

FILE COPY

Georgia Department of Natural Resources

Environmental Protection Division-Land Protection Branch

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

(404) 657-8600; Fax (404) 657-0807

Judson H. Turner, Director

May 22, 2015

VIA E-MAIL AND REGULAR MAIL

Mercer University
c/o Dr. James S. Netherton
Executive VP for Administration & Finance
1400 Coleman Avenue
Macon, Georgia 31207

Re: First VIRP Semi-Annual Progress Report – August 20, 2014
Mercer University Triangle Site, HSI No. 10779
1535 Montpelier Avenue, Macon, Bibb County, Georgia

Dear Dr. Netherton:

The Georgia Environmental Protection Division (EPD) has reviewed the First Voluntary Investigation and Remediation Plan (VIRP) Semi-Annual Progress Report dated August 20, 2014. EPD offers the following comments which should be addressed in subsequent progress reporting:

1. As noted in EPD's February 24, 2014 letter, Comment # 3, EPD agreed that delineation has not been completed horizontally or vertically. However, since the property qualifies under Section 12-8-107(g)(2) of the Act, delineation requirements may be reduced based on the results of the fate and transport modeling and vapor intrusion pathway analysis. Consequently, further horizontal and vertical delineation of groundwater at the site is not required.
2. Field sampling records should provide appropriate documentation in accordance with the EPA Region 4 Field Branches Quality System and Technical Procedures, Science and Ecosystem Support Division (SESD OPs), "Procedure SESDPROC-301-R3, Groundwater Sampling," effective date March 6, 2013. Items that should be included in the records include a description of the purge and sample method and purge rate (specifically low flow/low stress or low flow/low volume) used to purge the well, location of the pump relative to the screen interval, and sample collection techniques, e.g., peristaltic pump and "soda straw" method for VOCs.
3. Field equipment decontamination procedures should be conducted as described in the SESD operating procedure document titled Field Equipment Cleaning and Decontamination Operating Procedure (SESDPROC-205-R2, revised December 20, 2011) and in all future sampling events deionized water rather than distilled water should be used for equipment decontamination.
4. The potentiometric map in Figure 1 is not accurately drawn. EPD noted that groundwater elevations and the corresponding potentiometric contours are inconsistent. For example, MW-8 has an elevation of 57.93 and is drawn upgradient of the 58 contour and MWA-5 has an elevation of 53.30 and is drawn downgradient of the 53 contour. Also the groundwater flow direction arrow should be drawn perpendicular to and across the potentiometric contours.

100 219

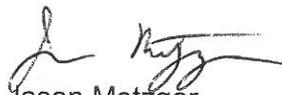
5. EPD's February 24, 2014 Comment letter requested that Mercer University evaluate the potential vapor-intrusion pathway using an EPA-recognized or otherwise peer-reviewed vapor-intrusion model, e.g., Johnson & Ettinger. However, EPA now recommends the use of the Vapor Intrusion Screening Levels Calculator (VISL), a model more applicable for the volatile organic compounds detected at the site. The VISL is routinely revised with updated Regional Screening Levels (RSL), toxicity, and parameter changes. As a result EPD recommends the use of this tool.

Using the VISL calculator, EPD assessed the worst-case potential vapor intrusion pathway by selecting the two most recent (October 2013 and June 2014) groundwater sampling data for PCE and TCE at monitoring well MWA-1. Based on the historical, current, and expected future use of the area around MWA-1, commercial exposure scenarios were analyzed. A conservative residential scenario was used to analyze the potential vapor intrusion pathway of on-campus buildings in the groundwater flow pathway using wells MW-10, MW-13 and MW-14. The results from these wells using the residential scenario output indicated no potential risk above thresholds for MW-10 and MW-13 concentrations, but a hazard quotient just above 1 for MW-14. The output for the MWA-1 area using the higher concentration data indicate that the vapor intrusion pathway shows potential risk above thresholds, while the lower concentration results were below thresholds (copies of the VISL output sheets are included for your perusal). Various parameters were modified based on site conditions including: 1) water temperature, from the default of 25°C to 20°C; 2) Target Risk for Carcinogens was changed from 1.00E-06 to 1.00E-05 per the Rules; 3) Exposure Scenario set at Commercial for the area closest to the triangle and Residential for the on-campus buildings; and 4) the Groundwater Attenuation Factor was changed to 0.0005 due to the soil type and texture.

6. Based on the VI analysis, EPD recommends one additional monitoring event to demonstrate whether the lower concentrations and downward trends reported in the June 2014 laboratory analytical results are representative of current/future conditions. If so, all potential exposure pathways have been addressed and Mercer may submit the final Compliance Status Report.

Please address the above comments in your next VIRP Progress Report which should be submitted by August 20, 2015 in accordance with the VIRP-Semi-Annual reporting schedule. If you have any questions, please contact Montague M^oPherson of the Response and Remediation Program at (404) 657-8600.

Sincerely,



Jason Metzger
Unit Coordinator
Response and Remediation Program

c: Jason A. Cooper - Geotechnical & Environmental Consultants, Inc.

Encl: VISL Output Spreadsheets (MWA-1 (2), MW-10, MW-13, and MW-14)

File: HSI# 10779

S:\DRIVE\MONTMC\HSI\Mercer University Triangle\VRP Appl Review\First VIRP Semi-Annual Report.doc