Department of Toxic Substances Control

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October 23, 2012

Mr. Greg Haet
EH&S Associate Director, Environmental Protection
317 University Hall, No 1150
Berkeley, California 94720

Dear Mr. Haet:

The Department of Toxic Substances Control (DTSC) received the document titled *Draft Phase I November 2010 through April 2012 Groundwater Sampling Results Technical Memorandum* (Tech Memo). The September 05, 2012 Tech Memo was prepared by Tetra Tech EM Inc. for the University of California, Richmond Field Station. The Tech Memo provides ground water sampling data that were collected from the shallow water bearing zone in November 2010, April 2011, October 2011, and April 2012, representing two dry and two wet season sampling events. We have reviewed the document and have the following comments and recommendations.

1. Section 7.0 Conclusions and Recommendations: The Tech Memo proposes annual ground water monitoring in April for those wells where drinking water maximum contaminant levels (MCLs) were exceeded in any of the previous four monitoring events. Also, analyses would be limited to the methods that include the analytes detected at concentrations greater than MCLs. We assume that MCLs will be identified as ARARs where ground water meets Water Board (RWQCB) criteria for drinking water. DTSC concurs with the proposal to sample annually and to limit analytical methods; but with the sampling frequency reduced to annually the sampling criteria should be detections at one-half of the MCLs until contaminant concentrations are determined to be less than MCLs and decreasing. If decreasing trends are not apparent and concentrations have exceeded one-half the MCLs in the one of the four most recent sampling events, then annual sampling would continue. If no concentrations exceed one-half the MCL in the four most recent sampling events then the well would not be sampled. Also, ground water sampling and analysis may be required as part of the five year review cycle.

2. The table on Page 22 indicates wells and analytical methods proposed for sampling. For comparison purposes, please amend the table to also indicate wells to be sampled and analytical methods based on a one-half of the MCLs criterion.

3. Monitoring capability needs to be maintained in VOC areas to assess potential vapor intrusion risks.

4. One of the purposes of the document is to summarize the site hydrogeology and to evaluate the data collected. To provide a more complete picture of the site conditions, prepare representative cross-sections of the site and maps depicting concentrations of the most frequently detected site contaminants. On maps, post ground water elevations or chemical concentrations (the Z values) in addition to the well identifications.

5. Cover letter: The dates cited in the first two sentences of the letter should be corrected.

6. Page 5, Paragraph 4: Correct the text that states "*The RFS is predominantly made of clayey soil with inherently low permeability...*" For example, the Richmond Field Station is predominantly underlain by...

7. Page 7, Paragraph 4: The text indicates that the April 2012 analytical results are compared to the first round of data. Ensure and clarify that the April results are compared to analytical results from the all of the completed sampling events.

8. The use of the word only: As in, *"only 20 of the 71 target analytes were detected at the site."* This language may be misleading to a casual reader. Please delete the word only in order to provide an objective accounting of the site conditions. Detection of a single analyte may be significant.

   Specific examples of this practice include:

   - Page 11, Paragraph 2: Discussing VOCs, the text states *"...only 20 of the 71 target analytes were detected..."*
   - Page 11, last paragraph: Discussing semivolatile organic compounds (SVOCs) *"...only 11 of 73 target analytes..."*
   - Page 15, Paragraph 4, discussing VOC detections *"...only 30 of 71target analytes..."*
   - Page 17, discussing SVOC detections *"...only 14 of 73 target analytes..."*

9. Page 11, second bullet: Amend the discussion to incorporate the California MCL of 0.5 ug/L.

10. Page 19, Section 6.3, Metals: Revise the statement so that the dry season is identified as April to October.

11. Figure 11, Proposed Continued Groundwater Sampling Locations: The figure needs to be revised to indicate that piezometers B128 and GEO will continue to be

sampled. In addition, the identification of location "GWF" should be revised to "GEO".

12. Attachment 1: The Monitoring Well Sampling Forms for B197, DH, and WTA all indicate that there was some type of obstruction in each well and roots or plant matter were present in the groundwater sample. State what actions will be taken to clear obstructions and how the plant matter will be removed and the wells rehabilitated.

13. Attachment 2, Summary of Complete Analytical Results for Groundwater Samples: The results for thallium should be checked and corrected as needed.

Please submit a response to these comments within 21 days of the date of this letter. Replacement pages may be submitted rather than a new hard copy; however, please provide us with a CD containing the complete revised report. If you have any questions, please contact Lynn Nakashima at (510) 540-3839 or email at lnakashi@dtsc.ca.gov.

Sincerely,

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