



Via FedEx

September 21, 2012 In reply refer to: SHEA-112441

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

Attention: Mr. Peter Raftery

Subject: Third Quarter Progress Report for June 23, 2012 – September 14, 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 third quarter 2012 and summarizes ISRA and BMP Plan activities performed during the period of June 23, 2012 through September 14, 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 June 23, 2012 through September 14, 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



P. Raftery, RWQCB September 21, 2012 SHEA-112441 Page 2

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

Sincerely,

Art Lenox

Boeing Remediation

Environment, Health and Safety

AL:jag

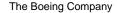
Attachments:

July 2012 Monthly Progress Report (June 23, 2012 – July 20, 2012)
August 2012 Monthly Progress Report (July 21, 2012 – August 24, 2012)
September 2012 Monthly Progress Report (August 25, 2012 – September 14, 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



5800 Woolsey Canyon Road Canoga Park, CA 91304-1148



Date: 07/30/2012 No.: Via E-Mail

SHEA-112217

To: Sam Unger From: Art Lenox

Executive Officer Santa Susana

LA Regional Water Quality Control Environment, Health & Safety

Board

Subject: July 2012 Monthly Progress Report for June 23, 2012 - July 20, 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 June 23, 2012 to July 20, 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-June to mid-July, 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 is 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-June to mid-July, 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, continued evaluation of the surface water data from the 2011-2012 rainy season.

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

Activities Performed – June 23, 2012 to July 20, 2012

- June 23, 2012 July 20, 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 awaiting formal written approval from DTSC, which is anticipated to be received in early August.
- In coordination with the Expert Panel, the revised grading permit application for the alternative location of the Lower Lot Sediment Basin and Biofilter was submitted to Ventura County the week of July 20th and construction is scheduled to begin in August.
- o 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 EPA for feedback on its proposed sampling suite. Design will resume following radiological characterization. The Expert Panel has been frequently updated on the status of the negotiations with DTSC and the implications relative to the timing of implementing BMPs at the Helipad and ELV channel.
- o Boeing received RWQCB/ACOE/CDFG approval on permits for the Northern Drainage Restoration, Mitigation, and Monitoring Plan (RMMP). Baseline channel morphology monitoring was performed June 26 27, 2012 and a contractor bid site walk took place on July 17, 2012.
- In coordination with the Expert Panel, continued 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. The Expert Panel conducted a meeting onsite at SSFL to review BMP data on June 27 - 28, 2012.
- July 2, 2012: Internal planning meeting for commencement of ISRA activities at Ash Pile and LOX held.

30-Day Look ahead - through August 17, 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/NASA Continue planning for commencement of ISRA activities at Ash Pile and LOX.
- Boeing/Expert Panel Continue construction preparation activities for the Lower Parking Lot sediment basin and biofilter outside the SCE easement and begin construction tentatively August 1, 2012.
- Boeing/Expert Panel Continue contractor selection process for the Northern Drainage RMMP and begin construction activities tentatively August 20, 2012.
- 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.
- Boeing/NASA SWRCB site visit tentatively scheduled for August 28, 2012.
- 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.

Mr. S. Unger, RWQCB (SHEA- 112217) July 30, 2012 Page 3

Approved By:

Art Lenox

Boeing Remediation

Environment, Health and Safety

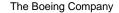
Distribution:

Mr. Peter Raftery, RWQCB

Ms. Cassandra Owens, RWQCB

Mr. Buck King, DTSC Mr. Allen Elliott, NASA

Mr. Peter Zorba, NASA



5800 Woolsey Canyon Road Canoga Park, CA 91304-1148



Date: 08/27/2012 No.: SHEA-112314

To: Sam Unger From: Art Lenox
Executive Officer Santa Susana

LA Regional Water Quality Control Environment, Health & Safety

Board

Subject: August 2012 Monthly Progress Report for July 21, 2012 - August 24, 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 July 21, 2012 to August 24, 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-July to mid-August, the primary activities have been receiving authorization from DTSC to use the December 2011 EPA Radiological Trigger Levels (RTLs) for the ISRA program, preparing to resume NASA ISRA activities, and planning for ISRA implementation at ISRA area IEL-3, including conducting delineation sampling.

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-July to mid-August, the primary activities associated with BMPs have been installing additional erosion control BMPs within the Outfall 008 watershed and preparing to start construction of the Lower Parking Lot Sediment Basin and Biofilter, the Northern Drainage Restoration, Mitigation, and Monitoring Plan (RMMP), and the LOX BMPs. In addition, the evaluation of the surface water data from the 2011/2012 rainy season continued.

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

Activities Performed - July 21, 2012 to August 24, 2012

- July 21, 2012 August 24, 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 a letter to NASA on August 23, 2012 allowing use of the December 2011 EPA RTLs for disposal of ISRA soils and provided guidance for evaluating non-detect sample results with a minimum detectable concentration (MDC) above the RTL.
 - The grading permit for the Lower Parking Lot Sediment Basin and Biofilter was received from Ventura County and the Building/Piping/Electrical permit application was submitted to Ventura County on August 23, 2012. Excavation activities are scheduled to begin the week of August 27, 2012. Also, in-situ waste characterization sampling of soil and roadbase that is planned to be removed during construction of the Lower Parking Lot Sediment Basin and Biofilter was conducted July 25-31, 2012.
 - The Northern Drainage RMMP and LOX BMPs construction contractor was selected and construction planning activities are ongoing. Construction is tentatively scheduled to begin August 27, 2012.
 - A pre-demolition gamma scan was performed on June 22, 2012 at the Helipad area and results indicate that the demolition debris is certified to be radiologically acceptable for off-site disposal and/or recycling. Radiological sampling of Helipad soils and further planning and design activities for the Helipad and ELV BMPs will resume with the receipt of the August 23, 2012 letter from DTSC allowing use of the December 2011 EPA RTLs.
 - o In coordination with the Expert Panel, continued evaluation of surface water data from the 2011/2012 rainy season for inclusion in the Performance Monitoring and BMP Monitoring Summary Report and development of conceptual BMP designs for inclusion in the 2012 BMP Plan Addendum. The 2011/2012 Rainy Season Summary Report is scheduled to be submitted to the RWQCB on August 31, 2012 and the 2012 BMP Plan Addendum is tentatively scheduled for submittal on September 28, 2012.
- July 23-24, 2012: Conducted post-demolition sampling at Building 1300. Data was used to develop the delineation sampling plan for ISRA area IEL-3.
- August 3-10, 2012: Installed additional erosion control BMPs to address localized areas of erosion within Outfall 008 that are located outside drainages. Awaiting approval from the RWQCB to complete BMP installations located within drainages.
- August 20-21, 2012: Conducted delineation sampling for ISRA area IEL-3.

30-Day Look ahead – through September 23, 2012

- Boeing/NASA Continue inspections of erosion control BMPs at ISRA areas, per the ISRA SWPPP.
- Boeing Continue planning activities for ISRA implementation at ISRA area IEL-3, including collection of waste characterization samples.
- Boeing/NASA Continue planning activities for ISRA implementation at Ash Pile and ELV.
- Boeing/NASA Resume BMP planning and design activities for the Helipad and ELV BMPs and conduct radiological sampling of Helipad soils.

Mr. S. Unger, RWQCB SHEA-112314 August 27, 2012 Page 3

- Boeing/Expert Panel Begin excavation activities for the Lower Parking Lot Sediment Basin and Biofilter and begin construction activities upon receipt of the Building/Piping/Electrical permit from Ventura County.
- Boeing/Expert Panel Begin construction of the Northern Drainage Restoration, Mitigation, and Monitoring Plan (RMMP) and LOX BMPs.
- Boeing/NASA SWRCB site visit scheduled for August 28, 2012.
- Boeing/NASA/Expert Panel Submit the 2011/2012 Rainy Season Summary Report on August 31, 2012.
- Expert Panel Continue development of conceptual BMP designs for inclusion in the 2012 BMP Plan Addendum, which is tentatively scheduled to be submitted on September 28, 2012.

Approved By:

Art Lenox

Boeing Remediation

Environment, Health and Safety

Distribution:

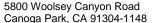
Mr. Peter Raftery, RWQCB

Ms. Cassandra Owens, RWQCB

Mr. Buck King, DTSC

Mr. Allen Elliott, NASA

Mr. Peter Zorba, NASA





Date: 09/21/2012 No.: SHEA-112440

To: Sam Unger From: Art Lenox Santa Susana

LA Regional Water Quality Control Environment, Health & Safety

Board

Subject: September 2012 Monthly Progress Report for August 25, 2012 - September 14, 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 August 25, 2012 to September 14, 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-August to mid-September, the primary activities have been resuming AP/STP ISRA activities on NASA property, planning for ISRA implementation at ISRA area IEL-3, and submitting the 2011/2012 Rainy Season Summary Report to the RWQCB.

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-August to mid-September, the primary activities associated with BMPs have been starting construction of the Lower Parking Lot Sediment Basin and Biofilter, the Northern Drainage Restoration, Mitigation, and Monitoring Plan (RMMP) channel stabilization measures, and the LOX BMPs, and preparing the 2012 BMP Work Plan Addendum.

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

<u>Activities Performed – August 25, 2012 to September 14, 2012</u>

- August 25, 2012 September 14, 2012:
 - o In coordination with the Expert Panel, continued planning and design activities for the Helipad and ELV BMPs. Radiological soil sampling of Helipad soils was performed on August 31,

- 2012 and boring of infiltration holes upgradient of the Helipad sand bag berms was completed on September 6-7, 2012.
- In coordination with the Expert Panel, continued development of conceptual BMP designs for inclusion in the 2012 BMP Plan Addendum, which is tentatively scheduled for submittal on September 28, 2012.
- August 27, 2012: Held kick-off meetings for construction of the Northern Drainage RMMP channel stabilization measures and LOX BMPs and for resuming AP/STP ISRA activities on NASA property.
- August 28, 2012: Began construction of the Northern Drainage RMMP channel stabilization measures and LOX BMPs.
- August 28, 2012: SWRCB and RWQCB conducted a site visit to familiarize Board members with the Santa Susana Site.
- August 29, 2012: Began construction of the Lower Lot Sediment Basin and Biofilter.
- August 29, 2012: Submitted the Building/Piping/Electrical permit application for the Lower Lot Sediment Basin and Biofilter to Ventura County.
- August 29, 2012: Ventura County conducted a site visit to inspect the Lower Parking Lot BMP activities.
- August 31, 2012: Submitted the 2011/2012 Rainy Season Report to the RWQCB.
- September 4, 2012: Conducted biological survey of AP/STP ISRA areas.
- September 4, 2012: Conducted quarterly ISRA SWPPP inspection.
- September 5, 2012: Cleared vegetation and resumed excavation activities at AP/STP ISRA areas.
- September 5-14, 2012: Conducted excavation activities at AP/STP ISRA areas.
- September 6, 2012: Ventura County conducted a site visit to inspect the Lower Parking Lot BMP activities.
- September 11, 2012: Ventura County conducted a site visit to inspect the Lower Parking Lot BMP activities.
- September 13, 2012: RWQCB conducted a site visit of AP/STP ISRA areas.

30-Day Look ahead – through October 19, 2012

- Boeing/NASA Continue inspections of erosion control BMPs at ISRA areas, per the ISRA SWPPP.
- Boeing/NASA Continue excavation and begin confirmation sampling activities at AP/STP ISRA areas.
- Boeing Continue planning activities for ISRA implementation at ISRA area IEL-3, including collection of waste characterization samples.
- Boeing/Expert Panel Continue construction of the Northern Drainage RMMP channel stabilization measures and LOX BMPs.
- Boeing/NASA Continue BMP planning and design activities for the Helipad and ELV BMPs.
- Boeing/NASA Continue construction of the Lower Parking Lot BMP and receive the Building/Piping/Electrical permit from Ventura County.

Mr. S. Unger, RWQCB (SHEA-112440) September 21, 2012 Page 3

- Boeing Submit 401c permit application for remaining BMP work within Outfall 008 drainages to the RWQCB.
- Boeing/NASA/Expert Panel Submit the 2012 BMP Plan Addendum on September 28, 2012.

Approved By:

Árt 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