



## Department of Toxic Substances Control



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Secretary for  
Environmental Protection

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700 Heinz Avenue  
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Arnold Schwarzenegger  
Governor

March 15, 2007

Mr. Greg Haet  
Associate Director, Environmental Protection  
Office of Environment, Health & Safety  
University of California, Berkeley  
317 University Hall #1150  
Berkeley, California 94720-1150

Dear Mr. Haet:

The Department of Toxic Substances Control (DTSC) received Draft Interim Soil Management Plan for the Upland and Transition Areas for the University of California, Berkeley Richmond Field Station Site located in Richmond, California. The plan, dated February 16, 2007 was prepared by Tetra Tech EM Inc. on behalf of the University of California, Office of Environment, Health & Safety (UC). The purpose of the plan is to provide protocols for managing potentially contaminated soils disturbed by construction and maintenance projects in the upland and transition areas of the site. DTSC has reviewed the plan and has the following comments:

### General Comments:

1. The plan needs to specify at what points in the process UC will notify DTSC when potential or known contamination is discovered. The procedures that will be followed should be incorporated into the plan.
2. If it is anticipated that contaminated soil will be encountered, the soil should be sampled prior to its disturbance. For example the third bullet on page 8 states that stockpiled soil that is "expected to be contaminated" should be completely covered until sample results are reviewed and evaluated.
3. Personnel who require 40-hour HAZWOPER training should also comply with the requirements found in Title 8 California Code of Regulations Section 5192.
4. It would be helpful to the reader if a decision flow chart(s) was included with this plan. The chart could help to identify what documents/data should be initially reviewed, who to contact and when, level of health and safety training required, when sampling is necessary before proceeding with a project, soil reuse criteria, etc.

**Specific Comments:**

1. Page 1, Section 1, Introduction, second paragraph: The discussion regarding the Job Safety Analysis sheets should include a reference to Appendix B.
2. Page 3, Section 3.0, Soil Management Scope of Activities: Title 8 California Code of Regulations Section 5192 (Title 8 CCR 5192) requirements apply to employees involved with hazardous substance sites unless the employer can demonstrate that the operation does not involve employee exposure or the reasonable possibility for employee exposure to safety or health hazards. Workers handling soils that are known or have the potential to exceed concentrations that are determined to be greater than a construction/maintenance worker screening value would need to comply with Title 8 CCR 5192. Total threshold limit concentrations (TTLCs) are not risk based values, but are one criterion used to determine whether a waste is a hazardous waste.
3. Page 4, Section 3.1, Determination of Contaminated Material:
  - a. The screening levels identified need to be revised to represent a risk of  $10^{-6}$ . The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) requires that a  $10^{-6}$  risk level be used as the point of departure for determining remediation goals. The revised values along with the calculations and input parameters need to be submitted to DTSC for review.
  - b. See specific comment 2 above regarding the appropriate type of training for employees who may come into contact with soil.
4. Page 5, Section 3.2, Sampling of Disturbed Soil: The sample data collected as stated in this section needs to be provided to DTSC to determine whether additional characterization is necessary. This section should also be clarified to indicate under what circumstances this section is applicable. For example, how will a "larger" project be defined and how will smaller projects be handled?
5. Page 5, Section 3.3, Sampling and Analysis Plan: The Sampling and Analysis Plan (SAP) should be submitted to DTSC for review and approval. The steps that will be followed after the SAP is implemented should also be included in the plan. Also, this section should state that the SAP will also include a Health and Safety Plan.
6. Page 6, Section 3.4, Reuse of Soils on Site: As this is an interim plan, soil that is above residential screening levels should not be re-used on the Site. The excavated soil exceeding residential screening levels should be transported to an appropriate off-site facility for disposal.

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7. Page 6, Section 4.1, Worker Training: See specific comment 2 above.
8. Page 8, Section 4.2, Soil Handling: If contamination is found in an excavation, steps should be taken to cover the excavation to prevent potential exposure to the contaminant.
9. Page 8, Section 4.2, Bullets 6, 7 and 8: If visibly contaminated soil is observed, sampling should be conducted to characterize the material. Only after the data is evaluated can a decision be made as to the appropriate level of training and protection needed.
10. Page 9, Section 4.2, 4<sup>th</sup> Bullet, Hazard Potential: If observations indicate that the soil may be contaminated, then work should have been stopped and the material evaluated. Material suspected of being contaminated should not be reused in another location.
11. Appendix B, Job Safety Analyses, Hand Tool Excavation: Task 1 indicates that prior to excavation; employees must consult a current map noting locations of historic structures, where soil samples have been obtained and the associated contaminant levels. This map should be included with the Interim SMP and the JSA should indicate where at the Richmond Field Station Site this map is available to employees.
12. Appendix D, Table D-1: The screening levels included in this table need to be revised as stated in specific comment 3a above. The table should also state that the samples represent single samples from various locations at the Richmond Field Station, but workers should contact EH&S if they suspect the presence of cinders or there are visible signs of contaminants.

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

Sincerely,



Barbara J. Cook, P.E., Chief  
Northern California – Coastal Cleanup  
Operations Branch