



Via FedEx

February 15, 2016 In reply refer to SHEA-115388

Information Technology Unit Regional Water Quality Control Board, Los Angeles Region 320 West 4th Street, Suite 200 Los Angeles, California 90013

Attention:

Information Technology Unit

Gentlemen:

Subject:

Fourth Quarter 2015 NPDES Discharge Monitoring Report

Compliance File CI-6027 and NPDES No. CA0001309

Santa Susana Field Laboratory Ventura County, California

The Boeing Company (Boeing) hereby submits this Discharge Monitoring Report (DMR) for the Santa Susana Field Laboratory (Santa Susana Site) for the period of 1 October through 31 December 2015 (Fourth Quarter 2015). This DMR was prepared as required by and in accordance with National Pollutant Discharge Elimination System (NPDES) Permit No. CA0001309 (Permit) and under regulatory oversight of the Los Angeles Regional Water Quality Control Board (Regional Board). Included are summary tables of best management practices (BMPs), stormwater sample analytical results, rainfall quantities, liquid waste shipments, and laboratory analytical reports for stormwater samples.

Hard copies of this DMR are available to the public at California State University at Northridge Library; Simi Valley Library; and the Platt Branch of the Los Angeles Library. An electronic version of this DMR is located at:

http://www.boeing.com/principles/environment/santa-susana/monitoring-reports.page

# **FOURTH QUARTER 2015 DMR CONTENTS**

This DMR includes the following sections and appendices:

- **Discharge Summary:** This section describes the number of rain events, number of samples collected, sample dates, and sample locations during Fourth Quarter 2015. Table I summarizes the Fourth Quarter 2015 sampling record by outfall, location, and sample type collected per the requirements of the NPDES Permit.
- Fourth Quarter 2015 Summary of Compliance: This section summarizes the sample results that exceeded NPDES Permit limits in Fourth Quarter 2015.



- Fourth Quarter 2015 Santa Susana Site Stormwater Pollution Prevention Plan (SWPPP)/BMP Activities: This section presents the Santa Susana Site SWPPP activities and BMPs related to demolition, Interim Source Removal Actions (ISRA), the BMP Plan, Northern Drainage, and other activities implemented in Fourth Quarter 2015. Table II summarizes specific BMP activities by outfall location.
- Data Validation and Quality Control: This section discusses data validation results and any laboratory or field corrective actions.
- Figure 1 shows the stormwater collection conveyance system and site features and Figure 2 shows the Arroyo Simi Frontier Park (RSW-002) sampling location.
- Appendix A summarizes measured Fourth Quarter 2015 precipitation at the Santa Susana Site.
- Appendix B tabulates liquid waste shipment details.
- Appendix C presents chemical analytical results of Fourth Quarter 2015 stormwater and/or receiving water samples in tabular form by outfall location, constituents evaluated (analytes), sample dates, and data validation qualifiers.
- Appendix D contains copies of laboratory analytical reports, chains of custody, and data validation reports.

#### DISCHARGE SUMMARY

The Santa Susana Site experienced three qualifying rain events that produced greater than 0.1 inch of rainfall within a 24-hour period and were preceded by at least 72 hours of dry weather during Fourth Quarter 2015 (Appendix A). Automated flow-weighted composite samplers (autosamplers) were set in preparation for all rain events. No discharge occurred at any of the outfalls; therefore, no samples were collected. One offsite surface water sample was collected at the Arroyo Simi – Frontier Park location in Simi Valley (RSW-002). Table I summarizes the Fourth Quarter 2015 sampling record by outfall, location and sample type collected, per NPDES Permit requirements.

TABLE I: Sampling Record during Fourth Quarter 2015

Date	Outfall/Location	Sample Frequency	Sample Type
12/22/2015	Arroyo Simi Frontier Park (RSW-002)	Quarterly	Grab

The sample was submitted to and analyzed by TestAmerica Laboratories, Inc., a California-certified analytical laboratory in Irvine, per the NPDES Permit requirements.

#### FOURTH QUARTER 2015 SUMMARY OF COMPLIANCE

No surface water discharges occurred from the Santa Susana Site during Fourth Quarter 2015. As such, there are no onsite compliance issues to report for this period. Additionally, in the quarterly sample collected at Arroyo Simi sample location RSW-002 in Simi Valley, no constituents exceeded receiving water limits. All Fourth Quarter 2015 samples were therefore in full compliance with the NPDES Permit.



## FOURTH QUARTER 2015 SANTA SUSANA SITE SWPPP/BMP ACTIVITIES

Boeing implemented significant SWPPP- and BMP-related activities to assist in improving stormwater quality and compliance at the Santa Susana Site. Table II summarizes the activities that were completed during Fourth Quarter 2015 by outfall number. In addition to SWPPP-related activities, specific BMP projects included: demolition-related BMPs; Outfall 008/009 ISRA BMPs; BMP Plan-related BMPs; and Northern Drainage BMPs.

TABLE II: Boeing's Fourth Quarter 2015 BMP Activities

OUTFALL (Location)	BMP ACTIVITIES DURING FOURTH QUARTER 2015
001 (South Slope below Perimeter Pond)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis.
002 (South Slope below R-2 Ponds)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis.
003 (Radioactive Material Handling Facility)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis. Conducted maintenance inspections of structural BMPs, including the flow-through structure and stormwater conveyance and retention systems. Added a diesel pump as a backup in the event of a power failure.



OUTFALL (Location)	BMP ACTIVITIES DURING FOURTH QUARTER 2015
004 (Sodium Reactor Experiment)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected the outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis. Conducted maintenance inspections of the structural BMPs, including the flow-through structure and stormwater conveyance system. Added two diesel pumps as backups in the event of a power failure. Installed an automatic switch (fail-close actuator valve) to force water through the media bed in the event of a power failure.
005 (Former Sodium Disposal Facility - 1)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected the outfall for sediment/debris. Checked sample box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Conducted maintenance inspections of the stormwater conveyance and retention systems. Added two Baker tanks at the 5-7 pad.
006 (Former Sodium Disposal Facility - 2)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis. Conducted maintenance inspections of the structural BMPs, including the flow-through structure and stormwater conveyance system. Added a diesel pump as a backup in the event of a power failure at the outfall and two Baker tanks at the 5-7 pad.
007 (Building 100)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected the outfall for sediment/debris. Checked sample box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Conducted maintenance inspections of the stormwater conveyance and retention systems. Added two Baker tanks at the 5-7 pad.
008 (Happy Valley)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected the outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis.



OUTFALL (Location)	BMP ACTIVITIES DURING FOURTH QUARTER 2015
	Outfall BMPs: Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis.
	Restoration, Monitoring and Mitigation Plan (RMMP) BMPs: Performed watering twice per week in October/November and once per week in December, added gravel at the top of the staircase located east of the LOX area that provides access from Sage Ranch trail to the Northern Drainage, and performed a quarterly monitoring inspection on November 12.
009	Biofilter: Inspected sedimentation basin, biofilter, and cistern areas. Upgraded diversion plate at cistern inlet with 4-inch stainless steel angle iron and neoprene seal. Swept sediment from road leading to Lower Lot parking area as needed. Performed pump maintenance at the cistern. Removed loose gravel from Lower Lot and Upper Lot parking areas and implemented additional erosion control BMPs on south slope of Lower Lot parking area.
(WS-13 Drainage)	Former Building 1436 (B1436) Detention Bioswales: Performed maintenance inspection of bioswale surface area, including hydroseeded area and fiber rolls.
	<i>B-1 Area:</i> Performed maintenance inspection of BMPs along slope and within drainage and removed accumulated sediment from plastic liner of the B-1 retention basin as needed. Repaired and secured jute netting on slope above B-1 culvert.
	CM-9 Area: Performed maintenance inspection of BMPs and cleared the screened culvert inlet of built-up vegetation debris and sediment.
	CM-1 Area: Performed maintenance inspection of BMPs. Attached filter fabric back over weir board.
	Helipad: Added 22 Adler tanks to increase capacity and installed a new flow totalizer.
	NASA-led Activities: Installed fiber rolls across the road that leads to completed LOX ISRA excavation areas. Removed accumulated sediment in Expendable Launch Vehicle (ELV) treatment BMP sump.
010 (Building 203)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected the outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis. Conducted maintenance inspections of structural BMPs, including the flow-through structure and stormwater conveyance and retention systems. Replaced damaged fiber roll on slope. Added a diesel pump as a backup in the event of a power failure.



OUTFALL (Location)	BMP ACTIVITIES DURING FOURTH QUARTER 2015
011 (Perimeter Pond)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected outfall and weir for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis. Conducted maintenance inspections of structural BMPs, including the flow-through structure and stormwater conveyance system. Added a diesel pump as a backup in the event of a power failure.
018 (R-2 Spillway)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis. Conducted maintenance inspections of the structural BMPs, including the flow-through structure and conveyance system.
019 (Area I Groundwater Extraction and Treatment [GET] System)	The GET system has not been in operation since April 2013 and no pumping or discharge has occurred. Therefore, no NPDES sampling was performed in Fourth Quarter 2015 at the Area I GET System. Conducted maintenance inspections of the structural BMPs.
RSW-002 (Arroyo Simi – Frontier Park)	Collected quarterly receiving water samples at the Arroyo Simi – Frontier Park location. Conducted monthly receiving water inspections.

## OTHER BMP ACTIVITIES

BMP observations, inspections, and maintenance activities were conducted in conformance with the site wide SWPPP at and around the former active test stands Alfa and Bravo, and former Advanced Propulsion Test Facility (APTF).

# **NASA RELATED ACTIVITIES**

Demolition activities covered by NASA's Construction SWPPP (dated March 4, 2015) are inspected in accordance with the Construction General Permit (CGP). During Fourth Quarter 2015, NASA hydroseeded and placed wattles in areas where concrete/asphalt have been removed around former Buildings 204, 206, 207, 231, 232, and 760.

Additionally, during Fourth Quarter 2015, NASA inspected temporary BMPs (sand bags and wattles) at Liquid Oxygen Plant (LOX) ISRA areas, the Storable Propellant Area (SPA) impoundments, and discharge points to the Northern Drainage; and inspected ELV BMP storage tanks.



# **OUTFALL 008/009 ISRA AND BMP PLAN-RELATED ACTIVITIES**

ISRA soil removal within the Outfall 008 watershed was completed in 2009, and ISRA soil removal conducted within the Outfall 009 watershed was completed in Fourth Quarter 2013. Following ISRA remedial activities, performance monitoring up- and downstream of completed ISRA areas was performed. ISRA performance monitoring is considered complete based on data collected through the 2014/2015 rainy season, signifying the completion of the ISRA program (MWH et al, 2015).

The Expert Panel prepared BMP plans and submittals on behalf of NASA and Boeing to meet Outfall 008/009 permit limits/benchmarks established in the NPDES Permit (Order No. R4-2004-0090)¹. The 2010 BMP Plan outlined a strategy for subarea sampling, statistical analysis of lab results, and ranking of locations for treatment control prioritization. Annual reports have been submitted including summary and evaluation of the previous year's monitoring results, and development of new general BMP recommendations. Annual BMP Plan addenda have also been submitted to provide conceptual design details and proposed implementation schedules for the following year. The following list identifies the BMP Plans and addenda that have been submitted to the Regional Board, with each document currently located on Boeing's Santa Susana Site web page under Outfall 008/009 ISRA- and BMP-related activities²:

- 2010 BMP Plan Outfalls 008 and 009 BMP Watersheds (MWH et al., 2010);
- 2011 BMP Plan Addendum (Geosyntec and the Expert Panel, 2011);
- 2012 BMP Plan Addendum (Geosyntec and the Expert Panel, 2012);
- 2013 BMP Plan Addendum (Geosyntec and the Expert Panel, 2013); and
- 2014 BMP Plan Addendum (Geosyntec and the Expert Panel, 2014).

Completed Expert Panel-recommended BMPs are discussed in the ISRA Performance Monitoring and BMP Monitoring Report for Outfalls 008 and 009 Watersheds submitted to the Regional Board for each rainy season (MWH, 2010; MWH et al., 2011; MWH et al., 2012; MWH et al., 2013; MWH et al., 2014, and MWH et al., 2015). The final annual rainy season report under the 2010 BMP Plan was submitted in August 2015 (MWH et al., 2015). Future BMP-related activities will be performed and reported as specified in the Site-Wide Stormwater Work Plan and 2014/15 Annual Report (Geosyntec and the Expert Panel, 2015).

The BMP activities discussed below were performed, commenced, or completed during Fourth Quarter 2015 in coordination with the Expert Panel.

#### Former Building 1436 Detention Bioswales

Two detention bioswales were constructed at former B1436 following its removal in Third Quarter 2014. The graded surface was hydroseeded and more than 2,900 native plantings were installed in December 2014. The bioswales were designed to capture, pretreat and detain runoff from the adjacent parking lot and from approximately 13.9 acres of drainage area east and upgradient, prior to releasing this stormwater to the former Instrument and Equipment Laboratories (IEL) storm drain where flow is

<sup>&</sup>lt;sup>1</sup> Available at: http://www.boeing.com/principles/environment/santa-susana/permits.page

<sup>&</sup>lt;sup>2</sup> Available at: http://www.boeing.com/principles/environment/santa-susana/interim-source-removal.page



diverted to the lower lot biofilter for treatment. Fourth Quarter 2015 activities included inspections of the bioswales and hydroseeded areas and BMP maintenance activities or upgrades.

### Lower Lot Biofilter

The lower lot biofilter is a stormwater treatment BMP designed and built to capture, convey, and treat stormwater runoff from the lower parking lot and former IEL watershed. A treatment BMP at the lower parking lot was first proposed in the 2010 BMP Plan (MWH et al., 2010). The lower lot biofilter consists of a 30,000-gallon cistern, a stormwater conveyance line, a sedimentation basin, and a media biofilter. Construction activities were completed on March 15, 2013; a Regional Board and public tour of the completed biofilter was conducted on March 20, 2013.

Fourth Quarter 2015 activities included inspections to verify that the sedimentation basin and biofilter were free of sediment and debris, checks of the cistern area and pump, and inspections of surrounding BMPs. A total of approximately 65,200 gallons of stormwater were pumped from the cistern to the sedimentation basin during Fourth Quarter 2015 rain events.

## NASA Expendable Launch Vehicle (ELV) Area BMPs

BMPs and drainage improvements were installed between June and October 2013 at NASA ELV to improve the quality of stormwater from the ELV area before it is conveyed to Outfall 009. Stormwater is gravity-driven through the tank system, stating with the settling tanks, then through the filter media tank, before discharging to a tributary that flows to Outfall 009.

Fourth Quarter 2015 activities included inspections of the BMPs.

### NASA and Boeing BMP Monitoring and Maintenance Activities

In addition to activities performed in coordination with the Expert Panel described above, the BMP Planrelated activities performed for Outfalls 008/009 during Fourth Quarter 2015 included the following:

- BMP performance monitoring samples were collected at the following locations. These samples will be reported by the Expert Panel in the 2015/16 Annual Report.
  - Detention Bioswales at former B1436; and
  - Lower Lot BMP.
- Inspection of BMPs at BMP monitoring locations and surrounding areas;
- Near the lower lot biofilter, performed pump maintenance at the cistern, installed 4-inch stainless steel diversion plate at cistern inlet, removed loose gravel from Lower Lot and Upper Lot parking areas, implemented additional erosion control BMPs on south slope of Lower Lot parking area, and swept sediment from retaining wall and gunite slope area on road leading to Lower Lot parking area;
- At the B-1 area, jute netting on the slope above B-1 culvert was repaired and secured and accumulated sediment was removed from the sand bag area at curb cuts and from the plastic liner of the B-1 retention basin;
- At CM-9, cleared vegetation debris and sediment from the screened culvert inlet along Area 2 (or Service Area) Road and cleared sediment and debris from road runoff collection pipe;



- At CM-1, filter fabric was replaced over weir board;
- At the Helipad, 22 Adler tanks were added to increase capacity and a new flow totalizer was installed;
- At the ELV area, accumulated sediment was removed from the treatment BMP sump;
- At the LOX area, fiber rolls were installed across the road that leads to completed ISRA excavation areas; and
- The Expert Panel proceeded on the development of new treatment BMP concepts along the Service Area Road.

### SITE-WIDE WORKPLAN AND ANNUAL REPORT

The Expert Panel submitted a Site-Wide Stormwater Work Plan and 2014/15 Annual Report (2015 Work Plan) in September 2015 (Geosyntec and the Expert Panel, 2015) on behalf of Boeing to meet the requirements of the NPDES Permit (Order No. R4-2015-0033)<sup>3</sup>. This Work Plan is applicable to all outfalls. The 2015 Work Plan is designed to assess the effectiveness of BMPs/treatment control implementation measures based on surface water samples collected at outfalls and supplemented by monitoring data. The 2015 Work Plan also includes recommended special studies, intended to guide the collection of additional data to further characterize potential pollutant sources. The Expert Panel will review the sampling results annually to determine whether additional upgrades may be warranted.

### **NORTHERN DRAINAGE BMPS**

Boeing has actively worked to restore the Northern Drainage following cleanup activities performed under the oversight of the DTSC and in accordance with the requirements of Regional Board Cleanup and Abatement Order No. R4-2007-0054 (RWQCB, 2007). The restoration and mitigation activities proposed in the Northern Drainage Restoration, Mitigation, and Monitoring Plan (RMMP)4 were implemented beginning in 2012. In accordance with the RMMP, regular maintenance, monitoring, and reporting have been implemented in the Northern Drainage since 2012 for the stream's plant biology and geomorphology. Biological activities include botanical and California Rapid Assessment Method surveys, plant watering only during periods of excessive heat, and weeding of non-native species. Geomorphic activities include stabilization measure inspections, physical surveying, facies mapping, photographic surveying, annual stream walks, as-needed maintenance, and annual geomorphic monitoring reports. Biological activities performed in Fourth Quarter 2015 included watering twice per week in October/November and once per week in December and a quarterly monitoring inspection on November 12. Geomorphic activities performed in Fourth Quarter 2015 included: an inspection performed on October 6, 2015, focusing on locations where maintenance is suggested for specific stabilization measures; completion in November 2015 of the Northern Drainage Annual Geomorphic Monitoring Report for Water Year 2015; maintenance on November 10, 2015 of a dirt road to alleviate localized rill erosion and an eroded staircase to alleviate localized gully erosion; and a quarterly inspection of stabilization measures on December 30, 2015.

<sup>&</sup>lt;sup>3</sup> Available at: http://www.boeing.com/principles/environment/santa-susana/permits.page

<sup>&</sup>lt;sup>4</sup> Available at: http://www.boeing.com/principles/environment/santa-susana/technical-reports.page



#### **REASONABLE POTENTIAL ANALYSIS**

No surface water discharges occurred from the Santa Susana Site and no new surface water discharge data became available during Fourth Quarter 2015. A reasonable potential analysis was therefore not triggered and reasonable potential analysis tables are not included in this report.

### DATA VALIDATION AND QUALITY CONTROL

In accordance with current federal and state Environmental Protection Agency guidelines and procedures, or as specified in the NPDES Monitoring and Reporting Program, chemical and radiological analyses of water samples were completed at a State of California-certified laboratory. Data validation was performed on the analytical results and quality control elements were found to be within acceptable limits for the analytical methods reported, except as noted on the analytical summary tables. Measures were implemented by the analytical laboratory to monitor and/or evaluate low level detections, analyze for interferences, and ensure that cross-contamination did not occur. Laboratory analytical reports, including validation reports and notes, are included in Appendix D.

#### **CONCLUSIONS**

Boeing continues to improve water quality at stormwater discharge locations at the Santa Susana Site through methods designed to preserve the natural conditions in the watershed to the maximum extent feasible by implementing sustainable erosion control/restoration measures and continuing our collaboration with the Expert Panel.

#### **FACILITY CONTACT**

If there are any questions regarding this report or its enclosures, you may contact Mr. Paul Costa of Boeing at (818) 466-8778.

### **CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

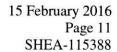
Executed on the 15th of February 2016 at The Boeing Company, Santa Susana Site.

Sincerely,

David W. Dassler P.E.

Southwest Remediation Manager

The Boeing Company





## **Enclosures:**

#### References

Figure 1 - Site Map with Stormwater Collection and Conveyance System and Site Features

Figure 2 - Arroyo Simi – Frontier Park (RSW-002) Sampling Location

Appendix A - Fourth Quarter 2015 Rainfall Data Summary

Appendix B - Fourth Quarter 2015 Liquid Waste Shipment Summary Table

Appendix C - Fourth Quarter 2015 Discharge Monitoring Data Summary Tables

Appendix D - Fourth Quarter 2015 Analytical Laboratory Report, Chain of Custody, and Validation Report

cc:

Ms. Cassandra Owens, RWQCB

Mr. Mark Malinowski, DTSC

California State University - Northridge, Library

Simi Valley Library

Los Angeles Library, Platt Branch



- 1. California Regional Water Quality Control Board, 2007. Cleanup and Abatement Order No. R4-2007-0054. November 6.
- California Regional Water Quality Control Board, 2014. Approval of Yearly Submittal of Interim Source Removal Action (ISRA) Progress Reports, The Boeing Company, Santa Susana Field Laboratory (NPDES No. CA0001309). October 10.
- Geosyntec and the Expert Panel, 2011. 2011 BMP Plan Addendum, The Boeing Company, Santa Susana Field Laboratory, Canoga Park, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027). September 28.
- Geosyntec and the Expert Panel, 2012. 2012 BMP Plan Addendum, The Boeing Company, Santa Susana Field Laboratory, Canoga Park, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No.6027). September 28.
- Geosyntec and the Expert Panel, 2013. 2013 BMP Plan Addendum, The Boeing Company, Santa Susana Field Laboratory, Canoga Park, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No.6027). September 30.
- Geosyntec and the Expert Panel, 2014. 2014 BMP Plan Addendum to the October 2010 Santa Susana Site Outfalls 008/009 Watersheds BMP Plan, Santa Susana Field Laboratory, Ventura County, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No.6027). September 30.
- Geosyntec and the Expert Panel, 2015. Site-Wide Stormwater Work Plan and 2014/15 Annual Report, Santa Susana Field Laboratory, Ventura County, California (NPDES No. CA0001309, CI No.6027). October 07.
- 8. MWH, 2010. ISRA Performance Monitoring for Outfalls 008 and 009 Watersheds, 2009-2010 Rainy Season, Santa Susana Field Laboratory, Ventura County, California (NPDES No. CA0001309; CI No. 6027; SCP No. 1111; Site ID No. 2040109; and California Water Code §13304 Order). June 30.
- 9. MWH, 2014. Interim Source Removal Action (ISRA) Phase III Implementation Report 2011-2013 Activities, The Boeing Company, Santa Susana Field Laboratory, Ventura County, California (California Water Code §13304, Order No. CA0001309, CI No. 6027, SCP No. 1111, Site ID No. 2040109). January 14.
- 10. MWH Americas, Inc., Santa Susana Field Laboratory Stormwater Expert Panel, Geosyntec Consultants, Haley & Aldrich, Inc., and CH2M Hill, 2010. Best Management Practices (BMP) Plan, Outfalls 008 and 009 Watersheds, The Boeing Company, Santa Susana Field Laboratory, Canoga Park, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027). October 14.



- MWH Americas, Inc., Santa Susana Site Surface Water Expert Panel, Geosyntec Consultants, and Haley & Aldrich, Inc., 2011. ISRA Performance Monitoring and Potential BMP Subarea Monitoring for the Outfalls 008 and 009 Watersheds, 2010/2011 Rainy Season, The Boeing Company, Santa Susana Field Laboratory, Ventura County, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027; and California Water Code §13304 Order; No. CA0001309, CI No. 1111, Site ID No. 2040109). July 29.
- 12. MWH Americas, Inc., Santa Susana Site Surface Water Expert Panel, and Geosyntec Consultants, 2012. ISRA Performance Monitoring and Potential BMP Subarea Monitoring for the Outfalls 008 and 009 Watersheds, 2011/2012 Rainy Season, The Boeing Company, Santa Susana Field Laboratory, Ventura County, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027; and California Water Code §13304 Order; No. CA0001309, CI No. 1111, Site ID No. 2040109). August 31.
- 13. MWH Americas, Inc., Santa Susana Site Surface Water Expert Panel, and Geosyntec Consultants, 2013. ISRA Performance Monitoring and BMP Monitoring for the Outfalls 008 and 009 Watersheds, 2012/2013 Rainy Season, The Boeing Company, Santa Susana Field Laboratory, Ventura County, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027; and California Water Code §13304 Order; No. CA0001309, CI No. 1111, Site ID No. 2040109). August 30.
- 14. MWH Americas, Inc., Santa Susana Site Surface Water Expert Panel, and Geosyntec Consultants, 2014. ISRA Performance Monitoring and BMP Monitoring for the Outfalls 008 and 009 Watersheds, 2013/2014 Rainy Season, Santa Susana Field Laboratory, Ventura County, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027; and California Water Code Section 13304 Order; NPDES No. CA0001309, CI No. 1111, Site ID No. 2040109). August 29.
- 15. MWH Americas, Inc., Santa Susana Site Surface Water Expert Panel, and Geosyntec Consultants, 2015. ISRA Performance Monitoring and BMP Monitoring for the Outfalls 008 and 009 Watersheds, 2014/2015 Rainy Season, Santa Susana Field Laboratory, Ventura County, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027; and California Water Code Section 13304 Order; NPDES No. CA0001309, CI No. 1111, Site ID No. 2040109). August 28.