



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

Via FedEx

September 30, 2013

In reply, refer to SHEA-114026

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: Third Quarter Progress Report for June 15, 2013 – September 20, 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 June 15, 2013 – September 20, 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 June 15, 2013 – September 20, 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)



September 30, 2013

Page 2

SHEA-114026

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

Sincerely,

A handwritten signature in black ink, appearing to read "AL", with a long horizontal flourish extending to the right.

Art Lenox  
Boeing Remediation  
Environment, Health and Safety

Enclosures:

July 2013 Monthly Progress Report (June 15, 2013 – July 19, 2013) SHEA-113814  
August 2013 Monthly Progress Report (July 20, 2013 – August 16, 2013) SHEA-113927  
September 2013 Monthly Progress Report (August 17, 2013 – September 20, 2013) SHEA-114025

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: 07/24/2013

No.: SHEA-113814

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

From: Art Lenox  
Santa Susana  
Environment, Health & Safety

Subject: July 2013 Monthly Progress Report for June 15, 2013 - July 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 June 15, 2013 to July 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-June to mid-July, the primary activities have been completing pre-excavation activities (e.g., surveying, utility locating, vegetation clearance) at ELV-1D and LOX ISRA areas, conducting soil sampling at ELV-1D and LOX ISRA areas, and continuing the process for setting up the waste profile with the landfill (Energy Solutions) 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-June to mid-July, the primary activities associated with BMPs have been continuing the evaluation of the surface water data from the 2012-2013 rainy season and starting construction activities for the ELV BMP.

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

**Activities Performed – June 15, 2013 to July 19, 2013**

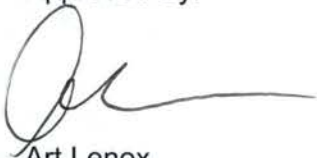
- June 15, 2013 – July 19, 2013:
  - In coordination with the Expert Panel, continued evaluation of surface water data from the 2012-2013 rainy season for inclusion in the Performance Monitoring and BMP Monitoring Summary Report.
  - Continued planning activities for ISRA implementation at LOX ISRA areas. Excavation tentatively scheduled to begin on July 22, 2013.
  - Continued process to set-up a profile with the landfill (Energy Solutions) to accept soils with radionuclides above LUT values.
  - Continued planning activities for ISRA implementation at ISRA areas ELV-1C and ELV-1D. Excavation tentatively scheduled to begin in mid-August.
- June 24, 2013: Began construction of ELV BMP.
- June 24, 2013: Held teleconference with DTSC and RWQCB to review data at ELV-1D and LOX ISRA areas. During the teleconference, it was agreed that soil excavation work at ISRA areas LOX-1A, LOX-1B-4, LOX-1C, and LOX-1D would be conducted by NASA under the Administrative Order on Consent (AOC) and no action would be performed as part of the ISRA program. The primary rationale for this agreement is the ISRA COCs at these areas (copper and/or cadmium) have not been detected in NPDES samples for several years.
- June 26 - 27, 2013: Cal Vada Surveying, Inc. surveyed planned excavation boundaries for ISRA area ELV-1D and LOX ISRA areas.
- June 28, 2013: Collected soil samples along planned boundaries at ISRA areas LOX-1B-1, LOX-1B-2, and LOX-1B-3.
- June 28, 2013: Collected additional waste characterization soil samples at ISRA area ELV-1D.
- June 28, 2013: Submitted letter to RWQCB documenting the plan to dispose of soils with radionuclides above LUT values at the Energy Solutions Clive Disposal Site.
- July 1 - 3, 2013: Conducted utility survey and vegetation clearance at ISRA areas LOX-1B-1, LOX-1B-2, and LOX-1B-3.
- July 10, 2013: Held teleconference with DTSC and RWQCB to review ELV-1D waste characterization data.
- July 17, 2013: Held teleconference with DTSC and RWQCB to review results of soil samples collected along planned boundaries at LOX ISRA areas.
- July 18, 2013: Collected additional soil samples along planned sidewall boundaries at ISRA areas LOX-1B-2, and LOX-1B-3.

**30-Day Look ahead – through August 16, 2013**

- Boeing/NASA – Continue inspections of erosion control BMPs at ISRA areas, per the ISRA SWPPP.
- Boeing/NASA – Begin ISRA implementation at LOX ISRA areas.

- Boeing/NASA – Complete the waste profile of soils with radionuclides above LUT values with landfill (Energy Solutions).
- Boeing/NASA – Continue planning activities for ISRA implementation at ISRA areas ELV-1C and ELV-1D
- 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 – Continue 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



Date: 08/26/2013 No.: SHEA-113927

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

From: Art Lenox  
Santa Susana  
Environment, Health & Safety

Subject: August 2013 Monthly Progress Report for July 20, 2013 - August 16, 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 July 20, 2013 to August 16, 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-July to mid-August, the primary activities have been starting excavation activities at LOX ISRA areas, conducting waste characterization and confirmation soil sampling at LOX ISRA areas, and submitting the 2010 Grading Permit close-out documents to Ventura County.

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-July to mid-August, the primary activities associated with BMPs have been continuing the evaluation of the surface water data from the 2012-2013 rainy season and preparation of the 2012-2013 Rainy Season Summary Report, and continuing construction activities for the ELV BMP.

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

**Activities Performed – July 20, 2013 to August 16, 2013**

- July 20, 2013 – August 16, 2013:
  - In coordination with the Expert Panel, continued evaluation of surface water data from the 2012-2013 rainy season for inclusion in the 2012/2013 Rainy Season Summary Report, which is scheduled to be submitted to the RWQCB on August 30, 2013.

- Continued construction of the ELV BMP.
- Continued process to set-up a profile with the landfill (Energy Solutions) to accept soils with radionuclides above LUT values.
- Continued planning activities for ISRA implementation at ISRA areas ELV-1C and ELV-1D. Excavation tentatively scheduled to begin in early September.
- July 22, 2013: Began planned excavation activities at LOX ISRA areas.
- August 1, 2013: Collected floor confirmation and regional board split soil samples from ISRA areas LOX-1B-1 and LOX-1B-3.
- August 1, 2013: Collected waste characterization soil samples from a debris pile near LOX ISRA areas.
- August 7, 2013: Conducted quarterly SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas, per the ISRA SWPPP.
- August 8, 2013: Collected a sidewall confirmation soil sample at ISRA area LOX-1B-2.
- August 16, 2013: Submitted the 2010 ISRA Grading Permit close-out documents to Ventura County.

**30-Day Look ahead – through September 13, 2013**

- Boeing/NASA – Continue inspections of erosion control BMPs at ISRA areas, per the ISRA SWPPP.
- Boeing/NASA – Complete ISRA implementation at LOX ISRA areas.
- Boeing/NASA – Complete the waste profile of soils with radionuclides above LUT values with landfill (Energy Solutions).
- Boeing/NASA – Begin ISRA implementation at ISRA areas ELV-1C and ELV-1D.
- Boeing/NASA/Expert Panel – Complete the 2012/2013 Rainy Season Summary Report and submit to the RWQCB.
- Boeing/NASA/Expert Panel – Begin preparation of the 2013 BMP Plan Addendum.
- NASA – Continue construction of the ELV BMP.

Approved By:



Art Lenox,  
Boeing Remediation  
Environment, Health and Safety

Distribution:

Mr. Peter Rafferty, 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: 09/30/2013

No.: SHEA-114025

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

From: Art Lenox  
Santa Susana  
Environment, Health & Safety

Subject: September 2013 Monthly Progress Report for August 17, 2013 to September 20, 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 August 17, 2013 to September 20, 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-August to mid-September, the primary activities have been completing planned excavation activities at LOX ISRA areas, conducting confirmation soil sampling at LOX ISRA areas, continue planning activities for ISRA implementation at ISRA area ELV-1D, and continuing the process for setting up the waste profile with the landfill (Energy Solutions) 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, 2011-2012, and 2012-2013 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-August to mid-September, the primary activities associated with BMPs have been submitting the 2012/2013 Rainy Season Summary Report to the RWQCB, continuing preparation of the 2013 BMP Plan Addendum and continuing construction activities for the ELV BMP.

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



### **Activities Performed – August 17, 2013 to September 20, 2013**

- August 17, 2013 – September 20, 2013:
  - In coordination with the Expert Panel, continued preparation of the 2013 BMP Plan Addendum which is scheduled to be submitted to the RWQCB on September 27, 2013.
  - Continued construction of the ELV BMP.
  - Continued process to set-up a profile with the landfill (Energy Solutions) to accept soils with radionuclides above LUT values.
  - Continued planning activities for ISRA implementation at ISRA area ELV-1D. Excavation tentatively scheduled to begin in late-September.
- August 20, 2013: Collected floor confirmation and regional board split soil samples at ISRA areas LOX-1B-1 and LOX-1B-3.
- August 26, 2013: Collected floor confirmation and regional board split soil samples at ISRA areas LOX-1B-2 and LOX-1B-3.
- August 28, 2013: Completed planned excavation activities at LOX ISRA areas.
- August 28, 2013: Collected floor confirmation soil samples at ISRA area LOX-1B-2.
- August 29, 2013: Conducted post-excavation boundary survey at LOX ISRA areas.
- August 29, 2013: Installed a curb along the asphalt adjacent to ISRA area ELV-1C, to direct stormwater runoff towards the Helipad BMP.
- August 29 – September 3, 2013: Completed restoration and installation temporary BMPs at LOX ISRA areas.
- August 30, 2013: Submitted the 2012/2013 Rainy Season Summary Report to the RWQCB.
- September 4, 2013: Reviewed confirmation sample results from LOX ISRA areas with RWQCB and DTSC.
- September 11, 2013: Performed biological survey at ELV and AP/STP ISRA areas.
- September 16, 2013: Received concurrence from DTSC and RWQCB that LOX ISRA excavation activities are complete.

### **30-Day Look ahead – through October 18, 2013**

- Boeing/NASA – Continue inspections of erosion control BMPs at ISRA areas, per the ISRA SWPPP.
- Boeing/NASA – Begin ISRA implementation at ISRA area ELV-1D.
- Boeing/NASA – Complete the waste profile of soils with radionuclides above LUT values with landfill (Energy Solutions).
- Boeing/NASA – Begin excavation of soils with radionuclides above LUT Values at ISRA areas AP/STP-1C-1, ELV-1C, ELV-1D, and LOX-1B-3.
- Boeing/NASA/Expert Panel – Submit the 2013 BMP Plan Addendum to the RWQCB.
- NASA – Continue 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