GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Land Protection Branch
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September 18, 2017

Pilot Travel Centers, LLC
c/o Joey Cupp, Senior Environmental Manager
5508 Lonas Road
Knoxville, Tennessee 37909

VIA FIRST-CLASS MAIL AND EMAIL

Re: Comments on VRP Semiannual Progress Reports 1, 2, and 3
Pilot Wastewater Treatment Plant, HSI Site Number 10929
LaGrange, Georgia; Troup County

Dear Mr. Cupp:

The Georgia Environmental Protection Division (EPD) is in receipt of VRP Semiannual Progress Reports 1, 2, and 3, dated May 5, 2016, November 29, 2016, and May 24, 2017, respectively, for the Pilot Wastewater Treatment Plant site. The documents were submitted to EPD pursuant to the Georgia Voluntary Remediation Program Act (the Act), O.C.G.A. 12-8-100. Our comments are provided below.

1. In the next semiannual progress report, please provide a delineation table specifying which standards are going to be used for site delineation criteria of soil and groundwater for each regulated substance released (see Section 12-8-108 of the Act). EPD requested a delineation table in Comment 2 of our November 6, 2015, Supplemental Comments on Voluntary Remediation Program Application of July 8, 2015. That table was not included in VRP Semiannual Progress Report 1, 2, or 3.
2. EPD notes that horizontal and vertical delineation of contaminants in groundwater has not yet been achieved (assuming delineation to Type 1/3 groundwater risk reduction standards). Horizontal delineation will require installation of additional wells to the east and west of the former wastewater treatment pond, possibly outside the property lines. Vertical delineation will require installation of one or more deep wells within the most contaminated area of the site.
3. EPD already approved a remedial plan in our Voluntary Investigation and Remediation Plan (VIRP) and Application approval letter of November 6, 2015. Specifically, EPD approved a groundwater pump-and-treat system, combined with ultraviolet light and/or ozone and/or chemical oxidation, with corrective-action measures to be discussed with EPD prior to implementation. However, Section 3.0 of Semiannual Progress Report 3 states that a corrective action plan (CAP) will be submitted to EPD to provide a detailed remedial strategy. Any revisions to the previously approved VIRP must be submitted to EPD in the form of a VIRP Amendment, which will be subject to EPD review prior to approval.
4. Concentrations of 1,4-dioxane have declined dramatically in some wells from one sampling event to the next. If this trend continues, a detailed analysis of existing site hydrogeological data or additional investigatory work in the subsurface may be required. For example, the concentration of 1,4-dioxane in MW-7 dropped from 36,100 ug/L in October 2016 to 116 ug/L (laboratory estimate) in March 2017. EPD does not believe this to be normal behavior for dissolved VOCs in groundwater. Please ensure that proper groundwater purging and sampling

protocols are being followed. In future reports, if a large discrepancy in 1,4-dioxane concentrations is observed in a well between the previous and current sampling event, please provide a possible explanation.

5. The source of the 1,4-dioxane in soil, groundwater, and pond water on site is still unknown. EPD has learned that some sodium polyacrylate absorbent compounds contain 1,4-dioxane. Please inquire of the manufacturer of the absorbent material, to definitively rule out the possibility of 1,4-dioxane being present in the absorbent material used to clean up sludge from the wastewater pond. EPD has the MSDS previously provided to us by Pilot, which does not indicate 1,4-dioxane is a constituent of the absorbent material used in the pond. However, we would prefer confirmation from the manufacturer that the substance is not present in its product.

6. All risk reduction standard (RRS) values must be approved by EPD. In the next semiannual report, please provide a table of applicable RRS values for each regulated substance released on site. Include all calculations associated with obtaining those values. RRS values provided should include, at a minimum, those used for site delineation and for remedial goals. When calculating RRS values, please obtain toxicity factors from the latest version of the US EPA Regional 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 Regional Screening Level Chemical Specific Parameters Table. Both tables can be accessed on the Internet at https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-june-2017.

7. Contrary to what is stated in Section 2.3 of Semiannual Progress Reports 1 and 2, chloroform does have an established groundwater RRS. The Type 1/3 groundwater RRS for that substance is 0.08 mg/L (see "Trihalomethanes" in Appendix III, Table 1, of the HSRA Rules).

8. The following substances are not regulated under HSRA or the VRP, and can therefore be excluded from future laboratory analysis:

   a. 1,2,4-trimethylbenzene

   b. 1,3,5-trimethylbenzene

   c. Benzyl alcohol

   d. Bromochloromethane

   e. Ethyl alcohol (ethanol)

   f. Tert-butylbenzene

9. Please install at least two additional piezometers to better identify the probable point of entry (PPE) for contaminated-groundwater discharge into the creek. Surface-water-sampling locations can then be modified, to improve the chances of detecting impact to water in Long Cane Creek from groundwater on site. Based upon data presented on Figure 4 in Semiannual Progress Report 3, one preferred location for a new piezometer would be closer to the creek bank, southwest of PZ-1 and southeast of MW-14.

10. The current table format for groundwater analytical results, as presented in the appendices of the semiannual progress reports, is not conducive to tracking contaminant trends in each well over time. EPD recommends revising the table format to list wells and associated sampling dates in a column on the left, with individual laboratory analytes listed on or near the top row of the table. EPD will provide an example of such a table upon request.

11. In the Applicable Standards column on Tables 2 and 5 in Semiannual Progress Report 3, the abbreviation "NE" is listed several time, but is not defined anywhere in the table headers or notes. On tables in future reports, please provide a definition for each abbreviation.

12. Please provide soil-concentration maps in all future reports which depict the soil sampling history at the site. The map or maps should specify sampling locations, regulated substances detected, and the associated concentrations. These maps will aid EPD in tracking regulatory compliance with regard to soil.

13. Please indicate the sampling locations of surficial soil samples SS-1 through SS-6, obtained from the overspill areas, on a figure in future reports. Bullet items in Section 1.0 of Semiannual Progress Reports 1, 2, and 3 state that the locations from which those surficial soil samples were obtained are indicated on Figure 3. However, EPD could not find reference to those samples on any figure in the appendices of the reports.

14. Please clearly label the wastewater treatment plant influent and effluent sampling locations on a figure in future reports

15. On figures and tables in future reports, please reserve the "SW" sample designation for surface-water samples. For sidewall soil samples, please spell out "sidewall," e.g. Sidewall-1, Sidewall-2, etc.

16. Regarding groundwater sampling, please note the following:

    a. EPD requires adherence to the USEPA Region 4 groundwater sampling operating procedures (OPs), "Procedure SESDPROC-301-R4, Groundwater Sampling," effective April 26, 2017. The OPs can be accessed on the Internet at https://www.epa.gov/quality/quality-system-and-technical-procedures-sesd-field-branches.

    b. On all groundwater sampling field logs, the depth to the tube or pump intake should be included. When conducting low-flow sampling or micropurging, the pump intake should be positioned in the middle of the screened interval, whereas with a traditional multi-volume purge, the pump intake should be positioned near the top of the water column. Also, specify the type of pump used.

    c. Please provide a more detailed narrative on groundwater-sampling procedures in future reports. In particular, transferring groundwater from a pump to a sample container for VOC analyses requires the use of specific sampling protocols.

17. On future well-construction diagrams, please clearly indicate the types of materials used to fill the borehole annular space, from the bottom of the borehole to the ground surface; a legend or labeling will suffice. Ideally, a sand-pack layer fills the annular space from the bottom of the borehole to a level 2 feet above the top of the screen; a 2-foot layer of water-activated bentonite flakes or chips will fill the annular space directly above the sand pack; a cement-bentonite-mixture layer will fill the remaining annular space up to the ground surface. EPD understands that layer thicknesses may be dependent upon varying field conditions, such as a high groundwater table.

18. In the next semiannual report, please provide a monthly summary of professional engineer/geologist hours and description of services for the first three semiannual reports and for the current report. In EPD's VIRP approval letter of November 6, 2015, the last paragraph states that "Each progress report must describe all actions taken since the last submittal, and include certification by the professional engineer/geologist specified in the VIRP, along with a

monthly summary of hours invoiced and description of services provided since the last submittal."

19. In future reports, in the Background section, please include a relatively brief narrative describing the potable-well sampling that took place on Murphy Road.

Pilot Travel Centers, 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 Pilot Travel Centers, LLC. However, failure of EPD to respond to a submittal within any timeframe does not relieve Pilot Travel Centers, 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) 657-3935.

Sincerely,

David Brownlee
Unit Coordinator
Response and Remediation Program

c (via email): Max Burmeister, ATC