



Linda S. Adams
Secretary for
Environmental Protection



Department of Toxic Substances Control

Maziar Movassaghi
Acting Director
700 Heinz Avenue
Berkeley, California 94710



Arnold Schwarzenegger
Governor

August 3, 2009

Cassandra Owens
Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, California 90013

Interim Source Removal Action (ISRA), Soil Management Plan, Santa Susana Field Laboratory, Ventura County, California, dated July 2009

Dear Ms. Owens:

Staff from the Santa Susana Field Laboratory (SSFL) team of the Department of Toxic Substances Control (DTSC) reviewed the *Interim Source Removal Action Soil Management Plan (ISRA SMP)* submitted by the Boeing Company (Boeing). Attached is a review memorandum prepared for Mr. Jim Pappas dated August 3, 2009.

Our review identified the following three items requiring addition information or clarification.

- 1) The ISRA SMP proposes to backfill and re-contour ISRA excavation areas using soil generated from regrading areas adjacent to the excavations. This proposed regrading approach is atypical and will require chemical characterization of the adjacent soils used for backfill. The ISRA SMP should address chemical characterization and documentation of source of soil backfill.
- 2) The ISRA SMP indicates that soil for excavation backfill may also be used from onsite borrow sources or from RWQCB approved offsite borrow sources. The ISRA SMP should include a soil borrow source chemical characterization analyte list.
- 3) The proposed sampling frequency for waste characterization of excavated soils is not specifically described. The ISRA SMP should describe soil sampling and analysis frequency for radionuclides.

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If you have any questions, please contact me at (510) 540-3955 or via email at BKing@dtsc.ca.gov.



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To: Jim Pappas, P.E.
Senior Engineering Geologist
Northern California Permitting and Corrective Action Branch
Hazardous Waste Management Program

From: Buck King, C.H.G. *Buck King*
Senior Engineering Geologist
Geologic Services Branch

Date: August 3, 2009

Re: Interim Source Removal Action, Soil Management Plan

PCA: 22120

Site Code: 530033-48

MPC: 37

Staff from the Geological Service Unit (GSU) of the Geologic Services Branch of the Department of Toxic Substances Control (DTSC) reviewed the work plan titled *Interim Source Removal Action Soil Management Plan, Santa Susana Field Laboratory, Ventura County California (ISRA SMP)* dated July 2009.

Previous DTSC Comments on Final ISRA Work Plan

The ISRA SMP was reviewed for its responses to previous DTSC comments and concerns (DTSC Letter from Mr. Buck King to Ms. Cassandra Owens dated June 4, 2009) identified during review of the Final ISRA Work Plan dated May 1, 2009. The DTSC letter identified three issues in the Final ISRA Work Plan that should be addressed in the subsequent ISRA SMP. The DTSC June 4, 2009 comments are summarized in the ISRA SMP responsiveness discussion below. Boeing responded to DTSC comments in an *Addendum to Final Interim Source Removal Work Plan (ISRA WP Addendum)* dated June 19, 2009. The ISRA WP Addendum generally addressed the DTSC comments and indicated additional information would be included in the ISRA SMP.

ISRA SMP Responsiveness to Previous DTSC Comments

The ISRA SMP was reviewed for its technical content and responsiveness to previous DTSC comments.

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In response to DTSC Comment 1 requesting additional information regarding radiologic screening and contingency waste management plans in the event unforeseen items or waste are encountered, the ISRA SMP was found to contain a discussion of the radionuclide screening process and soil management procedures. The ISRA SMP indicates that soil samples will be collected and analyzed for a designated suite of radionuclides for waste characterization purposes and includes Attachment A providing additional ISRA Waste radionuclide sampling information. The Attachment A indicates that in the event radionuclides are detected above background levels, the Department of Public Health and DTSC will be notified and the need for further waste evaluation or alternate waste disposition will be determined.

In response to DTSC Comment 2 requesting that the soil confirmation sampling description include a clear reference to use of sampling method EPA Method 5035 for analysis of VOCs in soil, the ISRA SMP was found to contain clear statements indicating use of EPA Method 5035 soil collection method for soil VOC analysis.

In response to DTSC Comment 3 requesting that the SMP describe soil stockpile photo ionization detector (PID) action levels used to fulfill the requirements for Ventura County Air Pollution Control District, the ISRA SMP was found to contain soil stockpile reactive organic compound (ROC) emissions monitoring information including the 50 parts per million (ppm) by volume PID criteria.

ISRA SMP Comments

SMP1. The ISRA SMP proposes to backfill and re-contour ISRA excavation areas using soil generated from regrading areas adjacent to the excavations. This proposed regrading approach is atypical and will require chemical characterization of the adjacent soils used for backfill. The ISRA SMP should address chemical characterization and documentation of source of soil backfill.

SMP2. The ISRA SMP indicates that soil for excavation backfill may also be used from onsite borrow sources or from RWQCB approved offsite borrow sources. The ISRA SMP should include a soil borrow source chemical characterization analyte list.

SMP3. The proposed sampling frequency for waste characterization of excavated soils is not specifically described. The ISRA SMP should describe soil sampling and analysis frequency for radionuclides.

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General ISRA Project Comments

GC1. As stated in the letter from Jim Pappas to Cassandra Owens dated March 19, 2009, the purpose of the ISRA is cleanup of soil to prevent violations of RWQCB NPDES effluent limitations and that DTSC will not consider the removal to be SB 990 compliant unless, after DTSC completes its investigation of these areas, the affected areas are determined to meet SB 990 standards.

GC2. Boeing is responsible for managing and handling all hazardous wastes from this operation pursuant to Title 22 requirements. If Boeing, or the LA RWQCB have any questions or need assistance regarding the adequacy of the ISRA SMP description of characterization of radiological materials, they can contact Mr. James Thomas or Mr. Gary Butner of the Department of Public Health, Radiological Health Branch.

GC3. Until such time as the revised background study and SB 990 compliant risk-based screening levels are approved by DTSC, DTSC is not in a position to approve the placement of any on-site or offsite soil borrow materials. Therefore, although the placement of non-DTSC approved soil borrow material may be adequate for meeting NPDES requirements, whether this soil borrow material can meet SB 990 requirements will not be determined until the new background and Risk-Based Screening Levels are developed.

Conclusions

The GSU recommends that ISRA SMP be revised in response to the request for additional information described above regarding: (1) chemical characterization and documentation of source of adjacent soil used for backfill; (2) chemical characterization and documentation of source of onsite and offsite borrow soils used; and (3) soil sampling and analysis frequency for radionuclides.

If you have any questions or comments, please contact me at (510) 540-3955

Cc: File