

UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



SANTA BARBARA • SANTA CRUZ

OFFICE OF ENVIRONMENT, HEALTH AND SAFETY
UNIVERSITY HALL, 3rd FLOOR

BERKELEY, CALIFORNIA 94720-1150

May 16, 2007

Lynn Nakashima
Department of Toxics Substances Control
700 Heinz Avenue
Berkeley, CA 94710-2721

RE: Pyrite Cinder-containing Soil Management Procedures

Dear Lynn:

As a follow-up to our meeting on March 28, 2007, to discuss UC Berkeley's draft interim Soils Management Plan (SMP) for the Uplands area of the Richmond Field Station (RFS), I am writing to summarize the key points we discussed during this meeting and to transmit additional information we have received since that time.

Because the strategy we discussed differs from that contained in the draft interim SMP (dated February 16, 2007), we will not be providing a formal response to DTSC's comments on the SMP at this time, but will proceed under the terms DTSC proposed during our meeting and outlined below. We concurred that we should revisit the SMP after DTSC has reviewed and commented on the April 5, 2007 draft Current Conditions Report and a final version of that report has been approved by the Department, and after the two Uplands removal actions discussed below have been completed. Until that time, as we discussed, we propose to manage cinder-containing soils per the procedures stated in this letter.

For purposes of this discussion, the term "Uplands" refers to that area of the RFS north of the marsh and transition area, but excludes areas north of the marsh and the Transition Area where removal actions are planned [Area of Concern (AOC) 7 and near the Forest Products Lab].

In summary, EH&S will follow the procedures and requirements set forth in previous regulatory determinations for underground utility work (DTSC Piloni:Karfiol and Gin:Currie 1993). Because the requirements in these rulings are well-defined, we will not reiterate them here, but state simply that UC Berkeley will comply with them. We have created electronic copies and have attached them for your reference.

We have received an interpretation from CalOSHA about whether contractors or UC RFS staff performing soil disturbing activities in the upland portion of the RFS need to be trained per 8 CCR § 5192. Based on CalOSHA's interpretation, training per 8 CCR § 5192 is not required for workers performing excavation in the RFS Uplands, but that EH&S should provide hazard awareness training and be informed if any cinders are encountered.

Currently, UC Berkeley believes it is taking precautions which exceed those required under CalOSHA's interpretation. Beyond providing hazard awareness training, a 40-hour HAZWOPER-trained UC Berkeley EH&S professional (or other 40-hour trained person acting on behalf of the University) is providing, and will continue to provide, oversight and inspections during projects involving utility excavation or roadwork in areas where EH&S has determined that there is a possibility of encountering pyrite cinders.

In addition to the conditions provided in the regulatory guidance letters discussed above, the following key points apply:

- The management strategy discussed here applies only to pyrite cinders. Should other contaminants be suspected or discovered during excavation, work will cease until EH&S can evaluate the situation.
- To the extent that no removal of cinders from the project area is involved and that all material can be placed back into the excavation, EH&S will likely not perform cinder sampling.
- If there is remaining pyrite cinder material that cannot be placed back into the excavation, EH&S will sample the material and determine the proper method of disposal. While sample results are pending, the material will be stockpiled as discussed in the attached regulatory guidance.
- In all cases, UC Berkeley will ensure that established health and safety precautions are taken to protect the safety of its workers and of contractors working at the RFS.
- RFS facilities management personnel will notify EH&S (and EH&S will notify DTSC) before underground utility work or similar activities occur in accordance with the strategy discussed below. This notification will occur prior to the start of work.

Examples of projects where 8 CCR § 5192 trained personnel will be conducting inspections during excavation periods (where cinders are expected) and notification will be provided include:

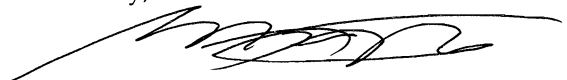
- drainage pipe or culvert installation;
- sewer or water main installation or removal;
- road work where excavation is required as part of drainage or road base installation; and
- building renovation work that involves the types of underground utility work discussed above.

EH&S does not expect that direct oversight and inspections will be necessary during smaller jobs that are to be performed by UC Berkeley staff or contractors, as identified below. In these cases (as well as for the list of projects provided above), workers are instructed to follow Job Safety Analysis procedures (for UC) and are provided hazard awareness information (contractors), and to contact EH&S if cinders or other unusual conditions are encountered. This information includes training and procedures for identification of cinders and other suspect materials. EH&S will not typically notify DTSC of this work unless specifically requested. Examples of these jobs include:

- tree planting;
- tree removal;
- small irrigation line work; and
- emergency utility work.

Although we currently have no specific plans for construction of new buildings in the Uplands area, we will notify DTSC if such plans arise and will develop a building site-specific sampling plan to assess conditions for the proposed excavation.

Sincerely,



Greg Haet
Associate Director