

# Georgia Department of Natural Resources

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## Reply To:

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

October 21, 2011

## VIA E-MAIL AND REGULAR MAIL

# COPY

Arivec Chemicals PRP Group  
c/o Mr. Charles Tisdale, Esq.  
King & Spalding LLP  
1180 Peachtree Street, NE  
Atlanta, Georgia 30309-3521

Re: Voluntary Investigation and Remediation Plan and Application, July 25, 2011  
Application Incomplete  
Arivec Chemicals Property, HSI Site No. 10123  
7962 Huey Road, Douglasville, Douglas County, Georgia  
Tax Parcels 0825182 B001 and 0825182 B016

Dear Mr. Tisdale:

The Georgia Environmental Protection Division (EPD) has reviewed the July 25, 2011 Voluntary Investigation and Remediation Plan (VIRP) submitted by the Arivec PRP Group (PRP Group) for the above-referenced tax parcels (the "Property") that are part of the Arivec Chemical Site (Site). Pursuant to the Georgia Voluntary Remediation Program Act (the Act) O.C.G.A. 12-8-100, *et seq.* EPD has determined that the application is incomplete based on the following items:

### Lien

1. In accordance with Section 12-8-105(2)(C)(4) of the Act, in order for a property to be considered a qualifying property for enrollment in the Voluntary Remediation Program, any lien filed against the property must be satisfied or settled and released by the Director. As you are aware, EPD filed a lien on the Property on March 22, 2004 in the amount of \$89,887.25 for corrective action activities performed at the Property using funds from the Georgia Hazardous Waste Trust Fund. EPD has received your memorandum dated October 3, 2011 which requests that EPD settle and release the Arivec PRP Group of any further obligations under the lien. EPD has evaluated your request and we do not agree that it is appropriate to settle and release the lien in the manner proposed. As previously stated, the Property will not be considered a "qualifying property" for enrollment in the Voluntary Remediation Program until the lien has been satisfied or settled and released by the Director.

### Investigation and Remediation Plan

2. The VIRP states that the groundwater protection requirements for soil will be assessed using multiple points of exposure (POE) including existing off-Site wells, existing off-Site residences with no wells but potential for vapor intrusion, and/or a hypothetical point of drinking water exposure located at a distance of 1,000 feet downgradient of the Site. The VIRP also states that off-Property groundwater will be addressed using a localized remedy at the POE, if needed, and that contamination extending off-Property will continue to be addressed under Hazardous Site Response Act (HSRA) regulations. Note that the POE must be located at the downgradient property line of the qualifying properties on the basis that impacted non-qualifying properties will be addressed within the HSRA regulatory framework, whereby all groundwater is considered potential drinking water (i.e., a theoretical POE). The revised VIRP must enumerate and describe all corrective action

measures planned to ensure groundwater exiting the Property will meet RRS within five (5) years of enrollment in the Voluntary Remediation Program.

3. Section 8.0 of the VIRP states that soil areas exceeding Type 3 Risk Reduction Standards (RRS) at depths greater than 4 feet below ground surface (bgs) will initially be screened to select locations for possible Synthetic Precipitation Leaching Procedure (SPLP) analyses. The revised VIRP should provide additional detail regarding what is intended by an "initial screening". In accordance with Section 12-8-102(b)(6) of the Act, the soil domain for protection of groundwater at the established POE is the impacted area of site soils from the ground surface down to the uppermost groundwater zone; therefore, shallow soil areas (i.e., 0-2 or 0-4 feet bgs, refer to comment #7) in excess of Type 3 and/or Type 4 RRS should also be assessed for protection of groundwater at the established POE.
4. The revised VIRP should reference and include a copy of the agreement between the Property owner, Mr. James Paravechio, and the PRP Group dated August 19, 2011, whereby Mr. Paravechio has given the PRP Group permission to enter the Property to perform clean up activities and implement controls for the Property. Section 10.3 of the VIRP should also be revised to state whether the Property owner or the PRP Group will be responsible for executing institutional controls.
5. The VIRP states that a potential exposure pathway associated with the Property is a construction/utility worker scenario, although there are no plans for future construction or utility installation activities at the Property. If the Type 5 area(s) for soils are designed to allow construction/utility worker activities in the future, then the PRP Group will be required to calculate site-specific utility and construction worker RRS standards and draft the Environmental Covenant for the Property to explicitly state the procedures that will be used to protect workers.
6. Section 8 of the VIRP states that supplemental soil sampling will be performed within the 0-2 ft horizon and to the water table or to bedrock refusal. To clarify, in addition to the 0-2 ft depth interval, soil samples should also be collected at 5-ft intervals until the water table and/or bedrock/refusal is encountered.
7. The revised VIRP should be consistent as to whether soil samples collected from the 0-4 feet or 0-2 ft bgs intervals are to be considered "shallow" soil. According to the Act, the shallow soil domain is less than 2 feet bgs, although EPD may approve a more conservative soil exposure domain, as necessary. It may be helpful to review the historical soil boring logs to discern the depth at which grab samples for VOCs were collected in samples reported to be collected from the 0-4 ft interval for the purposes of assigning a soil exposure domain.
8. Section 1.2 of the VIRP mentions that one steel vessel currently remains at the Property following removal of the majority of the metal structures at the site. EPD believes that the remaining steel vessel is the same vessel that was noted as containing asbestos during an EPD site visit performed in March 2011. If the remaining vessel contains asbestos or regulated substances, the revised VIRP should provide a plan for addressing the vessel accordingly.
9. The VIRP states that soils exceeding Type 3 RRS will be remediated to meet Type 5 RRS. Note that if a Type 5 remedy is sought then the PRP Group will be required to develop a Monitoring and Maintenance Plan for the Type 5 soil area in accordance with Section 391-3-19-.07(10)(b) of the Rules for Hazardous Site Response. EPD will also require

permanent markers in accordance with Section 391-3-19-.08(7)(b)(4) of the Rules for Hazardous Site Response.

10. In the revised VIRP, please include a preliminary cost estimate for completion of all activities proposed through submittal of the compliance status report.

#### Conceptual Site Model

11. With respect to the Conceptual Site Model and associated figures, the revised VIRP should provide revised cross sections showing both water bearing units encountered at the Property along with colored areas representing soil and groundwater contamination. The cross sections should include a potentiometric surface and all relevant surface/sub-surface features (e.g., proposed POE, property boundaries, excavation areas, former process areas, and basins/ditches).
12. With respect to the assessment of potential exposure pathways, EPD noted that the Conceptual Site Model included exposure pathways associated with non-qualifying properties. While it is acceptable to include all potential exposure pathways associated with the Site in the Conceptual Site Model, please note that all potential exposure pathways associated with non-qualifying properties will be specifically addressed within the HSRA regulatory framework.
13. The conceptual site model description provided in the VIRP states that public water is supplied to residences in the vicinity of the Site, with the exception of two residential properties whose drinking water wells were sampled in July 2011 and found to be non-detect for volatile organic compounds (VOCs). According to the August 11, 2011 letter accompanying the residential drinking water well sampling data, the locations of the drinking water wells were provided to the PRP Group by EPD. Please note that EPD has not performed a well survey in the area since approximately 2003 and as such, additional drinking water wells may be present. As noted in the previous comment, potential exposure pathways in non-qualifying property areas will be addressed within the HSRA regulatory framework. As part of future HSRA activities, EPD will require an updated drinking water well survey in the vicinity of the Site and routine sampling of all drinking water wells located downgradient of the qualifying properties using an EPA drinking water method for VOCs (i.e., EPA Method 524.2).
14. To aid in review, figures illustrating the extent of deep and shallow soil impacts should include only soil samples collected in deep and shallow soil zones, respectively. For example, Figure 5.2, which shows the extent of deep VOC soil impacts on the Property, includes numerous soil boring locations where no deep soil samples were collected (e.g., soil borings B-5 and B-6) or where no VOCs were analyzed (e.g., soil borings B-45 and B-46).
15. As previously stated, off-Property contamination is not considered to be part of the VIRP. Completion of groundwater delineation on non-qualifying properties will be addressed under separate cover within the HSRA regulatory framework.

#### Delineation Criteria

16. The revised VIRP must state the criteria that will be used to delineate groundwater contamination on the Property. Also, to aid in review, please provide the groundwater and soil delineation criteria in a separate table for each contaminant of concern (COC) detected on the qualifying property.

17. In accordance with Section 12-8-108 of the Act, the revised VIRP must specify a Point of Demonstration (POD) that will be used to demonstrate that groundwater concentrations are protective of any established POE. EPD noted that there are no monitoring wells located in the north-northwest portion of the Property, downgradient of the 2009 and 2010 excavation areas, and upgradient of non-qualifying properties, which would be the most suitable locations for POD wells. As such, EPD recommends monitoring wells, to be used as POD wells, be installed in the areas between soil borings B-12 and B-13 and in the vicinity of soil boring locations B-66 and B-67.

Miscellaneous Comments

18. The VIRP describes the Property as being surrounded by industrial land on all four sides. According to the Douglas County Tax Assessors office, a residential property is located to the west of the portion of Huey Road bordering the Property. The residential property is located at 7973 Huey Road and is currently owned by Nathan and Maxine Hillery. The residential property should be indicated on all applicable figures. EPD also noted a discrepancy between the property lines shown in the tax maps in Appendix B and the base maps provided in the VIRP. Please revise accordingly.
19. All references to non-regulated substances, such as n-butyl benzene, methyl tert-butyl ether [MTBE], and tert-butylbenzene should be removed from all RRS tables in the revised VIRP. EPD noted discrepancies between the Type 1 and Type 4 RRS for groundwater proposed in the VIRP and the Type 1 and Type 4 RRS for groundwater previously approved by EPD on January 27, 2010. The revised VIRP should clearly indicate whether new RRS for groundwater are being sought or whether the PRP Group instead proposes to use the Type 1 and Type 4 values already approved by EPD.
20. Table 5 of Appendix C references Type 2 groundwater RRS used to evaluate protection of groundwater in support of Type 4 soil RRS calculations. Please note that in accordance with Section 391-3-19-.07(9)(d)(1) of the Rules for Hazardous Site Response, the higher of a Type 3 or Type 4 groundwater RRS should be used instead of Type 2 groundwater RRS value. To aid in the review process, the soil RRS summary tables in the revised VIRP should clearly indicate whether the Type 4 RRS values actually reflect Type 3 RRS in instances where the Type 3 RRS is higher than the calculated Type 4 RRS.
21. Analytical data for soil borings B-53 and B-74 were not provided in Table 2.1 (Summary of Historical Soil Analytical Results). Please revise accordingly.

Please submit a revised VIRP, which includes responses to the above comments in a response-to-comment format, by December 21, 2011. Alternatively, you may submit a Corrective Action Plan that addresses the Site under HSRA regulations by December 21, 2011. If you have any questions, please contact Carrie Williams Welty P.G. of the Response and Remediation Program at (404) 657-8608.

Sincerely,



Alexandra Y. Cleary  
Program Manager  
Response and Remediation Program