S.C. Department of Health and Environmental Control

Proposed Plan for Site Remediation

Itron

1310 Emerald Road
Greenwood, South Carolina

October 2021

ANNOUNCEMENT OF PROPOSED PLAN

The South Carolina Department of Health and Environmental Control (DHEC or the Department) has completed an evaluation of cleanup alternatives to address source area contamination at the former Itron facility (the Site). This Proposed Plan identifies DHEC's preferred Alternative for cleaning up the contaminated area and provides the reasoning for this preference. In addition, this Proposed Plan includes summaries of the other cleanup alternatives evaluated. These alternatives were identified based on information gathered during environmental investigations conducted at the Site since 2011.

The Department is presenting this Proposed Plan to inform the public of our activities conducted at the Site, gain public input, and fulfill the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (National Contingency Plan or NCP). This Proposed Plan summarizes information that can be found in greater detail in the Revised Feasibility Study (June 2019) and other documents contained in the Administrative Record file. The Department encourages the public to review these documents to gain an understanding of the Site and the activities that have been completed.

The Department will select a final cleanup remedy after reviewing and considering comments submitted during the public comment period. The Department may modify the Preferred Alternative or select another response action presented in this Proposed Plan based on new information or public comments. Therefore, the public is encouraged to review and comment on all the alternatives presented in this Proposed Plan.

DHEC's Preferred Cleanup Summary
Alternative 6: Excavation and ISCO

DHEC's preferred remedial option includes:

- Excavation and Disposal with In Situ Chemical Oxidation (ISCO) using PersulfOx ;
- Monitored Natural Attenuation with Institutional Controls

MARK YOUR CALENDAR

❑ PUBLIC MEETING:

When: November 4, 2021, 6:30 PM

Where: Virtual meeting
http://www.dhec.sc.gov/Itron

DHEC will hold a virtual public meeting to explain the Department's preferred remedial alternative for cleanup and to discuss all cleanup alternatives presented in the Source Area Focused Feasibility Study. After the Proposed Plan presentation, DHEC will provide opportunity for the public to ask questions Oral and written comments will be accepted at the meeting and following the meeting during the public comment period.

❑ PUBLIC COMMENT PERIOD:

November 4, 2021 through January 14, 2022

DHEC will accept written comments on the Proposed Plan during the public comment period. Please submit your written comments to:

Cynde Devlin, Project Manager
SC DHEC Bureau of Land & Waste Management
2600 Bull Street
Columbia, SC 29201
devlincl@dhec.sc.gov

❑ FOR MORE INFORMATION:

Call: Cynde Devlin, Project Manager, 803-898-0816

See: DHEC's website at:
http://www.dhec.sc.gov/Itron

View: The Administrative Record at the following locations:
http://www.dhec.sc.gov/Itron

Greenwood County Library
600 Main Street, Greenwood, SC 29646
(864) 941-4650
Hours: Monday & Tuesday 9 am - 8 pm
Wednesday - Friday 9 am – 5:30 pm
Saturday & Sunday Closed

DHEC Freedom of Information Office
2600 Bull Street, Columbia, SC
(803) 898-3817
Monday - Friday: 8:30 am - 5:00 pm

SITE HISTORY

The Itron site is located on approximately 24 acres 3 miles northeast of the town of Greenwood in a light industrial and residential area at 1310 Emerald Road, Greenwood, South Carolina. The site is located on the southern side of Emerald Road at the intersection of Parkland Place Road. A Seaboard Railroad line runs east-west just north of Emerald Road.

The facility consists of a 130,000 square foot building. The facility manufactures flow meters for industrial and municipal uses and stores pre-formed brass, stainless steel, steel and aluminum parts on site. Additional materials manufactured at the facility include electronic circuit boards, wiring, casings and other components. Site features include office space, a parking area, production areas, loading docks, an oil water separator, a maintenance shop and shipping and receiving areas.

Prior to 1972, the site was used for agricultural purposes. The current building was constructed in 1972 by Neptune Carolina Inc. to manufacture flow meters. In April 1972, Neptune Carolina Inc. transferred ownership of the property to Greenwood County. While the property was owned by Greenwood County for nearly 30 years, the manufacturing of flow meters continued under the operation of Allied Signal, Wheelabrator Frye and Schlumberger Industries. In September 2001, the ownership of the Site changed from Greenwood County to Schlumberger Industries. Schlumberger transferred ownership of the site to Actaris U.S. Liquid Measurement in October 2001. Itron acquired Actaris in 2008. Itron is currently leasing the facility to Red Seal Measurement and retains ownership of the building and property.

A Phase I Environmental Assessment conducted in December 2011 identified possible areas of concern. In 2012, a Phase II Environmental Assessment included installation of soil borings and temporary groundwater monitoring wells which identified tetrachloroethene (PCE) and PCE degradation products in soil and groundwater exceeding regulatory screening levels. Additional investigations were conducted for indoor air, soil and groundwater in 2012. DHEC and Itron entered into a Responsible Party Voluntary Cleanup Contract 13-6078-RP on October 2, 2013.

A 2014 Remedial Investigation (RI) advanced soil borings within and adjacent to the on-site building and a debris pile located in a wooded area east of the building in addition to permanent shallow and deep groundwater monitoring wells. The RI identified potential source areas with the highest concentrations in the vicinity of the Steel Sump and Cardboard Storage Area. A Supplemental Remediation Investigation Report (Nov 2015) included the installation of additional monitoring wells to define the extent of groundwater impacts. An Addendum to the Supplemental Remediation Investigation Report was submitted in March 2017 which presented results of additional groundwater investigation in combination with relevant data obtained in previous investigations. A comprehensive groundwater sampling and analysis event was conducted in April of 2019 for all existing monitoring wells. Groundwater in the shallow aquifer contains PCE as high as 95,000 ug/l, intermediate aquifer ranges from 450 ug/l to 14,000 ug/l and deeper aquifer concentration are as high as 170 ug/l.

Collective results of investigations identified source areas in the Steel Sump area located on the southeast side of the building and the Cardboard Storage Area located east of the on-site building. PCE is the primary contaminant of concern at the site with lower concentrations of trichloroethene (TCE), cis 1,2 dichloroethene, petroleum hydrocarbons and polynuclear aromatic hydrocarbons (PAHs) in soil and groundwater.

AREAS OF CONCERN

The main areas of concern at the site include the Steel Sump Area located near the southeast corner of the on-site building and the Cardboard Storage Area located east of the building. Soil and groundwater contamination have been identified at both locations based on several phases of investigation.

The Steel Sump Area exhibits the highest levels of PCE contamination. Soil concentrations are above the soil screening level (SSL) for PCE which indicates a risk to groundwater. Concentrations of PCE in soil range from 5 mg/kg to 2,600 mg/kg in near surface soils (0-3 feet bgs). Additional VOCs detected in soil samples collected from the Steel Sump Area exceeded applicable screening criteria for 1,1-dichloroethene, 1,1,2-trichloroethane and trichloroethene. Groundwater monitoring wells MW-6 and MW-7, located in the Steel Sump Area, contain PCE concentrations of 4,300 ug/l and 95,000 ug/l (April 2019) respectively which is above the MCL of 5 ug/l.

PCE contamination is also evident in the Cardboard Storage Area. Soil contamination exceeds levels for the protection of groundwater for PCE. PCE concentrations range from 5.4 mg/kg to 1,300 mg/kg in near surface soils (0 to 4 feet bgs). Naphthalene, ethylbenzene, benzo(a)pyrene and benzo(b)fluoranthene also exceeded SSLs at various locations. Groundwater monitoring wells MW-17 and MW-3, located near the Cardboard Storage Area, contain PCE at concentrations of 190 ug/l and 63 ug/l respectively. MW-3 also contains additional VOCs above MCLs.

SUMMARY OF SITE RISKS

Contamination from operations at the Itron site have been released to soil and groundwater. The latest analytical data indicates volatile organic compounds (VOCs) in soil and groundwater above regulatory standards.

The primary risk to the public and the environment is from direct ingestion or exposure to contaminated soil and/or groundwater on-site. Data collected to date indicates that contamination is contained on-site therefore there is no direct receptor beyond the property boundary. Preferred alternatives identified in this Proposed Plan and the Feasibility Study are necessary to protect public health and the environment from actual or threatened releases of hazardous substances to the environment.

CLEANUP GOALS

Remedial action objectives (RAOs) are developed in order to set goals for protecting human health and the environment. The goals should be as specific as possible, but should not unduly limit the range of remedial alternatives that can be developed. Accordingly, the following RAOs were developed for the Site:

1. Restore groundwater to MCLs (maximum contaminant level).

2. Prevent exposure of human and ecological receptors to impacted soil and groundwater above applicable standards.

The remediation goals for contaminated groundwater at the site are the Environmental Protection Agency (EPA) Maximum Contaminant Levels (MCLs) for drinking water or the Tap Water Screening Levels in EPA's Regional Screening Level tables if a MCL does not exist.

SCOPE AND ROLE OF THE ACTION

The proposed actions in this Proposed Plan will be the final cleanup action for the Site. The remedial action objectives (RAOs) for these proposed actions include removing contaminated soil to reduce the potential for contamination to leach to groundwater, minimizing the time required for groundwater contaminants of concern to reduce below MCLs, and to further mitigate and control the migration of contaminants through groundwater.

SUMMARY OF REMEDIAL ALTERNATIVES

Based on information collected during previous investigations, *a Revised Source Area Focused Feasibility Study* (AECOM, June 2019) was conducted to identify, develop, and evaluate options and remedial alternatives to address the contamination at the Site. This evaluation considered the nature and extent of contamination and associated potential human health risks developed during the remedial investigations and associated studies to determine and evaluate potential remedial alternatives and their overall protection of human health and the environment. Each remedial alternative evaluated by the Department is described briefly below. Note: A final Remedial Design will be developed prior to implementation of any alternative.

Table 1. SUMMARY OF REMEDIAL ALTERNATIVES	
Alternative	**Description**
1: No Action	• No action for soil • No action for groundwater • Cost: $0
2: Monitored Natural Attenuation (MNA) and Institutional Controls (ICs)	• Monitor natural degradation of COCs in groundwater with existing monitoring network • Implement restrictions on land and groundwater use • Cost: Approximately $610,000
3: Excavation and Disposal with MNA/ICs	• Excavate impacted soils • Monitor natural degradation of COCs in groundwater with existing monitoring network • Implement restrictions on land and groundwater use • Cost: $2,868,000
4: *In-Situ* Remediation using BOS 100 with MNA/ICs	• Inject BOS 100 into the subsurface to degrade chlorinated contaminants in soil and groundwater • Monitor natural degradation of COCs in groundwater to address residual contamination following in situ remediation • Implement restriction on land and groundwater use • Cost: $1,428,000
5: *In-Situ* Chemical Oxidation (ISCO) using PersulfOx with MNA/ICs	• Inject PersulfOx into the subsurface to chemically oxidize chlorinated contaminants in soil and groundwater • Monitor natural degradation of COCs in groundwater to address residual contamination following in situ chemical oxidation • Implement restrictions on land and groundwater use • Cost: 1,378,000
6: Excavation and Disposal Combined with In Situ Chemical Oxidation (ISCO) using PersulfOx	• Excavate impacted soils • Inject PersulfOx into the subsurface to chemically oxidize chlorinated contaminants in soil and groundwater • Monitor natural degradation of COCs in groundwater to address residual contamination following in situ chemical oxidation • Implement restrictions on land and groundwater use • Cost: $3,693,000

DESCRIPTION OF ALTERNATIVES

Alternative 1 - No Action

The No Action alternative is required by the National Contingency Plan to be carried through the screening process, as it serves as a baseline for comparison of the other remedial action alternatives.

The no action alternative does not include any on-site or legal controls or actions for soil or groundwater at the site. This alternative would not be protective of the environment and would take an unreasonable time to achieve remedial action objectives. There is no cost associated with implementing this alternative.

Alternative 2 – Monitored Natural Attenuation (MNA) and Institutional Control (ICs)

Monitored Natural Attenuation (MNA) is a passive approach that monitors the natural degradation or reduction in contaminant concentrations in groundwater. Groundwater chemistry and contaminants of concern are monitored to continually evaluate and confirm that natural degradation is occurring. A groundwater sampling and analysis plan would be developed to monitor remedy performance.

Institutional Controls (ICs) would include restrictions on land use, development, and groundwater use.

The 50 year present worth for this alternative is estimated at $610,000. This cost includes quarterly sampling and analysis for year 1 and annual sampling and analysis for years 2 through 30 for twenty eight (28) monitoring wells. Parameters analyzed would include volatile organics, nitrate, sulfate, methane, ethane, ethene, chloride, ferrous iron, total organic carbon and alkalinity.

Alternative 3 – Excavation and Disposal with MNA and ICs

Contaminated soils near the southeast corner of the Building and beneath the Cardboard Storage Area would be excavated to mitigate leaching of contamination into groundwater. Non-impacted fill would be used to backfill the excavation. Contaminated soil would be transported to a permitted off-site treatment and/or disposal facility.

MNA and ICs would be used following excavation of soils to address contamination in groundwater.

Present worth for this alternative is estimated to be $2,868,000.

Alternative 4 – In Situ Chemical Remediation using BOS 100 with MNA and ICs

BOS 100 is a Trap and Treat In Situ Remediation technology specifically designed to degrade chlorinated solvents through abiotic means. BOS 100 is made from food grade carbon impregnated with metallic iron formed under reducing conditions at a high temperature. For this alternative BOS 100 is mixed with water to a create a slurry and injected into the subsurface using direct push technology. The slurry can be employed in the source area and throughout the groundwater contaminant plume. More than one application may be necessary to reach remedial goals.

MNA and ICs would be used to address residual groundwater contamination following treatment.

The present worth is estimated to be $1,428,000. for this alternative.

Alternative 5- In Situ Chemical Oxidation (ISCO) using PersulfOx with MNA and ICs

PersulfOx is a sodium persulfate compound with a built-in patented catalyst that oxidizes chlorinated contaminants in the subsurface. PersulfOx would be injected into the subsurface at varying depths near the Steel Sump area and beneath the cardboard storage room and throughout the groundwater contaminant plume.

MNA and ICs would be used to address residual groundwater contamination following treatment. The present worth for this alternative is estimated to be $1,378,000.

Alternative 6- Excavation and Disposal Combined with In Situ Chemical Oxidation (ISCO) using PersulfOx with MNA and ICs

Alternative 6 combines excavation and disposal of contaminated soils near the southeast corner of the building and the cardboard storage area as described in Alternative 3 with sub surface injections of PersulfOx as described in Alternative 5. The present worth for this alternative is estimated to be $3,693,000.

EVALUATION OF ALTERNATIVES

The National Contingency Plan requires the Department use specific criteria to evaluate and compare the different remediation alternatives individually and against each other in order to select a remedy. This section of the Proposed Plan profiles the relative performance of each alternative against the criteria, noting how it compares to the other options under consideration. The criteria are:

1. Overall protection of human health and the environment;
2. Compliance with Applicable or Relevant and Appropriate Requirements (ARARs);
3. Long-term effectiveness and permanence;
4. Reduction of toxicity, mobility, or volume through treatment
5. Short-term effectiveness;
6. Implementability;
7. Cost; and
8. Community acceptance

The main objectives for the preferred remedial action are to be protective of human health and the environment and to comply with State and Federal regulations. These two objectives are considered *threshold criteria*. Threshold criteria are requirements each alternative must meet in order to be eligible for selection.

The following measures are considered *balancing criteria*: long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and cost. These criteria are used to weigh the technical feasibility, strengths and weaknesses, and cost advantages and disadvantages of each alternative.

Community acceptance of the cleanup alternative and the other considered alternatives is a *modifying criterion* that will be carefully considered by the Department prior to final remedy selection.

COMPARATIVE ANALYSIS OF ALTERNATIVES

A comparative analysis of each alternative was performed. The alternatives were evaluated in relation to one another for each of the evaluation criteria. The purpose of the analysis is to identify the relative advantages and disadvantages of each alternative. The alternatives are ranked from 1 to 6 (1 being the lowest) and the comparative analysis is illustrated in Table 2.

Note: Although Alternative 1 (No Action) does not meet the threshold criteria, it is retained for discussion because it provides a baseline for comparing the other alternatives to the criteria outlined above.

Overall Protection of Human Health and the Environment

When evaluating alternatives in terms of overall protection of human health and the environment, consideration is given to the way site-related risks are eliminated, reduced, or controlled through treatment, engineering controls, or institutional controls.

Alternatives 1 (No Action) does not achieve the remedial action objectives and provides the least protection of human health and the environment because no measures would be implemented to eliminate potential pathways for human exposure to contaminants in soil or groundwater. Alternative 2 (MNA and ICs) would rely on annual groundwater sampling to monitor the extent of contamination but does not include implementation of active remediation.

Alternative 3 (Excavation and Disposal with MNA and ICs) removes contaminants that remain in the subsurface but does not address groundwater contamination. Alternatives 4 and 5 (In Situ Chemical Remediation using BOS 100 and ISCO using PersulfOx) are expected to be protective of human health and the environment by reducing concentrations of PCE in groundwater, however, these technologies do not address the contamination that remains in soil.

Alternative 6 (Excavation and disposal of contaminated soils combined with In Situ Chemical Oxidation (ISCO) monitored natural attenuation and institutional controls) receives the highest score for protection of human health and the environment. This alternative removes contamination that remain in the soil drastically reducing leaching of contaminants to groundwater. The use of ISCO in the treatment area is expected to reduce concentrations of PCE and degradation products in groundwater.

Compliance with ARARs (Applicable or Relevant and Appropriate Requirements)

This evaluation criterion evaluates whether an alternative meets federal and state environmental statutes and regulations that pertain to the site. Each alternative is evaluated with respect to its ability to comply with such requirements.

Alternatives 1 does not meet regulatory limits for soil and groundwater in acceptable time frames since no active remediation would be conducted. Alternatives 2 through 6 would meet regulatory limits within various time frames. However, Alternative 6 ranks highest for meeting regulatory limits because it combines soil removal and treatment of contaminated groundwater offering the best overall time frame for attaining remedial goals.

Long-Term Effectiveness and Permanence

The magnitude of residual risk remaining from untreated impacted media or treatment residuals and the adequacy and reliability of containment systems and institutional controls are evaluated under this criterion.

Alternative 1 and Alternative 2 are the least effective long term because these remedies do not involve any active remediation therefore extending the length of time soil and groundwater contamination remain. Alternative 3 only addresses removal of contaminant mass through soil removal and does not address groundwater contamination extending the time frame to reach remedial action objectives. Alternatives 4 and 5 address groundwater contamination but do not address source area soil contamination extending the length of time to reach RAOs. Alternative 6 receives the highest score because it combines removal of contaminated soil which would act as a continuing source of groundwater contamination and treatment of contaminated groundwater.

Reduction of Toxicity, Mobility, or Volume through Treatment (TMV)
The degree to which an alternative employs treatment to reduce the harmful effects of contaminants, their ability to move in the environment, and the amount of contamination present is evaluated by this criterion.

Alternatives 1 and 2 do not employ treatment of groundwater or soil therefore would not result in reduction of toxicity, mobility, or volume of contamination. Alternatives 3 provides a reduction of contaminant mass in soil but does not address toxicity or mobility of groundwater contamination. Alternatives 4 and 5 treat only the existing groundwater contamination leaving the source in place. Alternative 6 reduces toxicity, mobility, and volume of contamination by removing source mass in soil and treating contamination in groundwater using treatment through in situ chemical oxidation.

Short-Term Effectiveness
The short-term effectiveness evaluation takes into consideration any risk the alternative poses to on-site workers, the surrounding community, or the environment during implementation, as well as the length of time needed to implement the alternative.

Alternative 1 and 2 do not involve any active remedial activities so no short-term risks exist to on-site workers or the community. Alternatives 3 through 6 do include active remediation and would involve a temporary disturbance at the site during soil excavation and amendment injections, however, proper use of personal protective equipment and adherence to a site-specific health and safety plan by on-site workers would minimize or eliminate impacts.

Implementability
The analysis of implementability considers the technical and administrative feasibility of remedy implementation, as well as the availability of required materials and services.

There are no technical or administrative limitations to implementing the Alternatives 1 and 2 because these alternatives do not involve any remedial activities and require minimal materials or services. Alternatives 3 through 6 require excavation, transportation, disposal and/or injection of amendments all of which have been successfully used to remediate similar sites in similar geologic settings. These services are commonly implemented and there are ample experienced contractors to perform these services.

Cost
The cost criterion includes estimated initial capital costs and annual O&M costs, as well as a present worth cost evaluation. Present worth cost is the total cost of an alternative over time in terms of today's dollar value. Cost estimates are expected to be accurate within a range of -30% to +50%.

Alternative 1	$0
Alternative 2	$610,000
Alternative 3	$2,868,000
Alternative 4	$1,428,000
Alternative 5	$1,378,000
Alternative 6	$3,693,000

Community Acceptance
Community acceptance of the preferred remedy will be evaluated after the public comment period. Public comments will be summarized and responses provided in the Responsiveness Summary Section of the Record of Decision document that will present the Department's final alternative selection. The Department may choose to modify the preferred alternative or select another remedy based on public comments or new information.

SUMMARY OF THE DEPARTMENT'S PREFERRED ALTERNATIVE

The Department has identified a preferred alternative to address the contamination in both soil and groundwater at the Site. The preferred remedial alternative is Alternative 6 which combines excavation and disposal of contaminated soil with in situ chemical oxidation using subsurface injections of PersulfOx along with Monitored Natural Attenuation and Institutional Controls.

Contaminated soils near the southeast corner of the Building and beneath the cardboard storage area would be excavated to mitigate leaching of contamination to groundwater. Non-impacted fill would be used to backfill the excavation. Contaminated soil will be transported to a permitted off-site treatment and/or disposal facility. Mass contaminant removal will prevent further leaching of contamination into groundwater. PersulfOx is a sodium persulfate compound with a built-in patented catalyst that oxidizes chlorinated contaminants in the subsurface. PersulfOx would be injected into the subsurface at varying depths near the steel sump area and beneath the cardboard storage room and throughout the groundwater contaminant plume. MNA and ICs would be used to address residual groundwater contamination following treatment.

The total estimated net present worth of this alternative combination is approximately $3.7M.

It is the Department's judgment that the Preferred Alternative identified in this Proposed Plan is necessary to protect public health and the environment.

Table 2. COMPARISON OF REMEDIAL ALTERNATIVES TO EVALTATION CRITERIA

Remedial Options	Overall Protection of Human Health And the Environment		Compliance with ARARs		Short Term Effectiveness		Long Term Effectiveness		Reduction of Toxicity, Mobility & Volume through Treatment		Implementability		Total Score	Cost
No Action	Provides no protection	1	Will not meet	1	Provides no remedial effects	1	Provides no remedial effects	1	Provides no remedial effects	1	Easily implemented	6	11	No Cost
Monitored Natural Attenuation (MNA) and Institutional Controls (ICs)	ICs restrict use of land and groundwater.	3	Will not meet analyte specific remedial goals within 50 years.	3	Not effective in the short term	1	Long term residuals expected to persist. Would take greater than 50 years to be effective.	2	Reduction in volume, toxicity and mobility of contaminants likely to take greater than 50 yrs.	2	Easy to implement.	4	15	$610,000
Excavation and Disposal with MNA and ICs	Removes impacted soil in source area.	4	COCs expected to meet standards in 20 yrs with removal of source material. Land Disturbance permit may be required.	4	Excavation anticipated to accelerate decreasing groundwater contaminant concentrations	3	Combination of active (excavation) and passive MNA expected to assist in meeting RGs	3	Excavation of residual source material removes mass and reduces COCs.	3	No excessive coordination required.	2	19	$2,868,000
In-Situ Chemical Remediation using BOS100 with MNA and ICs	Reduces concentrations of COCs. Natural attenuation expected to remediate remaining impacts to groundwater	6	RGs expected to be met in groundwater within 10 yrs. Underground Injection Control permit required.	6	Expected to reduce contamination in source area and plume.	3	Combination of active (in situ chemical remediation) and passive (MNA) expected to meet RGs.	5	Injection expected to reduce toxicity, mobility, and volume of contamination	4	Injectate making contact with targeted COCs in dense silts and saprolite is difficult. Injection points will be close together.	5	29	$1,428,000
In-Situ Chemical Oxidation (ISCO) using PersulfOx with MNA and ICs	Reduces concentrations of COCs in treatment area. ICs would restrict use of land and groundwater.	6	RGs expected to be met within 10 years. UIC permit required.	6	Expected to reduce contamination in source area and plume.	4	Combination of active (ISCO) and passive (MNA) expected to meet RGs.	5	Contaminants are reduced. Natural attenuation expected to assist in reducing toxicity and mobility of contamination.	5	Difficult to get injectate to make contact with target COCs in dense silts and saprolite. Injection points will be close together.	5	31	$1,378,000
Excavation and Disposal combined with ISCO using PersulfOx with MNA and ICs	Removes impacted soil in source area. Reduces concentrations of COCs in treatment area and groundwater.	6	RGs expected to be met within 10 years. Land disturbance permit and UIC permit needed.	6	Groundwater contaminant concentrations expected to decrease immediately after excavation and injection.	6	Combination of active (ISCO and excavation) and passive (MNA and IC) expected to meet RGs in 10 yrs.	6	Excavation would remove mass acting as a source. ISCO would address groundwater contamination.	6	Difficult to get injectate to target COCs. Injection points will be close together.	3	33	$3,693,000

USE THIS SPACE TO WRITE YOUR COMMENTS

Your input on the Proposed Plan for the Itron Site is important. Comments provided by the public are valuable in helping DHEC select a final cleanup remedy.

You may use the space below to write your comments, then fold and mail. Comments must be postmarked by January 14, 2022. If you have any questions, please contact Cynde Devlin at 803-898-0816. You may also submit your questions and/or comments electronically to: devlincl@dhec.sc.gov

Name _____ Telephone _____

Address _____ Email _____

City _____

State _____ Zip _____

Figure 1: Site Location

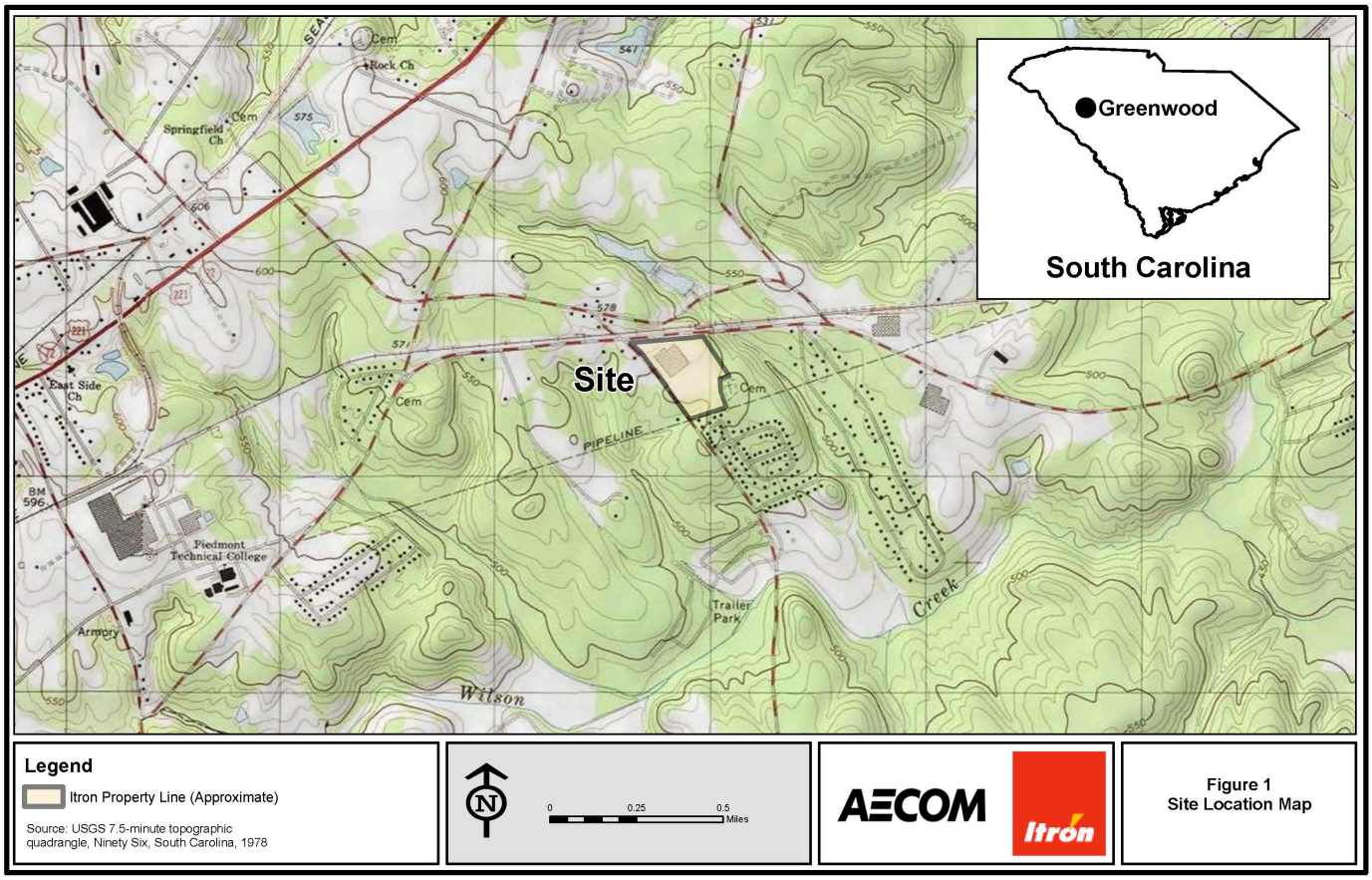

Figure 2: Distribution of Contaminants of Concern

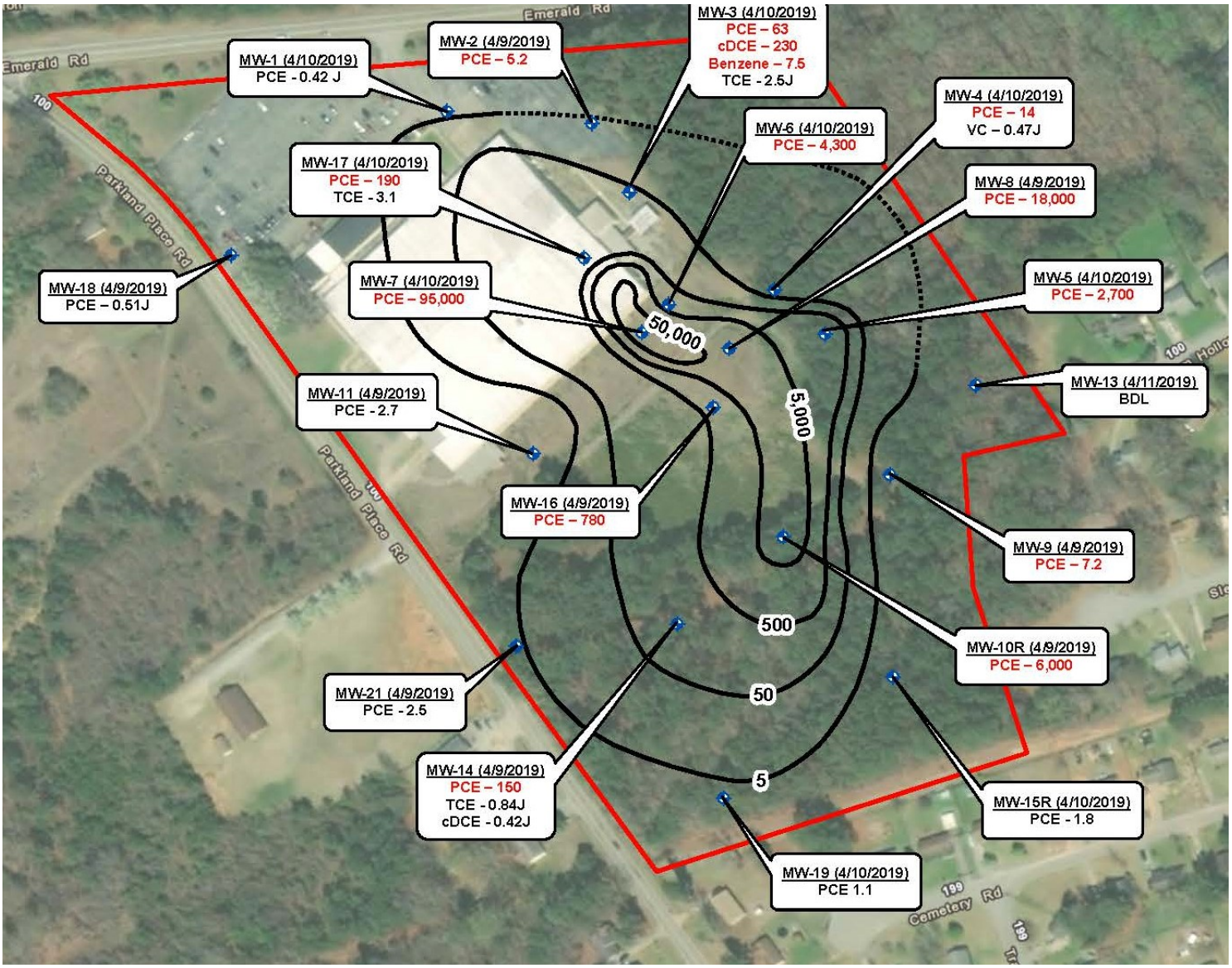

Figure 3: Alternative 6- Excavation and Disposal Combined with In Situ Chemical Oxidation (ISCO) using PersulfOx with MNA and ICs