



# California Regional Water Quality Control Board

## Los Angeles Region



Linda S. Adams  
Agency Secretary

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Arnold Schwarzenegger  
Governor

June 10, 2009

Mr. Thomas D. Gallacher, Director  
SSFL – Safety, Health & Environmental Affairs  
The Boeing Company  
Santa Susana Field Laboratory  
5800 Woolsey Canyon Road  
Canoga Park, CA 91304-1148

**DEPARTMENT OF TOXIC SUBSTANCES CONTROL COMMENTS ON THE FINAL INTERIM SOURCE REMOVAL ACTION WORK PLAN SUBMITTED IN RESPONSE TO CALIFORNIA WATER CODE SECTION 13304 ORDER – THE BOEING COMPANY, SANTA SUSANA FIELD LABORATORY, CANOGA PARK, CA (NPDES NO. CA0001309, CI NO. 6027, SCP NO. 1111, SITE ID NO. 2040109)**

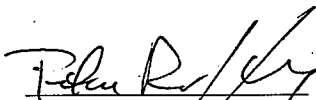
Dear Mr. Gallacher:

The Los Angeles Regional Water Quality Control Board (Regional Board) received comments from the Department of Toxic Substances Control regarding the May 2009 *Final Interim Source Removal Action (ISRA) Work Plan Santa Susana Field Laboratory, Ventura County, California* (Final Work Plan). The comments are attached.

No later than **June 19, 2009**, Boeing shall provide the Regional Board with your responses to these comments. As appropriate, the responses are to be made in an addendum to the Final Work Plan or as changes to the text of the Final Work Plan. These requirements are made under the Regional Board's California Water Code section 13304 Order, dated December 3, 2008.

Please telephone Mr. Peter Raftery at (213) 576-6724 or email him at [praftery@waterboards.ca.gov](mailto:praftery@waterboards.ca.gov) if you have any questions.

Sincerely,

  
Peter Raftery, PG, CHG  
Engineering Geologist  
Site Cleanup I Unit

attachment: DTSC comment memorandum, June 4, 2009

cc list next page

**California Environmental Protection Agency**

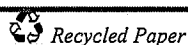


Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

cc: Honorable Alex Padilla, Senator 20th District  
Honorable Fran Pavley, Senator, 23rd District  
Honorable Tony Strickland, Senator 19th District  
Assemblymember Bob Blumenfield, Assemblymember 40th District Assembly  
Assemblymember Pedro Nava, Assemblymember 35th District  
Assemblymember Audra Strickland, Assemblymember 37th District  
Mr. Jarrod Degonia, c/o Assemblymember Cameron Smyth  
Ms. Rondi Guthrie, c/o Assemblywoman Audra Strickland  
Ms. Samantha Stevens, c/o Assemblymember Bob Blumenfield  
Mr. Aron Miller, c/o Senator Fran Pavley  
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Ms. Louise Rishoff, c/o Assembly member Julia Brownley  
Mr. Damon Wing, c/o Ms. Linda Parks, Ventura County Board of Supervisors  
Mr. Gerard Abrams, Department of Toxic Substances Control, Sacramento  
Mr. David Beckman, National Resources Defense Council  
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Mr. William Bowling  
Mr. Michael Bubman, c/o Bell Creek Homeowners Association  
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Mr. A. J. Greenstein  
Mr. Matt Hagemann, Soil/Water/Air Protection Enterprise  
Ms. Carol Henderson, Office Manager, Bell Canyon Homeowners Association  
Mr. Dan Hirsch, Committee to Bridge the Gap  
Ms. Heather L. Hoecherl Esq., Director of Science and Policy, Heal the Bay  
Mr. Philip Isorena, State Water Resources Control Board, Division of Water Quality  
Ms. Kirsten James, MESM, Staff Scientist, Heal the Bay  
Ms. Stephanie Jennings, United States Department of Energy  
Ms. Barbara Johnson, Susana Knolls Homeowners, Inc.  
Dr. Michael Josselyn, WRA, Inc.  
Mr. Thomas Johnson, ETEC Project Manager, United States Department of Energy  
Ms. Teresa Jordan  
Mr. Thomas Kelly, Environmental Protection Agency, Region 9, (WTR-5)

cc list continues on next page

**California Environmental Protection Agency**

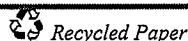


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***California Environmental Protection Agency***



cc list continued

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Los Angeles and San Gabriel Rivers Watershed Council  
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Los Angeles County, Department of Public Works, Environmental Programs Division  
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Simi Valley Library  
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Ventura County Air Pollution Control District  
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Linda S. Adams  
Secretary for  
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## Department of Toxic Substances Control

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Arnold Schwarzenegger  
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Los Angeles Region  
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June 4, 2009

Final Interim Source Removal Action (ISRA) Work Plan, Santa Susana Field Laboratory, Ventura County, California, dated May 2009

Dear Ms. Cassandra Owens,

Staff from the Santa Susana Field Laboratory (SSFL) team of the Department of Toxic Substances Control (DTSC) reviewed the *Final Interim Source Removal Action (ISRA) Work Plan (Work Plan)* submitted by The Boeing Company (Boeing). Attached is a GSU Review Memorandum of ISRA Workplan prepared by Buck King dated June 4, 2009.

It is our understanding that the project described in the *Work Plan* is being done pursuant to a Cleanup and Abatement Order (CAO) issued to Boeing by the Regional Water Quality Control Board (RWCQB) on December 3, 2008 and that the CAO was issued in response to exceedances of NPDES surface water outfall permit limits for the Happy Valley drainage (Outfall 008; lead) and the Northern drainage (Outfall 009; copper, lead, dioxins, pH, and oil & grease). The CAO requires Boeing to address the soil source areas that contribute to the release of the contaminants that exceeded NPDES limits. These areas that drain to the Outfall 008 and 009 are under investigation by DTSC for chemical and potential radiological contamination. Administrative Area 1 drains into Outfall 8; Administrative Areas 1, 2, and 3 drain into Outfall 009.

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

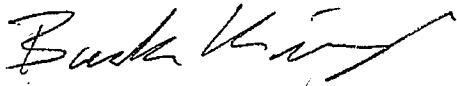
The *Work Plan* indicates that Soil Management Plans will be prepared prior to implementation of field work. The future Soil Management Plans (SMPs) should include chemical characterization and waste characterization sampling strategies for hazardous waste and non-hazardous waste offsite disposal. The SMPs should include a discussion of the radiologic screening process for soils and soil management procedures.

Ms. Cassandra Owens  
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The *Work Plan* does not indicate that soil confirmation sampling consistent with EPA Method 5035 sample collection method for analysis of volatile organic compounds (VOC) in soil. Future plans should indicate use of EPA Method 5035 sample collection for soil sampling and VOC analysis.

The *Work Plan* indicates that soil stock pile air emissions will be evaluated using a photo ionization detector (PID) but does not include monitoring criteria. Future plans should include the soil stockpile PID action levels used to fulfill the requirements for Ventura County Air Pollution Control District.

If you have any questions, please contact Buck King (510) 540-3955.



Mr. Buck King, C.HG  
Senior Engineering Geologist  
Santa Susana Field Laboratory (SSFL) Project Team

Attachment: GSU Review Memorandum of ISRA Workplan prepared by Buck King dated June 4, 2009

cc:

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Ms. Cassandra Owens  
June 4, 2009  
Final Interim Source Removal Action Work Plan  
Page 3

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June 4, 2009  
Final Interim Source Removal Action Work Plan  
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## Department of Toxic Substances Control




Linda S. Adams  
Secretary for  
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Arnold Schwarzenegger  
Governor

To: Gerard Abrams, C.HG.  
Senior Engineering Geologist  
Northern California Permitting and Corrective Action Branch  
Hazardous Waste Management Program

From: Buck King, C.HG.   
Senior Engineering Geologist  
Geologic Services Branch

Date: June 4, 2009

Re: Final Interim Source Removal Action Work 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) has reviewed the work plan titled *Final Interim Source Removal Action Work Plan, Santa Susana Field Laboratory, Ventura County California* (ISRA Work Plan) dated May 2009.

### Discussion of Responsiveness to Previous DTSC Comments and Concerns

The ISRA Work Plan was reviewed for its responses to previous DTSC comments and concerns (DTSC Letter from Mr. Jim Pappas to Ms. Cassandra Owens dated March 19, 2009) identified during review of the Preliminary ISRA Work Plan draft version of document dated February 2009. The DTSC letter identified the following concerns.

1. Soil background comparison concentrations for the Santa Susana Field Laboratory are under review and will likely be revised following completion of studies in Spring 2010. Radiological background study results should also become available from EPA Region IX in Spring 2010. Soil excavation areas identified in ISRA Work Plan reflect draft soil background values and may require additional evaluation and excavation upon completion of ongoing background studies in Spring 2010.
2. Historic management of radioactive materials and preliminary assessment data indicative of the presence of radionuclides at the facility should be addressed in

ISRA work planning documents. The ISRA Work Plan should indicate that excavated soil identified for disposal will be screened for radionuclides.

3. Removal of source soil materials from affected watersheds to address NPDES exceedances at Outfalls 008 and 009 will not necessarily mean that those areas will meet Senate Bill (SB) 990 standards upon completion of soil removal action.

The ISRA Work Plan is responsive to Concern 1 and indicates (page 5-1) that the plan uses the 2005 background comparison concentrations in evaluation of soil excavation areas and that when the revised soil background levels are approved by DTSC, the ISRA soil source areas will be reviewed and ISRA area recommendations will be amended as warranted.

The ISRA Work Plan is partially responsive to Concern 2 and includes a brief reference (page 6-4) to conducting radiologic screening during characterization of excavated soils for offsite disposal. The text indicates that radiological screening will be similar to procedures established for ongoing cleanup activities in the Northern Drainages. Work planning documents should include more information describing ongoing radiologic screening occurring in the Northern Drainage area. The description should be clearly documented in Soil Management Plans prior to implementation.

The ISRA Work Plan is silent to Concern 3 regarding SB 990 compliance and is clear in its identification of Cleanup and Abatement Order (CAO R4-2004-0111 and amendments) as the regulatory basis for the ISRA. The SB 990 compliance issues will not be addressed by the ISRA.

#### **Discussion of Concerns Identified by GSU in ISRA Work Plan**

The ISRA Work Plan was reviewed for its technical content. GSU identified the following items that require additional clarification in subsequent ISRA work planning documents.

1. The ISRA Work Plan indicates that several additional planning documents will be prepared including, Site Specific Health and Safety Plan, Erosion Control Plan, Soil Management Plan, and Transportation Plan prior to implementation of field work. Section 6.3 *Additional Remedial Planning Activities* should be revised to include additional information requirements for the future Soil Management Plans (SMPs). The SMPs should include area specific chemical characterization and waste characterization sampling strategies. Strategies for hazardous waste and non hazardous waste off site disposal should be described. The SMPs should at a minimum include a discussion of the radiologic screening process and soil management procedures and discussion of contingencies to be followed when encountering unforeseen items such as explosives.

Mr. Gerard Abrams  
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2. The Chemicals of Concern (COCs) used to define preliminary excavation areas (PEAs) in Outfall 009 watershed include volatile organic compound (VOC) trichloroethene (TCE). Soil confirmation sampling description (page 5-4) should include clear reference to use of sampling method EPA Method 5035 for analysis of VOCs in soil.
3. The description of soil stock pile air emissions evaluation using a photo ionization detector (PID) is incomplete (page 6-3). The SMP should include at a minimum the soil stockpile PID action levels used to fulfill the requirements for Ventura County Air Pollution Control District.

### **Conclusions**

The GSU recommends that subsequent drafts of ISRA Work Plan be revised in response to the request for additional information described above regarding, 1) future SMP requirements, 2) EPA Method 5035 sample collection methodology requirements for soil VOC sampling, and 3) PID monitoring criteria for soil stockpile air quality monitoring and soil management.

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

Cc: File