GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

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May 15, 2019

VIA U.S. MAIL AND EMAIL

Hood Packaging Corporation
c/o Mr. John Smith
25 Woodgreen Place
Madison, MS 39110

Subject: VRP Semi-annual Progress Reports #3, #4, and #5
Southern Bag Corp (HSI 10089)
910 River Street, Valdosta, Lowndes County, Georgia

Dear Mr. Smith:

The Georgia Environmental Protection Division (EPD) has reviewed the Voluntary Remediation Program (VRP) Semi-annual Progress Report (SAPR) #3 dated April 20, 2018, VRP SAPR #4 dated October 20, 2018, and VRP SAPR #5 dated April 20, 2019 for the referenced site. EPD has the following comments:

1. EPD notes that there have been updates to Risk Reduction Standards (RRS) as part of updates to the Rules for Hazardous Site Response that became effective in September 2018. The updated RRS may be used if desired. EPD has also published tables of updated default Type 1 and 3 RRS for selected substances, including lead, arsenic, barium, and zinc. More information about RRS, including tables of the updated Type 1 and 3 RRS, is available at: www.epd.georgia.gov/comparison-existing-contamination-risk-reduction-standards-391-3-19-07.

2. It has not been demonstrated that the extents of constituents in soil and groundwater have been fully characterized (i.e., delineated) to the delineation criteria provided under the VRP Act and the Rules for Hazardous Site Response. The delineation criteria for constituents in groundwater are typically the Type 1 RRS and the delineation criteria for constituents in soil are typically the Type 1 or 2 RRS.

3. As part of future reports, a description of all groundwater and soil sampling methods, including sample collection, field decontamination, QA/QC sampling, etc. should be provided to ensure that appropriate methodology is being utilized consistent with the United States Environmental Protection Agency (USEPA), Science and Ecosystem Support Division (SESD) procedures.

4. Groundwater Activities (Section 3.1) – 3rd, 4th, 5th SAPRs:

    a. A narrative description should be provided in the text of future reports describing which monitoring wells monitor/evaluate which hydrogeologic zone (i.e., upper residuum/shallow water bearing zone vs. lower residuum/deeper water bearing zone).

b. Table 4 Monitoring Well Construction Details should be revised as part of future reports to include a column designating which hydrogeologic zone each well is designed to monitor/evaluate.

c. Figure 7 should be revised to include multiple separate figures depicting isocontour maps for individual constituents of concern (COCs) (i.e., arsenic, lead, and zinc) for both the shallow and deeper groundwater zones. For example, one shallow zone and one deeper zone isocontour map should be provided for each COC (i.e., arsenic, lead, and zinc) identified at concentrations exceeding applicable delineation criteria. Isocontour lines and contour intervals should be based on analytical testing results and should include an outermost contour line corresponding to the groundwater delineation criteria for COCs.

d. EPD notes that it was stated in the 3rd SAPR report that it is possible that the elevated lead concentration (i.e., 2,670 µg/L) reported in MW-SB-6 could be the result of fine particulate matter in the sample. However, field sampling notes provided as an appendix to the report indicates that turbidity readings were recorded at 3.58 NTUs just prior to sample collection from this well which does not support the presumption that particulate matter may have contributed to the reported elevated lead concentration. Analytical testing results for lead in the 4th SAPR (i.e., 2,750 µg/L) for MW-SB-6 was similar in concentration to that of the 3rd SAPR with similar turbidity readings at the time of sample collection (i.e., 3.71 NTUs). Such results appear to be representative of groundwater quality in the vicinity of MW-SB-6. In the 5th SAPR, EPD noted that the well was purged dry, with a final recorded turbidity reading of 227 NTUs at 10:20 and sample collection at 15:55. In cases where the well is purged dry, groundwater quality parameters such as turbidity should also be recorded at the time of sample collection.

5. Surface Water Activities:

a. EPD notes that lead and zinc have been detected in surface water above Instream Water Quality Standard (IWQS) default values (assuming a hardness of 50 mg/L $CaCO_3$), and that detected concentrations are higher near areas of impacted groundwater compared to results from upstream sample SW-6.

b. EPD notes that IWQS for lead and zinc are hardness dependent. IWQS for lead and zinc based on hardness should be presented in the next progress report. Equations for calculating acute and chronic criteria based on hardness are provided in the Rules for Water Quality Control, which are available at: http://rules.sos.ga.gov/gac/391-3-6.

6. Soil Averaging:

a. As provided by Section 12-8-102(b)(14) of the VRP Act, average exposure concentrations in soil are to be determined consistent with USEPA guidance. EPD has published a draft guidance document, *Area Averaging Approach to Soil Cleanups*, which is based on USEPA methodology and is available at: https://epd.georgia.gov/land-protection-branch-technical-guidance.

b. Progress Report 4 (page 7) states that, "[a] large composite sample was prepared from equal aliquots of the 36 samples taken from Large Area 4 and the 75 samples taken from the larger sampling grid. This sample should conservatively represent the overall site-wide area of contamination." The use of a single composite soil sample to represent contamination over such a large area is not consistent with USEPA guidance.

c. It appears that the "large composite sample" was prepared from samples collected in July/August 2017 (36 samples from Large Area 4) and March 2018 (75 samples from the larger sampling grid). Compositing samples collected in July/August 2017 with samples collected in March 2018 for laboratory analysis would exceed standard laboratory holding times for the 2017 samples and raises concerns about maintaining chain-of-custody over the extended time period.

7. Calculation of Soil Type 4 RRS:

a. Please confirm whether updated RRS will be used for the site as referenced in Comment 1. Use of updated RRS will require updating calculations for ingestion, inhalation, and dermal exposure. The use of any site-specific exposure factors (e.g., exposure frequency) will need to be documented in a Uniform Environmental Covenant.

b. Evaluation of the Soil-to-Groundwater Pathway (i.e., leaching) is a component of determining Type 4 RRS. The single SPLP test conducted on the "large composite sample" is insufficient to evaluate leaching for the site. EPD has published a draft guidance document, *FAQs for Evaluating the Soil-to-Groundwater Pathway*, which is available at: https://epd.georgia.gov/land-protection-branch-technical-guidance.

Hood Packaging Corporation must address these comments to EPD's satisfaction in order to demonstrate compliance with the provisions, purposes, standards, and policies of the VRP Act. EPD anticipates that the 6th VRP Semi-annual Progress Report will be submitted no later than October 20, 2019. If you have any questions regarding this matter, please contact Will Lucas of the Response and Remediation Program at (404) 656-3851 or via email at william.lucas@dnr.ga.gov.

Sincerely,

David Hayes
Unit Coordinator
Response and Remediation Program

c: Martin Rollins (via email: mrollins@hmrollins.com)

File: 254-0060 (VRP)

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