Via Email

December 20, 2013
In reply, refer to SHEA-114343

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

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 fourth quarter 2013 and summarizes ISRA and BMP Plan activities performed during the period of September 21, 2013–December 18, 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 September 21, 2013–December 18, 2013, which are attached to provide the complete list of ISRA and BMP Plan activities performed during the period covered by this quarterly report. As noted in the December 2013 Monthly Report, the Phase III ISRA Implementation Summary Report is scheduled to be submitted to the RWQCB in January 2014. Phase III ISRA, which was conducted between 2011 and 2013, is the final phase of ISRA. Performance monitoring at Phase III ISRA areas is currently being performed with results and recommendations being presented in annual rainy season summary reports. Since the ISRA remedial activities are complete, future monthly and quarterly reports will only provide updates on the ISRA performance monitoring and the BMP monitoring programs.

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

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

Sincerely,

[Signature]

Art Lenox
Boeing Remediation
Environment, Health and Safety

Enclosures:

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: 10/25/2013

No.: SHEA-114203

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

From: Art Lenox
Santa Susana Environment, Health & Safety

Subject: October 2013 Monthly Progress Report for September 21, 2013 to October 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 September 21, 2013 to October 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, biweekly from July 2011 through September 2013, and on an as needed basis since September 2013. During this reporting period, the meeting participants have consisted of RWQCB staff, DTSC staff, Boeing, and NASA. For the period from mid-September to mid-October, the primary activities have been finalizing the waste profile with the landfill (Energy Solutions) to accept soils with radionuclides above Look-Up Table (LUT) values, conducting planned excavation activities at ELV ISRA areas, conducting additional excavation activities at ISRA area AP/STP-1C-2, performing confirmation and regional board split soil sampling at AP/STP-1C-2 and ELV ISRA areas, and preparing the Phase III ISRA Implementation Report.

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, 2012, and 2013 that provide additional detail on the BMP recommendations in the yearly summary reports, and the implementation schedule. For the period from mid-September to mid-October, the primary activities associated with BMPs have been submitting the 2013 BMP Plan Addendum to the RWQCB, completing construction activities for the ELV BMP, and preparing the 2013-2014 ISRA Performance Monitoring and BMP Monitoring Rainy Season Sampling and Analysis Plan (SAP).
Accomplishments and upcoming actions for both the ISRA and BMP programs are listed below:

**Activities Performed – September 21, 2013 to October 18, 2013**

- **September 21, 2013 – October 18, 2013:**
  - Began preparing the Phase III ISRA Implementation Report – 2011 to 2013 Activities, which is scheduled to be submitted to the RWQCB by December 31, 2013.
  - Began preparing the 2013-2014 ISRA Performance Monitoring and BMP Monitoring Rainy Season SAP.
- **September 24, 2013:** Shipped the roll-off bin with IEL-3 waste soils offsite for disposal.
- **September 24, 2013:** Began planned excavation activities at ISRA area ELV-1D.
- **September 30, 2013:** Submitted the 2013 Best Management Practices (BMP) Plan Addendum to the RWQCB.
- **October 1, 2013:** Conducted additional excavation at ISRA area AP/STP-1C-2.
- **October 2, 2013:** Collected confirmation and regional board split soil samples at ISRA area AP/STP-1C-2.
- **October 2, 2013:** Performed weekly ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- **October 2, 2013:** Finalized profile with the landfill (Energy Solutions) to accept soils with radionuclides above LUT values.
- **October 7, 2013:** Collected waste characterization soil samples at ISRA area ELV-1D.
- **October 8, 2013:** Resumed planned excavation activities at ISRA area ELV-1C.
- **October 8 - 9, 2013:** Performed pre-rain event, rain event, and post-rain event ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- **October 9, 2013:** Conducted ISRA Performance Monitoring and BMP Monitoring inspections; no flow observed.
- **October 14, 2013:** Completed planned excavation activities at ISRA area ELV-1C.
- **October 14, 2013:** Collected confirmation soil sample at ISRA area ELV-1C.
- **October 16, 2013:** Collected confirmation and regional board split soil samples at ISRA area ELV-1C.
- **October 17, 2013:** Collected waste characterization soil sample at ISRA area ELV-1D.
- **October 17, 2013:** Performed weekly ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- **October 18, 2013:** Completed additional excavation at ISRA area AP/STP-1C-1.
- **October 18, 2013:** Completed construction activities at the ELV BMP.

**30-Day Look ahead – through November 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 draft 2013-2014 Rainy Season SAP.
- Boeing/NASA – Finalize the 2013-2014 ISRA Performance Monitoring and BMP Monitoring Rainy Season SAP.
- Boeing/NASA – Complete excavation at ISRA areas ELV-1D and LOX-1B-3.
- Boeing/NASA – Conduct restoration activities and hydroseeding at ISRA areas AP/STP-1C-1, AP/STP-1C-2, ELV-1C, ELV-1D, and LOX-1B-3.

Approved By:

[Signature]

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: 12/20/2013  No.: SHEA-114344

To: Sam Unger  From: Art Lenox
Executive Officer  Santa Susana
LA Regional Water Quality Control Environment, Health & Safety
Board


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 November 16, 2013 to December 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, biweekly from July 2011 through September 2013, and on an as needed basis since September 2013. For the period from mid-November to mid-December, the primary activities have been applying hydroseed at AP/STP, ELV, and LOX ISRA areas and continuing preparation of the Phase III ISRA Implementation Report (the final ISRA implementation report). In addition, inspections of erosion control BMPs were performed at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP and Performance Monitoring inspections were conducted during rain events.

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, 2012, and 2013 that provide additional detail on the BMP recommendations in the yearly summary reports, and the implementation schedule. For the period from mid-November to mid-December, the primary activities associated with BMPs have been continuing the planning activities associated with the planned BMP (vegetated shallow detention basins) near Building 1436 and conducting BMP monitoring inspections during rain events.
Accomplishments and upcoming actions for both the ISRA and BMP programs are listed below:

**Activities Performed – November 16, 2013 to December 18, 2013**

- **November 16, 2013 – December 18, 2013:**
  - Continued preparing the Phase III ISRA Implementation Report – 2011 to 2013 Activities, which is scheduled to be submitted to the RWQCB in January 2014.
  - Continued planning activities for the BMP recommended in the 2013 BMP Plan Addendum, a series of vegetated shallow detention basins in the vicinity of Building 1436.
- **November 20, 2013:** Performed pre-rain event ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- **November 21, 2013:** Conducted ISRA performance monitoring and BMP monitoring inspections.
- **November 21, 2013:** Performed rain event and post-rain event ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- **November 26 - 27, 2013:** Applied hydroseed at AP/STP, ELV, and LOX ISRA areas.
- **November 27, 2013:** Performed weekly ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- **December 2, 2013:** Performed weekly ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- **December 6, 2013:** Performed pre-rain event ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- **December 7, 2013:** Conducted ISRA performance monitoring and BMP monitoring inspections and sampling.
- **December 7, 2013:** Performed rain event and post-rain event ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- **December 13, 2013:** Performed weekly ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- **December 18, 2013:** Performed weekly and pre-rain event ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.

**30-Day Look ahead – through January 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 2013-2014 Rainy Season SAP.
- Boeing/NASA – Submit the Phase III ISRA Implementation Report – 2011 to 2013 Activities to the RWQCB.
- Boeing/Expert Panel – Continue planning activities for the BMP in the vicinity of Building 1436.
Approved By:

[Signature]

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: 11/22/2013

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

From: Art Lenox
   Santa Susana
   Environment, Health & Safety


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 October 19, 2013 to November 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, biweekly from July 2011 through September 2013, and on an as needed basis since September 2013. During this reporting period, the meeting participants have consisted of RWQCB staff, DTSC staff, Boeing, and NASA. For the period from mid-October to mid-November, the primary activities have been completing excavation activities and beginning site restoration activities at ISRA areas AP/STP-1C-1, ELV-1C, ELV-1D, and LOX-1B-3, and preparing the Phase III ISRA Implementation Report.

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, 2012, and 2013 that provide additional detail on the BMP recommendations in the yearly summary reports, and the implementation schedule. For the period from mid-October to mid-November, the primary activities associated with BMPs have been submitting the 2013-2014 ISRA Performance Monitoring and BMP Monitoring Rainy Season Sampling and Analysis Plan (SAP) to the RWQCB and continuing the planning activities associated with the planned BMP (vegetated shallow detention basins) near Building 436.
Accomplishments and upcoming actions for both the ISRA and BMP programs are listed below:

**Activities Performed – October 19, 2013 to November 15, 2013**

- **October 19, 2013 – November 15, 2013:**
  - Continued preparing the Phase III ISRA Implementation Report – 2011 to 2013 Activities, which is scheduled to be submitted to the RWQCB by December 31, 2013.
  - Continued planning activities for the BMP recommended in the 2013 BMP Plan Addendum, a series of vegetated shallow detention basins in the vicinity of Building 436.
- **October 21, 2013:** Completed excavation activities at ISRA area AP/STP-1C-1.
- **October 22, 2013:** Completed excavation activities at ISRA area LOX-1B-3.
- **October 28, 2013:** Performed pre-rain event ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- **October 29, 2013:** Performed rain event and post-rain event ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- **October 30, 2013:** Reviewed confirmation sample results from ISRA areas ELV-1C and ELV-1D with RWQCB and DTSC.
- **October 31, 2013:** Submitted the 2013-2014 Rainy Season Sampling and Analysis Plan (SAP) Updates, BMP Monitoring and Performance Monitoring Programs to RWQCB.
- **October 31, 2013:** Completed excavation activities at ISRA areas ELV-1C and ELV-1D.
- **November 4, 2013:** Performed weekly ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- **November 4, 2013:** Began site restoration at AP/STP, ELV, and LOX ISRA areas.
- **November 11, 2013:** Performed weekly ISRA SWPPP inspections at 2010, 2011/2012, and 2013 ISRA areas per the ISRA SWPPP.
- **November 15, 2013:** Received concurrence from DTSC and RWQCB that ISRA excavation activities are complete.

**30-Day Look ahead – through December 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 draft 2013-2014 Rainy Season SAP.
- **Boeing/NASA** – Complete site restoration at AP/STP, ELV, and LOX ISRA areas.

Approved By:

[Signature]

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