Georgia Department of Natural Resources

Environmental Protection Division-Land Protection Branch
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Judson H. Turner, Director

May 28, 2014

VIA CERTIFIED MAIL

Arivec PRP Group
c/o Ms. Amy Magee, Esq.
King & Spalding, LLP
1180 Peachtree Street
Atlanta, Georgia 30309-3521

Re: Proposed Work Plan, April 15, 2014
Status Update, August 13, 2013
Interim Progress Report, November 2012
Arivec Chemicals Site, HSI Site Number 10123
7962 Huey Road, Douglasville, Douglas County, Georgia

Dear Ms. Magee:

The Georgia Environmental Protection Division (EPD) has reviewed the above referenced documents which have been submitted for the Arivec Chemicals site. EPD's October 21, 2011 letter requested a revised VIRP application or a HSRA Corrective Action Plan (CAP); however, the April 2014 Work Plan proposes two additional years of groundwater monitoring to characterize groundwater conditions and trends. Although, ongoing groundwater monitoring is acceptable, the Arivec PRP Group must address the ongoing soil source in the interim. EPD offers the following comments, which should be addressed in subsequent reports:

1. Based on the elevated soil and groundwater concentrations, and the significant leachate concentrations detailed in the 2012 progress report, it is obvious that significant leaching from soil has occurred and will continue to occur. SPLP data demonstrates leachate concentrations over 100 mg/L, which have continued to impact groundwater in the 3 ½ years since the drum removal was completed. Therefore, a soil CAP must be submitted, which preferably would provide for the use of active treatment technologies to remove or treat all soil to Type 1 through 4 risk reduction standards (RRS). At a minimum, it must provide for stabilization of soil in the seven areas designated in Section 2.4 of the 2012 progress report as exhibiting the greatest potential as groundwater contaminant source areas.

2. Based on 2013 groundwater concentrations, vapor intrusion has the potential to exceed target risks to nearby downgradient residents. Consequently, please ensure that the proposed vapor intrusion evaluation is completed in June/July 2014, as proposed in the April 2014 schedule. Concurrently, please provide a proposed soil vapor assessment work plan, which provides additional detail, including the following activities: 1.) collection of soil gas samples, with sample collection intervals at 2.5 to 3-feet and 12-feet below ground surface (bgs) based on water level elevations in the area; 2.) analysis of the samples by method TO-15; 3) a well-defined contingency plan for next steps, based on soil gas results and analysis via the VISL & J&E model, that includes evaluating additional locations and/or proceeding with sub slab and ambient air sampling in residences, as needed (e.g. 1551 Huey Road, 7875 and/or 7877 Newport Drive).

3. The drive-by windshield water well survey reported in the November 2012 progress report should be updated as soon as practicable. According to Table 4, eight of the addresses reported either no response or no mailbox. Please revisit the residences or contact relevant sources of information for 1506 and 1433 Huey Road to verify and/or confirm if there are wells in use. In addition, please collect a sample from the well at 1480 Huey Road. Even though this well is no longer in use, its close proximity downgradient to the site makes this data relevant.

4. The 2012 progress report stated that additional delineation wells would be proposed after the 2013 monitoring event. Concurrent with the monitoring of groundwater quality immediately downgradient of the drum removal areas on the site, additional delineation, in both the overburden and bedrock groundwater, needs to be completed northwest of wells MW-CRW 4S, 5S, and 5B, and north of MW-9R and 9B. If possible, please include these wells in the next well installation event scheduled for June-July 2014 and in the August 2014 groundwater sampling event.

5. The reporting limit for 1,4-dioxane analysis should at a minimum be the Type 1 RRS of 0.07 milligrams per liter (mg/L) for off-property wells. A method such as Modified EPA Method 8260 SIM should be used for this analysis. Please resample the residential wells, located at 1431 Huey Road and 1312 Pirkle Road for VOCs, using the lower reporting limit for 1,4-dioxane.

6. In future groundwater monitoring reports, please prepare figures that summarize groundwater analytical results for PCE, TCE, and VC concentrations in both water-bearing units. These figures should also depict the horizontal extent of contamination exceeding applicable groundwater RRS for *each* impacted water-bearing unit using isoconcentration contour lines representing RRS values. In addition, please show on the figures the 2009 and 2010 limits of excavation. If need be, please resize these drawings to C size so that they are legible.

7. Trend graphs should be developed showing PCE, TCE, and VC concentrations over time. These wells should include MW-CRA- 1S, 2S, 5S, 5B, 6S and MW-2B, 9R, 9B, 17B, 17R and AW-2.

8. Please note the following corrections to Tables and Figures in subsequent reporting:

   a. The SPLP leachate units should be micrograms per liter (ug/L) on Figures 5 and 6 of the 2012 Interim Progress Report.

   b. Table 3 of the 2013 Status Update, which appears to be a summary of historic groundwater sampling results, does not include any groundwater data for MW-2R, MW-9R, MW-9B, MW-15B, and MW-15R. Please add these wells and corresponding data to historical data summary table in future reports.

   c. All references to non-regulated substances, such as n-butyl benzene, methyl tert-butyl ether [MTBE], and tert-butylbenzene, should be removed from groundwater tables.

   d. EPD noted discrepancies between the Type 1 and 4 RRS for groundwater in Tables 2 and 3 of the 2013 Status Update, and the Type 1 and 4 RRS for groundwater previously approved by EPD on January 27, 2010. If new RRS are being sought, the report should clearly indicate this and include supporting documentation and

calculations for *all* constituents of concern. If using the previously approved RRS, please make the following corrections.

Regulated Substance	Type 1 RRS	Type 4 RRS
1,1,1,2-Tetrachloroethane	70	100
1,1,2,2-Tetrachloroethane	5	1.28
1,2-Dibromoethane (Ethylene dibromide)	0.5	5
Carbon Tetrachloride	5	5
cis-1,2-Dichloroethene	70	1020
cis-1,2-Dichloropropene	5	5
Dichlorodifluoromethane	1000	1000
m&p Xylenes	1000	1860
trans-1,3-Dichloropropene	5	5

EPD recognizes the ongoing efforts that have been undertaken to develop viable remedial actions for soil and groundwater at the Arivec Chemicals site. We concur that additional monitoring and investigation is needed to delineate and further develop a downgradient groundwater remedy as detailed in the April 2014 Work Plan. However, active soil remediation is necessary and a soil CAP must be submitted by November 14, 2014. The CAP should include the results from the August groundwater monitoring event, the soil vapor assessment, the drinking-water well survey and sampling event, and a copy of the ISS/ISCO treatability study. In addition, please submit the soil vapor assessment work plan referenced in Comment 2 as soon as practicable. If you have any questions, please contact Robin Futch, P.G., PMP of my staff at 404-657-8686.

Sincerely,

Jason Metzger

Jason Metzger
Unit Coordinator
Response and Remediation Program

c: Mr. Bob Pyle, Conestoga-Rovers & Associates
Arivec Technical Committee

File: HSI #10123

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