## Georgia Department of Natural Resources

**Environmental Protection Division** 

2 Martin Luther King, Jr. Dr., S.E., Suite 1054 East, Atlanta, Georgia 30334 Judson H. Turner, Director

Land Protection Branch Phone: 404/657-8600 FAX: 404/657-0807



January 6, 2015

Re:

Edspen, LLC c/o Mr. Louis Silverstein 2568 Central Avenue Augusta, Georgia 30904

## VIA EMAIL AND REGULAR MAIL

Silverstein's Cleaners, HSI Site Number 10875 Martinez, Georgia; Columbia County

Dear Mr. Silverstein:

The Georgia Environmental Protection Division (EPD) has completed its review of the above-referenced document, submitted pursuant to the Georgia Voluntary Remediation Program Act (the Act). Our comments are provided below:

Comments on Voluntary Remediation Program Semiannual Report 1 - September 2014

- 1. As stated in our March 6, 2014, Supplemental Comments on Voluntary Investigation and Remediation Plan Addendum, an additional source area may be present on site near the southern boundary, in the vicinity of SB-26, SB-27, and MW-9. Remedial efforts should include that area of the site. Soil and groundwater tetrachloroethene (PCE) concentrations at those locations suggest the presence of dense non-aqueous phase liquid (DNAPL) in the subsurface. Accordingly, a DNAPL-source-zone investigation may be warranted. We note that following the most recent groundwater sampling event, the analytical laboratory had to dilute the MW-9 groundwater sample due to the extremely high concentration of PCE present in the sample matrix.
- 2. Points of Exposure and associated Points of Demonstration, as defined under the VRP Act, will need to be identified in at least two directions, and possibly more. EPD disagrees with the assertion in Section 3.1 that historical potentiometric data indicates a groundwater-flow direction across the site to the southeast. Historical data indicates a semi-radial pattern of groundwater flow, to the west, northwest, north, and northeast. Furthermore, groundwater contamination believed to have originated from Silverstein's was initially detected east of the site, on a nearby McDonald's property. The presence of chlorinated solvents in McDonald's groundwater suggests that groundwater-flow directions on site have changed over time, or that groundwater-flow directions on site, as currently and historically depicted, are incorrect.
- 3. Please submit calculations for the Type 1 soil risk reduction standards (RRSs) presented in Table 2.5.1, including calculations and an RRS for isopropyl benzene (cumene), which is listed in that table but for which no RRS is presented. When calculating RRSs, please obtain toxicity factors from the latest version of the US EPA Region 3 Screening Level Summary Table. Where necessary, obtain input values for specific physical and chemical properties of a substance from the latest version of the US EPA Region 3 Screening Level Chemical Specific Parameters Table. Both tables can be accessed on the Internet at: http://www.epa.gov/reg3hwmd/risk/human/rb-concentration\_table/Generic\_Tables/index.htm.
- 4. The Type 1 groundwater RRSs presented in Table 2.5.2 are acceptable for use at the site, except for chloroform, whose Type 1 groundwater RRS should be 80 ug/L.

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- 5. Please provide subsurface cross-sections intersecting the source areas on site, including MW-9 on the south. EPD believes that cross-sections could aid in remedial design. The cross-sections should depict the upper level of the saturated zone, soil horizons in the vadose zone, and should specify contaminant concentrations in vadose-zone soil and in groundwater.
- 6. Please construct a map depicting volatile organic compound concentrations at the various soil-sample locations on site. Also, indicate the estimated lateral extent of PCE in soil via contours. Different colored contours may be used to depict differing depths below ground surface, where needed.
- 7. Delineation of soil contamination is incomplete to the south. Relatively high concentrations of PCE were present in soil samples obtained from SB-26 and SB-27. Additional soil sampling south of those two locations will be required.
- 8. Delineation of groundwater contamination is incomplete in the following compass directions:
  - a. north of MW-12
  - b. east of MW-3
  - c. east of the former location of MW-10
  - d. south of MW-9
  - e. west of MW-8

Off-site access and installation of additional monitoring wells will be required to complete horizontal delineation of groundwater contamination.

- 9. Vertical delineation of groundwater contamination is incomplete. Installation of a vertical-delineation well, preferably within a source area, will be required.
- 10. Please note that EPD allows low-flow/low-volume sampling (micropurging) on a case-by-case basis, and preferably then only in high permeability formations. During future groundwater sampling events, please use a traditional multiple volume purge, as described in Section 3.2.1 of the USEPA Region 4 groundwater sampling operating procedures (OPs), "Procedure SESDPROC-301-R3, Groundwater Sampling," effective March 6, 2013. At a minimum, three well volumes should be purged prior to sampling, unless the well runs dry. Please note that the pump intake should initially be positioned near the top of the water column, and then slowly lowered, to accommodate drawdown, until the water column stabilizes. The OPs can be accessed on the Internet at <a href="http://www.epa.gov/region4/sesd/fbqstp">http://www.epa.gov/region4/sesd/fbqstp</a>.
- 11. Regarding the groundwater sampling logs in Appendix B:
  - a. On the logs for wells MW-2, MW-3, MW-4, MW-8, and MW-9, the specified depths of the pump intake were greater than the specified total depths of the wells, which is impossible.
  - b. On the log for well MW-12, the specified depth to water is greater than 19 feet, whereas the specified depth of the pump intake is 13 feet, which would place the pump intake above the water column.
  - c. In future reports, please include the depths to the top and bottom of screened intervals on the groundwater sampling logs.

To verify that proper groundwater-sampling protocol was followed, EPD must be confident that data presented on the groundwater-sampling logs are accurate and complete. Otherwise, groundwater-analytical data may be disallowed and resampling will be required.

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- 12. In future reports, please include the depths to the top and bottom of screened intervals on Table 1: Summary of Groundwater Elevation Measurements.
- 13. The groundwater scientist certification and signature page lacked the seal of the certifying professional. All reports containing groundwater data and interpretation must bear both the signature and seal of a professional geologist or engineer registered in the State of Georgia, along with the certifying groundwater scientist statement. Within 10 days of the date on this letter, please provide a complete groundwater scientist certification for VRP Semiannual Report 1, containing the signature and seal of a currently registered groundwater professional, along with the accompanying groundwater-scientist statement.

Edspen, LLC must address these comments to EPD's satisfaction in order to demonstrate compliance with the provisions, purposes, standards, and policies of the Act. EPD may, at its sole discretion, review and comment on documents submitted by Edspen, LLC. However, failure of EPD to respond to a submittal within any timeframe does not relieve Edspen, LLC from complying with the provisions, purposes, standards, and policies of the Act.

If you have any questions, please contact Allan Nix of the Response and Remediation Program at (404) 657-8600.

Sincerely,

David Brownlee Unit Coordinator

Response and Remediation Program

Denny Dobbs, Peachtree Environmental

c: