Department of Toxic Substances Control

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May 26, 2010

Mr. Greg Haet
Associate Director, Environmental Protection
Office of Environment, Health & Safety
University of California, Berkeley
317 University Hall #1150
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Dear Mr. Haet:

The Department of Toxic Substances Control (DTSC) received the *Final Phase I Groundwater Sampling Field Sampling Workplan; Appendix A, Quality Assurance Project Plan; and Appendix B, Health and Safety Plan, University of California, Berkeley, Richmond Field Station.* The plans, all dated April 15, 2010, were prepared by Tetra Tech EM Inc., on behalf of the University of California. The plans describe the approach to investigate the shallow and intermediate groundwater zones found at the Richmond Field Station. This workplan represents the sampling strategy for Phase I. Additional phases are planned to complete the investigation and characterization of the site. DTSC program and support staff has completed their reviewed of the workplan and appendices. The workplan and appendices are approved contingent upon revision and deletion of the following items:

Field Sampling Workplan

1. Figure 4, Human Health Conceptual Site Model: Footnote 1 is indicated at the bottom of the figure while no footnote is included on the chart. Either include the footnote on the chart or delete the footnote from the bottom of the figure.

2. Figure 5 Ecological Conceptual Site Model: This figure needs to be revised to include additional exposure routes and potentially complete pathways. A copy of the model with the additions is enclosed.

3. Page 17, Potential Exposure to Ecological Receptors: The second sentence in this paragraph needs to be revised to state that "Grasses, shrubs, and trees could be exposed to contaminants by taking up contaminants from soil and sediments."

4. Page 28, Section 5.3, Sampling Process Design: Delete the last two sentences in the second paragraph that begin "If the gradient is found to be upward…", and "If the gradient is downward…" as DTSC does not agree with the statements. Multiple lines of evidence will be used to determine when additional groundwater sampling is warranted and is not be limited to vertical gradient direction.

Appendix A, Quality Assurance Project Plan

1. The Quality Assurance Project Plan contains references to multi-incremental (MI) soil sampling or decision units. A search of the document should be conducted and the references deleted. DTSC has identified reference to MI sampling or decision units in the following sections:
   - Page A-ES-1, Subsection 4.1, last sentence.
   - Page A-ES-2, Subsection 4.8, first sentence.
   - Page A-15, Table A-2: Field Replicates indicated 1 every 10 DUs.
   - Page A-92, Section 4.8. both paragraphs.
   - Page A-98, Section 4.9, first bullet item.

2. Page A-70, Active Soil Gas: Because soil gas sampling techniques are currently evolving and the soil gas investigation advisory is currently being revised, delete the soil gas sampling methods described in this section. Because this phase of investigation does not include soil gas sampling, the QAPP may be amended in the future to include the most recent sampling method recommendations.

Appendix B, Health and Safety Plan

1. The Health and Safety Plan includes reference to MI sampling. DTSC understands that it is the University of California's intent to use this plan for all relevant activities at the Richmond Field Station. Therefore, sections (e.g., Section 3.3, Table 4-2 (pages B-25 – 29) that refer to MI sampling along with a brief description indicating which employees would be conducting the MI sampling should be moved to an appendix to the Health and Safety Plan.

2. Appendix B-2: Delete Safe Work Practices 6-7 as the special site hazards identified in this section do not appear to be relevant to this site.

3. The Health and Safety Plan needs to identify the location of the sanitation facilities that will be available to site personnel. This should include, but not be limited to adequate washing facilities such as soap, water, towels, and where appropriate showers, toilets, and adequate stocks of potable water, provided in sanitary containers.

4. A section describing how minimum illumination will be provided for site personnel. If all planned field activities will occur during daylight hours and not within any structures at the site, this should be stated in the plan.

The revisions/deletions may be provided to DTSC by submitting the new pages for insertion into the April 15, 2010 documents. Please include a new cover sheet as well as table of contents, and an electronic version of the documents. Files should not exceed 15 megabytes in size.

In addition, please note that previous comments provided to the University of California by DTSC regarding other matrix sampling should be incorporated into future sampling plans.

If you have any questions regarding this letter, please contact Lynn Nakashima of my staff at (510) 540-3839 or Lnakashi@dtsc.ca.gov.

Sincerely,

Barbara J. Cook, P.E.
Acting Assistant Deputy Director
Brownfields & Environmental Restoration Program
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Enclosure

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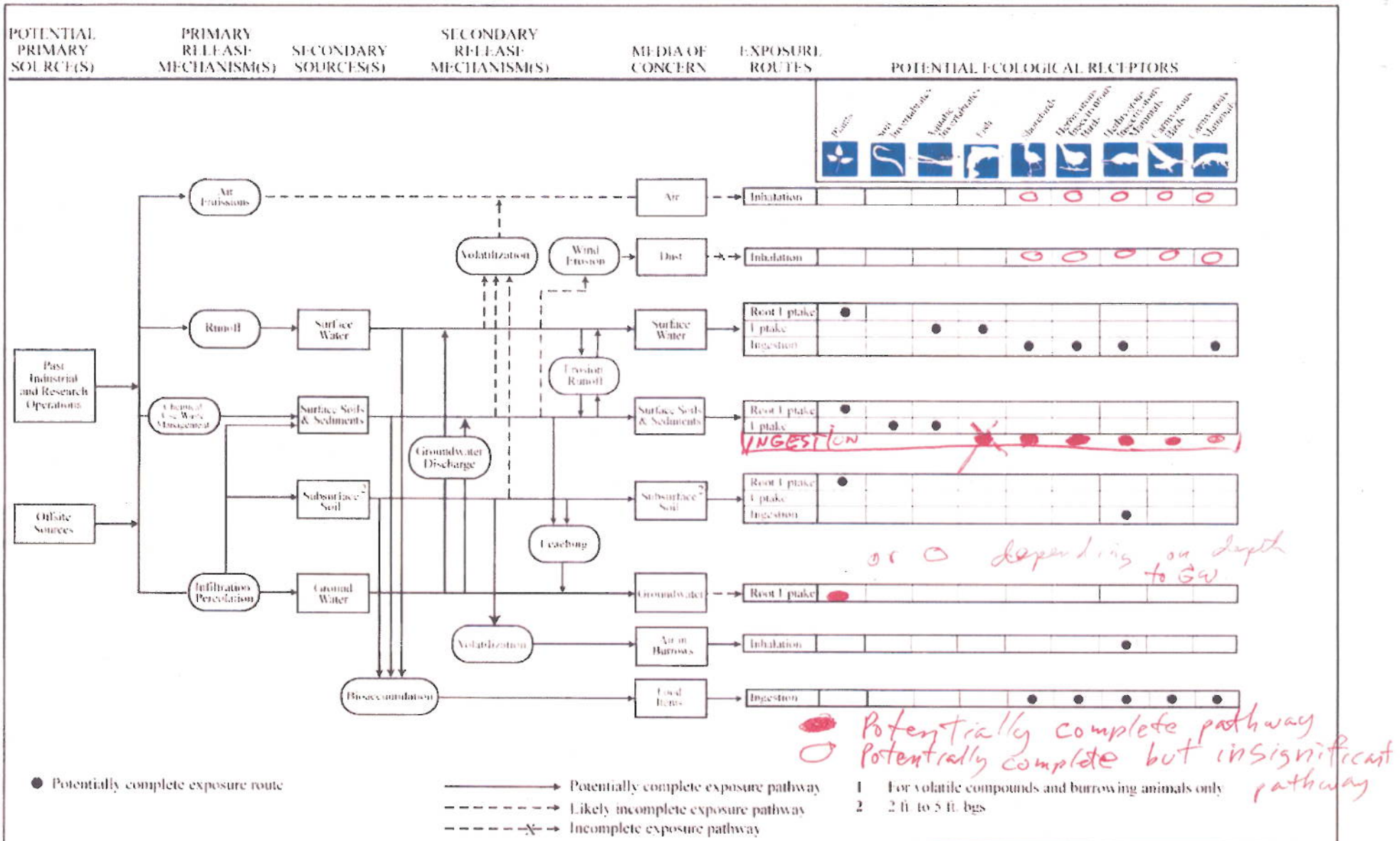

TETRA TECH

Richmond Field Station
University of California, Berkeley

FIGURE 5
ECOLOGICAL
CONCEPTUAL SITE MODEL

Field Sampling Workplan