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February 18, 2014

Ms. Robin S. Futch, PG, PMP
Geologist
Georgia Environmental Protection Division
Land Protection Branch
2 Martin Luther King Jr. Dr, Suite 1054 East
Atlanta, Georgia 30334

Subject: Response to Comments Received January 16, 2014
Former Manchester Tank Company Site – Cedartown, GA (HSI No. 10765)

Dear Ms. Futch:

We received the letter from your office dated January 16, 2014 concerning the former Manchester Tank Company site and appreciate the Environmental Protection Division's (EPD's) approval of the Corrective Action Plan (CAP). On behalf of Textron, we offer the following responses to your specific comments:

1. The schedule proposed in the CAP exceeds the 5-year timeframe for submittal of the Compliance Status Report (CSR) as established in the Voluntary Remediation Program (VRP) checklist and the April 2010 VIRP application. EPD will issue a draft consent order to memorialize the revised schedule in compliance with the Act. Note that the schedule should be modified to show semi-annual reporting through submittal of the CSR.

   OK

2. An Environmental Covenant in conformance with O.C.G.A. 44-16-1, et seq., the "Georgia Uniform Environmental Covenants Act" must be executed as part of the corrective actions at the site. This covenant must prohibit residential use of the property, must require that no drinking water wells be installed on the site, and require that any future construction plans for building on the site be evaluated for risks associated with vapor intrusion.

   This is consistent with our expectations for what would be required.

3. The adjacent impacted properties have not currently been designated as qualifying properties under the Act. Therefore, they continue to be addressed under the Hazardous Site Response Act. Although not clearly specified in the CAP, it appears that monitored natural attenuation (MNA) will be the proposed mechanism for attainment of RRS once

hydraulic containment of the plume has been established. Prior to, or concurrent with CSR submittal, Textron must demonstrate that compliance with RRS will be achieved within a reasonable timeframe and/or enter the properties into the VRP with the use of appropriate institutional controls. Please install and periodically monitor a permanent monitoring well in the impacted residential area (GP-2A vicinity) in order to monitor the efficacy of the extraction system and obtain the data necessary to make the demonstration for that area.

As described in the CAP, CDM Smith proposes to submit the CSR after operating the containment system for a period of two years. The CSR will not be submitted before the corrective action has been demonstrated to have achieved several short-term goals: 1) containing the onsite source, 2) preventing onsite volatile organic compounds (VOCs) in groundwater from migrating onto adjacent properties, 3) preventing offsite VOCs in groundwater from migrating downgradient of Missouri Machine and Plow (MM&P), and 4) achieving applicable RRSs downgradient of MM&P and on the Hon property.

At the time of CSR submittal, CDM Smith expects that VOCs in groundwater will exceed the RRSs proposed in the CAP on the former Manchester Tank property. As discussed in Comment 2 above, Textron will execute an Environmental Covenant in conformance with O.C.G.A. 44-16-1, et seq. for the former Manchester Tank property prior to CSR submission.

CDM Smith also expects that VOCs in groundwater will exceed the Type 1 RRSs on the MM&P property at the time of CSR submittal. Groundwater data will be collected prior to CSR submittal during the containment system operation that will provide insight into the mechanisms (i.e., mass removal and attenuation) reducing the VOC concentrations in groundwater beneath the MM&P property. This insight should allow CDM Smith to provide a more accurate time estimate for the time required to achieve the groundwater Type 1 RRSs beneath MM&P.

Per EPD request, a shallow monitoring well will be installed in the residuum (Unit A) in the vicinity of GP-2A.

4. In all future Semi-Annual Progress Reports describing soil, groundwater, vapor, or surface water sampling events please provide the field sampling forms, a summary of the field sampling parameters recorded during the sampling events, and a discussion of the sampling protocols and methods used. Please note that when a field activity is described in a report, specific details on how and at what depth samples were collected, what analyses were performed, and the corresponding analytical reports should be provided. Please provide this information for the 2013 soil gas sampling event in the next progress report.

   The requested information will be provided in progress reports moving forward. The June 2014 progress report will include the 2013 soil gas sampling data.

5. The background data set for soils provided is acceptable to EPD and can be used for compliance purposes. EPD concurs that for soils chromium meets Type 3 RRS and all other metals meet residential standards. However, EPD does not concur that other metals besides chromium were not contaminants of concern for the site.

   OK

6. Please provide additional details for the Geoprobe samples that were attempted including the depths at which the borings were terminated and what sampling methods were used for GP-2A and GP-10A.

   The following table summarizes the Geoprobe drilling details. In all cases, refusal was believed to be at the top of bedrock. Groundwater above the bedrock was only found at locations GP-2A and GP-10A. Following purging using a peristaltic pump with dedicated, disposable polyethylene tubing, groundwater samples were collected from GP-2A and -10A. The samples were collected by disconnecting the polyethylene tubing from the pump, lowering the tubing to the bottom of the well, and sealing the top of the tubing to prevent air from entering the tubing. The tubing was then withdrawn from the well and the seal removed, allowing the groundwater to drain by gravity into the sample containers.

ID	**Installation Date**	**Total Depth** (feet below ground surface)	**Depth to Water** (feet below ground surface)
GP-1A	10/2/12	15	Dry
GP-2A	10/2/12	22.5	12.91
GP-3A	10/2/12	12	Dry
GP-4A	10/2/12	11	Dry
GP-5A	10/2/12	5	Dry
GP-6A	10/2/12	12	Dry
GP-7A	10/2/12	10	Dry
GP-8A	10/3/12	5	Dry
GP-9A	10/3/12	11	Dry
GP-10A	10/3/12	13.5	11.41
GP-11A	10/3/12	9	Dry
GP-12A	10/3/12	10.5	Dry
GP-13A	10/3/12	5.25	Dry
GP-14A	10/3/12	5	Dry

7. MW-55D completes the vertical delineation requirement for groundwater but the horizontal delineation of the groundwater plume is incomplete. To confirm completion of horizontal delineation in groundwater, GP-10A should be replaced with a permanent monitoring well and groundwater samples collected and analyzed to confirm the results.

   During the upcoming field activities to support design, an additional well will be installed in the residuum (Unit A) in the vicinity of GP-10A to confirm the current horizontal delineation and be available for future monitoring.

8. The groundwater RRS values provided in Table 4-2 of the CAP are correct; however the units are incorrect. Please note that the correct units are ug/l for all values.

   OK

9. The June 2013 Progress Report noted that, based on groundwater concentrations, vapor intrusion of TCE and VC has the potential to exceed target risks to nearby residents. However, since the constituents were not detected in soil gas samples, the no further action was recommended. The potential for vapor intrusion must be re-evaluated in the future if groundwater concentrations in the vicinity of GP-2A do not decline within a reasonable timeframe.

   We believe that based on the soil gas results and very conservative nature of the soil vapor calculations, the potential for vapor intrusion to nearby residences is extremely low if groundwater concentrations remain near the current levels observed at GP-2A. Should concentrations in the new well to be installed near GP-2A increase significantly above the current levels, Textron and CDM Smith will re-evaluate the potential for vapor intrusion.

10. For the proposed treatment system shown in Figure 6-3 in the CAP, please note that all air emissions must be treated using the Best Available Control Technology, e.g., thermal oxidizer or carbon.

    Textron and CDM Smith would like to revisit this requirement with EPD after the additional design data collection activities are complete. What type of treatment system will be installed will be dependent on several factors, including expected extraction flow rates, extracted groundwater concentrations, and the requirements of the Publicly Operated Treatment Works.

11. The site figures showing groundwater sampling results are difficult to read and to interpret. Please enlarge these figures to an 11 x 17 format and *remove* potentiometric data. Also, please make the numbers more legible as it is difficult to read the concentration numbers on the aerial photo background. On all figures, when analytical data is being shown, please specify the date(s) of the sampling event for which sampling results are posted.

Per EPD request, attached are revised versions of Figures 2-5 and 2-6 from the CAP. These figures have been enlarged to 11x17 format with the potentiometric data removed. Non-detect concentrations have also been revised per comment #12 below. However, note that the laboratory only reported reporting limits, not detection limits, for these sampling events. Reporting limits are shown on the figure for non-detect concentrations. In general, the detection and reporting limits for TCE are 1 ug/L and 5 ug/L, respectively.

12. On all future figures and tables please post contaminant concentrations using the analytical result as (<XX.XX), where the XX.XX represents the detection limit rather than stating that a result was not detected (ND) or below detection limit (BDL).

    OK, future figures and tables will post data as requested.

If you have any questions regarding this response, please give me a call at (423) 771-4495 or Jamie Schiff at (401) 457-2422.

Sincerely,

Andrew Romanek

Andrew P. Romanek, P.E., BCEE
Associate
CDM Smith Inc.

Attachments

cc: Jamie Schiff, Textron

Residuum Geoprobe, Unit A
Residuum Well, Unit A
Upper Bedrock Well, Unit B
Below Type 1 RRSs
Exceeds Type 1 RRSs

Trichloroethene in ug/L

50 100 1,000 5,000

Hon

Manchester Tank

Missouri Machine & Plow

Cedar Creek

MW-20B
< 5.0 ug/L

MW-18B
180 ug/L

MW-10B
25 ug/L

MW-11B
38 ug/L

MW-27A
< 5.0 ug/L

MW-28A
420 ug/L

MW-29A
8,000 ug/L

MW-24B
91,000 ug/L

MW-23B
84 ug/L

MW-6A
9,100 ug/L

MW-26A
18 ug/L

MW-9B
11 ug/L

MW-15B
9.9 ug/L

MW-25A
< 5.0 ug/L

MW-3B
5.5 ug/L

MW-32B
76 ug/L

MW-5B
300 ug/L

MW-4B
320 ug/L

MW-8B
360 ug/L

MW-16A
480 ug/L

MW-2A
< 5.0 ug/L

MW-30A
25 ug/L

MW-1B
< 5.0 ug/L

GP-11A
Dry

GP-12A
Dry

GP-9A
Dry

GP-10A
< 5.0 ug/L

GP-8A
Dry

GP-5A
Dry

GP-6A
Dry

GP-7A
Dry

GP-13A
Dry

MW-33A
< 5.0 ug/L

GP-3A
Dry

GP-4A
Dry

GP-2A
490 ug/L

GP-1A
Dry

GP-14A
Dry

N

Scale in Feet

0 250 500

Unit A/B Investigation Results

Former Manchester Tank Company Site
(HSI #10765)
Cedartown, Polk County, Georgia

Notes:
Posted values are trichloroethene in groundwater.
Sampling was perfomed from 6/2012 to 10/2012.
"<" indicates that TCE was not detected above the specified reporting limit.

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Bedrock Well, Unit C
Bedrock Well, Unit D
Below Type 1 RRSs
Exceeds Type 1 RRSs
Trichloroethene in ug/L
50 100 1,000 5,000

Hon
Manchester Tank
Missouri Machine & Plow
Cedar Creek

MW-7C 70,000 ug/L
MW-13C 18 ug/L
MW-19C < 5.0 ug/L
MW-21C 88,000 ug/L
MW-12C 95 ug/L
MW-42C 30 ug/L
MW-22C 1,200 ug/L
MW-43D 910 ug/L
MW-54C 6.8 ug/L
MW-41C 4,100 ug/L
MW-53C < 5.0 ug/L
MW-17C < 5.0 ug/L
MW-51C 330 ug/L
MW-14C < 5.0 ug/L
MW-34C < 5.0 ug/L
MW-35D < 5.0 ug/L
MW-31C 37 ug/L
MW-36C 180 ug/L
MW-37C 280 ug/L
MW-40C < 5.0 ug/L
MW-45C < 5.0 ug/L
MW-55D < 5.0 ug/L
MW-39C 13 ug/L
MW-44C < 5.0 ug/L
MW-38C 30 ug/L
MW-52C 86 ug/L
MW-49C < 5.0 ug/L
MW-47C < 5.0 ug/L
MW-50C < 5.0 ug/L
MW-48C < 5.0 ug/L
MW-46C < 5.0 ug/L

N
Scale in Feet
0 250 500

Unit C/D Investigation Results

Former Manchester Tank Company Site
(HSI #10765)
Cedartown, Polk County, Georgia

Notes:
Posted values are trichloroethene in groundwater.
Sampling was perfomed from 6/2012 to 10/2012.
"<" indicates that TCE was not detected above the specified reporting limit.

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