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February 11, 2010

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DTSC COMMENTS ON DRAFT STANDARD OPERATING PROCEDURES FOR BUILDING DEMOLITION DEBRIS CHARACTERIZATION AND MANAGEMENT - SANTA SUSANA FIELD LABORATORY, VENTURA COUNTY, CALIFORNIA

Dear Mr. Lenox:

The Department of Toxic Substances Control (DTSC) has reviewed The Boeing Company's (Boeing) Draft Standard Operating Procedures: Building Demolition Debris Characterization and Management, (Draft SOP), dated November 3, 2009. DTSC required the preparation of the SOP to: (1) formalize screening and management procedures to assure that building demolitions will not result in the removal and uncontrolled reuse of potentially contaminated debris from the facility; (2) require limits on the scope of demolitions to assure that proposed activities will not adversely affect the ongoing site investigation and remediation, and; (3) ensure that the review, approval, documentation, and administrative record of proposed building demolitions at a minimum meet federal Resource Conservation and Recovery Act (RCRA) and state Hazardous Waste Control Law regulatory requirements.

DTSC's comments on the Draft SOP are provided below, and are divided into general and specific comments on the document.

General Comments

1. Department Notification and Pre-Demolition Screening and Work Proposal. For future demolitions, Boeing is to provide the following:

- a. A formal, written notification of planned building demolitions accompanied with a complete demolition work proposal package is to be provided for agency review no less than 30 days prior to the proposed commencement of demolition activities. This lead time is needed for DTSC to assess whether specific proposed demolition actions require a separate workplan for DTSC review and approval.
- b. The work proposal is to include a complete description of the building(s) and features to be demolished, maps and figures with fully documented existing and historic structures and features, the extent of planned removals, and the locations and results of all pertinent samples. For demolitions to be conducted in RCRA Facility Investigation (RFI) areas, the work proposal is to also include a copy of the completed Building Feature Documentation Logs.
- c. The demolition work proposal must discuss potential impacts the proposed activities may have on any active RFI and remediation efforts, or on permanent groundwater monitoring or remediation systems.
- d. DTSC's letter of October 14, 2009, requested that "the SOP shall require that any notification include a certification, signed and certified by a responsible corporate officer or a duly authorized representative, that based on a review of historical documents, that to the best of knowledge and belief, that no radiological materials were handled and that no radiological-related activities were conducted in any structure proposed to be demolished." DTSC believes that the evaluation for radiologic materials handling and activities, and the certification that attests to it, are necessary to ensure there has been an evaluation of historical documents as is currently being required and done for the corrective action submittals. This certification is to be included in the pre-demolition notification package.

Radiological Screening Procedures. Section 8.5 of the Draft SOP provides a very brief description of the radiological screening methods proposed for use in future demolitions. This section needs to be expanded to either describe or to reference methods and criteria to be used. For example, such methods could be consistent with the approved radiological screening protocols for the Northern Drainage Debris Removal, also used at the Interim Source Removal Area (ISRA) programs in 2009.

2. Contaminated Soil Removal Associated With Demolition. The SOP is to acknowledge that the removal of contaminated soil in association with demolition activities will be limited to the volume of soil necessary to protect workers or stabilize the site until formal investigation and remedial work can be performed. Boeing must notify DTSC in advance of any plans to remove contaminated soil and ensure that demolition-related soil removals are conducted in a limited and controlled manner.
3. Post-Demolition Summary Report. Boeing must provide DTSC with a post-demolition summary report following completion of demolition activities. This report is to include post-demolition maps, field reports, screening and sample results, chemical release identification findings as described in draft SOP Section 11.0, photographic documentation, and complete copies of the debris/waste recycling and removal documentation listed in Draft SOP Sections 9.0 and 13.0.

Specific Comments

1. Dust Control and Protection. The SOP must describe dust suppression, control and post-demolition dust management for newly exposed unpaved areas.
2. Sediment and Runoff Control for Newly Exposed Areas. Demolition work will likely result in exposure of unpaved areas which could result in increased sediment erosion and transport during rainfall. The SOP needs to describe how Best Management Practices (BMPs) will be utilized for all newly exposed post-demolition unpaved areas.
3. Transportation Plan. The SOP needs to cite or reference a transportation/traffic control plan for the demo activities. It is likely that a large number of trucks may be needed to transport demolition-derived waste off site.
4. Section 4.4.1 (g) Underground Features. The demolition activities raise concerns regarding possible undocumented underground storage tanks (USTs), buried liquid containment features (septic tanks, sumps, drains, etc.), and other unknown underground discoveries at the demolition sites. The revised SOP must be revised to demonstrate methods to be used in locating and documenting such features. Boeing must also notify DTSC in writing (email or written letter) within 24 hours of their discovery.

5. Section 6.6.1. The SOP needs to limit trash or debris removals to the manual removal of visible surficial items, and ensure that no sifting or invasive separation methods that can disturb the existing soil conditions will occur.
6. Section 7.0. The SOP states that hazardous or potentially hazardous wastes will not be stockpiled. The SOP needs to clarify that "stockpiling" as used in this section refers to materials being stored or managed outside of lined containers.
7. Section 8.5 Radiological Screening.
 - a. The SOP needs to provide more detail regarding: 1) where and how screening will be performed (pre-demolition versus post-demolition), 2) how the separate classes of debris generated by demolition will be screened, and 3) a general description of the survey methods to be used.
 - b. The SOP must include notification of DTSC if radiological screening detects any results above accepted background conditions. DTSC must be notified in writing (by email note or written letter) within 24 hours of the receipt of radiological results above accepted background. Demolition activities should immediately cease in these areas, and resumption of demolition shall occur only with DTSC concurrence.
 - c. Section 8.5.1: It is not clear whether the proposed pre-screening in this subsection is intended to eliminate the need to perform post-demolition screening.
 - d. Section 8.5.2: There seems to be a word or phrase missing after "generated" concerning the radiological characterization of the wastes.
8. Section 9.3 Concrete and Asphalt Recycling. Material that is contaminated at concentrations below hazardous waste levels may still pose a potential health risk if it is recycled and used in an uncontrolled manner. This situation may be partially remedied by the material segregation and disposal, rather than recycling, discussed in Section 11.2.

of the SOP. This section of the SOP needs to include a provision that the controlling authority for debris recycling and disposal and any potential commercial recipients of the debris will be duly notified of contaminated materials that are not directly regulated under DTSC authority, including information about the contaminants that are present in the debris to be recycled.

9. Section 11.0 Waste Monitoring During Demolition.

- a. The title of this section needs to be revised to read "Waste Monitoring and Release Identification During Demolition."
- b. The SOP needs to clarify how concrete/asphalt or other removed ground cover will be managed in the event a verified or potential contaminant release is subsequently observed at the location where concrete/asphalt has been removed. Specifically, will the material still be managed pursuant to Section 9.3.2?
- c. Section 11.1: The SOP must specify that the onsite engineer or geologist documenting activities is qualified, and should be under the direct supervision of a P.G. and/or P.E.
- d. Section 11.1.1 Headspace Screening: The SOP needs to clarify where sampling the grid and subgrid for headspace sampling are discussed and defined. This seems to correspond to Section 4.2.1 of the June 2009 SOP, which indicates that sample locations will be determined in the field based on professional judgment.
- e. Section 11.1.2 Potential Impact Identification: These areas should be fully documented, including extensive photo documentation. Boeing must also notify DTSC before the features are removed, and consulted before characterization samples are collected.
- f. Section 11.2: A statement needs to be added to this section stating that contaminated soil removal for the purposes of worker safety or site stabilization will be evaluated on a case-by-case basis, in consultation with DTSC.
- g. Section 11.4: The wording in this section needs to state that if soil contamination "indicative of a release" is identified, the demolition operations will be moved to other locations, and that Boeing will

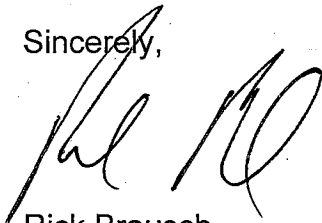
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notify DTSC "in writing (either via email or written letter) within 24 hours. Resumption of demolition in the suspected release location shall occur only with DTSC concurrence."

Please submit a revised SOP that incorporates the above comments by March 15, 2010. Once the revised SOP is received, DTSC intends to initiate a 30 day comment period to provide the community an opportunity to review and comment on the SOP prior to DTSC's final review and approval.

If you have any questions regarding this letter, please contact Mr. Gerard Abrams at (916) 255-3693 or Mr. Paul Carpenter at (916) 255-3691.

Sincerely,



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