

# Georgia Department of Natural Resources

2 Martin Luther King, Jr. Dr., S.E., Suite 1462 East, Atlanta, Georgia 30334

## Reply To:

Response and Remediation Program  
2 Martin Luther King, Jr. Drive, S.E.  
Suite 1462, East Tower  
Atlanta, Georgia 30334-9000  
Office 404/657-8600 Fax 404-657-0807

Mark Williams, Commissioner  
Environmental Protection Division  
F. Allen Barnes, Director  
Land Protection Branch  
Mark Smith, Branch Chief

June 30, 2011

**COPY**

Sara Lee Corporation and Rathon Corporation  
c/o Mr. Harvey M. Sheldon, Esq.  
Hinshaw & Culbertson  
222 North LaSalle Street, Suite 300  
Chicago, Illinois 60601

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Re: EPD Comments  
Baseline Human Health Risk Assessment, September 2009  
Semiannual Report, January 2010  
Voluntary Remediation Program Semiannual Progress Report Number 1, December 2010  
Diversey-Olympic Manufacturing (Former), HSI Site No. 10435  
3051 Olympic Industrial Drive, Smyrna, Cobb County, Georgia

Dear Mr. Sheldon:

The Georgia Environmental Protection Division (EPD) has completed its review of the above-referenced documents. Our comments are provided below.

### **Baseline Human Health Risk Assessment (BHHRA)**

1. The BHHRA lacked the seal of the certifying professional and did not contain the proper certifying statement. All reports containing groundwater data and interpretation must bear both the signature and seal of a professional geologist or engineer registered in the State of Georgia. In certain areas, particularly some of the strictly quantitative aspects of groundwater reports, the boundary between the geologic and engineering professions is not clearly drawn. In order to maintain consistency, and to ensure quality reports, the following statement is required on the groundwater-scientist-certification page, to be signed and sealed by the preparer of the report and to accompany all groundwater reports:

*I certify that I am a qualified groundwater scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared by myself or by a subordinate working under my direction.*

2. A site-specific Dilution Attenuation Factor (DAF) value of 16, presented on page 2-3, is acceptable to EPD for use in soil-leaching calculations.

3. Please calculate separate hydraulic conductivity (K) values for each water-bearing unit on site (shallow and bedrock). According to CSR Addendum 1, dated October 10, 2003, slug test data were obtained from five wells: MW-9a, MW-10, MW-11, MW-12, and MW-13a. Of those five wells, only MW-9a and MW-12 are screened entirely in the shallow aquifer. MW-10 and MW-13a are screened across the soil-bedrock interface, whereas MW-11 is screened entirely in bedrock (without a double casing). To obtain a K value for the shallow aquifer, please calculate a geometric mean of K values obtained from at least three wells screened entirely within the shallow aquifer on site. To obtain a K value for the bedrock aquifer, please calculate a geometric mean of K values obtained from at least three double-cased bedrock wells on site. K values should be presented in centimeters per second (cm/s).
4. EPD suggests using the presented hydraulic gradient (i) value of 0.07 for the surficial aquifer only, and an i value of 0.05 for the bedrock aquifer. EPD calculated the i value for the bedrock aquifer from Figure 1-5 by drawing a line perpendicular to the 805-foot and 790-foot contours.
5. The soil screening levels (SSLs) presented in Table 2-5 represent proposed Type 4 risk reduction standards (RRSs) to establish soil concentrations protective of groundwater directly beneath the contaminated soil. Although this approach is acceptable to EPD, it is more conservative than is necessary. Given that the site is a participant in the state of Georgia Voluntary Remediation Program (VRP), soil concentrations on site must be protective of groundwater at an established point of exposure, not necessarily of groundwater directly beneath the contaminated soil. Accordingly, a contaminant fate and transport model may be used in conjunction with a vadose-zone-transport model to establish soil concentrations protective of groundwater at the established point of exposure; however, it is not required.

Please note that when calculating substance-specific SSLs via the use of a vadose-zone-transport model, input values for specific physical and chemical properties of that substance should be obtained from the latest version of the EPA Region 3 regional screening levels (RSL) generic Chemical Specific Parameters table. This table can be accessed on the Internet at [http://www.epa.gov/reg3hwmd/risk/human/rb-concentration\\_table/Generic\\_Tables/index.htm](http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm)

6. EPD disagrees with the statement on page 2-3 that there is no potential for vapor intrusion into the on-site building from groundwater. We note that potential vapor intrusion is evaluated in the December 2010 VRP semiannual progress report.

#### ***Risk Reduction Standards***

7. Under the Voluntary Remediation Program Act, O.C.G.A. 12-8-100, the definition of "Available Cleanup Standard" with regard to human health risk assessments (12-8-108(6)) refers to Section 12-8-93 of the HWMA, which is in Section 2 – i.e. Hazardous Site Response. Because of this, the methodology used to develop cleanup standards under the Voluntary Remediation Program should be the methodology described in Section 391-3-19-.07 of the Rules. Therefore, cleanup standards would need to default to applicable RRS values.

The RRS methodology requires a concentration be determined for impacted media which would unlikely result in any noncancer toxic effects exceeding target hazard index (HI) of 1 or the upper bound on the estimated excess cancer risk is less than  $10^{-5}$  via two exposure routes: ingestion and

inhalation. The BHHRA, however, also included dermal contact and inhalation of volatiles while showering, which need not be addressed under the Rules.

8. Regarding Table 2-1: Footnote 'f' states that soil Type 2 and 4 RRSs were calculated based on 'reasonable assumptions'. When submitting RRSs for review, please provide sample calculations, equations, and all input parameters for all RRS calculations for review. Please note that soil Type 2 and 4 RRS values need to include leachability calculations. Examples of acceptable fate-and-transport model for leachability include Equation 4-10 or B-13 (Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, December 2002).
9. Regarding Table 2-3: Groundwater RRS values based upon background or detection limits should be specified using appropriate footnotes.
10. Regarding Table 4-1: When submitting RRSs for review, please also include toxicity values for all the substances for which RRS values were developed. Please note that the use of surrogate toxicity values is not allowed under the Rules (see footnote 'b' in Table 4-1).
11. Additional data should accompany the vapor-intrusion model outputs. When submitting a vapor intrusion model, all model inputs and outputs should be presented for review by EPD, as was done in the December 2010 VRP semiannual progress report.

#### **Semiannual Report dated January 2010**

12. Groundwater on site has historically been reported and mapped as being within two distinct water-bearing units, the water-table (shallow) aquifer and the bedrock aquifer. However, EPD notes the following:
  - a. Data from wells MW-5, MW-6, MW-7R, MW-10, MW-11, and MW-13aR are included on Figure 3-2: Shallow Aquifer Potentiometric Map, yet they all have well screens which cross the soil-bedrock interface. Accordingly, the accuracy of this shallow aquifer potentiometric map and preceding maps is questionable. Also in question is whether laboratory analytical data from these wells accurately represents groundwater quality in the shallow aquifer. Please provide a narrative as to how these wells can best be utilized as site monitoring and remediation activities move forward.
  - b. Wells MW-3R and MW-11 are screened entirely in bedrock, but were not installed with a double casing. Nevertheless, MW-3R and MW-11 should be considered bedrock wells and mapped accordingly on future potentiometric-surface and groundwater-detection maps.
13. The Diversey site has been accepted into the Georgia VRP as a qualifying property since the date this semiannual report was submitted to EPD. Accordingly, any EPD comments regarding proposed or active remedial activities on site will be made in response to VRP progress reports.

**VRP Semiannual Progress Report Number 1, December 2010**

14. EPD has reviewed the participants' May 19, 2010, protest of EPD findings regarding the source of the contamination on the adjoining Olympic Associates property located at 3021 Olympic Industrial Court. EPD believes that substantial evidence exists to support our earlier conclusion that the former Diversey-Olympic Manufacturing facility is the source of contaminants in the wells on the Olympic Associates property. Our response letter has been mailed to the participants under separate cover. Accordingly, as stated in our May 17, 2010, Voluntary Remediation Plan and Application Notice of Deficiencies:
  - a. Please horizontally delineate regulated substances in groundwater southeast and southwest of the MW-9a / MW-9b well nest.
  - b. Please horizontally and vertically delineate regulated substances in soil around the sanitary-sewer manhole located approximately 50 feet northeast of the MW-9a / MW-9b well nest. The area of impacted soil is described in the environmental investigation report of the adjoining warehouse property referenced above.
15. A meeting with EPD is requested within the VRP progress report to clarify certain aspects of VRP requirements. Please contact the EPD compliance officer and specify a preferred month for the meeting. EPD will attempt to schedule a meeting during that month, but available meeting slots will depend upon the availability of the relevant EPD associates. We will respond with several proposed dates and times.

***Risk Reduction Standards***

16. Regulated Substances: Please note that sec-Butyl Benzene, p-Isopropyl Toluene, n-Propyl Benzene are not regulated under the Rules of HSRA. Therefore, RRS values do not apply to these chemicals. Please remove these substances from the table listing Type 1 Standards for soil.
17. Type 1 Standards for Soil: The soil Type 1 RRS for all substances are correct except cis-1,2-dichloroethylene. The correct Type 1 value for this substance (based on the '100 x groundwater value), is 7 mg/kg as the revised Appendix III Table 1 value is 0.07 mg/L for this substance. Please revise the soil and groundwater Type 1 RRS for cis-1,2-dichloroethylene.
18. Chemical-Specific Parameters: It was noted that the chemical-specific parameters for the derivation of the volatilization factors (VF) were obtained from the Soil Screening Guidance Technical Background Document or the Region IX PRG tables. Please note that EPD's preferred hierarchy for chemical-specific parameters is:
  - a. EPA Region 3 RSL generic Summary Table 2, which can be accessed on the Internet at [http://www.epa.gov/reg3hwmd/risk/human/rb-concentration\\_table/Generic\\_Tables/index.htm](http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm)
  - b. Soil Screening Guidance Technical Background Document
  - c. Superfund Chemical Data Matrix (SCDM)

Please revise the input parameters and the VF calculations.

Sara Lee and Rathon must address these comments to EPD's satisfaction in order to demonstrate compliance with the provisions, purposes, standards, and policies of the Act. EPD may, at its sole discretion, review and comment on documents submitted by Sara Lee and Rathon. However, failure of EPD to respond to a submittal within any timeframe does not relieve Sara Lee and Rathon from complying with the provisions, purposes, standards, and policies of the Act.

Please address the comments in this letter in the next semiannual progress report, due December 31, 2011. If you have any questions, please contact Allan Nix of the Response and Remediation Program at (404) 657-8600.

Sincerely,



David Brownlee  
Unit Coordinator  
Response and Remediation Program

c: Trish Reifenberger, Brown & Caldwell  
Karl Forrest, Fine & Block for Jodaco, Inc.

File: HSI Site Number 10435