



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

VIA FedEx

March 25, 2013

In reply refer to SHEA-113331

Peter Raftery  
Regional Water Quality Control Board  
Los Angeles Region  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013-2343

Dear Mr. Raftery:

Subject: First Quarter Progress Report for December 15, 2012 – March 15, 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 first quarter 2013 and summarizes ISRA and BMP Plan activities performed during the period of December 15, 2012 – March 15, 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 December 15, 2012 – March 15, 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 me at 818-466-8795.

Sincerely,

Art Lenox  
Boeing Remediation  
Environment, Health and Safety



March 25, 2013  
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Attachments:

January 2013 Monthly Progress Report (December 15, 2012 – January 18, 2013)  
February 2013 Monthly Progress Report (January 19, 2013 – February 15, 2013)  
March 2013 Monthly Progress Report (February 16, 2013 – March 15, 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: 01/24/2013 No.: SHEA-113060

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

From: Art Lenox  
Santa Susana  
Environment, Health & Safety

Subject: January 2013 Monthly Progress Report for December 15, 2012 - January 18, 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 December 15, 2012 to January 18, 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-December to mid-January, the primary activities have been obtaining agreement with agencies that AP/STP excavation activities are complete, completing planned excavation at ELV-1C (western portion), and starting planned excavation at IEL-3. In addition, inspections of erosion control BMPs were performed at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP, and Performance Monitoring and BMP Monitoring inspections were conducted.

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-December to mid-January, the primary activities associated with BMPs have been continuing construction of the Lower Parking Lot BMP, continuing installation of BMPs within the Outfall 008 watershed and performing general maintenance of BMPs within the Outfall 009 watershed. In addition, BMP monitoring was performed during rain events.

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

**Activities Performed – December 15, 2012 to January 18, 2013**

- December 15, 2012 – January 18, 2013:
  - In coordination with the Expert Panel, continued planning and design activities for the Helipad and ELV BMPs.
- December 14, 2012 (Addition to December 2012 Monthly report): Conducted maintenance in vicinity of Area 2 Road and Helipad Road, including removal of mulefat plant and plant debris blocking flow within asphalt swale parallel to Area 2 Road, covering exposed soil areas with gravel, and installing a row of sandbags and fiber roll along the edge of soil adjacent to Area 2 Road.
- December 15 – 19, 2012: Performed rain event and post-rain event SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- December 15 – 18, 2012: Conducted ISRA Performance Monitoring and BMP Subarea Monitoring inspections.
- December 15, 2013: Replaced old, worn gravel bags in the LOX berm with sand bags.
- December 17, 2012: Performed rain event SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- December 17, 2012: Conducted ISRA Performance Monitoring and BMP Subarea Monitoring inspections.
- December 17, 2012: Performed maintenance of fabric covering weir boards of CMs within Outfall 009.
- December 17, 2012: Held ISRA area IEL-3 kick-off meeting.
- December 18, 2012: Held meeting with DTSC to review the IEL-3 radiological certification for excavated soils.
- December 21 – 29, 2012: Performed pre-rain event, rain event, and post-rain event SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- December 23 – 29, 2012: Conducted ISRA Performance Monitoring and BMP Subarea Monitoring inspections.
- January 2, 2013: Performed weekly SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- January 3, 2013: Inspected condition of newly installed plants within Northern Drainage.
- January 7, 2013: Received RWQCB and DTSC approval that excavation at AP/STP ISRA areas is complete.
- January 7, 2013: Ventura County conducted site visit to inspect the Lower Parking Lot BMP activities.
- January 7, 2013: Conducted maintenance activities, including removal of plant debris within the asphalt swale upstream/south of the B-1 Media Filter and adjusted/secured with sand bags plastic tarp covering ISRA area AP/STP-1C-2.
- January 8, 2013: Performed additional maintenance of fabric covering weir boards of CMs within Outfall 009.
- January 8, 2013: Held ISRA area IEL-3 kick-off meeting.
- January 9, 2013: Performed weekly SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.

- January 10, 2013: Ventura County conducted inspection of the plumbing associated with the Lower Parking Lot BMP.
- January 14, 2013: Began planned excavation at ISRA area IEL-3.
- January 14, 2013: Began BMP installation activities within the Outfall 008 watershed per the RWQCB approved 401c permit.
- January 16, 2013: Performed weekly SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- January 18, 2013: Reviewed ELV-1C confirmation sample results (western portion) and radiological results with DTSC and the RWQCB.

**30-Day Look ahead – through February 15, 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 – Conduct restoration activities and hydroseeding at AP/STP ISRA areas.
- Boeing/NASA – Complete additional excavation and confirmation sampling activities at ISRA area ELV-1C (western portion) and begin site restoration.
- Boeing – Complete planned excavation and confirmation sampling activities at ISRA area IEL-3.
- Boeing/NASA/Expert Panel – Continue BMP planning and design activities for the Helipad and ELV BMPs.
- Boeing – Continue construction of the Lower Parking Lot BMP (completion estimated mid to late February); remaining activities include installation of split rail fencing, the electrical pad, bench, and educational sign.
- Boeing – Continue implementing BMPs within Outfall 008 watershed.

Approved By:



Art Lenox  
Boeing Remediation  
Environment, Health and Safety

AL:jag

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: 02/22/2013 No.: SHEA-113239

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

From: Art Lenox  
Santa Susana  
Environment, Health & Safety

Subject: February 2013 Monthly Progress Report for January 19, 2013 - February 15, 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 January 19, 2013 to February 15, 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-January to mid-February, the primary activities have been completing excavation, confirmation sampling, and restoration activities at ISRA area IEL-3 and performing additional waste characterization sampling at ISRA area ELV-1C (eastern portion). In addition, inspections of erosion control BMPs were performed at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP, and Performance Monitoring and BMP Monitoring inspections were conducted.

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-January to mid-February, the primary activities associated with BMPs have been continuing construction of the Lower Parking Lot BMP, completing installation of structural BMPs within the Outfall 008 watershed, planning installation of the BMP at CM-9 recommended in the 2012 BMP Plan Addendum, and continuing ELV BMP design activities with support from the Expert Panel. In addition, BMP monitoring was performed during rain events.

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

**Activities Performed – January 19, 2013 to February 15, 2013**

- January 19, 2013 – February 15, 2013:
  - In coordination with the Expert Panel, continued design activities for the ELV BMP.
- January 23, 2013: Collected additional radiological waste characterization soil samples at ISRA area ELV-1C.
- January 23, 2013: Collected one additional waste characterization soil sample at ISRA area IEL-3.
- January 23 - 28, 2013: Performed pre-rain event, rain event, and post-rain event SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- January 24 - 26, 2013: Conducted ISRA Performance Monitoring and BMP Subarea Monitoring inspections and sampling.
- January 25, 2013: Completed planned excavation at ISRA area IEL-3.
- January 29, 2013: Conducted confirmation and RWQCB split soil sampling at ISRA area IEL-3.
- January 29, 2013: Ventura County conducted site visit to inspect the Lower Parking Lot BMP activities.
- January 29 - 30, 2013: Cal Vada surveyed ISRA areas AP/STP-1B, AP/STP-1C-1, and ELV-1C, and the Soil Borrow Area.
- January 31, 2013: Conducted site walk at CM-9 with contractors to review installation of BMPs recommended in the 2012 BMP Plan Addendum.
- February 6, 2013: Performed weekly SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- February 6, 2013: Cal Vada surveyed ISRA area IEL-3.
- February 7, 2013: Reviewed confirmation sampling results for ISRA area IEL-3 with DTSC and RWQCB and received approval that excavation activities are complete.
- February 7, 2013: Ventura County conducted site visit to inspect the Lower Parking Lot BMP activities.
- February 7, 2013: Completed construction of structural BMPs within Outfall 008, including rip rap check dams, berms, and rolling dips along dirt road.
- February 8, 2013: Completed restoration of ISRA area IEL-3.
- February 9, 2013: Performed rain event SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- February 9, 2013: Conducted ISRA Performance Monitoring and BMP Subarea Monitoring inspections.
- February 11, 2013: Performed weekly/post-rain event SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- February 13, 2013: Padre performed a biological survey of ISRA areas ELV-1C and ELV-1D.
- February 13, 2013: Staked ISRA area ELV-1D.

**30-Day Look ahead – through March 15, 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 – Conduct restoration activities and hydroseeding at AP/STP ISRA areas.
- Boeing/NASA – Perform excavation and confirmation sampling activities at ISRA area ELV-1C (eastern and western portions).
- Boeing/NASA – Continue planning activities for ISRA implementation at ISRA area ELV-1D, including vegetation clearance and additional waste characterization sampling.
- Boeing/NASA/Expert Panel – Complete design activities for the ELV BMP and prepare bid package.
- Boeing – Complete construction of the Lower Parking Lot BMP (completion estimated late February or early March); remaining activities include testing of the pump and installation of sign pedestals and educational artwork.
- Boeing – Install the planned BMP at CM-9 recommended in the 2012 BMP Plan Addendum.

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: 03/22/2013

No.: SHEA-113329

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

From: Art Lenox  
Santa Susana  
Environment, Health & Safety

Subject: March 2013 Monthly Progress Report for February 16, 2013 - March 15, 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 February 16, 2013 to March 15, 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-February to mid-March, the primary activities have been performing excavation of soils without radiological restrictions at ISRA area ELV-1C, conducting confirmation soil sampling at ISRA area ELV-1C, conducting radiological delineation and data gap sampling at ISRA area ELV-1D, and completing restoration activities at Ash Pile ISRA Areas. In addition, inspections of erosion control BMPs were performed at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP, and Performance Monitoring and BMP Monitoring inspections were conducted.

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-February to mid-March, the primary activities associated with BMPs have been completing construction of the Lower Parking Lot BMP, installing the BMPs at CM-9 recommended in the 2012 BMP Plan Addendum, and completing the design of the ELV BMP with support from the Expert Panel. In addition, BMP monitoring was performed during rain events.

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

**Activities Performed – February 16, 2013 to March 15, 2013**

- February 16, 2013 – March 15, 2013:
  - In coordination with the Expert Panel, completed design of the ELV BMP and started bidding process.
- February 18 – March 1, 2013: Completed construction of BMPs at CM-9 per the 2012 BMP Plan Addendum.
- February 18 - 26, 2013: Completed planned excavation and additional excavation activities at ISRA area ELV-1C (excluding soils with radiological restrictions).
- February 18 - 20, 2013: Performed pre-rain event, rain event, and post-rain event SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- February 19, 2013: Conducted ISRA Performance Monitoring and BMP Subarea Monitoring inspections.
- February 22, 2013: Ventura County conducted site visit to inspect the Lower Parking Lot BMP activities.
- February 25, 2013: Performed weekly SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- February 27, 2013: Cal Vada surveyed ISRA area IEL-3.
- February 27, 2013: Placed rip rap on area of erosion at the northeast side of Area II Road at the Lower Lot driveway and installed bollards to prevent vehicles from disturbing the area.
- February 28 – March 6, 2013: Completed restoration activities at ISRA areas AP/STP-1B, AP/STP-1C-1, AP/STP-1C-2, AP/STP-1E-1, AP/STP-1E-2, and AP/STP-1E-3.
- March 4, 2013: Ventura County conducted a grading inspection at the Lower Parking Lot BMP.
- March 5 - 6, 2013: Conducted radiological delineation soil sampling and data gap sampling at ISRA area ELV-1D.
- March 5 - 11, 2013: Performed pre-rain event, rain event, and post-rain event SWPPP inspections at 2010 and 2011/2012 ISRA areas per the ISRA SWPPP.
- March 6 - 8, 2013: Conducted ISRA Performance Monitoring and BMP Subarea Monitoring inspections and sampling.
- March 6, 2013: Ventura County conducted site visit and provided final approval of electrical and pumping installations at the Lower Parking Lot BMP Cistern.
- March 11, 2012: Conducted confirmation and RWQCB split soil sampling at ISRA area ELV-1C (western and eastern portions; excluding soils with radiological restrictions).
- March 11, 2013: Applied hydroseed to Ash Pile ISRA areas (AP/STP-1B, AP/STP-1C-1, AP/STP-1C-2, AP/STP-1E-1, AP/STP-1E-2, and AP/STP-1E-3) and at the restored Happy Valley fire road.
- March 12 – 13, 2013: Conducted hydraulic pump test of the Lower Parking Lot BMP.
- March 15, 2013: Completed construction of the Lower Parking Lot BMP.
- March 15, 2013: Replaced ten 1-gallon walnut trees in the Northern Drainage and replaced Driveway cartons at planting areas in the Northern Drainage.

**30-Day Look ahead – through April 12, 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/Expert Panel – Public site walk/meeting (March 20).
- Boeing/NASA – Continue planning activities for ISRA implementation at ISRA area ELV-1D, including additional waste characterization sampling.
- NASA/Expert Panel – Continue bidding process for the ELV BMP.

Approved By:



Art Lenox  
Boeing Remediation  
Environment, Health and Safety

Distribution:

Mr. Peter Raftery, RWQCB  
Ms. Cassandra Owens, RWQCB  
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