Georgia Department of Natural Resources
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Mark Williams Commissioner
Environmental Protection Division
Judson H. Turner, Director
Land Protection Branch
Mark Smith, Branch Chief

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

FILE COPY

February 8, 2012

VIA EMAIL and REGULAR MAIL

BFEL Indemnitor, Inc.
Attn: Ken Anderson
PO Box 3010
St. Charles, IL 60174

Re: Addendum to Voluntary Remediation Program Application dated March 16, 2011
Estech General Chemicals Site, HSI Site No. 10196
Atlanta, Fulton County, Georgia
Tax Parcels 17-0191-LL0244 and 17-0191-LL0400

Dear Mr. Anderson:

The Georgia Environmental Protection Division (EPD) has received and reviewed the Addendum to Voluntary Remediation Program (VRP) Application and Plan that has been submitted by MACTEC on behalf of BFEL Indemnitor, Inc. in lieu of a Corrective Action Plan (CAP) for the site. While it has addressed EPD's comments on VRP Application and Plan with satisfactory, the following deficiencies are noted:

1. While concurring with the proposed surface water monitoring plan, EPD reiterates that if surface water continues to exceed ISWQs after 3 years of monitoring, then additional remedial measures must be implemented so that the qualifying properties can certify compliance within the requisite 5-year timeframe.

2. A BIOSCREEN-AT Model was used to model out the concentrations at various distances from the source zone within the residuum and bedrock. The model was also used to determine the soil concentrations of COCs in the source zone that are protective of surface water quality. EPD provides the following comments on the modeling section of the application:

    a. The revised VRP Application did not include an appropriate fate and transport model for the metals impacts to the groundwater. Please ensure that an appropriate model is provided.

    b. The Response to Comment (9i) indicates that, "calibration of the fate and transport model to the currently observed concentrations is not possible," yet the revised document has indicated that the subsurface soil concentrations protective of

groundwater will be calculated using this same fate & transport model. Without proper calibration of the model to site conditions EPD cannot concur with the use of the BIOSCREEN-AT model to calculate subsurface soil concentrations protective of groundwater. Please note that additional monitoring locations between the suspected source area and the point of exposure/point of demonstration well(s) may assist with properly calibrating the model in the future. In addition, EPD would be willing to accept certain site related assumptions regarding timing, location, and mass of the original source of the release, as long as these assumptions are based in most part on the available historical site data.

3. The Response to Comment (15) indicates that the SSG equation was not applied to lead and arsenic, and that the highest detected total metals result with a paired SPLP result less than the groundwater standard times the DAF (1) was selected as the soil concentration that would not leach over the groundwater Type 1 RRS. EPD concurs with the use of the methodology for determining an acceptable soil concentration by direct comparison of leaching test results with the target leachate concentration. However, prior to concurring with the resulting leaching values for arsenic and lead in soil, please provide a supporting table illustrating the SPLP data and the calculation(s) that lead to the proposed 22 mg/kg for arsenic and 120 mg/kg for lead.

4. According to the Revised VRP Application, monitoring wells MW-105, MW-106D, and MW-107D are proposed as the point of demonstration wells. EPD does not concur with the proposed POD wells MW-105 and MW-107D, as they are both located on the eastern part of the creek and hydrologically located such that they would not identify contaminants before reaching the point of exposure to surface water. In addition, EPD recommends making an additional attempt at installing an additional shallow bedrock (POD) monitoring well at MW-106D should this location continue to be used as a POD well. Should this additional monitoring well be installed, please use the data from this monitoring location to update any future fate and transport models, and to support conclusions related to the vertical hydraulic gradients in close proximity to the creek (POE).

5. The following comments are applicable to the proposed direct push technology monitoring locations illustrated in Figure 1 of the revised application:

    a. Please move the proposed location just north of SB-171 closer/proximal to MW-9 and exceedance area E.

    b. Please move the proposed location next to SB-140 closer to MW-23 and the property boundary that way the location may be used confirm baseline conditions for the proposed engineered soil cover Type 5 area.

6. Should the permeable reactive barrier (PRB) be utilized as one of the primary corrective measures at the site, please ensure that a sufficient amount of groundwater monitoring wells are installed upgradient of the PRB, and between the stream and the PRB in order to properly

evaluate its effectiveness at removing the groundwater contaminants before reaching the point of exposure.

7. EPD acknowledges that the PRB remedy is still in the conceptual phase; however, the proposed 400-foot length of the PRB does not seem sufficient to protect surface waters from impacts that will exceed ISWQs. Since protection of the surface water is the primary receptor of concern for groundwater and ISWQ violations are ongoing, EPD is requiring that the proposed pilot testing and design of the PRB remedy including supporting hydrologic modeling be submitted with the first progress report. If a different groundwater remedy is selected, that proposed remedy design should be included in the first progress report.

8. The toxicity values used in the VRP reflect those used in IRIS or the May 2010 Regional Screening Level table. However, the U.S. EPA Regional Screening Levels (RSL) tables were updated in November 2011. Please revise those toxicity values accordingly. Thallium now has recommended toxicity factors.

9. Maximum detected concentrations in sediment samples should be compared to current residential RSLs. Please revise Table 4.11 accordingly.

10. Please provide the outputs from the ProUCL software for Exposure Point Concentrations.

11. The screening values used to screen surface water on Table 4.12 are incorrect. Please use the current National Recommended Water Quality Criteria (http://water.epa.gov/scitech/swguidance/standards/current/index.cfm) to screen surface water protective of human health.

12. The Type 2 Risk Reduction Standards (RRS) provided on Table 7.1 are acceptable for use at the site. However, the reference provided for many of the regulated substances does not reflect the correct reference letter. Specifically, while the values provided for aldrin, benzo(a)anthracene, benzo(a)pyrene, benzo(b/k)fluoranthene, chrysene, copper, DDD, DDE, DDT, heptachlor, lead, thallium, and toxaphene are all leaching values, they are not reflected in the provided reference. Please revise it accordingly.

13. It is still unclear to EPD as to how the remedial activities focused on achieving compliance with human health RRS values will reduce the risk, below acceptable limits, to ecological receptors. Additionally, the ecological limits have not been established. Without the establishment of Remedial Goal Options (RGOs) for ecological receptors, it is difficult for EPD to agree that the proposed remedial activities will be effective for ecological receptors. It is stated in the Addendum to VRP that, "If redevelopment activities do not achieve the aforementioned limits on exposure, a Baseline Ecological Risk Assessment (BERA) that documents that there are no unacceptable risks to ecological receptors may be developed."

EPD agrees with this statement; however, please provide additional information on what the "ecological limits" are and how the proposed remedial activities will be effective at reducing risk to ecological receptors.

Please respond to the above comments in a response-to-comment format with the submittal of the first semi-annual VRP progress report due no later than August 8, 2012. If you have any questions regarding this matter, please contact Mr. Yue Han at 404-657-8678.

Sincerely,

David Brownlee
Acting Program Manager
Response and Remediation Program

c: Rhonda N. Quinn, MACTEC
Matt Adkins, CSX Transportation

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