

Land Protection Branch

2 Martin Luther King, Jr. Drive
Suite 1054, East Tower
Atlanta, Georgia 30334
404-657-8600

February 1, 2019

CBS Corporation
c/o Dean Reed, Environmental Remediation
PNC Center
20 Stanwix Street, 10th Floor
Pittsburgh, PA 15222

Subject: EPD Comments Regarding:

First VRP Progress Report dated January 2, 2018
Conference Call Follow Up Summary dated March 19, 2018
Second VRP Progress Report dated July 13, 2018
Third Semi-annual VRP Progress Report dated January 10, 2019
1610 Southland Circle (fka "Indcon"), HSI 10077
1610 Southland Circle, Atlanta, Fulton County, Georgia
Tax Parcel No. 17-0192-LL-051-6

Dear Mr. Reed:

The Georgia Environmental Protection Division (EPD) has reviewed the First VRP Progress Report, Conference Call Follow Up Summary, Second VRP Progress Report, and Third VRP Progress Report for the referenced site. EPD acknowledges the conclusions and meeting outcomes provided in the Conference Call Follow Up Summary, however some additional actions will be required based on the results presented in the VRP Progress Reports. EPD has the following comments:

1. **Sampling and Analysis Plan (SAP):** During the March 2, 2018 conference call, CBS and EPD discussed performing homolog analysis on 10% of the PCB samples collected. This approach was applied to the groundwater sampling activities described in the Second VRP Progress Report. To determine how accurately the Aroclor values reflect the total PCBs in specific environmental media, EPD evaluated correlations between total Aroclor PCBs and total homolog PCBs. Depending on the sampled media, the correlation between PCB Aroclors and PCB homologs varied widely. In light of these results, EPD requests that the sampling and analysis plan be modified such that homolog sampling is conducted in media where Aroclor analysis appears to poorly correlate with homolog analysis. EPD observations and recommended modification to the future SAP are as follows:
 - a. **Groundwater:** Based on the observed correlation, no additional groundwater homolog analysis is required. Future groundwater analysis may be performed for PCB Aroclors only. In addition, PCB Aroclor samples were not submitted for MW-6, MW-7, MW-9, and MW-10. Inclusion of these wells during future groundwater sampling events may be necessary to meet the delineation criteria of the VRP Act as described in Comment 2.
 - b. **Soil:** PCB Aroclor detections in soil had a corresponding PCB homolog exceedance. PCB homologs should be analyzed when PCB Aroclors are detected.

- c. **Surface Water:** PCB Aroclor detections and RRS exceedances do not correspond with PCB homolog detections and RRS exceedances. Moving forward, all surface water samples should be analyzed for PCB Aroclors *and* PCB homologs.
- d. **Sediment:** PCB Aroclor detections and RRS exceedances do not correspond with PCB homolog detections and RRS exceedances. Moving forward, all sediment samples should be analyzed for PCB Aroclors *and* PCB homologs.

EPD recognizes that Aroclor 1262 and 1268 were not reported. In some cases, the absence of these Aroclors may explain the poor correlations. If this is suspected, please provide a demonstration justifying the continued use of Aroclor analysis.

- 2. **Site Delineation:** EPD acknowledges that recent soil sampling activities have resolved several issues concerning lateral delineation. However, delineation activities must be completed to the delineation criteria provided under the VRP Act. EPD has the following comments regarding site delineation:
 - a. **Groundwater:** Regulated compounds were detected above RRS in several wells where lateral delineation has not been completed. Specifically, PCBs were detected above Type 4 RRS in several groundwater samples during the most recent groundwater sampling event. Locations MW-3, MW-4, and MW-12D had measurable turbidity levels greater than 10 NTUs and PCB detections in groundwater. Locations MW-2 and MW-12 had low turbidity level (less than 10 NTUs) and PCB detections in groundwater. EPD recommends redeveloping the groundwater monitoring wells to ensure that data are representative of the aquifer. Otherwise, additional lateral groundwater delineation will be required.
 - b. **Soil:** Additional lateral delineation is required beyond SB-3-2018 and SB-7-2018 to determine the extent of PCB impacts. Based on the proposed sampling and analysis plan discussed in Comment 1, location SB-6-2018 should be resampled and analyzed for PCB homologs. In the event that PCBs exceed RRS, additional delineation may be required.
 - c. **Surface Water:** Additional delineation is required downstream of the Downstream sample.
 - d. **Sediment:** Additional delineation is required downgradient of SD-2-2018.
- 3. **Groundwater Flow:** EPD has the following comments regarding the current groundwater monitoring network:
 - a. Water level observations from June 6, 2018 deviate from those historically observed. The screen interval and construction of MW-4 may be causing some of these issues. MW-4 was originally constructed as a temporary well and subsequently converted to a permanent well. Unlike the surrounding groundwater monitoring wells, MW-4 has a low transmissivity and purges dry when approximately one well volume (0.6 gallons) is removed. Given this anomalous behavior, additional actions at MW-4 are required. At a minimum, redevelopment should be performed as described in comment 2.a. Otherwise the monitoring well may need to be replaced. If a replacement well is preferred, EPD recommends installing a new well outside of the building near the property boundary to improve access.

- b. Potentiometric data collected from PZ-1 was excluded from Figure 2. Please clarify why this should be excluded from future measurements.
 - c. PZ-2 was listed as "Damaged" on Figure 2 of the Second VRP Progress Report. Please justify the exclusion of this data and repair the piezometer, if possible.
 - d. Based on recent conversations with GHD, both MW-3 and RW-1 are maintained as recovery wells. Since these are pumping wells, the inclusion of RW-1 and MW-3 on the potentiometric map may distort the groundwater flow direction. EPD recommends including an estimated capture zone on the figure to document pumping conditions.
4. **Risk Reduction Standards:** The risk reduction standards provided in the First and Second VRP Progress Reports were reviewed. EPD comments pertaining to the RRS values are included in Attachment 1. Once these comments have been addressed, please resubmit the calculations for approval in the next VRP submittal.
5. **Milestone Schedule:** An estimated milestone schedule should be provided in the next semi-annual progress report. The milestone schedule should include items discussed in the First Progress Report and Conference Call Follow Up. For example, the schedule should include surface water and groundwater monitoring events, additional soil sampling, groundwater delineation, downgradient sediment sampling, submission of a well survey, and performing a screening level ecological assessment (SLERA).
6. **Sub-Slab Soil Vapor Sampling:** Please perform sub-slab vapor sampling for PCBs as was described in the Conference Call Follow Up Summary.

EPD understands that the VRP activities are ongoing and that CBS may be actively addressing these issues. The next VRP submittal is due on or before July 15, 2019. If you have any questions, please contact Michael Smilley at 404-463-0530.

Sincerely,



David Hayes
Unit Coordinator
Response and Remediation Program

c: Terefe Mazengia, GHD (via email)

Attachments:

Attachment 1 – RRS Comments

File: File ID 261-0518 (VRP)

EPD has the following comments concerning the calculated RRS.

1. First VRP Progress Report, Appendix A, Table 2: Derivation of Generic Type 4 Target Concentrations for Groundwater

- a. 1,2,3-Trichlorobenzene is a non-regulated substance. Please remove it from all associated tables since the RRS do not apply to this substance.
- b. For 1,1,2-trichloroethane, the Type 4 groundwater RAGS, Part B, Equations 1 and 2 results were incorrect due to not accounting for the inhalation pathway for volatile substances. The correct value should be 4.6E-02 and 5.83E+4, respectively.
- c. The RAGS Part B Equation 1 results for ethylbenzene were calculated based on a target risk (TR) of 1E-4 for a Class C carcinogen; however, this substance is not classifiable as a human carcinogen. Therefore, the TR should be 1E-5. Please revise the TR in all associated tables.
- d. For trichloroethene, the Type 4 groundwater RAGS, Part B, Equation 2 result is incorrect due to not accounting for the inhalation pathway for a volatile substance. The correct value should be 5.2E-3 mg/L and note that this will impact the final groundwater RRS. Please revise.

2. First VRP Progress Report, Appendix A, Table 3 Derivation of Generic Type 1 Target Concentration for Soil

- a. See comments 1.a. and 1.c.
- b. The TR for 1,2-dichloroethane is incorrect and impacts the RAGS, Part B Equation 6 result. This substance is listed as a probable human carcinogen and the correct TR for use should be 1E-5. The correct RAGS, Part B Equation 6 result is 6.3E+0 mg/kg.
- c. For 1,1,2-Trichloroethane, the Type 1 soil RAGS, Part B, Equation 7 result is incorrect due to not accounting for the inhalation pathway for volatile substances. The correct value should be 2.45E+0 mg/kg. Please revise the soil RAGS, Part B, Equation 7 results for all associated tables.
- d. For Aroclor-1016, 1242, 1248, 1254, and 1260, the Type 1 soil RAGS, Part B, Equation 6 results were incorrect due to not accounting for the inhalation pathway for volatile substances. The correct values should be 1.878E+02 mg/kg, 6.4 mg/kg, 6.5 mg/kg, 6.7 mg/kg, and 7.0 mg/kg, respectively. Please revise in all associated tables and note the final soil Type 3 and 4 soil RRS result will be different than the values listed above.

3. Second VRP Progress Report, PCB RRS

- a. EPD agrees with the summation of homolog groups for comparison to the applicable total PCB RRS, as was conducted in the report.
- b. For samples collected for PCB homolog analysis, the RRS for PCBs should be revised to calculate risk as a PCB mixture (i.e., total PCBs) in lieu of individual Aroclors for specific media.