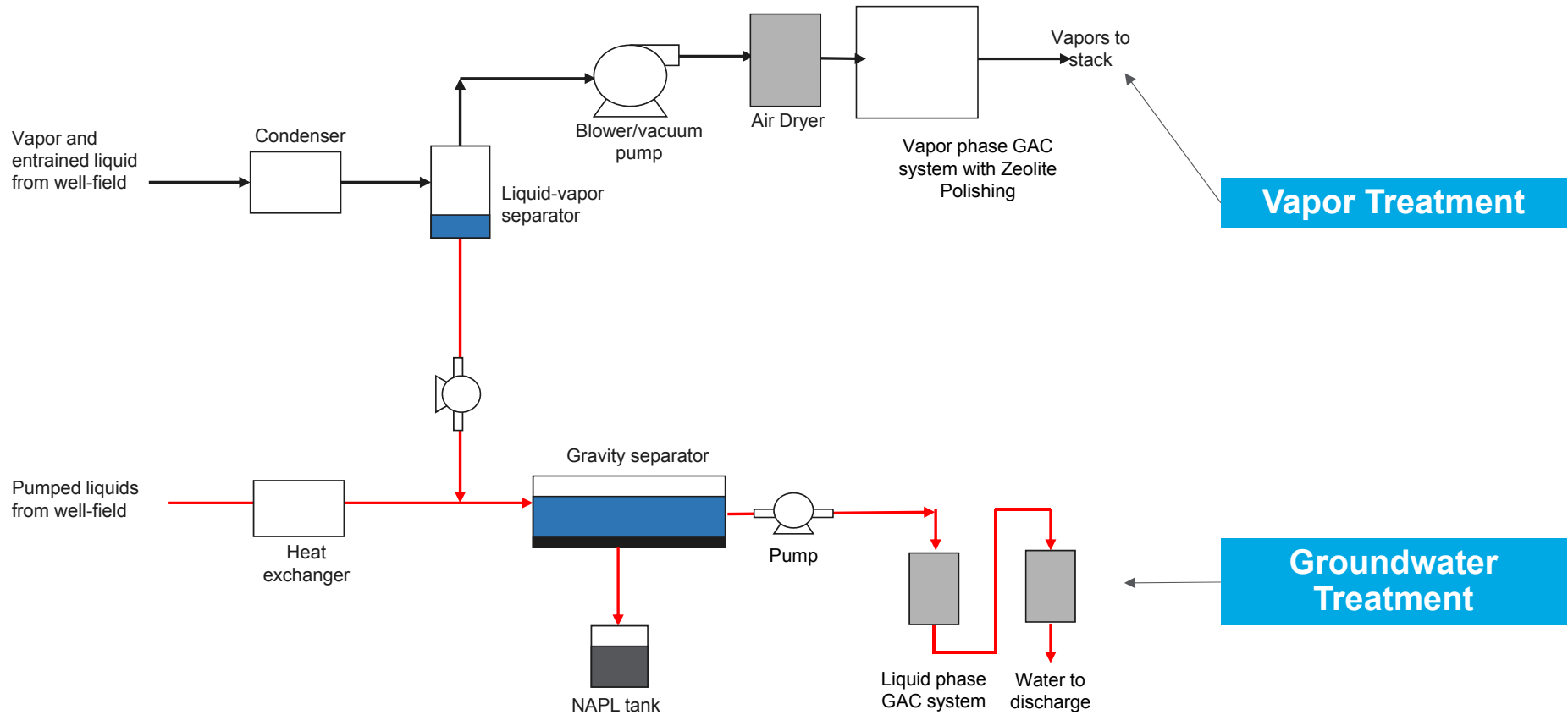
Monitoring:

- Temperature monitoring wells (40 wells) and pressure monitoring wells (16 wells) to track subsurface heating, pneumatic, and hydraulic control.
- Vapor and liquid treatment system monitoring for mass removal and discharge compliance.

Scenario 2 Layout



Vapor and Liquid Treatment System



Well Design

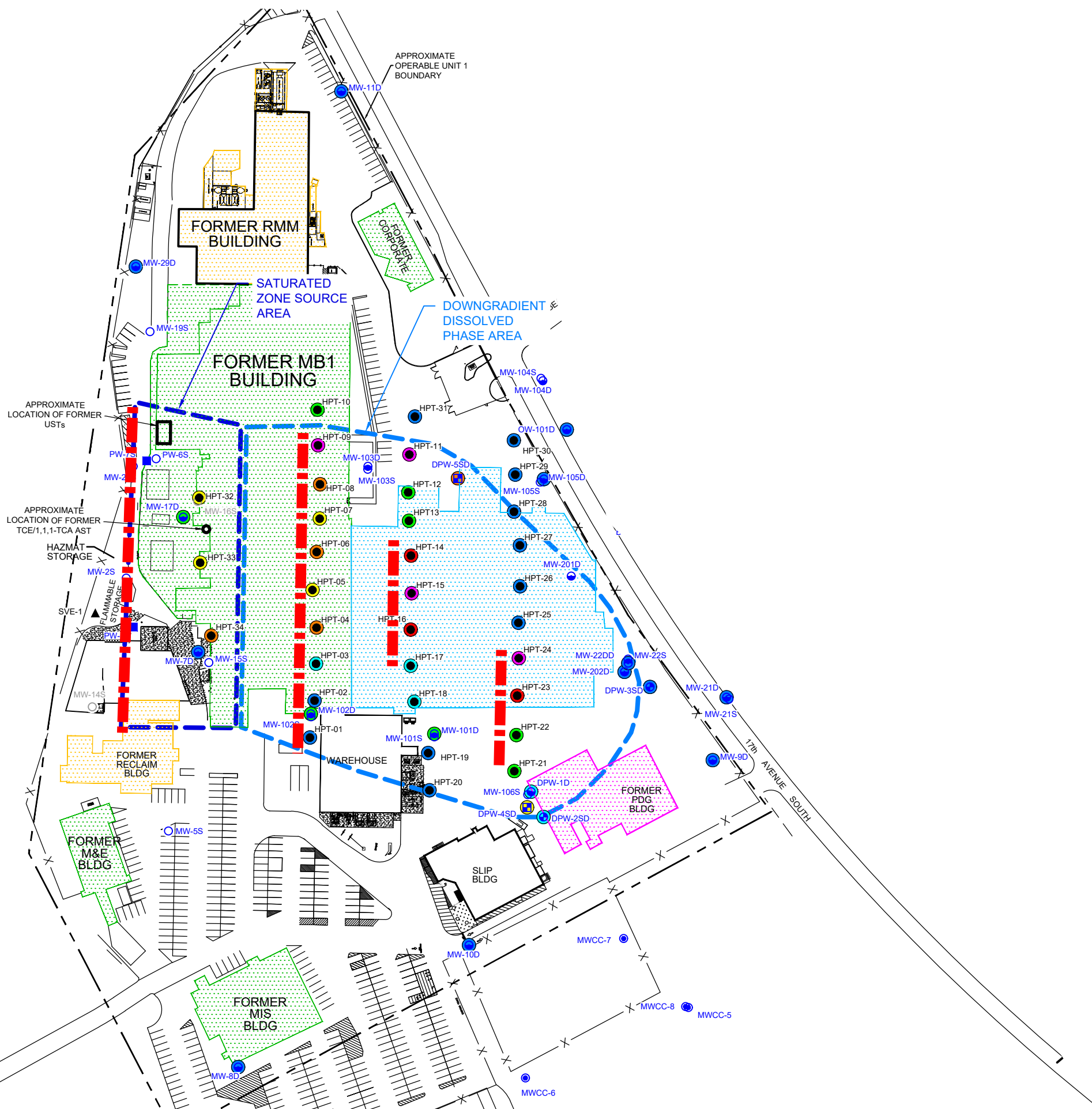
| Well Type | Scenario 1 | Scenario 2 |
|------------------------|---|---|
| Electrodes | 35 ft deep (2 electrodes per borehole) – 10-12 inch boreholes | 30 ft deep (2 electrodes per borehole) – 10-12 inch boreholes |
| Steam Injection Points | 22-28 ft deep (2 inch SS well with 1 ft screen) | 22 ft deep (2 inch SS well with 1 ft screen) |
| Horizontal Extractors | 5-6 ft deep (50 ft long, SS WW screen) | 5-6 ft deep (25-50 ft long, SS WW screen) |
| MPE Wells | 30 ft deep (4 inch dia, 25 ft SSWW screen) | 25 ft deep (4 inch dia, 20 ft SS WW screen) |
| Temperature Monitoring | 35 ft deep (1.5 inch diameter steel) | 35 ft deep (1.5 inch diameter steel) |
| Pressure Sensors | 5 ft deep (1 inch diameter SS) | 5 ft deep (1 inch diameter SS) |

Utility Requirements

| | Scenario 1 | | Scenario 2 | |
|--------------------------|---------------------------------|--------------------|----------------------------------|--------------------|
| | Rate | Total | Rate | Total |
| Electricity | Power 4,690 KW Load 5900 kVA | 15,000,000 kWh | Power 4,690 KW Load 4,000 kVA | 9,064,000 kWh |
| Gas | 200 MM BTU/day | 32,080 MM BTU | 240 MM BTU/day | 38,620 MMBTU |
| Potable Water | 15 gpm | 3,450,000 gallons | 16 gpm | 3,686,000 gallons |
| Sewer or NPDES Discharge | 45 gpm | 10,400,000 gallons | 50 gpm | 10,400,000 gallons |

Cost Estimate

| | Scenario 1 | Scenario 2 | Details |
|-----------------------|------------------------|------------------------|--|
| Design | \$ 290,000.00 | \$ 290,000.00 | Arcadis and subcontractor fees for design report/package |
| Procurement | \$ 160,000.00 | \$ 140,000.00 | purchase of expendable equipment/supplies (well materials, cabling, piping, etc) |
| Construction | \$ 5,700,000.00 | \$ 4,400,000.00 | Drilling, vapor cap, installation of treatment systems |
| Operation | \$ 1,900,000.00 | \$ 1,900,000.00 | rental of equipment, misc supplies, sub and Arcadis labor |
| Laboratory Analytical | \$ 50,000.00 | \$ 50,000.00 | GW and vapor samples for process monitoring |
| Utilities | \$ 1,960,000.00 | \$ 1,320,000.00 | electricity (\$.12/kWh) and gas \$3.12/MMBTU) |
| Demobilization | \$ 565,000.00 | \$ 440,000.00 | remove equipment and abandon wells |
| Total | \$10,625,000.00 | \$ 8,540,000.00 | |



LEGEND:

- MONITORING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- MONITORING WELL SCREENED IN THE LOWER TERRACE DEPOSITS
- MONITORING WELL SCREENED IN THE PEEDEE FORMATION
- MONITORING WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- FORMER PUMPING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- PRODUCTION WELL SCREENED IN THE UPPER & LOWER TERRACE DEPOSITS
- CARMIKE WELL LOCATION SCREENED IN THE UPPER TERRACE DEPOSITS
- ▲ FORMER SOIL VAPOR EXTRACTION WELL SCREENED IN THE UPPER TERRACE DEPOSITS
- ABANDONED MONITORING WELL
- DEMOLISHED BUILDING (2018)
- DEMOLISHED BUILDING (2015)
- DEMOLISHED BUILDING (2012)
- DEMOLISHED BUILDING (2009)

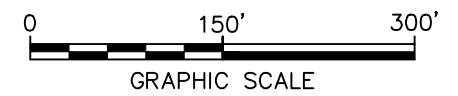
TCE CONCENTRATIONS IN µg/L

- >50,000
- 10,000 – 50,000
- 5,000 – 10,000
- 500 – 5,000
- 50 – 5000
- 5 – 50
- <5 MCL

Approx. Location of Injection Well Transects

NOTES:

1. THE RELATIONSHIPS BETWEEN INVESTIGATION LOCATIONS AND OTHER FEATURES LIKE ROADS, BUILDINGS AND WATER FEATURES ARE APPROXIMATE.
2. COLORS ASSOCIATED WITH DATA POINTS REPRESENT THE MOST RECENT DATA AVAILABLE FOR THAT LOCATION.

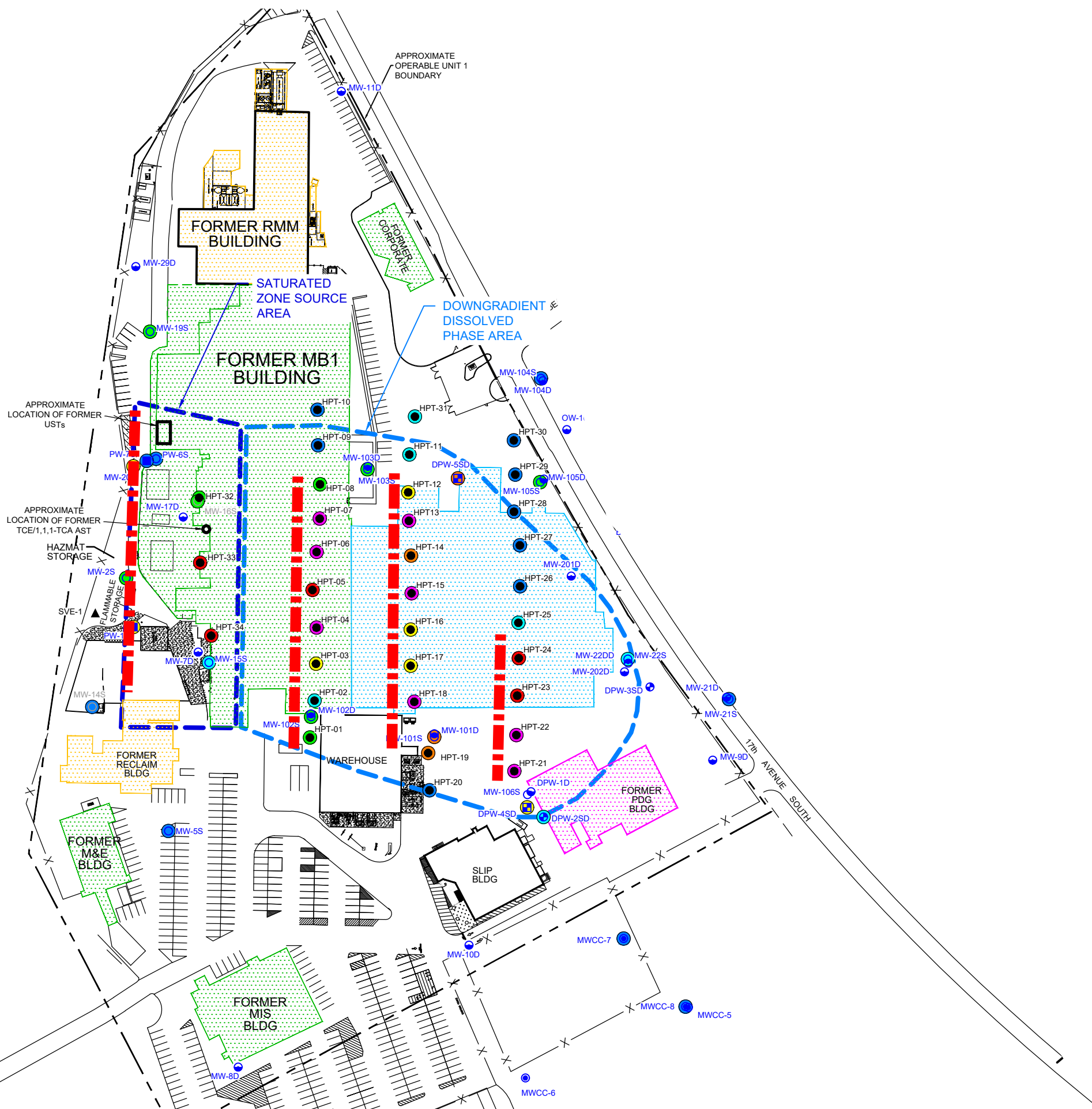


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**ERD CONCEPTUAL LAYOUT - LOWER
 TERRACE DEPOSITS**

ARCADIS Design & Consultancy
 for natural and built assets

FIGURE

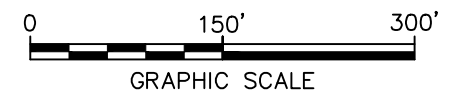


- LEGEND:**
- MONITORING WELL SCREENED IN THE UPPER TERRACE DEPOSITS
 - MONITORING WELL SCREENED IN THE LOWER TERRACE DEPOSITS
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Approx. Location of Injection Well Transects

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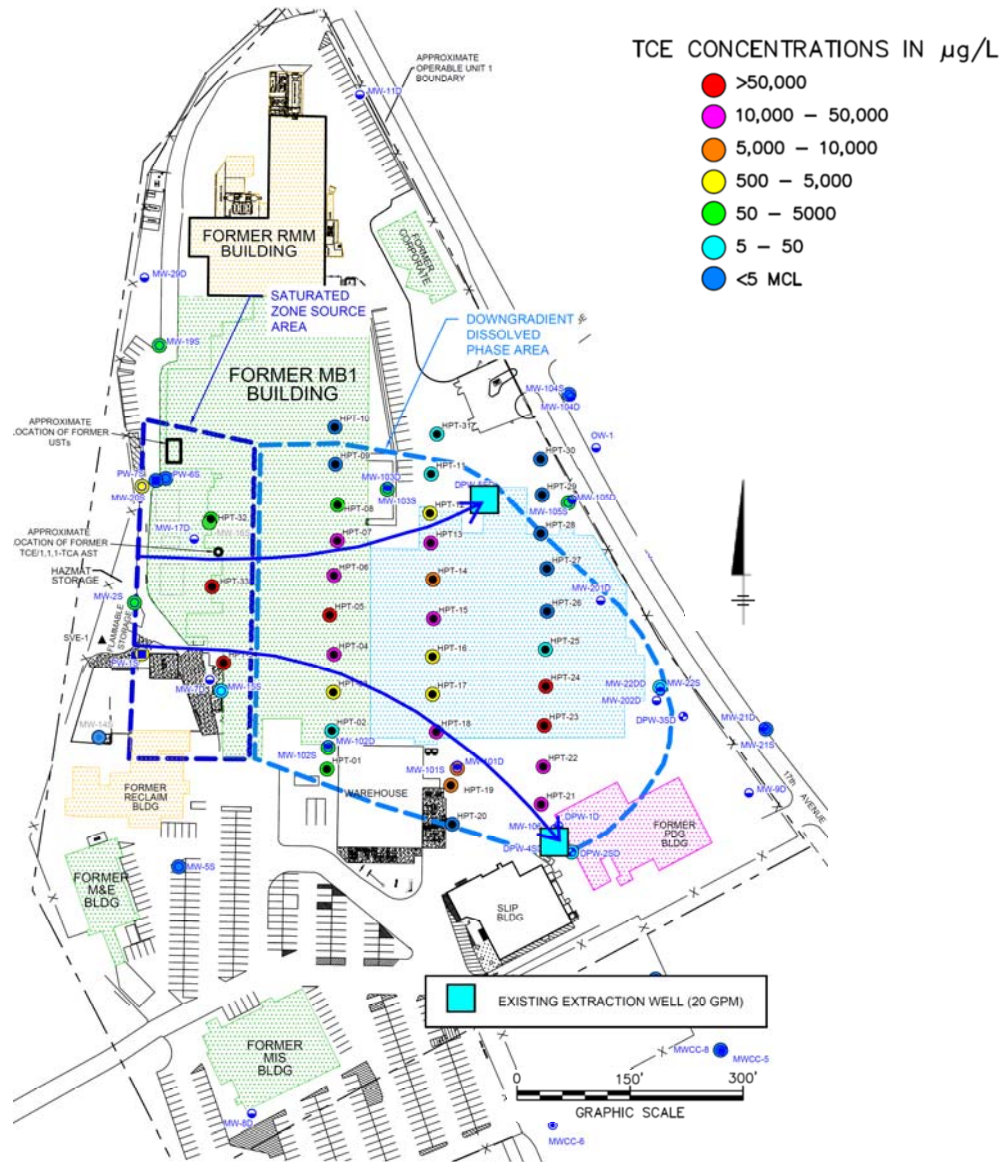
**ERD CONCEPTUAL LAYOUT - UPPER
 TERRACE DEPOSITS**

ARCADIS Design & Consultancy
 for natural and built assets

FIGURE

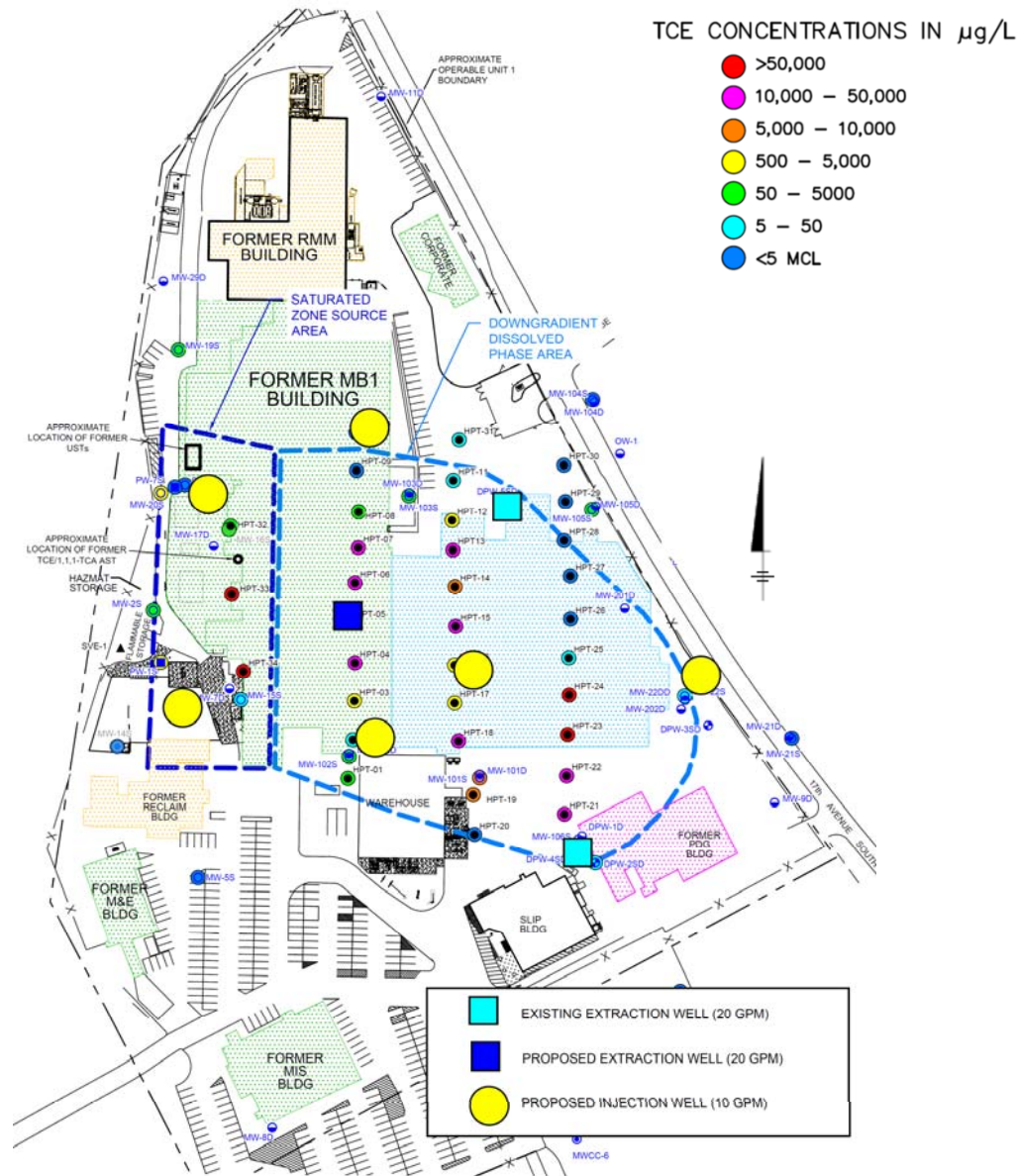
Groundwater Alternatives

Pumping and Treatment Conceptual Layout



Groundwater Alternatives

Dynamic Groundwater Recirculation Conceptual Layout



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