403139

D H E C

PROMOTE PROTECT PROSPER

Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

TO: Tim Hornosky, PG
State Remediation Section

FROM: Sandra Snyder
Federal Remediation Section

THOUGH: Susan Fulmer, PG, Manager
Federal Remediation Section

DATE: September 4, 2015

RE: Wix Filtration Corporation, LLC
Remedial Investigation Report Addendum

On August 31, 2015, a copy of 'Remedial Investigation Report Addendum' (Report) dated August 20, 2015, for Wix Filtration Corporation, LLC (Wix) was submitted for review. The Report was prepared by the Wix consultant, WSP USA Corporation (WSP). During a review of the Report, the following information was ascertained.

Wix began manufacturing fuel filters, oil filters and air filters for use in a variety of engines in 1977. Historically, the company prepared toluene-containing paints in a portion of the facility. Wix has records of toluene storage at the facility but does not have records of chlorinated solvents being used at the facility.

According to the Report, workers detected a paint-like odor in shallow soil material while performing repairs to an underground water line. Wix collected eight soil samples and three groundwater samples and analyzed them for volatile organic compounds (VOCs). Elevated toluene concentrations and other VOCs were detected in both soil and groundwater samples. Wix disclosed these results to SCDHEC thereafter. Ongoing work has continued between Wix and SCDHEC in order to bring Wix into compliance with state and federal regulations.

Due to the VOC contamination in shallow groundwater and the possibility of vapor intrusion (VI) inside the facility, three sub-slab vapor samples were collected in April 2014 from an area inside the building where chemicals were stored and were analyzed. A Human Health Risk Assessment (HHRA) identified compounds of potential concern (COPCs), PCE and TCE specifically. Ten additional vapor samples inside the building were collected in April 2015 in order to further characterize the extent of the chlorinated VOCs in sub-slab vapor and fill data gaps.

The results with the highest COPC concentration from all thirteen samples from the 2014 and 2015 sampling events were evaluated. WSP entered the data into the EPA's June 2015 "Office of Solid Waste and Emergency Response (OSWER) Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air"

(Technical Guide; EPA 2015) spreadsheet to calculate VI Carcinogenic Risk and VI Hazard Quotient value for non-carcinogens.

The Report states that an estimated total for VI Carcinogenic Risk from the sub-slab vapor as a result of vapor intrusion to indoor air quality is 2.0×10^{-6}. The Report continues to state that a Hazard Index of 0.58 was calculated for potential exposures of non-cancer hazards of COPCs. The COPC having the highest VI Carcinogenic Risk was PCE with a calculated risk of 1×10^{-6}. The remaining COPCs had a calculated risk of less than 1×10^{-6}.

After reviewing all of the data contained in the Report, utilizing the EPA's spreadsheet calculator (the Vapor Intrusion Screening Level (VISL) Calculator and VISL Users Guide) to recalculate and verify the risks, we have concluded that the information contained in the Report appears accurate.