



The Boeing Company  
Santa Susana Field Laboratory  
5800 Woolsey Canyon Road  
Canoga Park, CA 91304-1148

Via FedEx

June 25, 2013

In reply, refer to SHEA-113674

Attention: Mr. Peter Raftery  
Regional Water Quality Control Board  
Los Angeles Region  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013

Dear Mr. Raftery:

Subject: Second Quarter Progress Report for March 16, 2013 – June 14, 2013 Activity,  
Interim Source Removal Action (ISRA) and Best Management Practices (BMP) Plan

In the Final ISRA Work Plan and the BMP Plan, Boeing and NASA proposed to provide the Los Angeles Regional Water Quality Control Board (RWQCB) with quarterly progress reports until work is complete. This Quarterly Progress Report is submitted for the second quarter 2013 and summarizes ISRA and BMP Plan activities performed during the period of March 16, 2013 - June 14, 2013.

ISRA activities at the Santa Susana Site are being conducted pursuant to a California Water Code Section 13304 Cleanup and Abatement Order (CAO) issued by RWQCB dated December 3, 2008. The BMP Plan was prepared pursuant to the National Pollution Discharge Elimination System (NPDES) Permit (Order No. R4-2010-0090) adopted by the RWQCB on June 3, 2010. ISRA and BMP Plan activities are being implemented under oversight of the RWQCB with the objective of achieving compliance with the Waste Discharge Requirements (WDRs) for Outfalls 008 and 009 established in the NPDES Permit.

Per the RWQCB's request, Boeing provides monthly progress reports on the ISRA and BMP Plan activities to the RWQCB Executive Officer. This quarterly progress report is a compilation of the monthly progress reports for the period of March 16, 2013 – June 14, 2013, which are attached to provide the complete list of ISRA and BMP Plan activities performed during the period covered by this quarterly report.

The ISRA and BMP Plan Quarterly Reports are posted on the ISRA website at:

[http://www.boeing.com/aboutus/environment/santa\\_susana/isra.html](http://www.boeing.com/aboutus/environment/santa_susana/isra.html)

If you have any questions or require anything further, please contact Art Lenox at (818) 466-8795.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Art Lenox'.

Art Lenox,  
Boeing Remediation  
Environment, Health and Safety

Enclosures:

April 2013 Monthly Progress Report (March 16, 2013 – April 19, 2013)

May 2013 Monthly Progress Report (April 20, 2013 – May 17, 2013)

June 2013 Monthly Progress Report (May 18, 2013 – June 14, 2013)

cc: Ms. Cassandra Owens, RWQCB, w/ attachments  
Mr. Mark Malinowski, DTSC, w/ attachments  
Mr. Buck King, DTSC, w/ attachments  
Mr. Allen Elliott, NASA, w/ attachments  
Mr. Peter Zorba, NASA, w/ attachments



The Boeing Company

5800 Woolsey Canyon Road  
Canoga Park, CA 91304-1148

Date: 04/24/2013

No.: SHEA-113423

To: Sam Unger  
Executive Officer  
LA Regional Water Quality Control  
Board

From: Art Lenox  
Santa Susana  
Environment, Health & Safety

Subject: April 2013 Monthly Progress Report for March 16, 2013 - April 19, 2013 Activity, Interim Source Removal Action (ISRA) and Best Management Practices (BMP) Plan

Per the Regional Water Board's request, Boeing, on behalf of Boeing and NASA, is providing the following Monthly Progress Report on the Interim Source Removal Action (ISRA) and Best Management Practices (BMP) Plan activities for the period of March 16, 2013 to April 19, 2013. In addition, a 30 day Look-Ahead is provided.

ISRA activities at the Santa Susana Site are being performed pursuant to a California Water Code Section 13304 Cleanup and Abatement Order (CAO) issued by RWQCB dated December 3, 2008. To track the ISRA activities, meetings have been held on a weekly basis from April 16, 2009 through June 29, 2011, and biweekly since July 2011. During this reporting period, the meeting participants have consisted of RWQCB staff, DTSC staff, Surface Water Expert Panel Members, Boeing, and NASA. For the period from mid-March to mid-April, the primary activities have been conducting radiological confirmation and delineation sampling at ISRA areas LOX-1C and LOX-1D, surveying ISRA areas, and setting up the profile with the landfill to accept soils with radionuclides above look-up table (LUT) values. In addition, inspections of erosion control BMPs were performed at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.

A BMP Plan was prepared by Boeing and NASA, with considerable input from the Surface Water Expert Panel, pursuant to the NPDES Permit (Order No. R4-2010-0090) adopted by the RWQCB on June 3, 2010. BMP recommendations were developed based on statistical evaluations performed on a yearly basis, which are presented in the 2010-2011 and 2011-2012 Rainy Season Summary Reports. BMP Plan Addenda were submitted to the RWQCB in September 2011 and 2012 that provide additional detail on the BMP recommendations in the yearly summary reports, and the implementation schedule. For the period from mid-March to mid-April, the primary activities associated with BMPs have been completing punch list items for the Lower Parking Lot BMP, performing minor upgrades to the BMPs at CM-9 recommended in the 2012 BMP Plan Addendum, and continuing the bidding process for the ELV BMP.



Accomplishments and upcoming actions for both the ISRA and BMP programs are listed below:

**Activities Performed – March 16, 2013 to April 19, 2013**

- March 16, 2013 – April 19, 2013:
  - In coordination with the Expert Panel, continued the bidding process for the ELV BMP.
  - Continue activities to set-up a profile with the landfill (Energy Solutions) to accept soils with radionuclides above LUT values.
- March 19, 2013: Performed weekly SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- March 20, 2013: Participated in RWQCB and public site walk/meeting for the completed Lower Lot BMP.
- March 21 – April 2, 2013: Address all but two punch list items for the Lower Lot BMP that were identified by the Expert Panel during the March 20, 2013 site walk. Two items remain that are tentatively scheduled to be addressed the week of April 22, 2013.
- March 25, 2013: Performed weekly SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- March 27, 2013: Reviewed surface water and soil data from A2LF and LOX areas with the Expert Panel.
- April 1 – 2, 2013: Performed minor upgrades to the BMPs installed at CM-9 that were recommended in the 2012 BMP Plan Addendum and installed in February 2013, including the berm and the perforated pipe.
- April 2, 2013: Performed weekly SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- April 9, 2013: Performed weekly SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- April 9 - 10, 2013: Conducted additional surveying at ISRA areas AP/STP-1C-2, ELV-1D and IEL-3.
- April 17, 2013: DTSC held a community meeting.
- April 17, 2013: Conducted radiological confirmation and delineation soil sampling at ISRA areas LOX-1C and LOX-1D.

**30-Day Look ahead – through May 17, 2013**

- Boeing/NASA – Continue inspections of erosion control BMPs at ISRA areas, per the ISRA SWPPP.
- Boeing/NASA – Continue Performance Monitoring and BMP Monitoring during rain events, per the 2012-2013 Rainy Season SAP.
- Boeing/NASA – Continue planning activities for ISRA implementation at ISRA area ELV-1D and LOX.
- Boeing/NASA – Continue activities to set-up a profile with the landfill (Energy Solutions) to accept soils with radionuclides above LUT values.

- NASA/Expert Panel – Continue bidding process for the ELV BMP.
- Boeing/Expert Panel – Address two remaining punch list items for the Lower Parking Lot.

Approved By:



Art Lenox,  
Project Manager  
Environmental Remediation

Distribution:

Mr. Peter Raftery, RWQCB  
Ms. Cassandra Owens, RWQCB  
Mr. Buck King, DTSC  
Mr. Allen Elliott, NASA  
Mr. Peter Zorba, NASA



Date: 05/24/2013 No.: SHEA-113561

To: Sam Unger  
Executive Officer  
LA Regional Water Quality Control  
Board

From: Art Lenox  
Santa Susana  
Environment, Health & Safety

Subject: May 2013 Monthly Progress Report for April 20, 2013 - May 17, 2013 Activity, Interim Source Removal Action (ISRA) and Best Management Practices (BMP) Plan

Per the Regional Water Board's request, Boeing, on behalf of Boeing and NASA, is providing the following Monthly Progress Report on the Interim Source Removal Action (ISRA) and Best Management Practices (BMP) Plan activities for the period of April 20, 2013 to May 17, 2013. In addition, a 30 day Look-Ahead is provided.

ISRA activities at the Santa Susana Site are being performed pursuant to a California Water Code Section 13304 Cleanup and Abatement Order (CAO) issued by RWQCB dated December 3, 2008. To track the ISRA activities, meetings have been held on a weekly basis from April 16, 2009 through June 29, 2011, and biweekly since July 2011. During this reporting period, the meeting participants have consisted of RWQCB staff, DTSC staff, Surface Water Expert Panel Members, Boeing, and NASA. For the period from mid-April to mid-May, the primary activities have been conducting planning activities to resume ELV implementation and begin LOX implementation, reviewing ELV and LOX chemical and/or radiological results with agencies, and continuing the process for setting up the profile with the landfill to accept soils with radionuclides above look-up table (LUT) values. In addition, inspections of erosion control BMPs were performed at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP, and Performance Monitoring and BMP Monitoring inspections were conducted.

ISRA activities at the Area 2 Landfill (A2LF) were discussed during a teleconference held on May 15, 2013 that was attended by members of NASA, the Expert Panel, MWH, Geosyntec, CH2M HILL, RWQCB, and DTSC. All parties attending the call expressed concern that because of difficulties associated with implementing activities in the A2LF ISRA areas, these areas have a higher potential to increase the contribution of COCs to surface water compared to current vegetated conditions. Of particular concern were performing excavation and subsequent restoration activities on the steep slope of the A2LF and the uncertainties of excavating a portion of the landfill without an approved backfill source. Geosyntec presented the results of a surface water model that predicted the runoff volume and peak flow contributed to the Northern Drainage from the A2LF ISRA drainage areas is relatively small. The model results are consistent with observations made during the three years of surface water monitoring, during which only one sample was collected downslope of the A2LF and the results were below NPDES permit limits. Following this discussion, it was agreed that soil removal activities at the A2LF would be conducted by NASA under the Administrative Order on Consent between NASA and DTSC (AOC) and no action would be performed at this location as part of the ISRA program.



A BMP Plan was prepared by Boeing and NASA, with considerable input from the Surface Water Expert Panel, pursuant to the NPDES Permit (Order No. R4-2010-0090) adopted by the RWQCB on June 3, 2010. BMP recommendations were developed based on statistical evaluations performed on a yearly basis, which are presented in the 2010-2011 and 2011-2012 Rainy Season Summary Reports. BMP Plan Addenda were submitted to the RWQCB in September 2011 and 2012 that provide additional detail on the BMP recommendations in the yearly summary reports, and the implementation schedule. For the period from mid-April to mid-May, the primary activities associated with BMPs have been beginning the evaluation of the surface water data from the 2012-2013 rainy season, completing contractor selection process for the ELV BMP, and completing punch list items for the Lower Parking Lot BMP.

Accomplishments and upcoming actions for both the ISRA and BMP programs are listed below:

### **Activities Performed – April 20, 2013 to May 17, 2013**

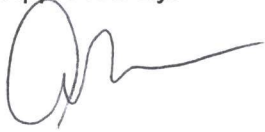
- April 20, 2013 – May 17, 2013:
  - In coordination with the Expert Panel, began evaluation of surface water data from the 2012-2013 rainy season for inclusion in the Performance Monitoring and BMP Monitoring Summary Report.
  - Continued planning activities for the ELV BMP, including performing a contractor bid walk, reviewing contractor bids, and selecting a contractor. Construction tentatively scheduled to begin in late May.
  - Continued process to set-up a profile with the landfill (Energy Solutions) to accept soils with radionuclides above LUT values.
- April 24, 2013: Performed pre-rain SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- April 30, 2013: Addressed final two punch list items for the Lower Lot BMP that were identified by the Expert Panel during the March 20, 2013 site walk.
- May 6, 2013: Performed rain event SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- May 6, 2013: Conducted ISRA Performance Monitoring and BMP Subarea Monitoring inspections and sampling.
- May 15, 2013: Reviewed excavation boundaries from AP/STP, confirmation sample results from ELV-1C, sidewall boundary sample results from ELV-1D, radiological sample results from ELV-1D, LOX-1C, LOX-1D, and LOX-1B-3 with DTSC and RWQCB.
- May 15, 2013: During a teleconference, DTSC and RWQCB agreed that soil removal activities at the A2LF would be conducted by NASA under the AOC and no action would be performed as part of the ISRA program. A summary of the discussion is provided above.

### **30-Day Look ahead – through June 14, 2013**

- Boeing/NASA – Continue inspections of erosion control BMPs at ISRA areas, per the ISRA SWPPP.
- Boeing/NASA – Continue Performance Monitoring and BMP Monitoring during rain events, per the 2012-2013 Rainy Season SAP.

- Boeing/NASA – Continue planning activities for ISRA implementation at ISRA area ELV-1D and LOX.
- Boeing/NASA – Continue activities to set-up a profile with the landfill (Energy Solutions) to accept soils with radionuclides above LUT values.
- NASA – Begin construction of the ELV BMP.

Approved By:



Art Lenox  
Boeing Remediation  
Environment, Health and Safety

Distribution:

Mr. Peter Raftery, RWQCB  
Ms. Cassandra Owens, RWQCB  
Mr. Buck King, DTSC  
Mr. Allen Elliott, NASA  
Mr. Peter Zorba, NASA





The Boeing Company

5800 Woolsey Canyon Road  
Canoga Park, CA 91304-1148

Date: 06/25/2013 No.: SHEA-113675

To: Sam Unger  
Executive Officer  
LA Regional Water Quality Control  
Board

From: Art Lenox  
Santa Susana  
Environment, Health & Safety

Subject: June 2013 Monthly Progress Report for May 18, 2013 - June 14, 2013 Activity, Interim Source Removal Action (ISRA) and Best Management Practices (BMP) Plan

Per the Regional Water Board's request, Boeing, on behalf of Boeing and NASA, is providing the following Monthly Progress Report on the Interim Source Removal Action (ISRA) and Best Management Practices (BMP) Plan activities for the period of May 18, 2013 to June 14, 2013. In addition, a 30 day Look-Ahead is provided.

ISRA activities at the Santa Susana Site are being performed pursuant to a California Water Code Section 13304 Cleanup and Abatement Order (CAO) issued by RWQCB dated December 3, 2008. To track the ISRA activities, meetings have been held on a weekly basis from April 16, 2009 through June 29, 2011, and biweekly since July 2011. During this reporting period, the meeting participants have consisted of RWQCB staff, DTSC staff, Surface Water Expert Panel Members, Boeing, and NASA. For the period from mid-May to mid-June, the primary activities have been conducting planning activities to resume ELV implementation and begin LOX implementation, and continuing the process for setting up the profile with the landfill to accept soils with radionuclides above look-up table (LUT) values.

A BMP Plan was prepared by Boeing and NASA, with considerable input from the Surface Water Expert Panel, pursuant to the NPDES Permit (Order No. R4-2010-0090) adopted by the RWQCB on June 3, 2010. BMP recommendations were developed based on statistical evaluations performed on a yearly basis, which are presented in the 2010-2011 and 2011-2012 Rainy Season Summary Reports. BMP Plan Addenda were submitted to the RWQCB in September 2011 and 2012 that provide additional detail on the BMP recommendations in the yearly summary reports, and the implementation schedule. For the period from mid-May to mid-June, the primary activities associated with BMPs have been continuing the evaluation of the surface water data from the 2012-2013 rainy season and preparing to start construction activities for the ELV BMP.

Accomplishments and upcoming actions for both the ISRA and BMP programs are listed below:

**Activities Performed – May 18, 2013 to June 14, 2013**

- May 18, 2013 – June 14, 2013:
  - In coordination with the Expert Panel, continued evaluation of surface water data from the 2012-2013 rainy season for inclusion in the Performance Monitoring and BMP Monitoring Summary Report.

- Continued planning activities for the ELV BMP. Construction tentatively scheduled to begin June 24, 2013.
- Continued planning activities for ISRA implementation at ISRA areas ELV-1C, ELV-1D, and LOX. Excavation tentatively scheduled to begin in early July.
- Continued process to set-up a profile with the landfill (Energy Solutions) to accept soils with radionuclides above LUT values.
- June 5, 2013: Collected an additional waste characterization soil sample at ISRA area ELV-1D and a sample adjacent to ISRA area AP/STP-1C-2.
- June 12, 2013: Collected an additional waste characterization soil sample at ISRA area ELV-1D.

**30-Day Look ahead – through July 19, 2013**

- Boeing/NASA – Continue inspections of erosion control BMPs at ISRA areas, per the ISRA SWPPP.
- Boeing/NASA – Continue Performance Monitoring and BMP Monitoring during rain events, per the 2012-2013 Rainy Season SAP.
- Boeing/NASA – Continue activities to set-up a profile with the landfill (Energy Solutions) to accept soils with radionuclides above LUT values.
- Boeing/NASA – Begin ISRA implementation at ISRA areas ELV-1C, ELV-1D, and LOX.
- Boeing/NASA/Expert Panel – Continue evaluation of surface water data from the 2012-2013 rainy season for inclusion in the Performance Monitoring and BMP Monitoring Summary Report.
- NASA – Begin construction of the ELV BMP.

Approved By:



Art Lenox,  
Boeing Remediation  
Environment, Health and Safety

Distribution:

Mr. Peter Raftery, RWQCB  
Ms. Cassandra Owens, RWQCB  
Mr. Buck King, DTSC  
Mr. Allen Elliott, NASA  
Mr. Peter Zorba, NASA