



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

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Via FedEx and e-mail

July 3, 2012  
In reply refer to: SHEA-112118

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

Attention: Mr. Peter Raftery

Subject: Second Quarter Progress Report for March 17, 2012 – June 22, 2012 Activity,  
Interim Source Removal Action (ISRA) and Best Management Practices (BMP) Plan

Dear Mr. Raftery:

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 2012 and summarizes ISRA and BMP Plan activities performed during the period of March 17, 2012 through June 22, 2012.

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 17, 2012 through June 22, 2012, 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)



In reply refer to: SHEA-112118  
July 3, 2012  
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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

AL:jag

Attachments: April 2012 Monthly Progress Report (March 17, 2012 – April 13, 2012)  
May 2012 Monthly Progress Report (April 14, 2012 – May 18, 2012)  
June 2012 Monthly Progress Report (May 19, 2012 – June 22, 2012)

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



Date: 04/24/2012 No.: SHEA-111959

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

From: Art Lenox  
Santa Susana  
Environment, Health & Safety

Subject: April 2012 Monthly Progress Report for March 17, 2012 - April 13, 2012 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 17, 2012 to April 13, 2012. In addition, a 30 day Look-Ahead is also 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 planning for ISRA activities to resume after the rainy season ends, collecting delineation soil samples at ISRA areas AP/STP-1C-1 and AP/STP-1C-2, and conducting inspections of erosion control BMPs at 2009, 2010, and 2011 ISRA areas per the ISRA Storm Water Pollution Prevention Plan (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. A list of new BMP recommendations was developed based on a statistical evaluation performed on available data, which is presented in the 2010-2011 Rainy Season Summary Report. A BMP Plan Addendum was submitted to the RWQCB in September 2011 that provides additional detail on the new BMP recommendations and the implementation schedule. For the period from mid-March to mid-April, the primary activities associated with BMPs have been continuing planning activities for additional BMPs in the Outfall 009 watershed at the Lower Parking Lot, the Helipad, the ELV channel, and the Northern Drainage.

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

#### **Activities Performed – March 17, 2012 to April 13, 2012**

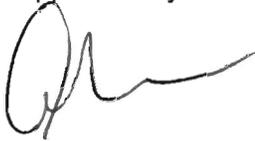
- March 17, 2012 – April 13, 2012:
  - Performed a geophysical survey of the alternate location of the Lower Parking Lot Biofilter outside the Southern California Edison (SCE) easement between March 26-29, 2012 and finalized selection of the alternate location. The redesign started and the revised grading permit application will be submitted when the redesign is complete.

- In coordination with the Expert Panel, continued design of BMPs and drainage improvements at the Helipad and ELV channel in NASA administered Area II.
- Boeing communicated with agencies on the Northern Drainage Restoration, Mitigation, and Monitoring Plan (RMMP) permit application and supporting information. A site walk of the Northern Drainage was performed on April 12, 2012 to observe revegetation conditions and evaluate potential modifications to the design. In coordination with the Expert Panel, began work on the RMMP 90% design drawings.
- March 17-18, 2012: Conducted rain event and post rain event ISRA SWPPP inspections at 2009, 2010, and 2011 ISRA areas, per the ISRA SWPPP.
- March 17, 2012: Conducted rain event Performance Monitoring and BMP inspections and sampling.
- March 22-26, 2012: Conducted pre-rain event, rain event, and post rain event ISRA SWPPP inspections at 2009, 2010, and 2011 ISRA areas, per the ISRA SWPPP.
- March 25, 2012: Conducted rain event Performance Monitoring and BMP inspections and sampling.
- April 2, 2012: NASA sent email to DTSC requesting approval to use the December 16, 2011 EPA Radiological Trigger Levels for characterizing ISRA soils until DTSC's Radiological Lookup Table is finalized.
- April 2, 2012: Conducted non-rainy season ISRA SWPPP inspections at 2009, 2010, and 2011 ISRA areas, per the ISRA SWPPP.
- April 4, 2012: Conducted soil sampling at ISRA areas, including sidewall confirmation sampling at AP/STP-1C-1 and additional excavation delineation sampling at AP/STP-1C-2.
- April 11-16, 2012: Conducted pre-rain event, rain event, and post rain event ISRA SWPPP inspections at 2009, 2010, and 2011 ISRA areas, per the ISRA SWPPP.
- April 11, 2012: Conducted rain event Performance Monitoring and BMP inspections and sampling.
- April 13, 2012: Conducted rain event Performance Monitoring and BMP inspections and sampling.

### **30-Day Look ahead – through May 18, 2012**

- Boeing/NASA – Continue inspections of erosion control BMPs at the 2009, 2010, and 2011 ISRA areas, per the ISRA SWPPP.
- Boeing/NASA – Continue Performance Monitoring and BMP Monitoring during rain events, per the 2011-2012 Rainy Season SAP.
- Boeing/Expert Panel – Complete redesign of the Lower Parking Lot sediment basin and biofilter outside the SCE easement and submit revised grading permit application to Ventura County.
- NASA/Expert Panel – Continue design of the BMPs and drainage improvements at the Helipad and ELV channel in NASA administered Area II.
- Boeing/Expert Panel – Complete 90% design of the RMMP and begin preparation of contractor bid documents.
- Boeing/NASA/Expert Panel – Host a site tour with new RWQCB members on April 26, 2012 and discuss the various surface water related projects being performed at the Site.
- Boeing/NASA – Resume ISRA soil removal after the 2011-2012 rainy season; pending approval from DTSC to use December 16, 2011 EPA Radiological Trigger Levels.

Approved By:

A handwritten signature in black ink, appearing to read 'Art Lenox', with a stylized, cursive style.

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: 05/23/2012 No.: SHEA-112020

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

From: Art Lenox  
Santa Susana  
Environment, Health & Safety

Subject: May 2012 Monthly Progress Report for April 14, 2012 - May 18, 2012 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 14, 2012 to May 18, 2012. In addition, a 30 day Look-Ahead is also 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 inspections of erosion control BMPs at 2009, 2010, and 2011 ISRA areas per the ISRA Storm Water Pollution Prevention Plan (SWPPP). At this time, ISRA implementation on NASA property is currently on hold until the DTSC Radionuclide Look-up Table is finalized (estimated summer).

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. A list of new BMP recommendations was developed based on a statistical evaluation performed on available data, which is presented in the 2010-2011 Rainy Season Summary Report. A BMP Plan Addendum was submitted to the RWQCB in September 2011 that provides additional detail on the new BMP recommendations and the implementation schedule. For the period from mid-April to mid-May, the primary activities associated with BMPs have been continuing planning activities for additional BMPs in the Outfall 009 watershed at the Lower Parking Lot, the Helipad, the ELV channel, and the Northern Drainage.

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

#### **Activities Performed – April 14, 2012 to May 18, 2012**

- April 14, 2012 – May 18, 2012:
  - In coordination with the Expert Panel, continued design activities for alternative location of the Lower Lot Biofilter outside the Southern California Edison (SCE) easement. The revised grading permit application will be submitted when the redesign is complete.

- Design of BMPs and drainage improvements at the Helipad and ELV channel in NASA administered Area II were put on hold until the DTSC Radionuclide Look-up Table is finalized (estimated summer).
- Boeing submitted the Northern Drainage Restoration, Mitigation, and Monitoring Plan (RMMP) additional information package to the RWQCB on May 2, 2012. In coordination with the Expert Panel, the 90% RMMP design is in progress.
- April 24, 2012: Conducted pre-rain event ISRA SWPPP inspections at 2009, 2010, and 2011 ISRA areas, per the ISRA SWPPP.
- April 26, 2012: Hosted a site tour with new RWQCB members and discussed the surface water related projects ongoing and planned at the site.
- April 26, 2012: Conducted rain event Performance Monitoring and BMP inspections, no runoff observed.
- April 26, 2012: Conducted rain event and post rain event ISRA SWPPP inspections at 2009, 2010, and 2011 ISRA areas, per the ISRA SWPPP.
- April 26, 2012: Performed biological survey of planting areas in Outfall 008; based on vegetation conditions observed, biologist is recommending no further actions in terms of vegetation monitoring.
- May 2, 2012: Submitted the RMMP additional information package to the RWQCB.
- May 10, 2012: Submitted electronically the updated ISRA SWPPP to the RWQCB's Stormwater Multi-Application Report Tracking System (SMARTS); included updated figures closing-out ISRA SWPPP for Phase I and some Phase II (CTLI-1A, CTLI-1B, and IEL-1) ISRA areas and updated acreage for 2012 ISRAs.

### **30-Day Look ahead – through June 15, 2012**

- Boeing/NASA – Continue inspections of erosion control BMPs at the 2009, 2010, and 2011 ISRA areas, per the ISRA SWPPP.
- Boeing/NASA – Continue Performance Monitoring and BMP Monitoring during rain events, per the 2011-2012 Rainy Season SAP.
- Boeing/Expert Panel – Complete redesign of the Lower Parking Lot sediment basin and biofilter outside the SCE easement and submit revised grading permit application to Ventura County.
- Boeing/Expert Panel – Complete 90% design of the RMMP and begin preparation of contractor bid documents.
- Boeing/NASA – NASA ISRA implementation and BMP design activities on hold until the DTSC Radionuclide Look-up Table is finalized (estimated summer).
- Expert Panel – Begin evaluation of surface water data (e.g., BMP evaluation process) for inclusion in the Performance Monitoring and BMP Monitoring Summary Report for the 2011-2012 Rainy Season.

Approved By:



Art Lenox  
Boeing Remediation  
Environment, Health and Safety

Mr. S. Unger, RWQCB (SHEA-112020)  
May 23, 2012  
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AL:jag

Distribution:

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



Date: 06/29/2012 No.: SHEA-112111

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

From: Art Lenox  
Santa Susana  
Environment, Health & Safety

Subject: June 2012 Monthly Progress Report for May 19, 2012 - June 22, 2012 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 19, 2012 to Jun 22, 2012. 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 activity has been continuing to work through how to appropriately use the December 2011 EPA Radiological Trigger Levels (RTLs) for the ISRA program. At this time, ISRA implementation on NASA property is currently on hold until an agreement between NASA and DTSC regarding the use of the RTLs has been reached.

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. A list of new BMP recommendations was developed based on a statistical evaluation performed on available data, which is presented in the 2010-2011 Rainy Season Summary Report. A BMP Plan Addendum was submitted to the RWQCB in September 2011 that provides additional detail on the new BMP recommendations and the implementation schedule. For the period from mid-May to mid-June, the primary activities associated with BMPs have been continuing the planning activities for additional BMPs in the Outfall 009 watershed at the Lower Parking Lot, the Helipad, the ELV channel, and the Northern Drainage. In addition, evaluation of the surface water data from the 2011-2012 rainy season has begun.

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

#### **Activities Performed – May 18, 2012 to June 22, 2012**

- May 18, 2012 – June 22, 2012:
  - NASA and DTSC continued communicating on the appropriate application of the December 2011 EPA RTLs for the ISRA program as the ISRA radionuclide waste characterization samples were collected prior to publication of the RTLs. DTSC sent an email to NASA on May 23, 2012

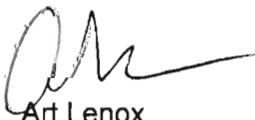
allowing use of December 2011 EPA RTLs for Cs-137, U-235, and U-238 for disposal of ISRA soils and requested the opportunity to review the lab QA/QC for samples whose minimal detectable concentrations (MDCs) exceed the RTLs. NASA is preparing a response to DTSC's email.

- In coordination with the Expert Panel, finalized the 90% design for alternative location of the Lower Lot Biofilter outside the Southern California Edison (SCE) easement. The revised grading permit application is scheduled to be submitted to the county the week of June 25<sup>th</sup> and construction is scheduled to begin in August.
- Design of BMPs and drainage improvements at the Helipad and ELV channel in NASA administered Area II are preparing to resume. NASA and DTSC have had discussions regarding requirements for radiological characterization of waste soils, and NASA is communicating with US EPA for feedback on its proposed sampling suite. Design will resume following radiological characterization.
- In coordination with the Expert Panel, finalized the 90% Northern Drainage Restoration, Mitigation, and Monitoring Plan (RMMP) design and the contractor bid package. Baseline channel morphology monitoring is scheduled to be performed the week of June 25<sup>th</sup>.
- In coordination with the Expert Panel, began evaluation of surface water data from the 2011-2012 rainy season for inclusion in the Performance Monitoring and BMP Monitoring Summary Report and the 2012 BMP Plan Addendum.

### **30-Day Look ahead – through July 20, 2012**

- Boeing/NASA – Continue inspections of erosion control BMPs at ISRA areas, per the ISRA SWPPP.
- Boeing – Begin planning activities for IEL-3 following demo of Building 1300.
- Boeing/Expert Panel – Submit revised grading permit application to Ventura County for the redesign of the Lower Parking Lot sediment basin and biofilter outside the SCE easement and continue construction preparation activities.
- Boeing/Expert Panel – Continue contractor selection process for the RMMP and perform baseline channel morphology monitoring.
- Boeing/NASA – NASA ISRA implementation and BMP design activities to resume following agreement with DTSC in regards to radionuclides, and requirements for radiological characterization of waste soils.
- Expert Panel – Onsite Expert Panel meeting scheduled for June 27-28, 2012.
- Boeing/NASA – SWRCB site visit scheduled for August.
- Expert Panel – Continue evaluation of surface water data from the 2011-2012 rainy season for inclusion in the Performance Monitoring and BMP Monitoring Summary Report and the 2012 BMP Plan Addendum.

Approved By:



Art Lenox  
Boeing Remediation  
Environment, Health and Safety

Mr. S. Unger, RWQCB (SHEA-112111)  
June 29, 2012  
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Distribution:

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