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

Via FedEx

February 6, 2014
In reply refer to SHEA-114485

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

Gentlemen:

Subject: Fourth Quarter 2013 NPDES Discharge Monitoring Report
Compliance File CI-6027 and NPDES No. CA0001309
Santa Susana Field Laboratory, Simi Valley, CA

The Boeing Company (Boeing) hereby submits this Discharge Monitoring Report (DMR) addressing activities related to the Santa Susana Field Laboratory (Santa Susana Site) stormwater outfalls (Figure 1) that occurred during the period of 1 October through 31 December 2013 (Fourth Quarter 2013). 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/aboutus/environment/santa_susana/ents/monitoring_reports.html

FOURTH QUARTER 2013 DMR CONTENTS

This DMR includes the following sections and appendices:

- **Discharge Summary:** This section describes the number of rain events, the number of samples collected, the sample dates, and the sample locations during Fourth Quarter 2013. Table I summarizes the Fourth Quarter 2013 sampling record by outfall, location, and sample type collected per the requirements of the NPDES Permit.
- **Fourth Quarter 2013 Summary of Compliance:** This section summarizes the sample results that exceeded NPDES Permit limits in Fourth Quarter 2013.
- **Fourth Quarter 2013 Santa Susana Site-wide Stormwater Pollution Prevention Plan (SWPPP)/BMP Activities:** This section presents 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 2013. 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.
- **Appendix A** summarizes measured Fourth Quarter 2013 precipitation at the Santa Susana Site.
- **Appendix B** tabulates liquid waste shipment details.
- **Appendix C** presents chemical analytical results of Fourth Quarter 2013 stormwater 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.

Summary notes, abbreviations, and data validation codes used in the analytical data summary tables are included in Appendices C and D.

DISCHARGE SUMMARY

The Santa Susana Site experienced three rain events that produced greater than 0.1 inch of rainfall within a 24-hour period during Fourth Quarter 2013 (see Appendix A). No discharges occurred at any outfalls located at the Santa Susana Site, and therefore no samples were collected. One offsite receiving water sample was collected at the Arroyo Simi – Frontier Park (RSW-002) location in Simi Valley. Table I summarizes the Fourth Quarter 2013 sampling record by outfall, location, and sample type collected per the requirements of the NPDES Permit.

TABLE I: Sampling Record during Fourth Quarter 2013

Date	Outfall/Location	Samples Collected (i.e., grab, composite)
12/13/2013	Arroyo Simi Frontier Park – (RSW-002) – Quarterly	Grab

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

FOURTH QUARTER 2013 SUMMARY OF COMPLIANCE

No stormwater discharges occurred from the Santa Susana Site during Fourth Quarter 2013. As such, there are no reportable compliance issues for this period. No constituents exceeded established receiving water limits in the quarterly sample collected at Arroyo Simi sample location RSW-002; Fourth Quarter 2013 sample results are therefore in full compliance.

FOURTH QUARTER 2013 SANTA SUSANA SITE SWPPP/BMP ACTIVITIES

Boeing implemented significant SWPPP- and BMP-related activities to assist in improving storm water quality and compliance at the Santa Susana Site. Table II summarizes by outfall watershed the Santa Susana Site SWPPP and specific BMP activities completed in Fourth Quarter 2013. 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 2013 BMP Activities

OUTFALL (Location)	BMP ACTIVITIES DURING FOURTH QUARTER 2013
001 (South Slope below Perimeter Pond)	Conducted erosion and sediment control inspections around the perimeter of the outfall and drainage. Inspected outfall and flume for excess sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Reset flow meter and replaced tape on a monthly basis. Cleaned sample box and the outfall area and performed weed abatement as needed.
002 (South Slope below R-2 Ponds)	Conducted erosion and sediment control inspections around the perimeter of the outfall and drainage. Inspected outfall and flume for excess sediment/debris. Checked flow meter control box for the presence of debris and/or animals. Reset flow meter and replaced tape on a monthly basis. Completed maintenance inspection and reset the automated composite sampling equipment (autosamplers). Cleaned sediment and debris from the flume and sample box, cleaned the outfall area, and performed weed abatement as needed.
003 (Radioactive Material Handling Facility)	Conducted erosion and sediment control inspection. Inspected flume and sample box for excess sediment/debris. Conducted maintenance inspection of the structural BMPs, including the stormwater retention basin and conveyance and filter systems. Checked sample box and flow meter control box for spiders and the presence of debris and/or animals. Cleaned sample box and removed vegetation from the outfall flume area. Connected conveyance piping from flume to autosamplers and sample drums. Reset flow meter and replaced tape on a monthly basis.
004 (Sodium Reactor Experiment)	Conducted an erosion and sediment control inspection near the outfall. Inspected the flume, outfall, and liner for excess sediment/debris. Conducted a maintenance inspection of the structural BMPs, including the stormwater retention system and conveyance and filter systems. Inspected dedicated retention tanks. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area. Reset flow meter and replaced tape on a monthly basis.
005 (Former Sodium Disposal Facility - 1)	Conducted an erosion and sediment control inspection. Inspected the outfall and flume for excess sediment/debris. Completed a maintenance inspection of structural BMPs, including the conveyance and stormwater retention systems and sediment basin liner. Cleaned sample box and the outfall area. Reset flow meter and replaced tape on a monthly basis.

OUTFALL (Location)	BMP ACTIVITIES DURING FOURTH QUARTER 2013
006 (Former Sodium Disposal Facility - 2)	Conducted erosion and sediment control inspection near the outfall. Completed maintenance inspection of the structural BMPs, including the stormwater retention and filter systems. Completed inspection of dedicated retention tanks. Inspected the flume, outfall and liner for excess 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 connected conveyance piping from flume to autosamplers and sample drums. Reset flow meter and replaced tape on a monthly basis.
007 (Building 100)	Conducted an erosion and sediment control inspection at the perimeter of the outfall. Completed a maintenance inspection of the conveyance system, stormwater retention system, and sediment basin liner. Observed sediment basin liner and outfall for excess sediment/debris or deficiencies. Checked high level float/switch in sedimentation basin. Completed inspection of dedicated retention tanks. Cleaned sample box and the outfall area. Reset flow meter and replaced tape on a monthly basis.
008 (Happy Valley)	Conducted erosion and sediment control inspections near the perimeter of the outfall and within the outfall drainage. Observed the outfall and flume for excess sediment/debris, and cleared excess sediment from the flume. Checked sample box and flow meter control box for the presence of debris and/or animals. Reset flow meter and replaced tape on a monthly basis. Cleaned sample box and the outfall area.
009 (WS-13 Drainage)	*Outfall BMPs:* Checked sample box and flow meter control box for spiders and the presence of rodents/animals. Reset flow meter and replaced tape on a monthly basis. Cleaned sample box and outfall area, and performed weed abatement as needed. *Culvert Modification (CM)-9*: Inspected riprap and culvert intake improvements made during Second Quarter 2013. *Restoration, Monitoring and Mitigation Plan (RMMP) BMPs:* Inspected plantings and pole cuttings in the Northern Drainage and replaced water replenishment cartons at each plant. Selective weeding was performed at plantings to remove invasive species. Inspected structural BMPs. 108 plants were replanted in November 2013. Hydroseeded areas along the Northern Drainage and continued weekly watering *National Aeronautics and Space Administration (NASA) ISRA BMPs:* Performed site restoration and applied hydroseed to completed ISRA areas at Expendable Launch Vehicle (ELV), Liquid Oxygen Plant (LOX), and portions of Ash Pile/Sewage Treatment Plant (AP/STP). Maintained temporary BMPs (sand bag berms, fiber rolls, and plastic tarps) at ELV-1C during ISRA implementation. Placed rip rap beneath the culvert drain outlet in the eastern

OUTFALL (Location)	BMP ACTIVITIES DURING FOURTH QUARTER 2013
	portion of ELV-1C. Completed construction of permanent BMPs in the ELV channel. Completed restoration and installation of temporary BMPs at LOX ISRA areas. Replaced worn and broken sand bags at the LOX sand bag berm. *Lower Parking Lot BMP:* Inspected plantings and continued implementing watering plan. Inspected sediment basin, including fiber rolls, the biofilter, and the riprap berm placed at the west end. Hydroseeded the biofilter slope. Installed drip lines in planters, installed plants along fence and increased watering in biofilter.
010 (Building 203)	Conducted maintenance inspections of structural BMPs, including the filter media and conveyance and stormwater retention systems. Completed inspection of dedicated retention tanks. Maintained and inspected erosion and sediment controls within areas of disturbance or sparse vegetation. Checked sample box and flow meter control box for the presence of debris and/or animals. Reset flow meter and replaced tape on a monthly basis. Cleaned sample box and the outfall area and performed weed abatement as needed.
011 (Perimeter Pond)	Conducted maintenance inspections of structural BMPs, including the weir, filter media, and pump and conveyance systems. Conducted erosion and sediment control inspections at the flume, drainage area, perimeter of outfall, pond, and around the conveyance system. Checked sample box and flow meter control box for the presence of debris and/or animals. Reset flow meter and replaced tape on a monthly basis. Cleaned sample box and the outfall area and performed weed abatement as needed.
012 (Alfa Test Stand)	Conducted maintenance inspections of structural BMPs, including pump, conveyance system, and retention tank. Observed condition of the sand bag berm. Inspected outfall and perimeter for the presence of rodents/animals. Cleaned sample box and the outfall area and performed weed abatement as needed.
013 (Bravo Test Stand)	Conducted maintenance inspections of structural BMPs, including pump, conveyance system and retention tank. Observed condition of the sand bag berm. Inspected outfall and perimeter for the presence of rodents/animals. Cleaned sample box and the outfall area and performed weed abatement as needed.
014 (Advanced Propulsion Test Facility)	Conducted maintenance inspections of structural BMPs. Observed the condition and integrity of the liner and berm. Observed erosion and sediment control BMPs around outfall perimeter. Cleaned sample box and the outfall area and performed weed abatement as needed.
018 (R-2 Spillway)	Conducted maintenance inspections of structural BMPs, including the filter media and conveyance system. Checked sample box and flow meter control box for the presence of debris and/or animals. Reset flow meter and replaced tape on a monthly basis. Cleaned sample box and the outfall area and performed weed abatement as needed.

OUTFALL (Location)	BMP ACTIVITIES DURING FOURTH QUARTER 2013
019 (Area I Groundwater Extraction [GET] System)	The system has remained off since completing the RD-10 pump test on 14 April 2013. No NPDES sampling was performed in Fourth Quarter 2013 at the Area I GET System. No water was pumped or discharged from WS-9A in Fourth Quarter 2013.
RSW-002 (Arroyo Simi – Frontier Park)	Collected receiving water sample at Arroyo Simi – Frontier Park location. Conducted monthly receiving water inspections.

Boeing also continued to implement the individual SWPPPs during Fourth Quarter 2013 and BMP inspections were completed in accordance with the State of California Construction General Permit requirements.

Efforts to plan and implement BMPs for pre- and post-soil disturbance activities in construction/demolition and ISRA areas are discussed further below. Demolition projects comprised areas of disturbed soil from recent demolition and post-demolition restoration. ISRA areas are those subject to ongoing soil removal and/or remediation, post-remediation, and restoration activities.

Demolition-Related BMP Activities

Previously active areas are being demolished and prepared for restoration in an effort to return the Santa Susana Site back to its natural habitat. Demolition activities are ongoing at several facility locations, but have ceased within Area IV. Debris, metal, concrete, and asphalt are segregated upon demolition and transported to a waste or recycling facility per Boeing's waste management plan and in accordance with local, state, and federal regulations. Construction BMPs are implemented before, during, and after demolition activities.

Restoration activities, including the installation of erosion and sediment control BMPs, are conducted following the completion of demolition activities. Fourth Quarter 2013 restoration BMPs included the inspections of the Building 1436 demolition area and application of hydroseeding/hydromulch in the following other demolition areas:

- NASA removal areas in Area II (south west of Silvernale Pond/ north of R2A Pond);
- The former Praxair storage area in Area III;
- Building 4006 in Area IV;
- The L85 Area in Area IV; and
- The ESADA Area in Area IV.

As part of the long-term BMP maintenance plan, the sand bags are removed once vegetation has returned. Hydroseed and hydromulch placed on these areas in Second Quarter 2013 were inspected during Fourth Quarter 2013 to monitor growth. Boeing will continue demolition activities to remove impervious surfaces and reduce stormwater runoff, implement BMPs to address erosion and sedimentation, and return the Santa Susana Site to its natural habitat.

Outfall 008/009 ISRA and BMP Plan-Related Activities

Boeing continued ISRA activities in the Outfall 008 and 009 watersheds during Fourth Quarter 2013 to address constituents in soil that may contribute to NPDES Permit limit/benchmark exceedances in stormwater. ISRA soil removal within Outfall 008 was completed on 19 October 2009, and ISRA soil removal conducted within the Outfall 009 watershed continued during Fourth Quarter 2013. ISRA Implementation reports are submitted to the Regional Board summarizing all ISRA activities for each phase of work performed[1].

The Santa Susana Site Stormwater Expert Panel (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). These plans are considered conceptual designs and recommendations for BMPs that were identified based on an evaluation of NPDES Permit compliance and ISRA/BMP stormwater monitoring results. The following BMP plans have been submitted to the Regional Board and are located on Boeing's Santa Susana Site webpage under Outfall 008/009 ISRA- and BMP-related activities[2]:

- 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); and
- 2013 BMP Plan Addendum (Geosyntec and the Expert Panel, 2013).

All completed Expert Panel-recommended BMPs are discussed in the ISRA Performance Monitoring and BMP Monitoring Report for Outfalls 008 and 009 Watersheds and submitted to the Regional Board for each rainy season (Boeing, 2012). These BMPs are also outlined in agency biweekly meetings and special Santa Susana Site walks with the public, Regional Board, and other agencies to demonstrate Boeing and NASA's commitment to achieve the water quality requirements of the NPDES Permit.

The BMP activities discussed below were performed, commenced, or completed during Fourth Quarter 2013 in coordination with the Expert Panel. These activities are summarized in the "Fourth Quarter Progress Report for September 21, 2013 – December 18, 2013 Activity, Interim Source Removal Action (ISRA) and Best Management Practices (BMP) Plan" (Boeing, 2013).

Lower Parking Lot BMP

The Lower Parking Lot BMP is a stormwater treatment BMP designed and built to capture, convey, and treat stormwater runoff from the lower lot and Instrument and Equipment Laboratories (IEL) watersheds. The need for a treatment BMP at the Lower Parking Lot BMP was

1 Available at: http://www.boeing.com/boeing/aboutus/environment/santa_susana/isra.page
2 Available at: http://www.boeing.com/boeing/aboutus/environment/santa_susana/isra.page

first proposed in the 2010 BMP Plan (MWH et al., 2010). The Lower Parking Lot BMP consists of a 30,000-gallon cistern, a stormwater conveyance line, a sediment basin, and a media biofilter. Ventura County inspectors conducted building and grading inspections at various periods during the construction of the Lower Parking Lot BMP. Construction activities were completed on 15 March 2013 and a Regional Board and public tour of the completed Lower Parking Lot BMP was conducted on 20 March 2013.

Fourth Quarter 2013 activities included an inspection to verify that the sedimentation basin and biofilter were free of sediment and debris, a check of the cistern area and pump, and an inspection of the respective BMPs placed during Second Quarter 2013. In addition, the biofilter slope was hydroseeded, drip lines were installed in the planters, plants were installed along the fenceline, and watering in biofilter was increased.

NASA ELV BMPs

The bidding process for the NASA ELV BMPs was completed in May 2013 and construction activities for the BMPs and drainage improvements at the ELV channel commenced in June 2013. Construction activities at the ELV BMP were completed in October 2013. The purpose of these stormwater BMPs is to improve stormwater quality from the ELV area before it is conveyed to Outfall 009.

CM-9 Upgrades

CM-9 upgrades were recommended in the 2012 BMP Plan Addendum and construction of these upgrades was completed in March 2013. The purpose of these BMPs is to slow road runoff, reduce erosion along roadway slopes into the CM-9 runoff inlet, and provide additional infiltration upstream of CM-9. The need for improvements to the CM-9 media filter will be further evaluated in the 2013-14 rainy season.

Fourth Quarter 2013 NASA and Boeing ISRA Activities

In addition to activities performed in coordination with the Expert Panel, the following ISRA activities were performed for Outfall 008/009 during Fourth Quarter 2013:

- Sampling and ISRA Implementation:
  - Completed excavation activities at ISRA area LOX-1B-3;
  - Resumed and completed planned excavation activities at ISRA area ELV-1C, including collection of confirmation and Regional Board split soil samples, and reviewed sample results with the Regional Board and Department of Toxic Substances Control (DTSC);
  - Began and completed planned excavation activities at ISRA ELV-1D, including collection of waste characterization soil samples;
  - Completed additional excavation at ISRA area AP/STP-1C-1;

- Conducted additional excavation and collected confirmation and Regional Board split soil samples at ISRA area AP/STP-1C-2;
- Began site restoration at AP/STP, ELV and LOX ISRA areas;
- Submitted the 2013-2014 Rainy Season Sampling and Analysis Plan Updates, BMP Monitoring and Performance Monitoring Programs to Regional Board; and
- Received concurrence from Regional Board and DTSC that ISRA excavation activities are complete.

■ Surveys, Monitoring, and Inspections:

- Performed weekly, pre-rain event, rain event, and post-rain event SWPPP inspections at 2010 and 2011/2012 and 2013 ISRA areas per the ISRA SWPPP;
- Inspected condition of plants installed within the Northern Drainage and replaced water replenishment cartons; and
- Conducted ISRA Performance Monitoring and BMP Subarea Monitoring inspections.

■ ISRA BMPs Implemented:

- Inspected and maintained BMPs implemented at ISRA areas at ELV and LOX.

Boeing continues to conduct bi-weekly status meetings and submit monthly and quarterly progress reports to Regional Board staff on the progress of ISRA activities and the BMP Plan[3]. Boeing is committed to restoring the ISRA areas immediately following cleanup activities and works closely with the Regional Board, DTSC, and the Expert Panel to ensure that restoration is comprehensive.

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. The restoration and mitigation activities proposed in the RMMP plan[4] were implemented in 2012.

Some areas along the Northern Drainage hydroseeded in December were watered weekly. Monitoring and maintenance of plantings and pole cuttings were conducted in Fourth Quarter 2013. Water replenishment cartons were replaced to provide plants with a water source for three months and selective weeding was performed to remove invasive plants. Plant monitoring will continue for a minimum of five years and supplemental baseline geomorphic surveys will continue for two to three years, depending on the need to reassess the sediment conditions in the drainage. Water replenishment cartons will be replaced until the plants are

3 Available at: http://www.boeing.com/boeing/aboutus/environment/santa_susana/isra.page
4 Available at: http://www.boeing.com/aboutus/environment/santa_susana/tech_reports.html

well established. Structural BMPs were also inspected monthly to evaluate conditions and performance during rain events.

REASONABLE POTENTIAL ANALYSIS

No stormwater discharges occurred from the Santa Susana Site and no new stormwater discharge data became available during Fourth Quarter 2013. A reasonable potential analysis was therefore not triggered and reasonable potential analysis tables 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. As noted above, measures were implemented by the analytical laboratory to monitor and/or evaluate low level detections, to analyze for interferences, and to ensure that cross contamination did not occur. Laboratory analytical reports, including validation reports and notes, are included in Appendix D. Attachment H of the NPDES Permit issued to the Santa Susana Site presents the State Board minimum levels (MLs) for use in reporting and determining compliance with NPDES Permit limits.

The analytical laboratory achieved these MLs for this reporting period when technically possible. When elevated laboratory reporting limits (RLs) were noted, the laboratory maximum detectable limits (MDLs) remained below the State of California MLs. However, some constituents' daily MDLs in the NPDES Permit are less than their respective MLs, and less than the RL. In cases where the NPDES Permit limit is less than the RL and ML, the RL was used to determine compliance. The specific constituents that have NPDES daily maximum or monthly average Permit limits that are less than the RL and ML are: mercury, bis(2-ethylhexyl)phthalate, polychlorinated biphenyls (PCBs) (Aroclor congeners), chlordane, Dichlorodiphenyldichloroethane (DDD), Dichlorodiphenyldichloroethylene (DDE), Dichlorodiphenyltrichloroethane (DDT), dieldrin, toxaphene, and chlorpyrifos. These compounds were either not a required analyte or not detected above the RL in all of the water samples collected during Fourth Quarter 2013.

FACILITY CONTACT

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

CERTIFICATION

I certify under penalty of law that this document and all appendices 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 a knowing violation.

Executed on the 6th of February 2014 at The Boeing Company, Santa Susana Site.

Sincerely,

Paul Costa
Environmental Operations and Compliance Manager
Santa Susana Field Laboratory
Environment, Health and Safety

LB:jrc

Enclosures:

References
Figures 1 - Site Map with Outfall Locations and Stormwater Drainages
Appendix A - Fourth Quarter 2013 Rainfall Data Summary
Appendix B - Fourth Quarter 2013 Liquid Waste Shipment Summary Table
Appendix C - Fourth Quarter 2013 Discharge Monitoring Data Summary Tables
Appendix D - Fourth Quarter 2013 Analytical Laboratory Report, Chain of Custody, and Validation Report

cc: Regional Water Quality Control Board, Los Angeles Region; Attn: Ms. Cassandra Owens
Department of Toxic Substances Control; Attn: Mr. Mark Malinowski
California State University – Northridge, Library
Simi Valley Library
Los Angeles Library, Platt Branch

REFERENCES

1. Boeing, 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, Canoga Park, 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.

2. Boeing, 2013. Fourth Quarter Progress Report for September 21, 2013 – December 18, 2013 Activity, Interim Source Removal Action (ISRA) and Best Management Practices (BMP) Plan, The Boeing Company, Santa Susana Field Laboratory, Canoga Park, Canoga Park, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027). December 20.

3. Geosyntec and the Expert Panel, 2011. 2011 BMP Plan Addendum, The Boeing Company, Santa Susana Field Laboratory, Canoga Park, Canoga Park, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027). September 28.

4. Geosyntec and the Expert Panel, 2012. 2012 BMP Plan Addendum, The Boeing Company, Santa Susana Field Laboratory, Canoga Park, Canoga Park, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No.6027). September 28.

5. Geosyntec and the Expert Panel, 2013. 2013 BMP Plan Addendum, The Boeing Company, Santa Susana Field Laboratory, Canoga Park, Canoga Park, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No.6027). September 30.

6. MWH Americas, Inc. et al, 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.

DRAINAGE TO MEIER CANYON

DRAINAGE TO ARROYO SIMI

AREA I (NASA)

AREA I

AREA II (NASA)

AREA III

AREA IV

UNDEVELOPED LAND

DRAINAGE TO DAYTON CANYON

DRAINAGE TO BELL CANYON

Silvernale Pond

R-2B Pond

R-2A Pond

R-1 Pond

Perimeter Pond

GETS

DESCRIPTIONS OF DISCHARGE OUTFALL LOCATIONS

NPDES OUTFALL	DESCRIPTION	PRIMARY OVERSIGHT AGENCY
001	Treated Groundwater and Stormwater, South Slope	RWQCB
002	Stormwater, South Slope	RWQCB
003	Stormwater, Radioactive Material Handling Facility	RWQCB
004	Stormwater, Sodium Reactor Experiment Area	RWQCB
005	Stormwater, Sodium Burn Pit 1	RWQCB
006	Stormwater, Sodium Burn Pit 2	RWQCB
007	Stormwater, Building 100	RWQCB
008	Stormwater, Happy Valley	RWQCB
009	Stormwater, WS-13 Drainage	RWQCB
010	Stormwater, Building 203	RWQCB
011	Stormwater, Perimeter Pond	RWQCB
012	Stormwater, Alfa Test Stand	RWQCB
013	Stormwater, Bravo Test Stand	RWQCB
014	Stormwater, Advanced Propulsion Test Facility	RWQCB
015	STP-1 (Removed from permit)	--
016	STP-2 (Removed from permit)	--
017	STP-3 (Removed from permit)	--
018	Stormwater, R-2 Pond Spillway	RWQCB
019	Treated Groundwater (GET System)	RWQCB

LEGEND

- NPDES OUTFALL
- FORMER NPDES OUTFALL
- GROUNDWATER EXTRACTION TREATMENT SYSTEM (GETS)
- EFFLUENT PATHWAY
- DIRT ROAD
- ELEVATION CONTOUR
- **DRAINAGE**
  - CONCRETE LINED
  - DISTURBED
  - GRADED
  - NATURAL
- BUILDING/STRUCTURE FOOTPRINT
- SSFL PROPERTY BOUNDARY
- ADMINISTRATIVE AREA BOUNDARY
- SURFACE WATER RECLAMATION PONDS

N W E S

0 1,200 2,400

SCALE IN FEET

HALEY & ALDRICH

NPDES PERMIT COMPLIANCE FOURTH QUARTER 2013
DISCHARGE MONITORING REPORT
THE BOEING COMPANY
VENTURA COUNTY, CALIFORNIA

SITE MAP WITH OUTFALL LOCATIONS AND STORMWATER DRAINAGES

SCALE: AS SHOWN
FEBRUARY 2014

FIGURE 1

G:\40458_SSFL\Global\GIS\MapProjects\2014-01\40458-023-a001-Outfall_ocations.mxd

APPENDIX A

Fourth Quarter 2013 Rainfall Data Summary

TABLE A-I
AREA 1 STATION, DAILY RAINFALL SUMMARY - OCTOBER 2013
NPDES PERMIT CA0001309
THE BOEING COMPANY
VENTURA COUNTY, CALIFORNIA

HOUR OF THE DAY

DAY OF THE MONTH	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	INV	INV	INV	INV	INV	0.00p	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02
29	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

p = power failure
INV = Negative under range, invalid hour

TABLE A-II
AREA 1 STATION, DAILY RAINFALL SUMMARY - NOVEMBER 2013
NPDES PERMIT CA0001309
THE BOEING COMPANY
VENTURA COUNTY, CALIFORNIA

HOUR OF THE DAY

DAY OF THE MONTH	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.03	0.06	0.05	0.05	0.22
21	0.04	0.02	0.02	0.02	0.12	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A-III
AREA 1 STATION, DAILY RAINFALL SUMMARY - DECEMBER 2013
NPDES PERMIT CA0001309
THE BOEING COMPANY
VENTURA COUNTY, CALIFORNIA

HOUR OF THE DAY

DAY OF THE MONTH	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.09	0.09	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00p	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13d	0.00p	0.00D	0.00D	0.00D	0.00D	0.00D	0.00D	0.00D	0.00D	0.00D	0.00D	0.00
13	0.00D	0.00D	0.00D	0.00D	0.00D	0.00D	0.00D	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	INV	0.00
31	INV	INV	INV	INV	INV	INV	INV	INV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

p = power failure
d = Marked down, invalid hour
D = Marked down, valid hour
INV = Negative under range, invalid hour

APPENDIX B

Fourth Quarter 2013 Liquid Waste Shipment Summary Tables

TABLE B-I
FOURTH QUARTER 2013 LIQUID WASTE SHIPMENT SUMMARY
NPDES PERMIT CA0001309
THE BOEING COMPANY
VENTURA COUNTY, CALIFORNIA

DATE SHIPPED	MANIFEST TRACKING NUMBER	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
10/1/2013	010392844JJK	HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE)	40440	P	Clean Harbors Environmental Services Inc 1737 East Denni Street, Wilmington, CA 90744	Siemens Water Technologies, LLC 5375 South Boyle Avenue, Los Angeles, CA 90058
10/2/2013	010392808JJK	WASTE CORROSIVE LIQUID, INORGANIC (HYDROCHLORIC ACID, SULFURIC ACID)	174	P		Clean Harbors Wilmington, LLC 1737 East Denni Street, Wilmington, CA 90744
		HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE)	4571	P		
		HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE, MUD)	683	P		
		NON-RCRA HAZARDOUS WASTE LIQUID (LATEX PAINT)	51	P		
10/7/2013	010392772JJK	HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE)	32440	P		Siemens Industry, Inc. 5375 South Boyle Avenue, Los Angeles, CA 90058
10/9/2013	010392778JJK	HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE, WATER)	338	P		Clean Harbors Wilmington, LLC 1737 East Denni Street, Wilmington, CA 90744
10/16/2013	010392779JJK	WASTE SULFURIC ACID	4	P		Clean Harbors Wilmington, LLC 1737 East Denni Street, Wilmington, CA 90744
		NON-RCRA HAZARDOUS WASTE LIQUID (HYDREX)	297	P		
10/16/2013	010392781JJK	HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE, WATER)	53	P		Clean Harbors Wilmington, LLC 1737 East Denni Street, Wilmington, CA 90744
10/18/2013	010392782JJK	HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE)	12580	P		Siemens Water Technologies, LLC 5375 South Boyle Avenue, Los Angeles, CA 90058
10/23/2013	010392785JJK	HAZARDOUS WASTE LIQUID (ACETONE, TRICHLOROETHYLENE)	698	P		Clean Harbors Wilmington, LLC 1737 East Denni Street, Wilmington, CA 90744
10/30/2013	010392792JJK	HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE)	1260	P		Clean Harbors Aragonite, LLC 11600 North Aptus Road, Grantsville, UT 84029
12/5/2013	010392699JJK	HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE)	33060	P		Siemens Industry, Inc. 5375 South Boyle Avenue, Los Angeles, CA 90058
12/9/2013	010392703JJK	HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE)	42180	P		Siemens Industry, Inc. 5375 South Boyle Avenue, Los Angeles, CA 90058
12/10/2013	010392701JJK	HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE)	35060	P		Siemens Water Technologies, LLC 5375 South Boyle Avenue, Los Angeles, CA 90058
12/11/2013	010392702JJK	HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE)	26800	P		Siemens Water Technologies, LLC 5375 South Boyle Avenue, Los Angeles, CA 90058

TABLE B-I
FOURTH QUARTER 2013 LIQUID WASTE SHIPMENT SUMMARY
NPDES PERMIT CA0001309
THE BOEING COMPANY
VENTURA COUNTY, CALIFORNIA

DATE SHIPPED	JOB NUMBER	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
10/1/2013	33518	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G	Southwest Processors Inc. 4120 Bandini Blvd. Vernon, CA 90058	LACSD
10/1/2013	33517	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
10/1/2013	33516	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
10/8/2013	33557	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
10/8/2013	33556	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
10/8/2013	33558	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
10/15/2013	33590	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
10/15/2013	33591	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
10/15/2013	33592	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
10/22/2013	34325	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
10/22/2013	34326	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
10/22/2013	34327	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
10/29/2013	34357	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #2)	5000	G		
10/29/2013	34358	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
10/29/2013	34359	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
11/5/2013	34390	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
11/5/2013	34391	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
11/5/2013	34392	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
11/12/2013	34422	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
11/12/2013	34423	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
11/12/2013	34424	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #2)	5000	G		
11/19/2013	34459	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
11/19/2013	34460	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #2)	5000	G		
11/19/2013	34461	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
11/26/2013	34490	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
11/26/2013	34489	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
11/26/2013	34491	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
12/3/2013	33619	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #2)	5000	G		
12/3/2013	33620	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
12/3/2013	33621	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
12/10/2013	33660	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
12/10/2013	33661	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
12/10/2013	33662	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
12/13/2013	33677	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
12/13/2013	33678	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #2)	5000	G		
12/13/2013	33679	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
12/17/2013	33696	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
12/17/2013	33697	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
12/17/2013	33698	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
12/20/2013	32722	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #2)	5000	G		
12/20/2013	32723	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
12/20/2013	32724	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		

G = Gallons
P = Pounds

APPENDIX C

Fourth Quarter 2013 Discharge Monitoring Data Summary Tables

TABLE C-I
ARROYO SIMI (FRONTIER PARK RECEIVING WATER)
FOURTH QUARTER 2013 REPORTING SUMMARY
NPDES PERMIT CA0001309
THE BOEING COMPANY
VENTURA COUNTY, CALIFORNIA

				12/13/2013		
ANALYTE	**UNITS**	**Permit Limit Daily Max/Monthly Avg**	**SAMPLE FREQUENCY**	**SAMPLE TYPE**	**RESULT**	**VALIDATION QUALIFIER**
Water Velocity	ft/sec	-/-	1/Quarter	Meas	0	*
pH (Field)	pH Units	6.5-8.5/-	1/Quarter	Grab	7.40	*
Hardness	mg/L	-/-	1/Quarter	Grab	900	--
Temperature	F	-/-	1/Quarter	Grab	53.73	*
4,4'-DDD	ug/L	0.0014/-	1/Quarter	Grab	ND < 0.0038	U
4,4'-DDE	ug/L	0.001/-	1/Quarter	Grab	ND < 0.0028	U
4,4'-DDT	ug/L	0.001/-	1/Quarter	Grab	ND < 0.0038	U
Aroclor 1016	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.23	U
Aroclor 1221	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.23	U
Aroclor 1232	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.23	U
Aroclor 1242	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.23	U
Aroclor 1248	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.23	U
Aroclor 1254	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.23	U
Aroclor 1260	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.23	U
Chlordane	ug/L	0.001/-	1/Quarter	Grab	ND < 0.075	U
Chlorpyrifos	ug/L	0.02/-	1/Quarter	Grab	ND < 0.077	U
Diazinon	ug/L	0.16/-	1/Quarter	Grab	ND < 0.096	UJ (H)
Dieldrin	ug/L	0.0002/-	1/Quarter	Grab	ND < 0.0019	U
Toxaphene	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.23	U

See attached notes for abbreviations, definitions, and other explations for the data presented.

ARROYO SIMI (FRONTIER PARK RECEIVING WATER)
FOURTH QUARTER 2013 REPORTING SUMMARY NOTES
NPDES PERMIT CA0001309
THE BOEING COMPANY
VENTURA COUNTY, CALIFORNIA

Notes:

1. TCDD TEQs for the purpose of determining permit compliance are the sum of the products of the detected dioxin congener concentration multiplied by that congener's toxicity equivalency factor (TEF) and bioaccumulation equivalency factor (BEF). The resulting compliance TCDD TEQ does not include those congener concentrations that are reported as DNQ, as specified on Page 37 of the NPDES permit.

2. pH was determined with a field instrument and was noted as such. These results were not validated.

3. The NPDES monthly average permit limit for mercury of 0.05 µg/L (Outfall 019) is not achievable by the laboratory; therefore, the laboratory MDL of 0.10 µg/L was used to determine compliance.

4. All of the following abbreviations and/or notes may not occur on every table.

-92.9 +/-200	A negative radiochemical analytical result indicates the count rate of the sample was less than the background condition
$	reported result or other information was incorrectly reported by the laboratory; result was corrected by the data validator
--	based on validation of the data, a qualifier was not required
-/-	no permit limit established for daily maximum or monthly average
<(value)	analyte not detected at a concentration greater than or equal to the DL, MDL, or RL (see laboratory report for specific detail)
*	result not validated
*1	improper preservation of sample
*2	the ICP/MS ppb check standard was recovered above the control limit; therefore, the constituent detected was qualified as estimated (J)
*3	initial and or continuing calibration recoveries were outside acceptable control limits
*5	blank spike/blank spike duplicate relative percent difference was outside the control limit
*10	value was estimated detect or estimated non detect (J,UJ) due to deficiencies in quantitation of the constituent including constituents reported by the laboratory as Estimated Maximum Possible Concentration (EMPC) values
*11	no calibration was performed for this compound; result is reported as a tentatively identified compound (TIC)
* II *III	Unusual problems found with the data that have been described in Section II, "sample management", or Section III, "method analysis". The number following the asterisk (*) will indicated the validation report section where a description of the problem can be found.
ANR	analysis not required; e.g., constituent or outfall was not required by the permit to be sampled and analyzed over the reporting period (annual, semi-annual, etc.)
B	laboratory method blank contamination
BA	relative percent difference out of control
BEF	bioaccumulation equivalency factor
BU	analyzed out of holding time
BV	sample received after holding time expired
C	calibration %RSD or %D were noncompliant
Comp	Composite sample type

C5	Calibration verification %R was outside method control limits
CEs/100 ml	cell equivalents per 100 milliliters
D	The analysis with this flag should not be used because another more technically sound analysis is available
%D	percent difference between the initial and continuing calibration relative response factors
deg F	degrees Fahrenheit
DL	detection limit
DNQ	detected but not quantified (constituent value greater than or equal to the laboratory method detection limit and less then the laboratory reporting limit)
E	duplicates show poor agreement
ft/sec	feet per second
H	holding time was exceeded
I	ICP interference check solution results were unsatisfactory
J	estimated value, result lower than the detection limit
J, DX	estimated value, value < lowest standard (MQL), but > than MDL
K	The sample dilution's set-up did not meet the oxygen depletion criteria of at least 2 mg/l. Therefore, the reported result is an estimated value only.
L2	the laboratory control sample %R was below the method control limits
L	laboratory control sample %R was outside control limits
lbs/day	Pounds per day
LOD	limit of detection
LQ	LCS/LCSD recovery above method control limits
M1	matrix spike (MS) and/or MS duplicate were above the acceptance limits due to sample matrix interference
M2	the MS and/or MS duplicate were below the acceptance limits due to sample matrix interference
MDA	minimum detectable activity
MDL	method detection limit
Meas	Measure sample type
MFL	million fibers per liter
MGD	million gallons per day
MHA*	Due to high level of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information.
mg/L	milligrams per liter
mg/kg	milligrams per kilogram
ml/L/hr	milliliters per liter per hour
MPN/100 ml	most probable number per 100 milliliters
NA	not applicable; no permit limit established for the constituent and/or outfall
ND	analyte value less than the LOD or MDL
NM	not measured or determined
NTU	nephelometric turbidity unit
pCi/L	picocurries per liter
Q	matrix spike recovery outside of control limits
R	as a validation qualifier, results are rejected; the presence or absence of analyte cannot be verified
R	(reason code in parentheses) %R for calibration not within control limits
RL	laboratory reporting limit
RL-1	reporting limit raised due to sample matrix effects
%RSD	percent relative standard deviation

ARROYO SIMI (FRONTIER PARK RECEIVING WATER)
FOURTH QUARTER 2013 REPORTING SUMMARY NOTES
NPDES PERMIT CA0001309
THE BOEING COMPANY
VENTURA COUNTY, CALIFORNIA

% survival	percent survival
S	surrogate recovery was outside control limits
TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin
TEQ	toxic equivalent
T	presumed contamination, as indicated by a detect in the trip blank
TU_c	toxicity units (chronic)
U	result not detected
µg/L	micrograms per liter
µg/kg	micrograms per kilogram
UJ	result not detected at the estimated reporting limit
umhos/cm	micromhos per centimeter
WHO TEF	World Health Organization toxic equivalency factor
^	analysis not completed due to hold time exceedence or insufficient sample volume
#	Per ORDER NO. R4-2010-0090 page 23 Footnote 1. The effluent limitations for total suspended solids and settable solids are not applicable for discharges during wet weather. During wet weather flow, a discharge event is greater than 0.1 inches of rainfall in a 24-hour period. No more than one sample per week need be obtained during extended periods of rainfall or the discharge of collected stormwater. A storm event must be preceded by at least 72 hours of dry weather.
(4.0)3.1/-	Represents (Dry Weather Limit) Wet Weather Limit / Monthly Average Limit.

APPENDIX D

Fourth Quarter 2013 Analytical Laboratory Report, Chain of Custody, and Data Validation Report

APPENDIX D

TABLE OF CONTENTS

APPENDIX D

Section 1

Arroyo Simi-Frontier Park – December 13, 2013
MEC^X Data Validation Report

DATA VALIDATION REPORT

Haley & Aldrich Boeing SSFL Stormwater

SAMPLE DELIVERY GROUP: 440-65111-1

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Haley & Aldrich Boeing SSFL Stormwater
Contract Task Order:	1272.003H.01 001
Sample Delivery Group:	440-65111-1
Project Manager:	K. Miller
Matrix:	Water
QC Level:	IV
No. of Samples:	1
No. of Reanalyses/Dilutions:	0
Laboratory:	TestAmerica Irvine

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix*	*Collection*	*Method*
ArroyoSimi_20131213	440-65111-1	N/A	Water	12/13/2013 10:20:00 AM	SM2340B, 525.2, 608

II. Sample Management

No anomalies were observed regarding sample management. The sample in this SDG was received at the laboratory on ice. As the sample was transported directly from the field via courier, the sample had not had sufficient time to cool to 4°C ±2°C; however, no qualifications were deemed necessary. According to the laboratory sample receipt log for this SDG, the sample containers were received intact and properly preserved, if applicable. The COC was appropriately signed and dated by field and laboratory personnel.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins or PCB congeners.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 525.2—Chlorpyrifos and Diazinon

Reviewed By: P. Meeks
Date Reviewed: January 3, 2014

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0), EPA Method 525.2*, and the *National Functional Guidelines for Organic Data Review* (6/08).

- Holding Times: The sample was extracted 71.5 hours after collection. As the sample was not extracted within 24 hours of collection, the nondetected result for diazinon was qualified as estimated, "UJ." Chlorpyrifos was extraction within 14 days of collection and both samples were analyzed within 30 days of extraction.

- GC/MS Tuning: The DFTPP tunes met the method abundance criteria. The sample was analyzed within 12 hours of the DFTPP injection time.

- Calibration: Calibration criteria were met. The initial calibration average RRFs were ≥0.05 and %RSDs ≤30%. The continuing calibration RRFs were ≥0.05 and recoveries were within the method QC limits of 70-130%.

- Blanks: The method blank had no target compound detects above the MDL.

- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs were within laboratory-established QC limits.

- Surrogate Recovery: Recoveries were within laboratory-established QC limits.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on the sample in this SDG. Method accuracy and precision were evaluated based on the LCS/LCSD results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.

    - Field Duplicates: There were no field duplicate samples identified for this SDG.

- Internal Standards Performance: The internal standard area counts were within the method control limits established by the continuing calibration standards of ±30%. The retention times were within ±30 seconds.

- Compound Identification: Compound identification was verified. The laboratory analyzed for chlorpyrifos and diazinon by Method 525.2. Review of the sample chromatogram, retention times, and spectra indicated no problems with target compound identification.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Reported nondetects are valid to the reporting limit.

- Tentatively Identified Compounds: TICs were not reported by the laboratory for this analysis.

- System Performance: Review of the raw data indicated no problems with system performance.

B. EPA METHOD 608 (Low Level)—Pesticides and PCBs

Reviewed By: P. Meeks
Date Reviewed: January 3, 2014

The sample listed in Table 1 for these analyses was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Organochlorine Pesticides/PCBs by GC (DVP-4, Rev. 0), EPA Method 608*, and the *National Functional Guidelines for Organic Data Review* (6/08).

- Holding Times: Extraction and analytical holding times were met. The sample was extracted within seven days of collection and analyzed within 40 days of extraction.

- Calibration: The initial calibrations had %RSDs of ≤10% or r^2 of ≥0.990 on both analytical columns. The ICVs and CCVs had %Ds within the QC limit of ≤15%. As there were no primary column detects to confirm, secondary column CCVs were not assessed. The breakdown totals for endrin and 4,4'-DDT were ≤15%.

- Blanks: The method blanks had no confirmed target compounds detected.

- Blank Spikes and Laboratory Control Samples: Recoveries and the pesticide RPDs were within the laboratory-established QC limits. Chlordane and toxaphene were not spiked in the pesticide LCS/LCSD.

- Surrogate Recovery: Recoveries were within the laboratory-established QC limits.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the sample from this SDG. Evaluation of pesticide method accuracy and precision was based

on the LCS/LCSD results and evaluation of PCB method accuracy was based on the LCS results.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

  - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.

  - Field Duplicates: This SDG had no identified field duplicate samples.

- Compound Identification: Compound identification was verified. Review of the sample chromatograms and retention times indicated no problems with target compound identification. The laboratory analyzed for select pesticides and PCB Aroclors by Method 608.

- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any result reported between the MDL and the reporting limit was qualified as estimated, "J," and coded with "DNQ" in order to comply with the NPDES permit. Any reported nondetect is valid to the reporting limit.

C. EPA METHODS 200.7 and SM2340B—Hardness

Reviewed By: P. Meeks
Date Reviewed: April 12, 2013

The sample listed in Table 1 for these analyses was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0), EPA Methods 200.7* and *Standard Method for the Examination of Water and Wastewater Method 2340B,* and the *National Functional Guidelines for Inorganic Data Review* (1/10).

- Holding Times: The analytical holding time, six months, was met.

- Calibration: All calcium and magnesium initial and continuing calibration recoveries were within 90-110% for the ICP and ICP-MS metals and 85-115% for mercury. CRI recoveries were within the control limits of 70-130%.

- Blanks: Method blanks and CCBs had no detects affecting sample results.

- Interference Check Samples: Calcium and magnesium recoveries were within 80-120%.

- Blank Spikes and Laboratory Control Samples: As hardness was the requested analyte, calcium and magnesium recoveries were not reported. The reviewer checked the raw data and judged the recoveries to be within the Method 200.7 control limits of 85-115%.

- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on the sample in this SDG; however, as hardness was requested analyte, the laboratory did not report the results of the MS/MSD. These results were not assessed.

- Serial Dilution: No serial dilution analyses were performed on the sample in this SDG.

- Sample Result Verification: Calculations were verified and the sample results reported on the sample result summary were verified against the raw data. No transcription errors or calculation errors were noted. When the sample results were qualified and the reviewer was able to clearly determine bias, detected results were qualified as either “J+” or “J-“; otherwise, bias was not indicated in the qualification. Any detects between the method detection limit and the reporting limit were qualified as estimated, “J,” and coded with “DNQ,” in order to comply with the NPDES permit. Reported nondetects are valid to the MDL.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

    - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.

    - Field Duplicates: There were no field duplicate samples identified for this SDG.

Validated Sample Result Forms: 440651111

Analysis Method A2340B

Sample Name ArroyoSimi_20131213 **Matrix Type:** WG **Result Type:** TRG

Sample Date: 12/13/2013 10:20:00 AM **Validation Level:** 3

Lab Sample Name: 440-65111-1

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Hardness	HARDNESS	900	0.33	0.17	mg/L			

Analysis Method E525.2

Sample Name ArroyoSimi_20131213 **Matrix Type:** WG **Result Type:** TRG

Sample Date: 12/13/2013 10:20:00 AM **Validation Level:** 3

Lab Sample Name: 440-65111-1

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Chlorpyrifos	2921-88-2		0.96	0.077	ug/L	U	U	
Diazinon	333-41-5		0.24	0.096	ug/L	U	UJ	H

Analysis Method E608

Sample Name ArroyoSimi_20131213 **Matrix Type:** WG **Result Type:** TRG

Sample Date: 12/13/2013 10:20:00 AM **Validation Level:** 3

Lab Sample Name: 440-65111-1

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
4,4'-DDD	72-54-8		0.0047	0.0038	ug/L	U	U	
4,4'-DDE	72-55-9		0.0047	0.0028	ug/L	U	U	
4,4'-DDT	50-29-3		0.0094	0.0038	ug/L	U	U	
Aroclor-1016 (PCB-1016)	12674-11-2		0.47	0.23	ug/L	U	U	
Aroclor-1221 (PCB-1221)	11104-28-2		0.47	0.23	ug/L	U	U	
Aroclor-1232 (PCB-1232)	11141-16-5		0.47	0.23	ug/L	U	U	
Aroclor-1242 (PCB-1242)	53469-21-9		0.47	0.23	ug/L	U	U	
Aroclor-1248 (PCB-1248)	12672-29-6		0.47	0.23	ug/L	U	U	
Aroclor-1254 (PCB-1254)	11097-69-1		0.47	0.23	ug/L	U	U	
Aroclor-1260 (PCB-1260)	11096-82-5		0.47	0.23	ug/L	U	U	
Chlordane	57-74-9		0.094	0.075	ug/L	U	U	
Dieldrin	60-57-1		0.0047	0.0019	ug/L	U	U	
Toxaphene	8001-35-2		0.47	0.23	ug/L	U	U	

APPENDIX D

Section 2

Arroyo Simi-Frontier Park – December 13, 2013
TestAmerica Analytical Laboratory Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-65111-1
Client Project/Site: Boeing SSFL outfalls

For:
Haley & Aldrich, Inc.
9040 Friars Rd.
San Diego, California 92108

Attn: Nancy Gardiner

Debby Wilson

Authorized for release by:
12/30/2013 3:26:37 PM

Debby Wilson, Manager of Project Management
(949)261-1022
debby.wilson@testamericainc.com

Table of Contents

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: Boeing SSFL outfalls

TestAmerica Job ID: 440-65111-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-65111-1	ArroyoSimi_20131213	Water	12/13/13 10:20	12/13/13 15:40

Job ID: 440-65111-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-65111-1

Comments
No additional comments.

Receipt
The sample was received on 12/13/2013 3:40 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.2º C.

GC/MS Semi VOA
Method(s) 525.2: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 150753. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method(s) 525.2 UP: Surrogate (Triphenylphosphate) recovery for the following sample(s) was outside the upper control limit: (MB 440-150761/1-A). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 525.2 UP: Surrogate (Triphenylphosphate) recovery for the following sample(s) was outside the upper control limit: (LCSD 440-150761/3-A). This suggests a high bias may be present in the batch samples. The batch samples were ND for all target analytes, therefore re-extraction and/or re-analysis was not performed

No other analytical or quality issues were noted.

GC Semi VOA
Method(s) 608: The continuing calibration verification (CCV) associated with batch 151326 recovered above the upper control limit for Endosulfan sulfate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCV 440-151326/20), (CCVRT 440-151326/8), ArroyoSimi_20131213 (440-65111-1).

Method(s) 608: Surrogate recovery for the following sample(s) was outside control limits: (440-65121-2), (440-65121-2 MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 608: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 150967 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Client: Haley & Aldrich, Inc.
Project/Site: Boeing SSFL outfalls

TestAmerica Job ID: 440-65111-1

Client Sample ID: ArroyoSimi_20131213
Date Collected: 12/13/13 10:20
Date Received: 12/13/13 15:40

Lab Sample ID: 440-65111-1
Matrix: Water

Method: 525.2 UP - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diazinon	ND		0.24	0.096	ug/L		12/16/13 09:51	12/17/13 05:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*97*		*70 - 130*	*12/16/13 09:51*	*12/17/13 05:21*	*1*
Triphenylphosphate	*113*		*70 - 130*	*12/16/13 09:51*	*12/17/13 05:21*	*1*
Perylene-d12	*105*		*70 - 130*	*12/16/13 09:51*	*12/17/13 05:21*	*1*

Method: 525.2 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorpyrifos	ND		0.96	0.077	ug/L		12/16/13 09:46	12/18/13 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,3-Dimethyl-2-nitrobenzene	*96*		*70 - 130*	*12/16/13 09:46*	*12/18/13 01:26*	*1*
Perylene-d12	*93*		*70 - 130*	*12/16/13 09:46*	*12/18/13 01:26*	*1*
Triphenylphosphate	*111*		*70 - 130*	*12/16/13 09:46*	*12/18/13 01:26*	*1*

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.094	0.075	ug/L		12/17/13 06:23	12/18/13 15:00	1
Dieldrin	ND		0.0047	0.0019	ug/L		12/17/13 06:23	12/18/13 15:00	1
Toxaphene	ND		0.47	0.23	ug/L		12/17/13 06:23	12/18/13 15:00	1
4,4'-DDD	ND		0.0047	0.0038	ug/L		12/17/13 06:23	12/18/13 15:00	1
4,4'-DDE	ND		0.0047	0.0028	ug/L		12/17/13 06:23	12/18/13 15:00	1
4,4'-DDT	ND		0.0094	0.0038	ug/L		12/17/13 06:23	12/18/13 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*52*		*35 - 115*	*12/17/13 06:23*	*12/18/13 15:00*	*1*

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		0.47	0.23	ug/L		12/17/13 06:23	12/17/13 16:07	1
Aroclor 1221	ND		0.47	0.23	ug/L		12/17/13 06:23	12/17/13 16:07	1
Aroclor 1232	ND		0.47	0.23	ug/L		12/17/13 06:23	12/17/13 16:07	1
Aroclor 1242	ND		0.47	0.23	ug/L		12/17/13 06:23	12/17/13 16:07	1
Aroclor 1248	ND		0.47	0.23	ug/L		12/17/13 06:23	12/17/13 16:07	1
Aroclor 1254	ND		0.47	0.23	ug/L		12/17/13 06:23	12/17/13 16:07	1
Aroclor 1260	ND		0.47	0.23	ug/L		12/17/13 06:23	12/17/13 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*91*		*45 - 120*	*12/17/13 06:23*	*12/17/13 16:07*	*1*

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness, as CaCO3	**900**		0.33	0.17	mg/L			12/26/13 10:34	1

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: Boeing SSFL outfalls

TestAmerica Job ID: 440-65111-1

Method	Method Description	Protocol	Laboratory
525.2	Semivolatile Organic Compounds (GC/MS)	EPA	TAL IRV
525.2 UP	Semivolatile Organic Compounds (GC/MS)	EPA	TAL IRV
608	Organochlorine Pesticides in Water	40CFR136A	TAL IRV
608	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL IRV
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	TAL IRV

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Boeing SSFL outfalls

TestAmerica Job ID: 440-65111-1

Client Sample ID: ArroyoSimi_20131213
Date Collected: 12/13/13 10:20
Date Received: 12/13/13 15:40

Lab Sample ID: 440-65111-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	525.2			1040 mL	1 mL	150761	12/16/13 09:51	CN	TAL IRV
Total/NA	Analysis	525.2 UP		1	1040 mL	1 mL	150960	12/17/13 05:21	CP	TAL IRV
Total/NA	Prep	525.2			1040 mL	1 mL	150753	12/16/13 09:46	CN	TAL IRV
Total/NA	Analysis	525.2		1	1040 mL	1 mL	151206	12/18/13 01:26	CP	TAL IRV
Total/NA	Prep	608			1065 mL	2 mL	150967	12/17/13 06:23	AC	TAL IRV
Total/NA	Analysis	608		1	1065 mL	2 mL	150940	12/17/13 16:07	CN	TAL IRV
Total/NA	Prep	608			1065 mL	2 mL	150967	12/17/13 06:23	AC	TAL IRV
Total/NA	Analysis	608		1	1065 mL	2 mL	151326	12/18/13 15:00	KS	TAL IRV
Total Recoverable	Analysis	SM 2340B		1			152795	12/26/13 10:34	DT	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 525.2 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-150753/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 151206 — **Prep Batch: 150753**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorpyrifos	ND		1.0	0.080	ug/L		12/16/13 09:46	12/17/13 22:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,3-Dimethyl-2-nitrobenzene	*105*		*70 - 130*	*12/16/13 09:46*	*12/17/13 22:41*	*1*
Perylene-d12	*92*		*70 - 130*	*12/16/13 09:46*	*12/17/13 22:41*	*1*
Triphenylphosphate	*121*		*70 - 130*	*12/16/13 09:46*	*12/17/13 22:41*	*1*

Lab Sample ID: LCS 440-150753/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 151206 — **Prep Batch: 150753**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorpyrifos	5.00	5.15		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,3-Dimethyl-2-nitrobenzene	*96*		*70 - 130*
Perylene-d12	*94*		*70 - 130*
Triphenylphosphate	*104*		*70 - 130*

Lab Sample ID: LCSD 440-150753/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 151206 — **Prep Batch: 150753**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorpyrifos	5.00	5.22		ug/L		104	70 - 130	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,3-Dimethyl-2-nitrobenzene	*101*		*70 - 130*
Perylene-d12	*95*		*70 - 130*
Triphenylphosphate	*103*		*70 - 130*

Method: 525.2 UP - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-150761/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 150960 — **Prep Batch: 150761**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diazinon	ND		0.25	0.10	ug/L		12/16/13 09:51	12/17/13 01:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*101*		*70 - 130*	*12/16/13 09:51*	*12/17/13 01:40*	*1*
Triphenylphosphate	*144*	*LH*	*70 - 130*	*12/16/13 09:51*	*12/17/13 01:40*	*1*
Perylene-d12	*99*		*70 - 130*	*12/16/13 09:51*	*12/17/13 01:40*	*1*

Method: 525.2 UP - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-150761/2-A
Matrix: Water
Analysis Batch: 150960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 150761

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diazinon			5.00	5.29		ug/L		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Nitro-m-xylene	*90*		*70 - 130*
Triphenylphosphate	*112*		*70 - 130*
Perylene-d12	*105*		*70 - 130*

Lab Sample ID: LCSD 440-150761/3-A
Matrix: Water
Analysis Batch: 150960

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 150761

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diazinon			5.00	5.67		ug/L		113	70 - 130	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Nitro-m-xylene	*93*		*70 - 130*
Triphenylphosphate	*153*	*LH*	*70 - 130*
Perylene-d12	*100*		*70 - 130*

Method: 608 - Organochlorine Pesticides in Water

Lab Sample ID: MB 440-150967/1-A
Matrix: Water
Analysis Batch: 151326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 150967

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.10	0.080	ug/L		12/17/13 06:23	12/18/13 14:16	1
Dieldrin	ND		0.0050	0.0020	ug/L		12/17/13 06:23	12/18/13 14:16	1
Toxaphene	ND		0.50	0.25	ug/L		12/17/13 06:23	12/18/13 14:16	1
4,4'-DDD	ND		0.0050	0.0040	ug/L		12/17/13 06:23	12/18/13 14:16	1
4,4'-DDE	ND		0.0050	0.0030	ug/L		12/17/13 06:23	12/18/13 14:16	1
4,4'-DDT	ND		0.010	0.0040	ug/L		12/17/13 06:23	12/18/13 14:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*35 - 115*	*12/17/13 06:23*	*12/18/13 14:16*	*1*

Lab Sample ID: LCS 440-150967/4-A
Matrix: Water
Analysis Batch: 151326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 150967

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dieldrin			0.500	0.352		ug/L		70	55 - 115		
4,4'-DDD			0.500	0.395		ug/L		79	55 - 120		
4,4'-DDE			0.500	0.361		ug/L		72	50 - 120		
4,4'-DDT			0.500	0.362		ug/L		72	55 - 120		

Method: 608 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: LCS 440-150967/4-A
Matrix: Water
Analysis Batch: 151326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 150967

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	71		35 - 115

Lab Sample ID: 440-65121-A-2-A MS
Matrix: Water
Analysis Batch: 151326

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 150967

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dieldrin	ND		0.518	0.0468	LN	ug/L		9	50 - 120
4,4'-DDD	ND		0.518	0.0443	LN	ug/L		9	50 - 125
4,4'-DDE	ND		0.518	0.0591	LN	ug/L		11	45 - 125
4,4'-DDT	ND		0.518	0.0512	LN	ug/L		10	50 - 125

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	28	LG	35 - 115

Lab Sample ID: 440-65121-B-2-A MSD
Matrix: Water
Analysis Batch: 151326

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 150967

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dieldrin	ND		0.483	0.0476	LN	ug/L		10	50 - 120	2	30
4,4'-DDD	ND		0.483	0.0530	LN	ug/L		11	50 - 125	18	30
4,4'-DDE	ND		0.483	0.0443	LN	ug/L		9	45 - 125	13	30
4,4'-DDT	ND		0.483	0.0502	LN	ug/L		10	50 - 125	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	42		35 - 115

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 440-150967/1-A
Matrix: Water
Analysis Batch: 150940

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 150967

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		0.50	0.25	ug/L		12/17/13 06:23	12/17/13 14:35	1
Aroclor 1221	ND		0.50	0.25	ug/L		12/17/13 06:23	12/17/13 14:35	1
Aroclor 1232	ND		0.50	0.25	ug/L		12/17/13 06:23	12/17/13 14:35	1
Aroclor 1242	ND		0.50	0.25	ug/L		12/17/13 06:23	12/17/13 14:35	1
Aroclor 1248	ND		0.50	0.25	ug/L		12/17/13 06:23	12/17/13 14:35	1
Aroclor 1254	ND		0.50	0.25	ug/L		12/17/13 06:23	12/17/13 14:35	1
Aroclor 1260	ND		0.50	0.25	ug/L		12/17/13 06:23	12/17/13 14:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	96		45 - 120	12/17/13 06:23	12/17/13 14:35	1

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: LCS 440-150967/7-A
Matrix: Water
Analysis Batch: 150940

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 150967

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016			4.00	3.18		ug/L		79	50 - 115		
Aroclor 1260			4.00	3.41		ug/L		85	60 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*90*		*45 - 120*

Lab Sample ID: 440-65121-C-2-A MS
Matrix: Water
Analysis Batch: 150940

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 150967

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016	ND		4.00	3.24		ug/L		81	45 - 120		
Aroclor 1260	ND		4.00	3.32		ug/L		83	55 - 125		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*76*		*45 - 120*

Lab Sample ID: 440-65121-D-2-A MSD
Matrix: Water
Analysis Batch: 150940

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 150967

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016	ND		4.10	2.89		ug/L		71	45 - 120	11	30
Aroclor 1260	ND		4.10	3.39		ug/L		83	55 - 125	4	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*96*		*45 - 120*

GC/MS Semi VOA

Prep Batch: 150753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65111-1	ArroyoSimi_20131213	Total/NA	Water	525.2	
LCS 440-150753/2-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 440-150753/3-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MB 440-150753/1-A	Method Blank	Total/NA	Water	525.2	

Prep Batch: 150761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65111-1	ArroyoSimi_20131213	Total/NA	Water	525.2	
LCS 440-150761/2-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 440-150761/3-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MB 440-150761/1-A	Method Blank	Total/NA	Water	525.2	

Analysis Batch: 150960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65111-1	ArroyoSimi_20131213	Total/NA	Water	525.2 UP	150761
LCS 440-150761/2-A	Lab Control Sample	Total/NA	Water	525.2 UP	150761
LCSD 440-150761/3-A	Lab Control Sample Dup	Total/NA	Water	525.2 UP	150761
MB 440-150761/1-A	Method Blank	Total/NA	Water	525.2 UP	150761

Analysis Batch: 151206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65111-1	ArroyoSimi_20131213	Total/NA	Water	525.2	150753
LCS 440-150753/2-A	Lab Control Sample	Total/NA	Water	525.2	150753
LCSD 440-150753/3-A	Lab Control Sample Dup	Total/NA	Water	525.2	150753
MB 440-150753/1-A	Method Blank	Total/NA	Water	525.2	150753

GC Semi VOA

Analysis Batch: 150940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65111-1	ArroyoSimi_20131213	Total/NA	Water	608	150967
440-65121-C-2-A MS	Matrix Spike	Total/NA	Water	608	150967
440-65121-D-2-A MSD	Matrix Spike Duplicate	Total/NA	Water	608	150967
LCS 440-150967/7-A	Lab Control Sample	Total/NA	Water	608	150967
MB 440-150967/1-A	Method Blank	Total/NA	Water	608	150967

Prep Batch: 150967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65111-1	ArroyoSimi_20131213	Total/NA	Water	608	
440-65121-A-2-A MS	Matrix Spike	Total/NA	Water	608	
440-65121-B-2-A MSD	Matrix Spike Duplicate	Total/NA	Water	608	
440-65121-C-2-A MS	Matrix Spike	Total/NA	Water	608	
440-65121-D-2-A MSD	Matrix Spike Duplicate	Total/NA	Water	608	
LCS 440-150967/4-A	Lab Control Sample	Total/NA	Water	608	
LCS 440-150967/7-A	Lab Control Sample	Total/NA	Water	608	
MB 440-150967/1-A	Method Blank	Total/NA	Water	608	

Analysis Batch: 151326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65111-1	ArroyoSimi_20131213	Total/NA	Water	608	150967

GC Semi VOA (Continued)

Analysis Batch: 151326 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65121-A-2-A MS	Matrix Spike	Total/NA	Water	608	150967
440-65121-B-2-A MSD	Matrix Spike Duplicate	Total/NA	Water	608	150967
LCS 440-150967/4-A	Lab Control Sample	Total/NA	Water	608	150967
MB 440-150967/1-A	Method Blank	Total/NA	Water	608	150967

Metals

Analysis Batch: 152795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-65111-1	ArroyoSimi_20131213	Total Recoverable	Water	SM 2340B	

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
LH	Surrogate Recoveries were higher than QC limits

GC Semi VOA

Qualifier	Qualifier Description
LN	MS and/or MSD below acceptance limits. See Blank Spike (LCS)
LG	LG=Surrogate recovery below the acceptance limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: Haley & Aldrich, Inc.
Project/Site: Boeing SSFL outfalls

TestAmerica Job ID: 440-65111-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-14
Arizona	State Program	9	AZ0671	10-13-14
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-14 *
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-14
New Mexico	State Program	6	N/A	01-31-14
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-14
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

* Expired certification is currently pending renewal and is considered valid.

Test America Version 7/19/2010

CHAIN OF CUSTODY FORM

Client Name/Address:	Project:
Haley & Aldrich, Inc. 9040 Friars Road Suite 220 San Diego, CA 92108-5860 Test America Contact: Debby Wilson	Boeing-SSFL NPDES Quarterly Arroyo Simi-Frontier Park
Project Manager: Nancy Gardiner Sampler:	Phone Number: 619.285.7132, 858.337.4061(cell) Fax Number: 818.350.7340, 818.414.5608(cell)

Sample Description	Sample Matrix	Container Type	# of Cont.	Sample I.D.	Sampling Date/Time	Preservative	Bottle #	Hardness as $CaCO_3$	PCBs (608)	Chlorpyrifos, Diazinon (525.2)	Chlordane, Dieldrin, Toxaphene (608), 4,4-DDD, 4,4-DDE, 4,4-DDT							Comments
								ANALYSIS REQUIRED										Field readings: (Log in and include in report Temp and pH. Include units) Time of readings 1020 DO 5.30 pH 7.40 pH unit Temp 12.07°C
Arroyo Simi-FP	W	1L Poly	1	ArroyoSimi-FP-20131213	12/13/13 1020	HNO_3	1	X										
Arroyo Simi-FP	W	1L Amber	2	ArroyoSimi-FP-20131213	12/13/13 1020	None	2A, 2B		X									
Arroyo Simi-FP	W	1L Amber	2	ArroyoSimi-FP-20131213	12/13/13 1020	HCl	3A, 3B			X								Extract within 36-Hours of sampling
Arroyo Simi-FP	W	1L Amber	2	ArroyoSimi-FP-20131213	12/13/13 1020	None	4A, 4B				X							

Relinquished By	Date/Time:	Relinquished By	Date/Time:
Neal Smith	12/13/13 1315	Matt Crum	12-13-13 13:15
Relinquished By	Date/Time:	Relinquished By	Date/Time:
Matt Crum	12-13-13 15:40	[illegible]	12-13-13 1540
Relinquished By	Date/Time:	Relinquished By	Date/Time:

Turn around Time: (check)
24 Hours _____ 5 Days _____
48 Hours _____ 10 Days _____
72 Hours _____ Normal _____

Sample Integrity: (check)
Intact _____ On Ice: 6 / 5.2

Data Requirements: (check)
No Level IV ____ All Level IV ____
NPDES Level IV X

440-65111 Chain of Custody

12/13/13

Test America Version 7/19/2010

CHAIN OF CUSTODY FORM

Page 1 of 1

Client Name/Address:
Haley & Aldrich, Inc.
9040 Friars Road Suite 220
San Diego, CA 92108-5860

Test America Contact: Debby Wilson

Project Manager: Nancy Gardiner

Sampler:

Project:
Boeing-SSFL NPDES
Quarterly Arroyo Simi-Frontier Park

Phone Number:
619.285.7132, 858.337.4061(cell)
Fax Number:
818.350.7340, 818.414.5608(cell)

Sample Description	Sample Matrix	Container Type	# of Cont.	Sample I.D.	Sampling Date/Time	Preservative	Bottle #	Hardness as $CaCO_3$	PCBs (608)	Chlorpyrifos, Diazinon (525.2)	Chlordane, Dieldrin, Toxaphene (608), 4,4-DDD, 4,4-DDE, 4,4-DDT							Field readings: (Log in and include in report Temp and pH. Include units) Time of readings 1020 DO 5.30 pH 7.40 pH unit Temp 12.07°C **Comments**
Arroyo Simi-FP	W	1L Poly	1	ArroyoSimi-FP-20131213	12/13/13 1020	HNO_3	1	X										
Arroyo Simi-FP	W	1L Amber	2	ArroyoSimi-FP-20131213	12/13/13 1020	None	2A, 2B		X									
Arroyo Simi-FP	W	1L Amber	2	ArroyoSimi-FP-20131213	12/13/13 1020	HCl	3A, 3B			X								Extract within 36-Hours of sampling
Arroyo Simi-FP	W	1L Amber	2	ArroyoSimi-FP-20131213 KRM 12/17	12/13/13 1020	None	4A, 4B				X							
KRM 12/17																		Sample ID change to ArroyoSimi-20131213. No spaces in ID. KRM 12/17/13

Relinquished By: Neal Smith — Date/Time: 12/13/13 1315

Relinquished By: Mark Grant — Date/Time: 12-13-13 15:40

Relinquished By: — Date/Time:

Relinquished By: Mark Grant — Date/Time: 12-13-13 — 13.15

Relinquished By: — Date/Time: 12-13-13 1540

Relinquished By: — Date/Time:

Turn around Time: (check)
24 Hours ____ 5 Days ____
48 Hours ____ 10 Days ____
72 Hours ____ Normal ____

Sample Integrity: (check)
Intact ____ On Ice: 6 / 5.2

Data Requirements: (check)
No Level IV ____ All Level IV ____
NPDES Level IV X

440-65111 Chain of Custody

12/13/13

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 440-65111-1

Login Number: 65111

List Source: TestAmerica Irvine

List Number: 1

Creator: Avila, Stephanie

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	