GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Land Protection Branch
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July 19, 2018

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

VIA FIRST-CLASS MAIL AND EMAIL

Re: Comments on VRP Semiannual Progress Reports 4 and 5
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 4 and 5, dated November 29, 2017, and May 30, 2018, 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. The following items, listed below as a. through o., from our September 18, 2017, comment letter on VRP progress reports 1, 2, and 3 remain unaddressed. The specified issues should be rectified in the next VRP progress report, due to EPD on November 6, 2018:

   a. 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. Refer to Section 391-3-19.07 and Appendix III of the *Georgia Rules for Hazardous Site Response* for guidance on calculating RRSs. Obtain toxicity factors from the latest version of the US EPA Screening Level (SL) Summary Table. Where necessary, obtain input values for specific physical and chemical properties of a substance from the latest version of the US EPA SL Chemical Specific Parameters Table. Both tables can be accessed on the Internet at: http://www2.epa.gov/risk/risk-based-screening-table-generic-tables.

   b. 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, as well as in our comment letter of September 18, 2017. That table was not included in VRP Semiannual Progress Reports 1, 2, 3, 4, or 5.

   c. 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), leaving this property behind schedule on VRP delineation requirements. We note that on the VIRP Application Form and Checklist, which accompanied the VIRP that EPD subsequently approved, Item 5a states the following: *Within the first 12 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern on property where access is available at time of enrollment.* Item 5b states: *Within*

the first 24 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern onto property for which access was not available at the time of enrollment. The site was enrolled in the VRP on November 6, 2015, over 32 months ago. Horizontal delineation of groundwater contamination will require installation of additional wells to the east and west of the former wastewater treatment pond, possibly outside the property lines. Vertical delineation of groundwater contamination will require installation of one or more deep wells within the most contaminated area of the site.

d. Install at least two additional piezometers to better identify the probable point of entry (PPE) for contaminated-groundwater discharge into Long Cane creek. Surface-water-sampling locations can then be modified, to improve the chances of detecting impact to the creek from groundwater on site. Based upon analytical data presented on Figure 4 in Semiannual Progress Report 5, one preferred location for a new piezometer would be closer to the creek bank, southwest of PZ-1 and southeast of MW-14.

e. The Groundwater Analytical Results table format makes the tracking of contaminant trends in each well over time difficult and time-consuming. Please revise the table format to list wells and associated sampling dates in columns on the left, with individual laboratory analytes listed in individual columns on or near the top row of the table. EPD will provide an example of such a table upon request.

f. Regarding groundwater sampling protocol, please note the following:

   i. 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.

   ii. On all groundwater sampling field logs, the depth to the tube or pump intake should be included (include depths to top and bottom of screened interval as well). When conducting low-flow sampling or micro-purging, 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 types of pump and tubing used.

   iii. Provide a more detailed narrative on groundwater-sampling procedures in future reports, including the types of pump and tubing used and decontamination procedures. In particular, transferring groundwater from a pump to a sample container for VOC analyses requires the use of specific sampling protocols.

g. Provide a narrative on the protocols for sampling treatment-plant effluent and surface water.

h. Section 3.0 of Semiannual Progress Report 4 states that a corrective action plan (CAP) will be submitted to EPD to provide a detailed remedial strategy. However, 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. 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. We note that on the VIRP Application Form and Checklist, which accompanied the VIRP that EPD subsequently approved, Item 5c states the following: *Within 30 months after enrollment, the participant*

must update the site CSM to include vertical delineation, finalize the remediation plan and provide a preliminary cost estimate for implementation of remediation and associated continuing actions. The site was enrolled in the VRP on November 6, 2015, over 32 months ago.

i. 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, such as those that were used in the former sludge pond, 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.

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

- 1,2,4-trimethylbenzene
- 1,3,5-trimethylbenzene
- Benzyl alcohol
- Bromochloromethane
- Ethyl alcohol (ethanol)
- Tert-butylbenzene

k. In the Applicable Standards column in the analytical results tables, the abbreviation "NE" is used several times, but is not defined anywhere in the table headers or footers. On tables in future reports, please provide a definition for that abbreviation.

l. Provide figures in all future reports which depict historical soil sampling locations on site. EPD will use the figures to cross-reference soil-sample locations with analytical data provided in the VRP report tables.

m. 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, 3, 4 and 5, 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 reports.

n. Clearly label the wastewater treatment plant influent and effluent sampling locations on a figure in future reports (also indicate the location of the effluent sump described in Section 2.3 of Semiannual Progress Reports 4 and 5).

o. In the next semiannual report, provide a monthly summary of professional engineer/geologist hours and description of services for the first five 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."

2. Concentrations of 1,4-dioxane in groundwater remain extremely high in MW-2, which borders the former sludge pond on the east. During the April 17, 2018, sampling event, a concentration

of 25,200 micrograms per liter (ug/L) of 1,4-dioxane was detected in that well. The high concentration in that well suggests the presence of a nearby source area. If concentrations of 1,4-dioxane remain high in MW-2, further investigation should be conducted at or near that location.

3. A summary of each previous VRP semiannual progress report is not necessary to include in Section 1.0 (Background) of VRP reports. EPD would prefer a concise historical summary of the nature of the site, the release, ongoing assessment, and progress towards remedial goals.
4. On figures in future reports, please include the location of the effluent outfall into Long Cane Creek.
5. The analytical method used for detection of 1,4-dioxane in groundwater during future monitoring events should have a maximum laboratory method detection limit (MDL) of the Type 1 RRS for that substance, 70 ug/L. EPD notes that the MDL for 1,4-dioxane in groundwater samples, as indicated in the laboratory analytical reports, is 75 ug/L. According to Table 1 in Appendix III of the *Georgia Rules for Hazardous Site Response*, the Groundwater Criteria/Type 1 RRS for 1,4-diethylene dioxide, a synonym for 1,4-dioxane, is 70 ug/L.
6. The background section of the reports states that transferal of sludge waste from the wastewater treatment area to the pond discontinued in 2013. How is sludge waste currently being disposed of?
7. The proposed locations of monitoring wells MW-18, MW-19, and MW-20 are acceptable to EPD.

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.

Also, please be aware that this site has been transferred to the newly-formed VRP Unit. If you have any questions, please call David Hayes of the VRP Unit at (404) 657-8600.

Sincerely,

David Brownlee
Unit Coordinator
Response and Remediation Program

c (via email): Max Burmeister, ATC