Georgia Department of Natural Resources

Environmental Protection Division-Land Protection Branch 2 Martin Luther King Jr., Dr., Suite 1054 East, Atlanta, Georgia 30334 (404) 657-8600; Fax (404) 657-0807 Judson H. Turner, Director

February 18, 2016

VIA U.S. MAIL and EMAIL

Georgia Department of Transportation c/o Mr. Jim Clute State Facilities Manager 600 West Peachtree Street N.W. 7th Floor Atlanta, GA 30308

Re: EPD Comments

Voluntary Remediation Program Application Georgia DOT – Gainesville District Office HSI Site Number: 10759 2505 Athens Highway Gainesville, Hall County

Tax parcel ID #: 15023 000017

Dear Mr. Clute:

The Georgia Environmental Protection Division (EPD) has reviewed the November 12, 2015 Voluntary Investigation and Remediation Plan (VIRP) application that has been submitted by the Georgia Department of Transportation (GDOT) pursuant to the Georgia Voluntary Remediation Program Act (the Act) O.C.G.A. 12-8-100, et. seq. EPD has the following comments, which should be addressed in accordance with the Act:

1. Section 2.2 of the November 2015 VRP Application discusses the accidental destruction of the off-site, side-gradient monitoring well MW-9. The potentiometric contour lines drawn near the release area in Figures 6A and 6B depict a groundwater flow direction towards the destroyed monitoring well MW-9 to the north. Please install a replacement well in the direction of MW-9 in order to fully delineate the groundwater plume. Please note that horizontal delineation is required within 12 months of enrollment in the VIRP.

In addition, because concentrations of 1,4-dioxane continue to exceed the Type 3 Risk Reduction Standards (RRS) at MW-3D, the installation of a deeper monitoring well to the east of MW-3D is required for vertical and horizontal delineation prior to submittal of the CSR. Additionally, the laboratory reporting limit for 1,4-dioxane was 150 μ g/L during the most recent groundwater sampling event, which exceeds the Type 1 Risk Reduction Standard (RRS) of 70 μ g/L. Please use appropriate reporting limits that are below the RRS during the next groundwater sampling event. Furthermore, 1,1-DCE was also reported in exceedence of the Type 1 RRS (7 μ g/L) at MW-3D during the most current groundwater sampling event. Please note that vertical delineation is required within 30 months of enrollment in the VIRP.

2. EPD conducted a site visit on February 9, 2016 and observed a small stream located near the eastern portion of the Subject Property that did not appear to be intermittent as previously described. The stream begins from a culvert, which appears to originate off-site, and daylights near the northern portion of the Subject Property approximately 100 feet west of the salt storage building. The stream runs northwest to southeast and passes below an on-site road, through a culvert, and daylights again on the southeastern portion of the Subject Property. A sheen was observed, along with tires, metal debris, and trash, in the stream near the southern boundary of the Subject Property. A second smaller stream was located along the southeastern boundary of the

Voluntary Investigation and Remediation Plan GDOT Gainesville (HSI #10759) February 18, 2016 Page 2 of 3

Subject Property flowing from a small pond. A dry ditch was identified north of the pond on the eastern boundary of the Subject Property and appeared to primarily be a storm-water ditch, with the exception of the aforementioned pond and small stream. As described in Section 3.2 of the November 2015 VRP Application, one (1) water sample was collected in 1988 from a shallow borehole adjacent to Pond Fork and was analyzed for 1,1,1-TCA only. Because this sample was collected 28 years ago, analyzed for one (1) specific VOC, and is located directly downgradient from the release area, please collect a minimum of four (4) surface water samples from the facility and analyze the samples for total VOCs. Please collect the samples from the following locations:

- The culvert outfall where the stream first daylights on the Subject Property;
- the culvert outfall where the stream daylights on the southern portion of the Subject Property;
- the stream at the southeastern boundary of the Subject Property; and
- the ponded location near the southeastern portion of the site.

In addition, please remove identified solid waste in accordance with Section 391-3-4-.04(4)(c) of the Solid Waste Management Rules. If requested, EPD can provide photographs for the requested sampling locations and/or be present on-site during the surface water sampling event.

- EPD has reviewed the Certification of Compliance with RRS presented in the November 2015 VRP Application and concurs that the Subject Property is in compliance with the Type 1 RRS for soil.
- 4. Section 4.0 of the November 2015 VRP Application proposes one (1) annual groundwater monitoring event and report. EPD does not agree that one groundwater sampling event is sufficient to develop the CSR at this time. A limited groundwater sampling event identifying the sampling of specified wells may be proposed following the first full round of groundwater sampling. Please also address groundwater sampling Comments #4 and #5 in EPD's May 8, 2015 letter discussing proper groundwater sampling techniques during the next round of groundwater sampling. In the future, please follow SESDPROC-301-R3 sampling procedures.

Please include an updated milestone schedule per the Voluntary Investigation and Remediation Plan Application Form and Checklist. A Gantt chart format is preferred for the milestone schedule. Please also include a table of delineation standards in the next report per the Voluntary Investigation and Remediation Plan Application Form and Checklist.

- 5. Figure 4, Conceptual Site Model, of the November 2015 VRP Application, is incomplete. Please include two (2) scaled cross-sections in the first semi-annual progress report, one (1) perpendicular and one (1) parallel to the contaminant plume. In addition, please include a stratigraphic cross-section in the direction of the nearest drinking water/supply well to the subject property in the next report, if it is in a different direction than parallel or perpendicular to the plume. Please also conduct an updated drinking water well search and include the findings in the next report.
- 6. Section 3.3 of the November 2015 VRP Application is labeled *Point of Demonstration for Groundwater*" but the point of demonstration was not discussed in this or any other section of the report. If the Point of Demonstration (POD) well has not been established or considered, please define and/or discuss the POD in the next report.
- 7. Monitoring well MW-3 is listed on Table 3 as having been abandoned in January 2006. One (1) groundwater sampling event was conducted during September 2001 at MW-3 and reported 1,1-DCE and 1,2-DCA at elevated concentrations, above the applicable RRSs. The location of MW-3

Voluntary Remediation Program Application GDOT Gainesville (HSI #10759) February 18, 2016 Page 3 of 3

was not included in any of the figures. Although the well has been abandoned, please include the former location for MW-3 on all appropriate figures in subsequent reports.

8. Section 2.3 of the November 2015 VRP Application states that the groundwater VOC trend shows a decreasing or stable trend; however, after reviewing the Mann-Kendall data provided, no decreasing trends were observed. In addition, data for the sampling event #2 for MW-1 was incorrectly input into the GSI Mann-Kendall Toolkit module for PCE. 0.023 mg/L was entered into the cell, but according to the laboratory report, this concentration was reported for 1,1,2 trichlorethane not PCE. After entering the correct non-detect value for the #2 sampling event, the confidence factor was reduced from 75.8% to 50.0%. Please be sure to input all data accurately and appropriately in all future reports. EPD does agree that, although the confidence factor percentages are low, the data used in the Mann-Kendall analysis indicates a stable trend for the set of well data used.

GDOT 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 future documents submitted by GDOT. However, failure of EPD to respond to a submittal within any timeframe does not relieve GDOT from complying with the provisions, purposes, standards, and policies of the Act.

Should you have any question or concerns regarding this site, please contact Mr. Peter E. Johnson, P.G. of the Response and Remediation Program at (404) 657-0490.

Sincerely,

Jason Metzger 6
Program Manager

Response & Remediation Program

cc: Reginald Murph, GDOT (via email)

William J. Wagner and Peter Fleury, S&ME (via email)

File: 256-0079, VRP