

February 4, 2019

Via U.S. Mail and Email

CSX Transportation, Inc.
c/o Mr. Matt Adkins, CHMM, Manager Environmental Remediation
351 Thornton Road, Suite 125
Lithia Springs, Georgia 30122

Re: Voluntary Remediation Program
9th – 11th Semi-Annual Status Updates
CSX Transportation DePriest Signal Shop (HSI #10611)
641 East Liberty Street, Savannah, Chatham County, Georgia
Tax Parcel ID# 2-0033-12-001

Dear Mr. Adkins:

The Georgia Environmental Protection Division (EPD) has reviewed the 9th through the 11th Voluntary Remediation Program (VRP) Semi-Annual Status Updates that were submitted for the above referenced site on your behalf by Holley Consultants, Inc. The VRP Semi-Annual Status Updates are dated September 12, 2017, March 15, 2018, and September 19, 2018, respectively. EPD has the following comments:

- 1) **Area Averaging:** Although an area averaging approach to calculate an Exposure Point Concentration (EPC) is allowable under the VRP Act, the methods presented in the 9th VRP Semi-Annual Status Update will require additional work to be approved by EPD. Specifically:
 - a) EPD agrees with the choice of splitting the property into four Exposure Domains (ED). However, the ED boundaries are not indicated in any figure. Please provide a map/figure to present the boundaries of the EDs.
 - b) In addition, it is unclear which Type 4 Risk Reduction Standard (RRS) is being applied for each ED. Attachment C presents a multitude of scenarios based on site-specific exposure assumptions, but the report is lacking a table that shows which RRS is being used to compare with the calculated EPC.
 - c) The Statistical Summary of Metals in Soil presented in Table 2 does not match the electronic data from ProUCL that was provided in the Excel spreadsheets. Specifically:
 - i) In Table 2, the North ED shows a 95% UCL of 9, but the Excel spreadsheet has a value of 10. The mean value of 504 mg/kg for lead does not match the 95% UCL of 659 mg/kg that was presented in the Excel spreadsheet. EPD is also unsure why the Excel spreadsheet presented a UCL calculation for lead with points 903/0-1, 1003/0-

5, and 1103/0-1 removed since the 95% UCL with all points for lead was below the Type 4 RRS.

- ii) In Table 2, the South ED shows a mean value of 1927 mg/kg for lead. The Excel spreadsheet presents a 95% UCL value of 497.7 mg/kg after removing 15 samples greater than 710 mg/kg. The Excel spreadsheet also presents a value with all samples that gives a 95% UCL of 4822 mg/kg. It appears that additional evaluation is needed for this area to get an EPC that is under the Type 4 RRS. EPD ran the UCL calculations and found that removal of only one additional data point (702/0-1) beyond the two points removed for arsenic compliance (602/0-1 and 701/0-1) would provide a 95% UCL of 1118 mg/kg, which would be an acceptable EPC for a Type 4 RRS.
- iii) In Table 2, the East ED indicates a 95% UCL of for arsenic of 38 mg/kg after removal of data point 822(0-1). This was not presented in the Excel spreadsheet. EPD needs to see the ProUCL output for this calculation. In addition, a mean value of 764 mg/kg for lead is presented instead of the 95% UCL value of 1273 mg/kg. However, when EPD ran the UCL calculations for lead with data point 822(0-1) removed, the 95% UCL was only 824 mg/kg.
- iv) In Table 2, the West ED indicates a mean value of 232 mg/kg for lead instead of using the recommended 95% UCL value of 278.5 mg/kg.
- d) A figure for each Exposure Domain should be presented with all sample locations that are being used to calculate the EPC. It should also indicate points that will be excavated to bring the EPC down to meet the applicable Type 4 RRS.

2) Groundwater Sampling

- a) Although the 9th VRP Semi-Annual Status Update indicates that groundwater samples were collected according to the operating procedures recommended by the USEPA Region 4 Science and Ecosystem Support Division, SESDPROC-301-R4 (April 26, 2017), EPD's review found that in many cases groundwater samples were collected with final turbidity readings above 10 NTUs and without removing up to five well volumes. EPD recommends using the multiple purge volume method rather than the low flow/low volume method when turbidity of samples is an issue. Purging should continue until the turbidity is 10 NTUs or less or until at least 5 well volumes have been removed from the well before taking the sample, as outlined in SESDPROC-301-R4 referenced above.
- b) Despite the turbidity issues mentioned in the comment above, EPD can concur with the results presented and can agree with the most of the arguments presented in Section 3.4 of the 9th VRP Semi-Annual Status Update. EPD agrees that a leaching assessment is not appropriate due to the fact that groundwater has not been impacted after more than 100 years since the operation began at this site. However, the argument that this site was not listed on the HSI for Groundwater is incorrect. The original RQSM scoring for groundwater at this site was 14.45, which exceeds the threshold value of 10.0.

3) Other Comments

- a) EPD's previous comment letter (June 21, 2017) requested a set of revised electronic copies of the large format maps so that soil data was legible. EPD previously commented

on this issue in the VRP Application comments dated March 15, 2013. Please revise Figures 3.1-3.8 of the 2nd Semi-Annual Status update and Figure 2.1 of the 3rd Semi-Annual Status update and include them in the Compliance Status Report (CSR) for this site.

- b) EPD is still awaiting results from additional delineation sampling to address Comment 3a in EPD's previous comment letter. Section 1.0 of the 9th Semi-Annual Status Update indicates that you are planning to focus on those delineation efforts. Results from those samples and updated figures should also be included in the forthcoming CSR.

Since CSX Transportation is already beyond the original March 18, 2018 deadline for submitting a CSR, EPD is requesting that you proceed with preparing the Corrective Action Plan mentioned in Section 4.0 of the 9th VRP Semi-Annual Status Update and submit that as the next Semi-Annual Status Update due on March 18, 2019. Any revisions based on this comment letter should be incorporated into that report. Also, please be aware this Site is being transferred to the newly-formed VRP Unit, and if you have any questions regarding this matter, you should call David Hayes of the VRP Unit at (404) 657-8600.

Sincerely,



David Brownlee
Unit Coordinator
Response and Remediation Program

C: Ron Holley <ron@holleyconsultants.com>
David Hayes, EPD

File ID: 242-0232 (HSI# 10611, VRP950192559)