

SECTION 10

ARROYO SIMI (FRONTIER PARK RECEIVING WATER)  
ANNUAL 2011 REPORTING SUMMARY

**ARROYO SIMI (Frontier Park Receiving Water)**

**ANNUAL 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

January 1 through December 31, 2011

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	2/24/2011			3/9/2011		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER	SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Water Velocity	ft/sec	-/-	Meas	0.02	*	ANR	ANR	ANR
Dissolved Oxygen	mg/L	/-	Grab	10.97	*	ANR	ANR	ANR
E. Coli	MPN/100 ml	235/-	Grab	300	--	Grab	220	--
Fecal Coliform	MPN/100 ml	400/-	Grab	300	--	Grab	220	--
pH (Field)	pH Units	6.5-8.5/-	Grab	7.5	*	ANR	ANR	ANR
Temperature	F	-/-	Grab	51	*	ANR	ANR	ANR
Total Cyanide	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Hardness	mg/L	-/-	Grab	950	--	ANR	ANR	ANR
Total Suspended Solids	mg/L	-/-	Grab	10	--	ANR	ANR	ANR
Calcium	mg/L	-/-	Grab	260	--	ANR	ANR	ANR
Magnesium	mg/L	-/-	Grab	76	--	ANR	ANR	ANR
4,4'-DDD	ug/L	0.0014/-	Grab	ND < 0.0043	*	ANR	ANR	ANR
4,4'-DDE	ug/L	0.001/-	Grab	ND < 0.0032	*	ANR	ANR	ANR
4,4'-DDT	ug/L	0.001/-	Grab	ND < 0.0043	*	ANR	ANR	ANR
Aroclor-1016	ug/L	0.0003/-	Grab	ND < 0.27	*	ANR	ANR	ANR
Aroclor-1221	ug/L	0.0003/-	Grab	ND < 0.27	*	ANR	ANR	ANR
Aroclor-1232	ug/L	0.0003/-	Grab	ND < 0.27	*	ANR	ANR	ANR
Aroclor-1242	ug/L	0.0003/-	Grab	ND < 0.27	*	ANR	ANR	ANR
Aroclor-1248	ug/L	0.0003/-	Grab	ND < 0.27	*	ANR	ANR	ANR
Aroclor-1254	ug/L	0.0003/-	Grab	ND < 0.27	*	ANR	ANR	ANR
Aroclor-1260	ug/L	0.0003/-	Grab	ND < 0.27	*	ANR	ANR	ANR
Chlordane	ug/L	0.001/-	Grab	ND < 0.085	*	ANR	ANR	ANR
Chlorpyrifos	ug/L	0.02/-	Grab	ND < 0.010	U	ANR	ANR	ANR
Diazinon	ug/L	0.16/-	Grab	ND < 0.10	U	ANR	ANR	ANR
Dieldrin	ug/L	0.0002/-	Grab	ND < 0.0021	*	ANR	ANR	ANR
Toxaphene	ug/L	0.0003/-	Grab	ND < 0.27	*	ANR	ANR	ANR

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THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

January 1 through December 31, 2011

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	3/14/2011			3/19/2011		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER	SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Water Velocity	ft/sec	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Dissolved Oxygen	mg/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
E. Coli	MPN/100 ml	235/-	Grab	23.0	*	Grab	>=1600	--
Fecal Coliform	MPN/100 ml	400/-	Grab	23.0	*	Grab	>=1600	--
pH (Field)	pH Units	6.5-8.5/-	ANR	ANR	ANR	ANR	ANR	ANR
Temperature	F	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Total Cyanide	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Hardness	mg/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Total Suspended Solids	mg/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Calcium	mg/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Magnesium	mg/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
4,4'-DDD	ug/L	0.0014/-	ANR	ANR	ANR	ANR	ANR	ANR
4,4'-DDE	ug/L	0.001/-	ANR	ANR	ANR	ANR	ANR	ANR
4,4'-DDT	ug/L	0.001/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1016	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1221	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1232	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1242	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1248	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1254	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1260	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR
Chlordane	ug/L	0.001/-	ANR	ANR	ANR	ANR	ANR	ANR
Chlorpyrifos	ug/L	0.02/-	ANR	ANR	ANR	ANR	ANR	ANR
Diazinon	ug/L	0.16/-	ANR	ANR	ANR	ANR	ANR	ANR
Dieldrin	ug/L	0.0002/-	ANR	ANR	ANR	ANR	ANR	ANR
Toxaphene	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR

**ARROYO SIMI (Frontier Park Receiving Water)**

**ANNUAL 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

January 1 through December 31, 2011

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	3/24/2011			3/29/2011		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER	SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Water Velocity	ft/sec	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Dissolved Oxygen	mg/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
E. Coli	MPN/100 ml	235/-	Grab	>=1600	--	Grab	70.0	--
Fecal Coliform	MPN/100 ml	400/-	Grab	>=1600	--	Grab	140	--
pH (Field)	pH Units	6.5-8.5/-	ANR	ANR	ANR	ANR	ANR	ANR
Temperature	F	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Total Cyanide	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Hardness	mg/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Total Suspended Solids	mg/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Calcium	mg/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Magnesium	mg/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
4,4'-DDD	ug/L	0.0014/-	ANR	ANR	ANR	ANR	ANR	ANR
4,4'-DDE	ug/L	0.001/-	ANR	ANR	ANR	ANR	ANR	ANR
4,4'-DDT	ug/L	0.001/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1016	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1221	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1232	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1242	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1248	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1254	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1260	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR
Chlordane	ug/L	0.001/-	ANR	ANR	ANR	ANR	ANR	ANR
Chlorpyrifos	ug/L	0.02/-	ANR	ANR	ANR	ANR	ANR	ANR
Diazinon	ug/L	0.16/-	ANR	ANR	ANR	ANR	ANR	ANR
Dieldrin	ug/L	0.0002/-	ANR	ANR	ANR	ANR	ANR	ANR
Toxaphene	ug/L	0.0003/-	ANR	ANR	ANR	ANR	ANR	ANR

**ARROYO SIMI (Frontier Park Receiving Water)**

**ANNUAL 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

January 1 through December 31, 2011

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	4/4/2011			5/12/2011		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER	SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Water Velocity	ft/sec	-/-	ANR	ANR	ANR	ANR	0.05	*
Dissolved Oxygen	mg/L	/-	ANR	ANR	ANR	ANR	ANR	ANR
E. Coli	MPN/100 ml	235/-	Grab	110	*	ANR	ANR	ANR
Fecal Coliform	MPN/100 ml	400/-	Grab	170	*	ANR	ANR	ANR
pH (Field)	pH Units	6.5-8.5/-	ANR	ANR	ANR	Grab	7.8	*
Temperature	F	-/-	ANR	ANR	ANR	Grab	56	*
Total Cyanide	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Hardness	mg/L	-/-	ANR	ANR	ANR	Grab	930	--
Total Suspended Solids	mg/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Calcium	mg/L	-/-	ANR	ANR	ANR	Grab	240	--
Magnesium	mg/L	-/-	ANR	ANR	ANR	Grab	82	--
4,4'-DDD	ug/L	0.0014/-	ANR	ANR	ANR	Grab	ND < 0.0038	UJ (C)
4,4'-DDE	ug/L	0.001/-	ANR	ANR	ANR	Grab	ND < 0.0028	U
4,4'-DDT	ug/L	0.001/-	ANR	ANR	ANR	Grab	ND < 0.0038	U
Aroclor-1016	ug/L	0.0003/-	ANR	ANR	ANR	Grab	ND < 0.24	U
Aroclor-1221	ug/L	0.0003/-	ANR	ANR	ANR	Grab	ND < 0.24	U
Aroclor-1232	ug/L	0.0003/-	ANR	ANR	ANR	Grab	ND < 0.24	U
Aroclor-1242	ug/L	0.0003/-	ANR	ANR	ANR	Grab	ND < 0.24	U
Aroclor-1248	ug/L	0.0003/-	ANR	ANR	ANR	Grab	ND < 0.24	U
Aroclor-1254	ug/L	0.0003/-	ANR	ANR	ANR	Grab	ND < 0.24	U
Aroclor-1260	ug/L	0.0003/-	ANR	ANR	ANR	Grab	ND < 0.24	U
Chlordane	ug/L	0.001/-	ANR	ANR	ANR	Grab	ND < 0.075	U
Chlorpyrifos	ug/L	0.02/-	ANR	ANR	ANR	Grab	ND < 0.010	U
Diazinon	ug/L	0.16/-	ANR	ANR	ANR	Grab	ND < 0.10	UJ (H)
Dieldrin	ug/L	0.0002/-	ANR	ANR	ANR	Grab	ND < 0.0019	U
Toxaphene	ug/L	0.0003/-	ANR	ANR	ANR	Grab	ND < 0.24	U

**ARROYO SIMI (Frontier Park Receiving Water)**

**ANNUAL 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

January 1 through December 31, 2011

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	8/9/2011			11/10/2011		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER	SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Water Velocity	ft/sec	-/-	ANR	NM	*	ANR	2.86	*
Dissolved Oxygen	mg/L	/-	ANR	ANR	ANR	ANR	ANR	ANR
E. Coli	MPN/100 ml	235/-	ANR	ANR	ANR	ANR	ANR	ANR
Fecal Coliform	MPN/100 ml	400/-	ANR	ANR	ANR	ANR	ANR	ANR
pH (Field)	pH Units	6.5-8.5/-	Grab	7.4	*	Grab	7.3	*
Temperature	F	-/-	Grab	68	*	Grab	64	*
Total Cyanide	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Hardness	mg/L	-/-	Grab	730	--	Grab	820	--
Total Suspended Solids	mg/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Calcium	mg/L	-/-	Grab	190	--	Grab	220	--
Magnesium	mg/L	-/-	Grab	63	--	Grab	66	--
4,4'-DDD	ug/L	0.0014/-	Grab	ND < 0.0038	*	Grab	ND < 0.0038	*
4,4'-DDE	ug/L	0.001/-	Grab	ND < 0.0028	*	Grab	ND < 0.0029	*
4,4'-DDT	ug/L	0.001/-	Grab	ND < 0.0038	*	Grab	ND < 0.0038	C5* (C5)
Aroclor-1016	ug/L	0.0003/-	Grab	ND < 0.24	*	Grab	ND < 0.24	*
Aroclor-1221	ug/L	0.0003/-	Grab	ND < 0.24	*	Grab	ND < 0.24	*
Aroclor-1232	ug/L	0.0003/-	Grab	ND < 0.24	*	Grab	ND < 0.24	*
Aroclor-1242	ug/L	0.0003/-	Grab	ND < 0.24	*	Grab	ND < 0.24	*
Aroclor-1248	ug/L	0.0003/-	Grab	ND < 0.24	*	Grab	ND < 0.24	*
Aroclor-1254	ug/L	0.0003/-	Grab	ND < 0.24	*	Grab	ND < 0.24	*
Aroclor-1260	ug/L	0.0003/-	Grab	ND < 0.24	*	Grab	ND < 0.24	*
Chlordane	ug/L	0.001/-	Grab	ND < 0.075	*	Grab	ND < 0.076	*
Chlorpyrifos	ug/L	0.02/-	Grab	ND < 0.080	U	Grab	ND < 0.080	*
Diazinon	ug/L	0.16/-	Grab	ND < 0.040	U	Grab	ND < 0.040	*
Dieldrin	ug/L	0.0002/-	Grab	ND < 0.0019	*	Grab	ND < 0.0019	*
Toxaphene	ug/L	0.0003/-	Grab	ND < 0.24	*	Grab	ND < 0.24	*

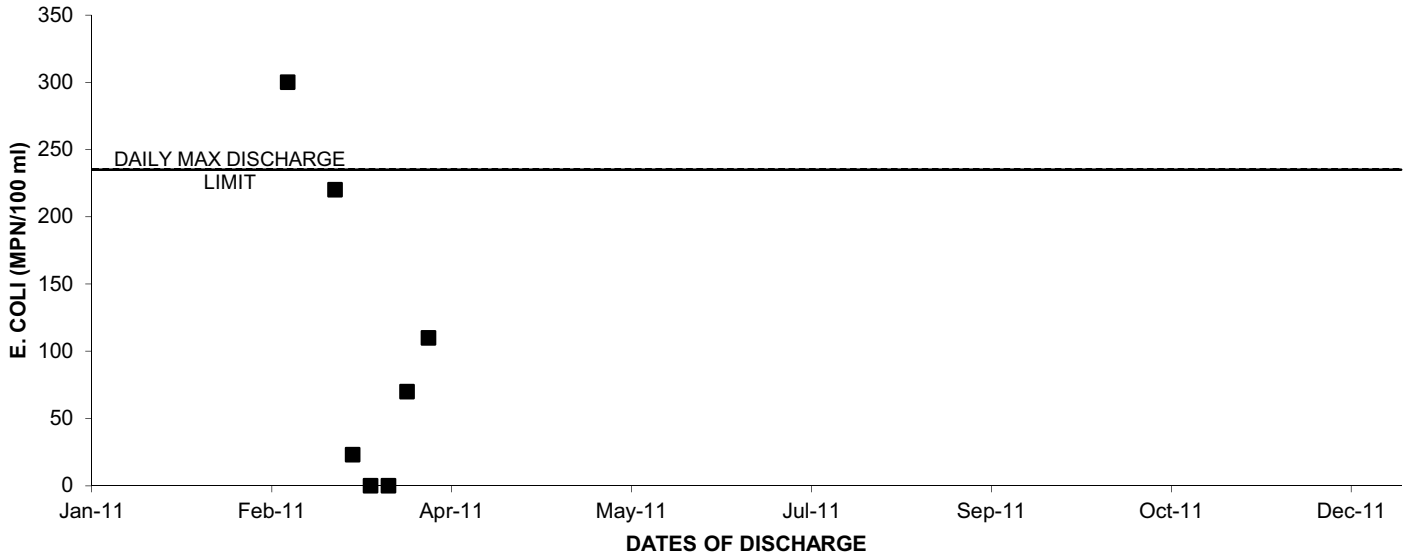
## ARROYO SIMI SEDIMENT (Frontier Park Receiving Water)

### ANNUAL 2011 REPORTING SUMMARY THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

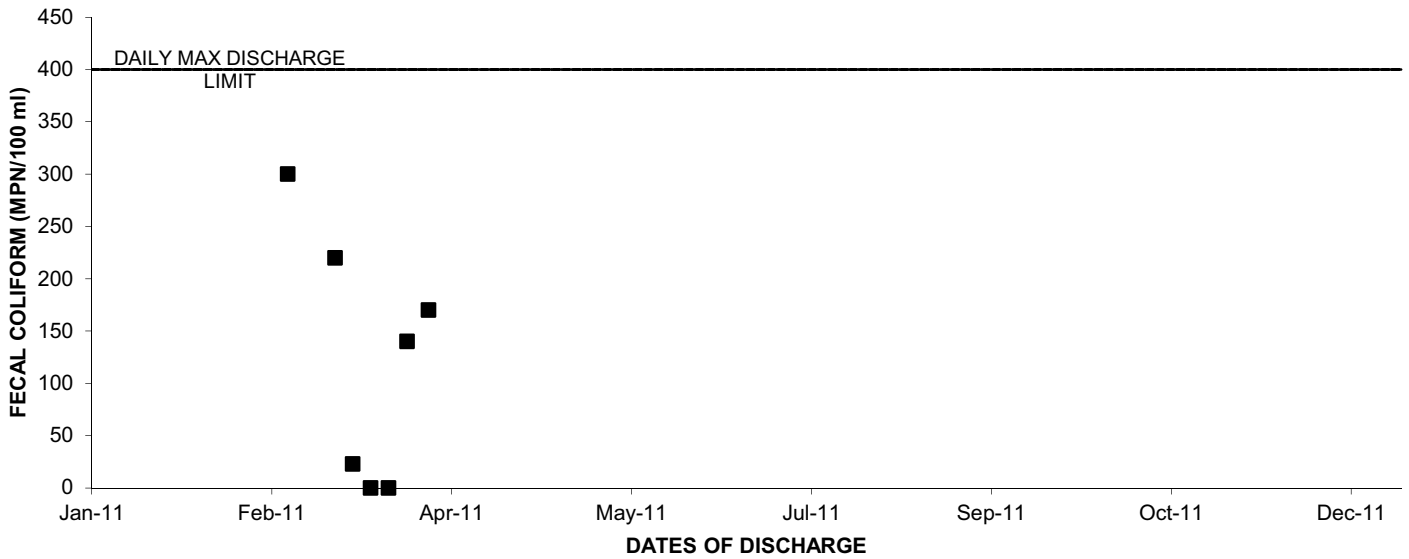
January 1 through December 31, 2011

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	2/24/2011		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Water Velocity	ft/sec	-/-	Meas	0.02	*
Ammonia as Nitrogen (N)	mg/kg	-/-	Grab	2.0	J (DNQ)
Dissolved Oxygen	mg/L	-/-	Grab	8.51	*
pH (Field)	pH Units	-/-	Grab	7.8	*
Temperature	F	-/-	Grab	50	*
Conductivity (Field)	umhos/cm	-/-	Grab	1230	*
Total Organic Carbon	mg/kg	-/-	Grab	ND < 1700	*
Percent Moisture	%	-/-	Grab	22	*
4,4'-DDD	ug/kg	14/-	Grab	ND < 1.5	*
4,4'-DDE	ug/kg	170/-	Grab	ND < 1.5	*
4,4'-DDT	ug/kg	25/-	Grab	ND < 1.5	*
Aroclor-1016	ug/kg	25700/-	Grab	ND < 14	*
Aroclor-1221	ug/kg	25700/-	Grab	ND < 14	*
Aroclor-1232	ug/kg	25700/-	Grab	ND < 14	*
Aroclor-1242	ug/kg	25700/-	Grab	ND < 14	*
Aroclor-1248	ug/kg	25700/-	Grab	ND < 14	*
Aroclor-1254	ug/kg	25700/-	Grab	ND < 14	*
Aroclor-1260	ug/kg	25700/-	Grab	ND < 14	*
Chlordane	ug/kg	3.3/-	Grab	ND < 10	*
Dieldrin	ug/kg	1.1/-	Grab	ND < 1.5	*
Toxaphene	ug/kg	230/-	Grab	ND < 50	*
Sediment toxicity	%	-/-	Grab	100	*
Bivalve Embryo toxicity	%	-/-	Grab	100	*
<b>PARTICLE SIZE DISTRIBUTION</b>					
Gravel	%	-/-	Grab	5.49	*
Coarse Sand	%	-/-	Grab	10.72	*
Medium Sand	%	-/-	Grab	79.39	*
Fine Sand	%	-/-	Grab	3.95	*
Silt/Clay	%	-/-	Grab	0.44	*

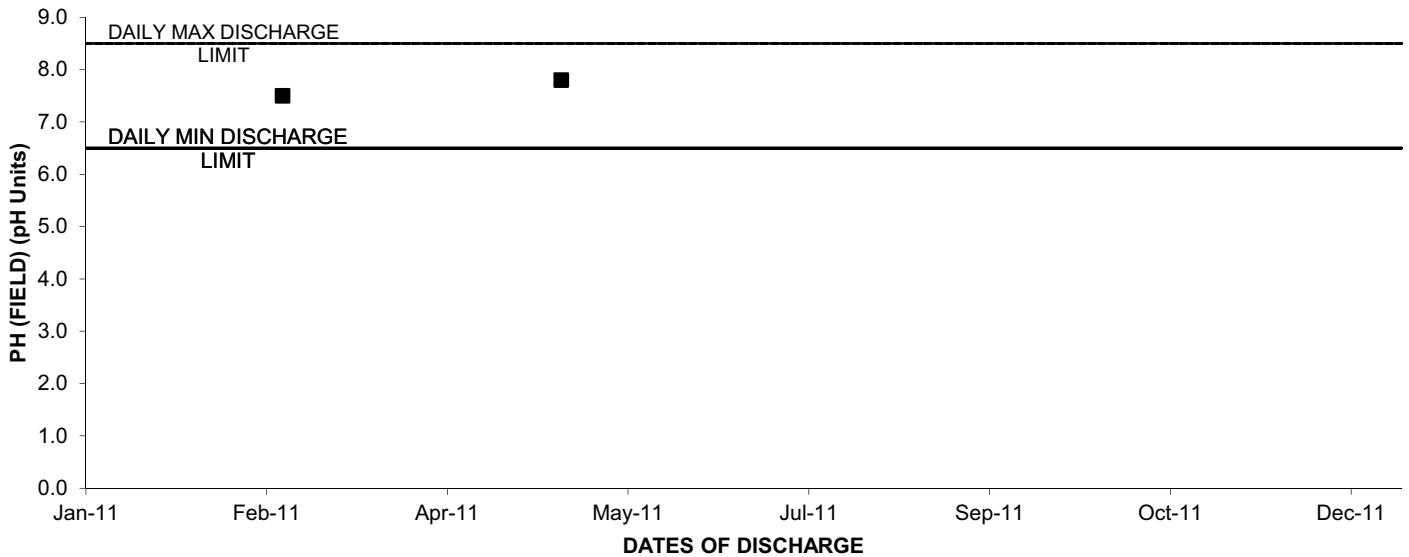
### 2011: ARROYO SIMI E. COLI



### 2011: ARROYO SIMI FECAL COLIFORM

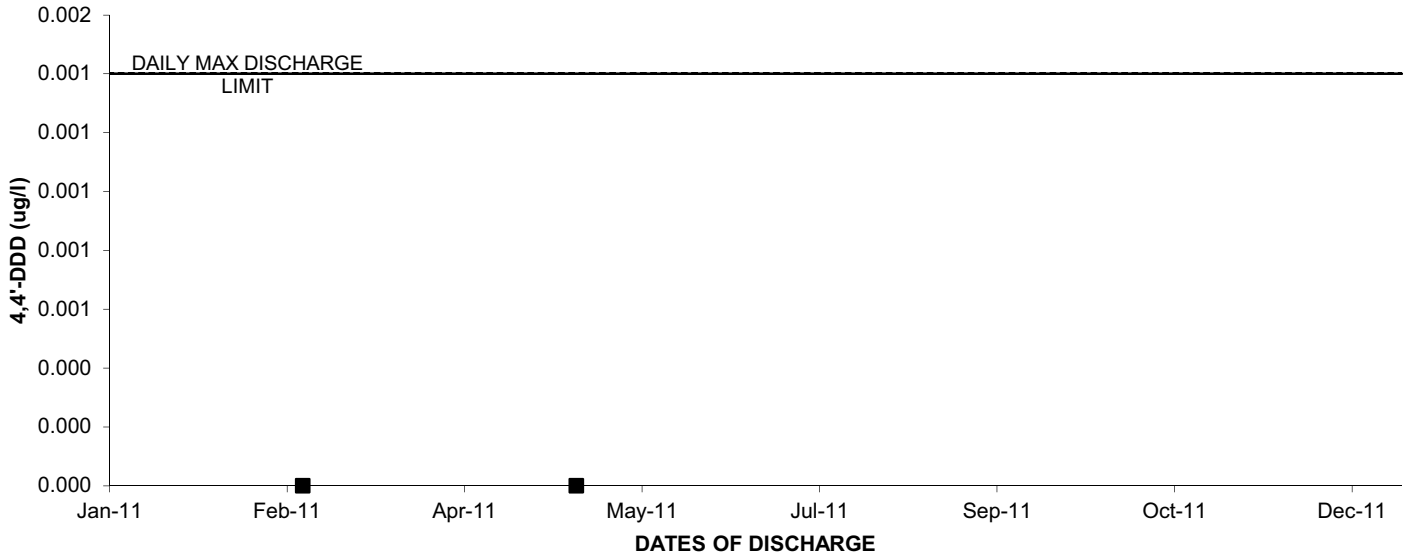


### 2011: ARROYO SIMI PH (FIELD)

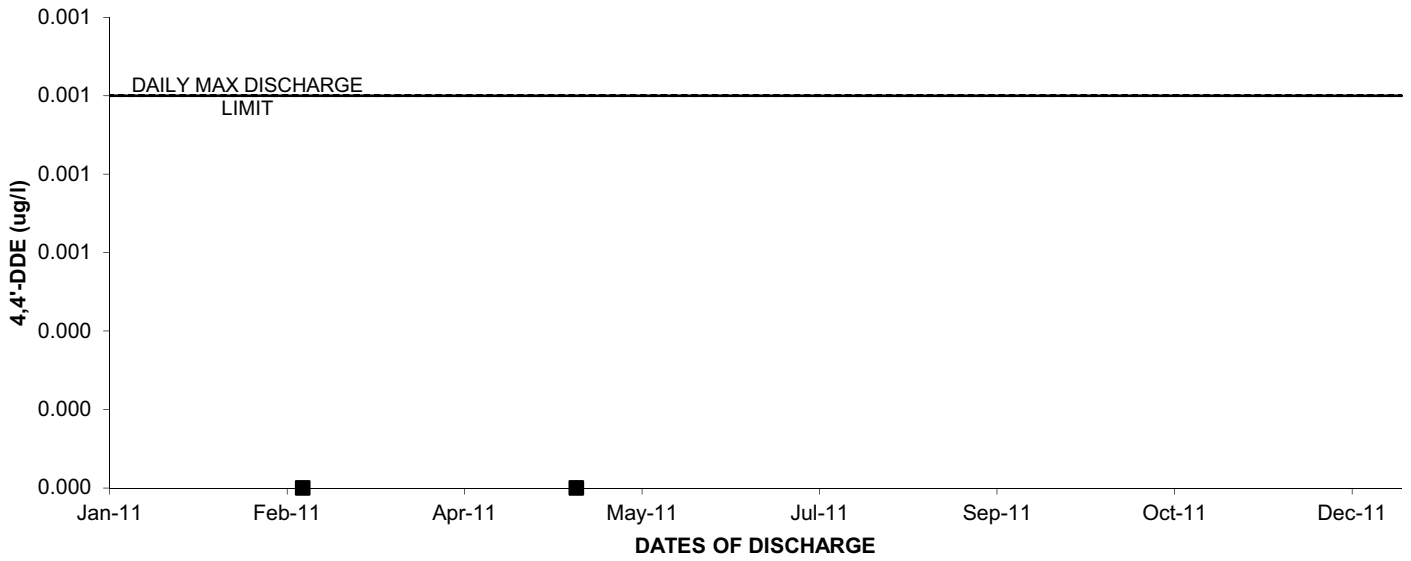




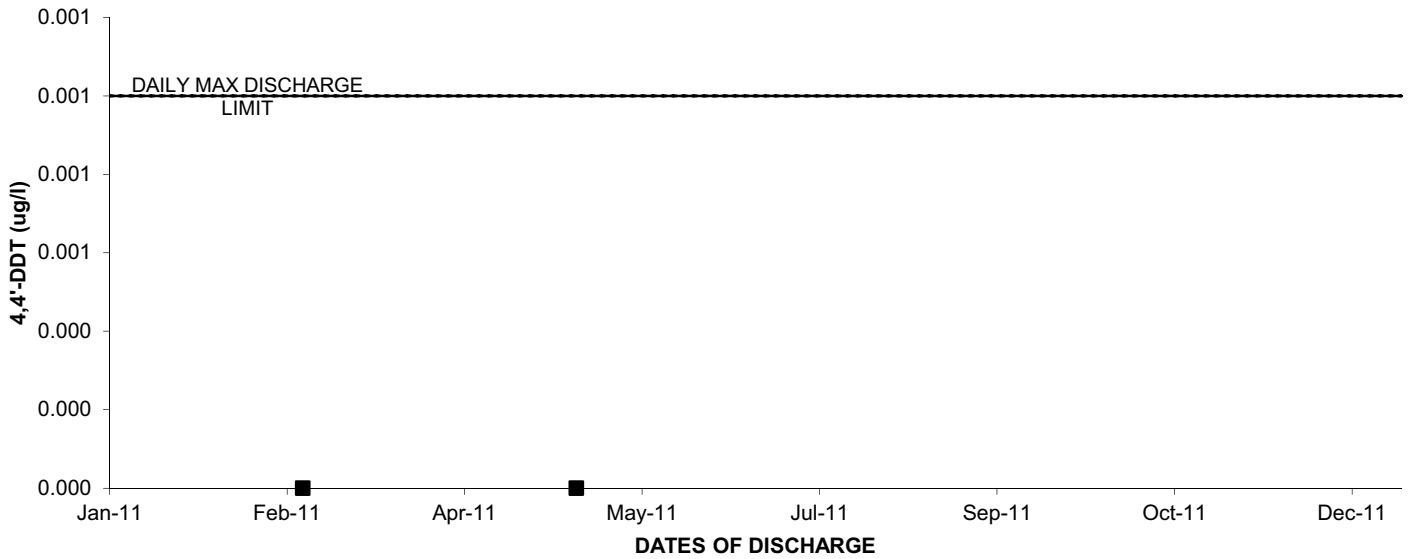
2011: ARROYO SIMI 4,4'-DDD



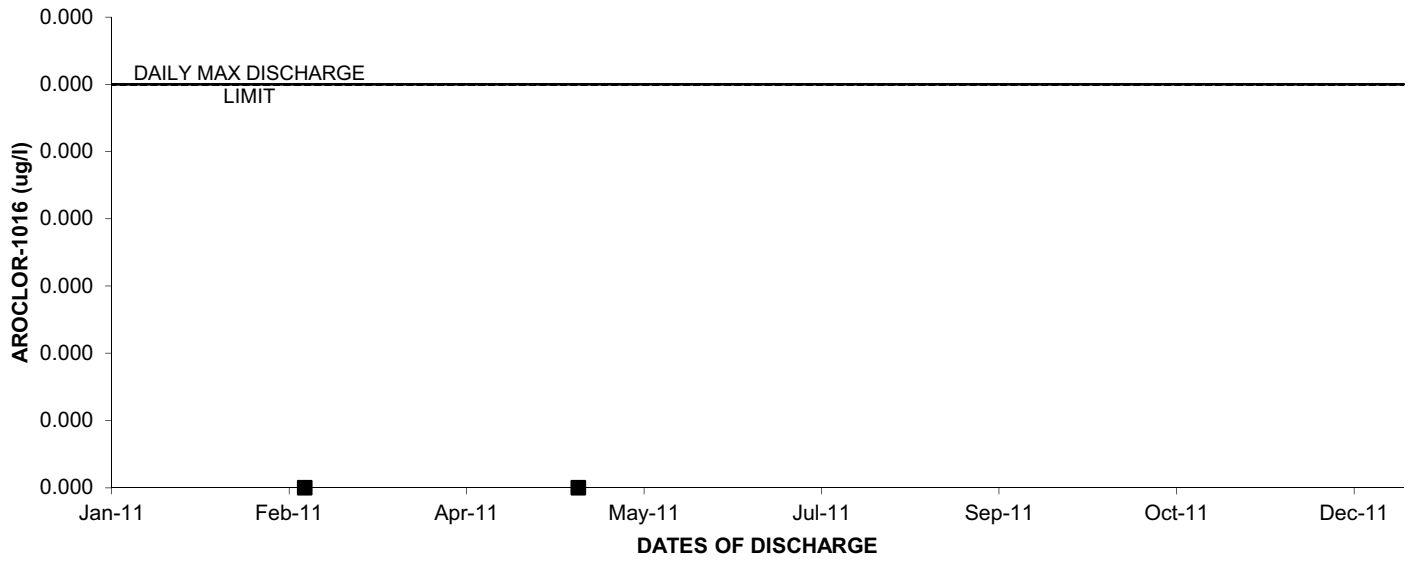
2011: ARROYO SIMI 4,4'-DDE



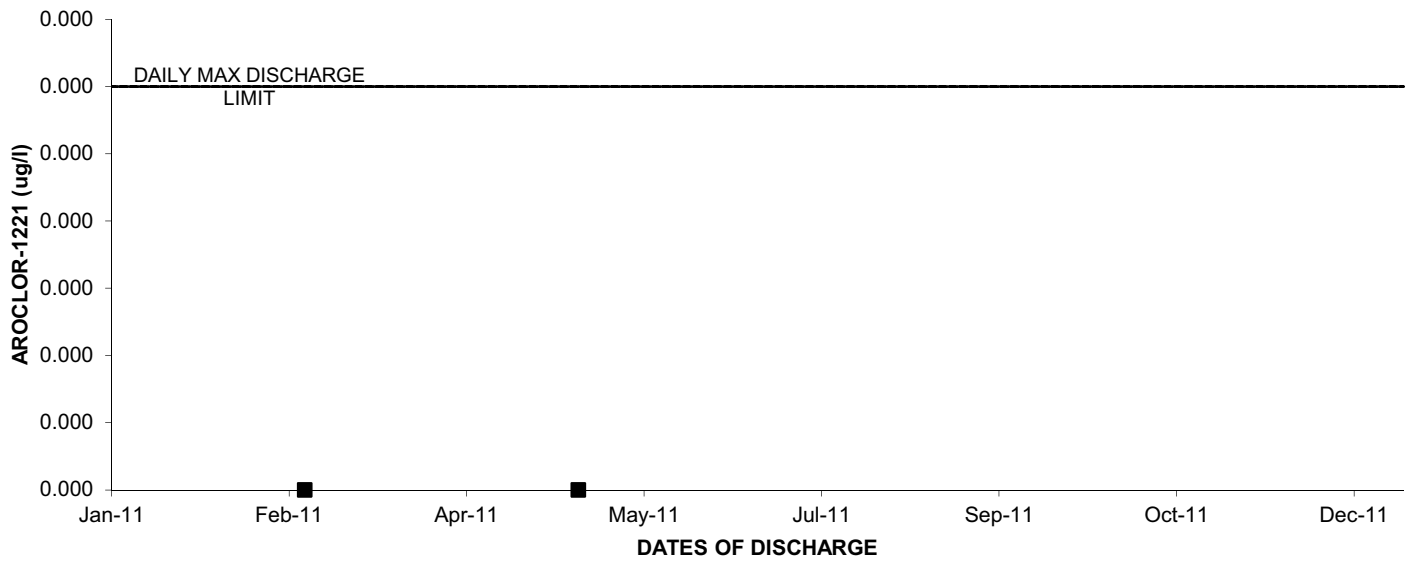
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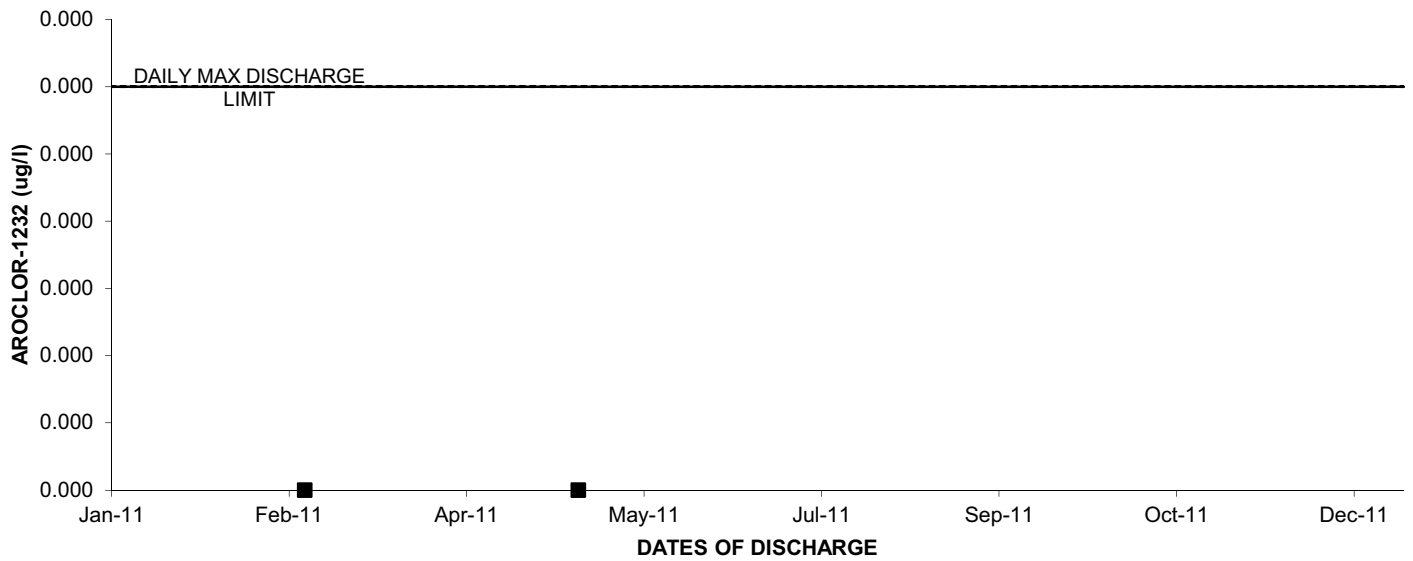
2011: ARROYO SIMI AROCLOR-1016



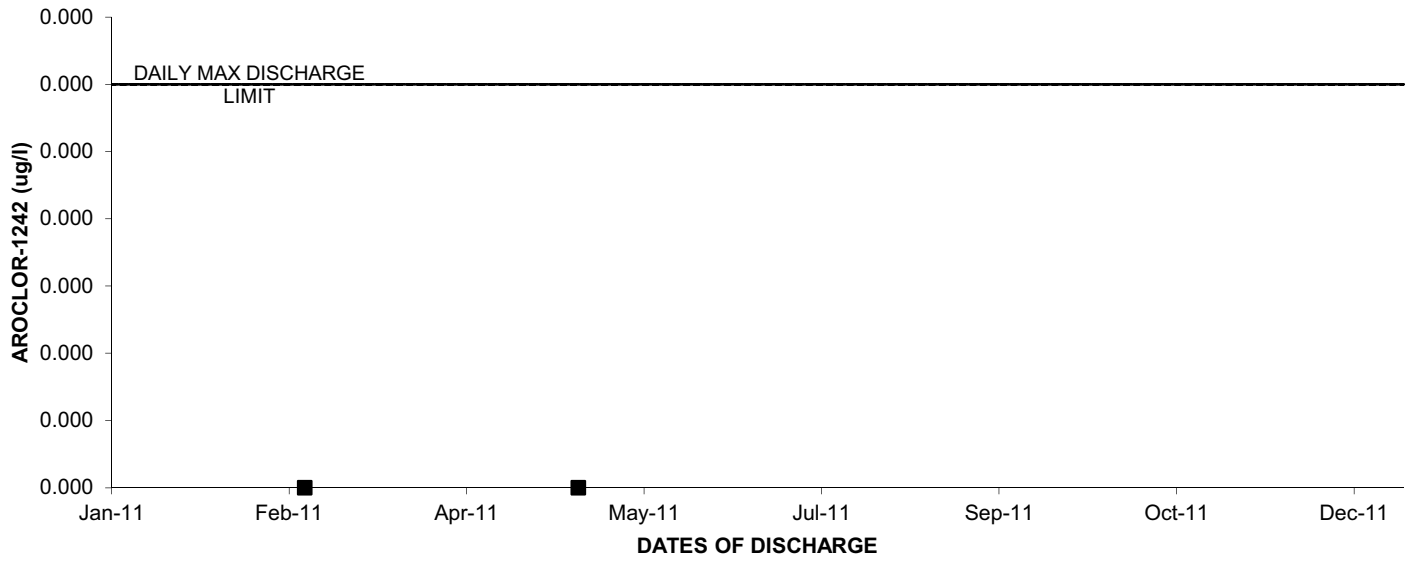
2011: ARROYO SIMI AROCLOR-1221



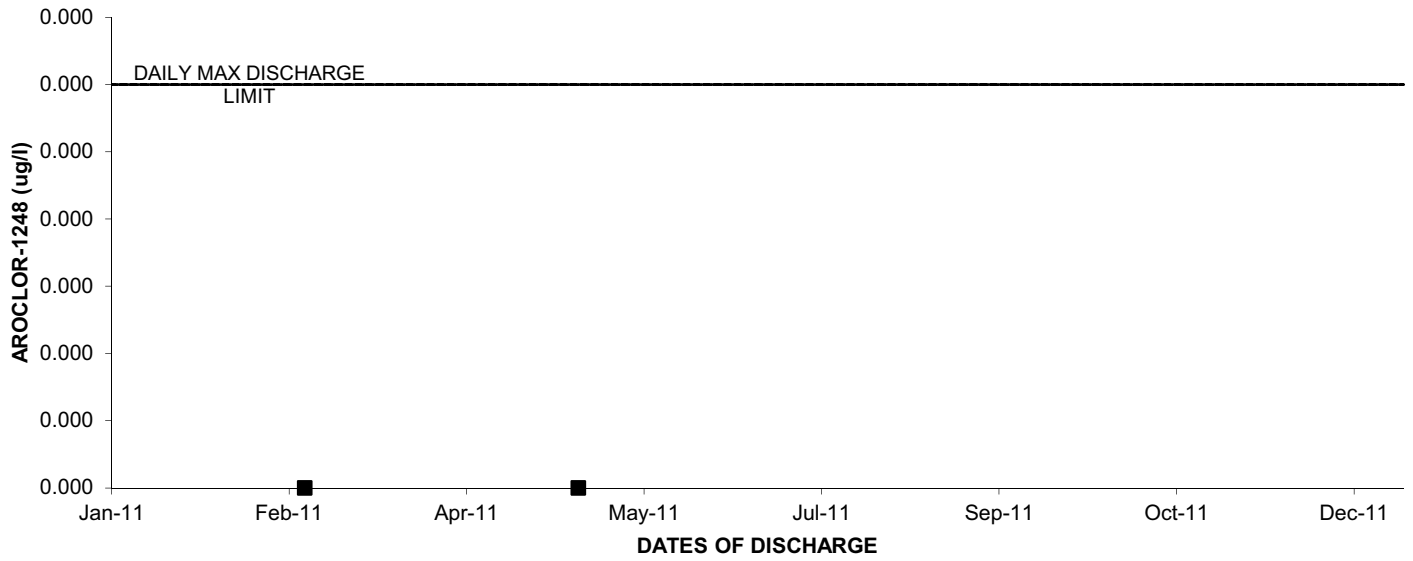
2011: ARROYO SIMI AROCLOR-1232



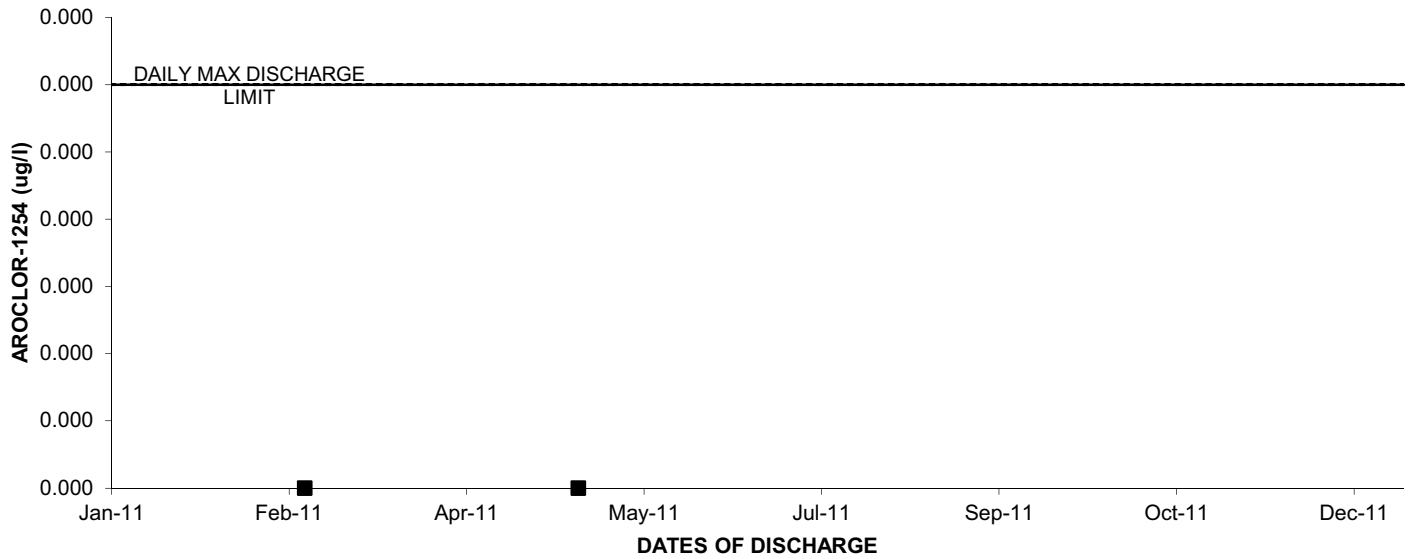
2011: ARROYO SIMI AROCLOR-1242



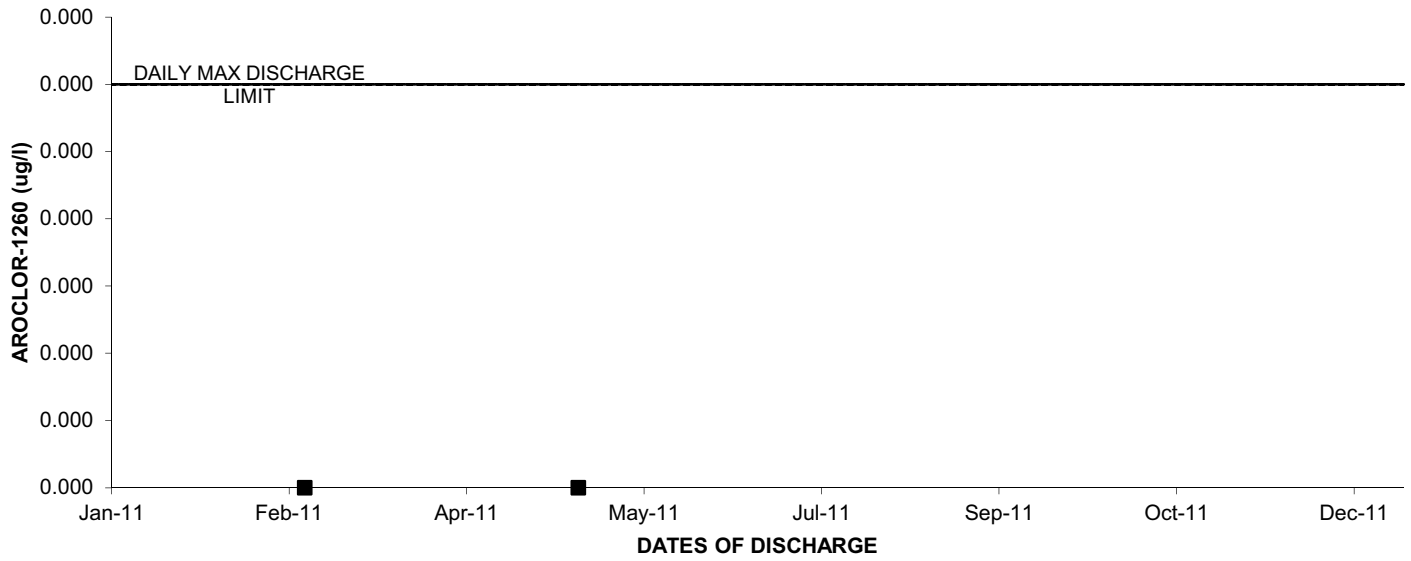
2011: ARROYO SIMI AROCLOR-1248



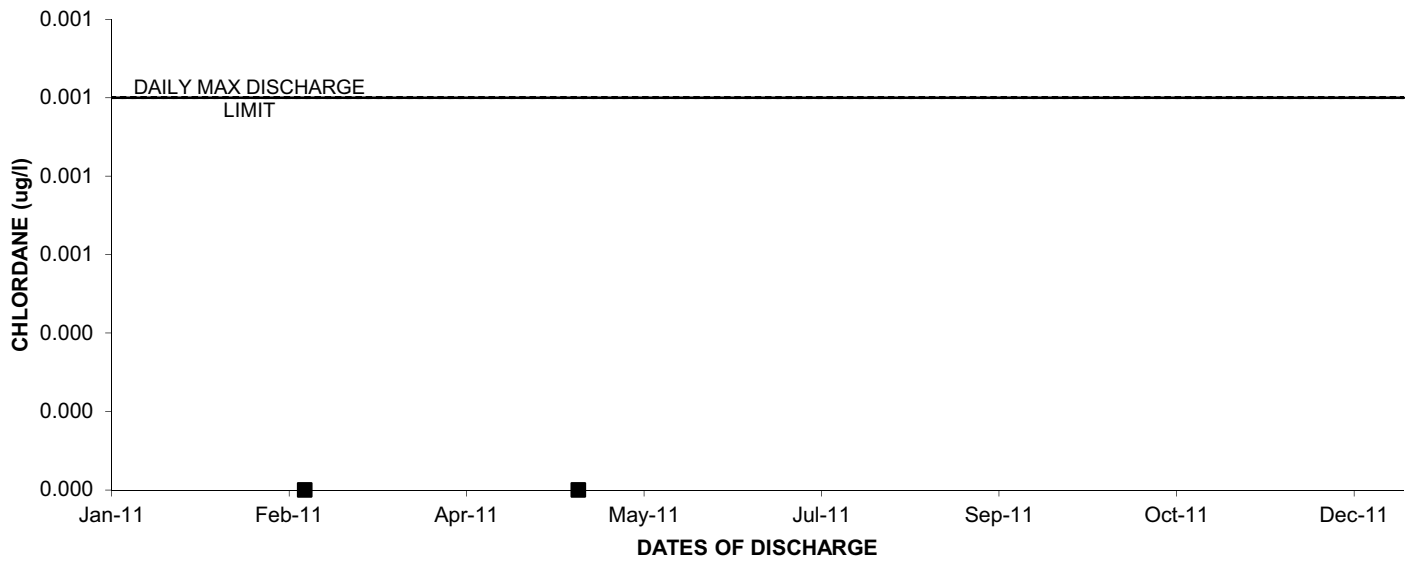
2011: ARROYO SIMI AROCLOR-1254



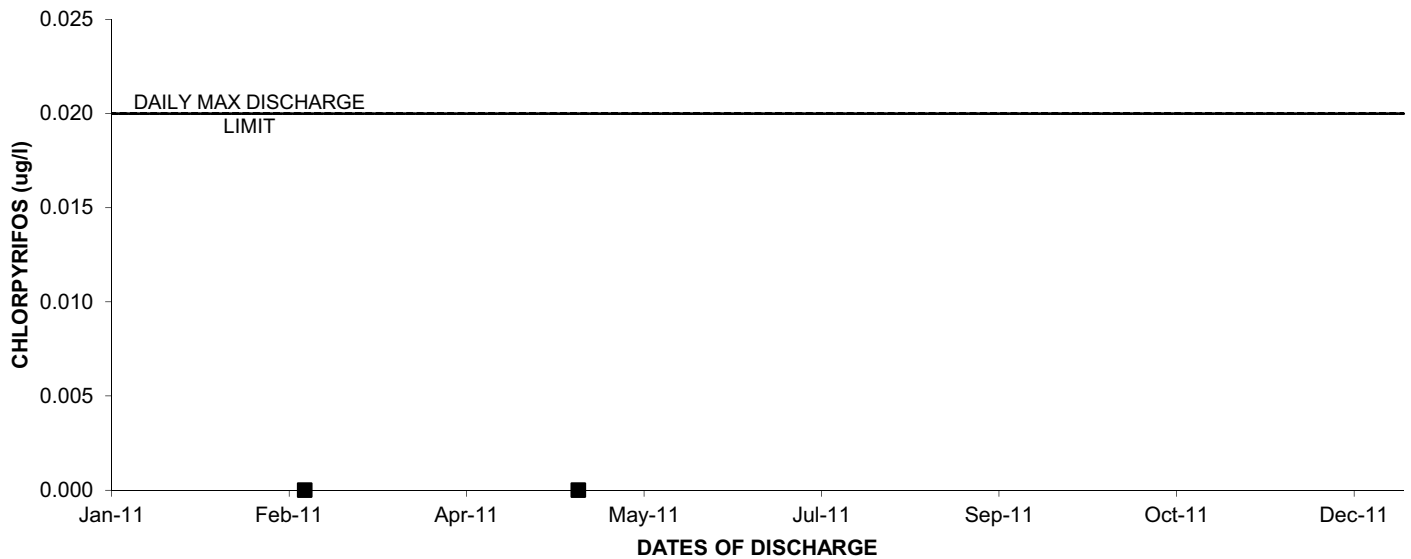
2011: ARROYO SIMI AROCLOR-1260



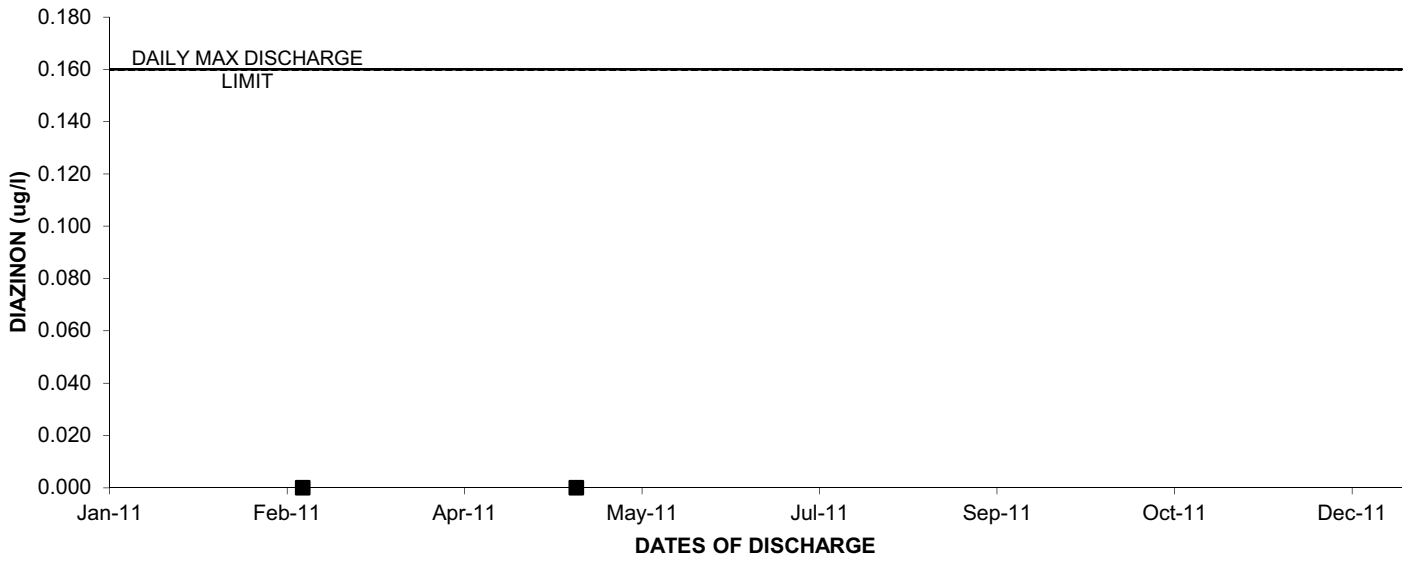
2011: ARROYO SIMI CHLORDANE



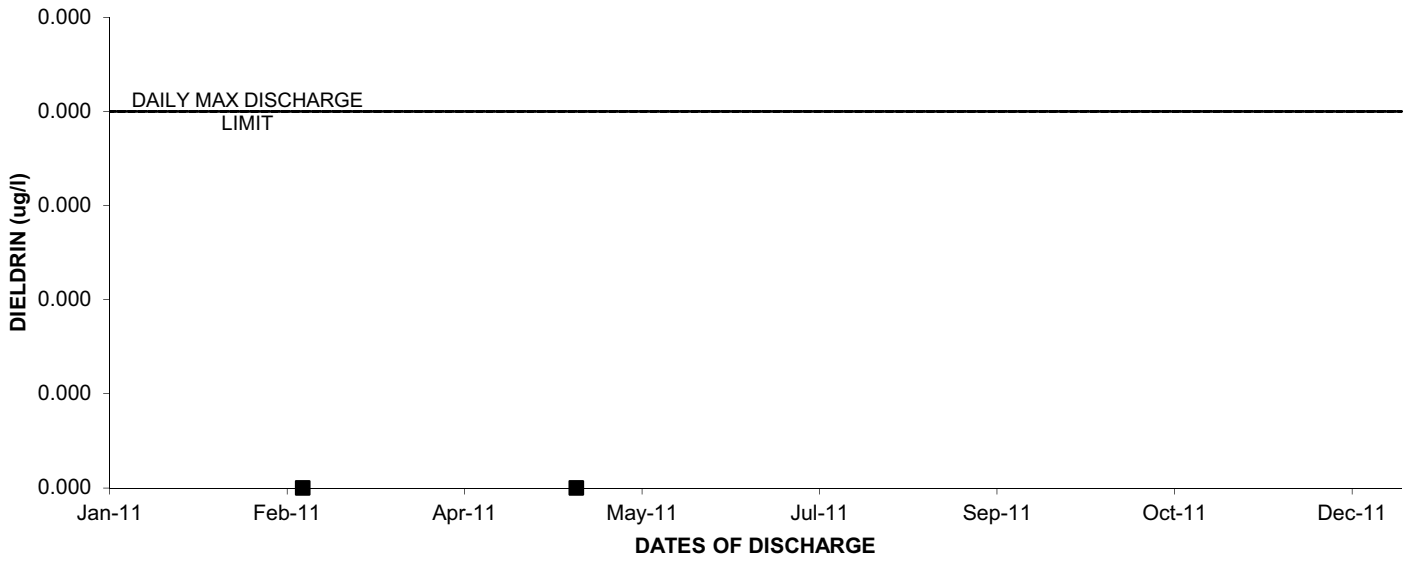
2011: ARROYO SIMI CHLORPYRIFOS



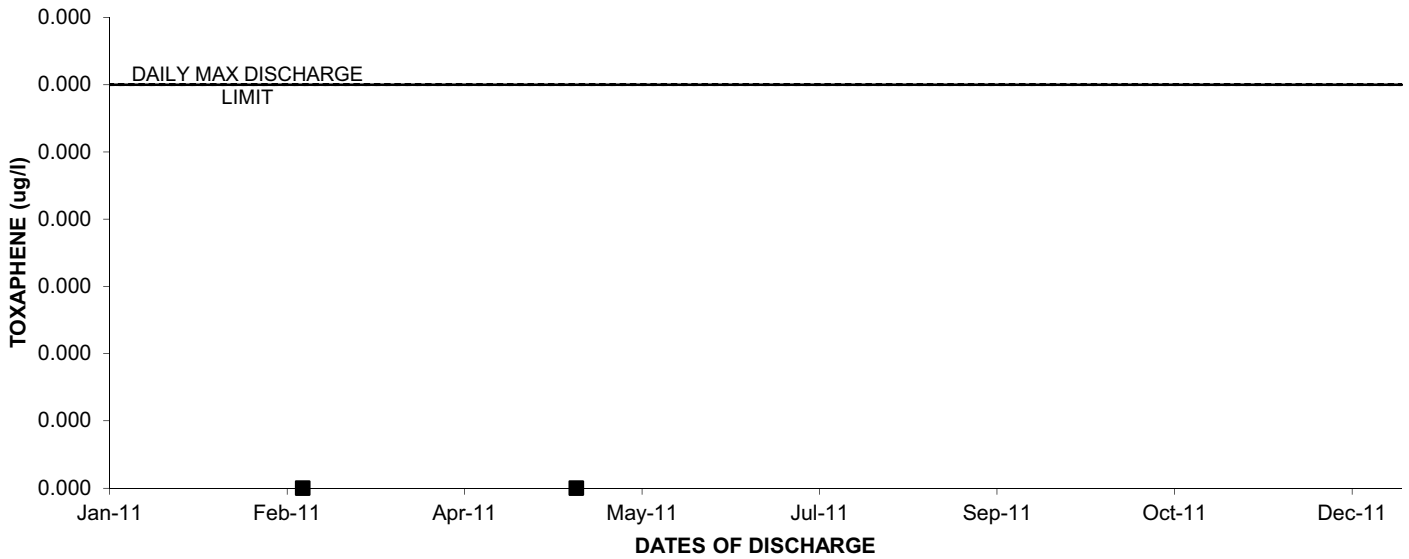
### 2011: ARROYO SIMI DIAZINON



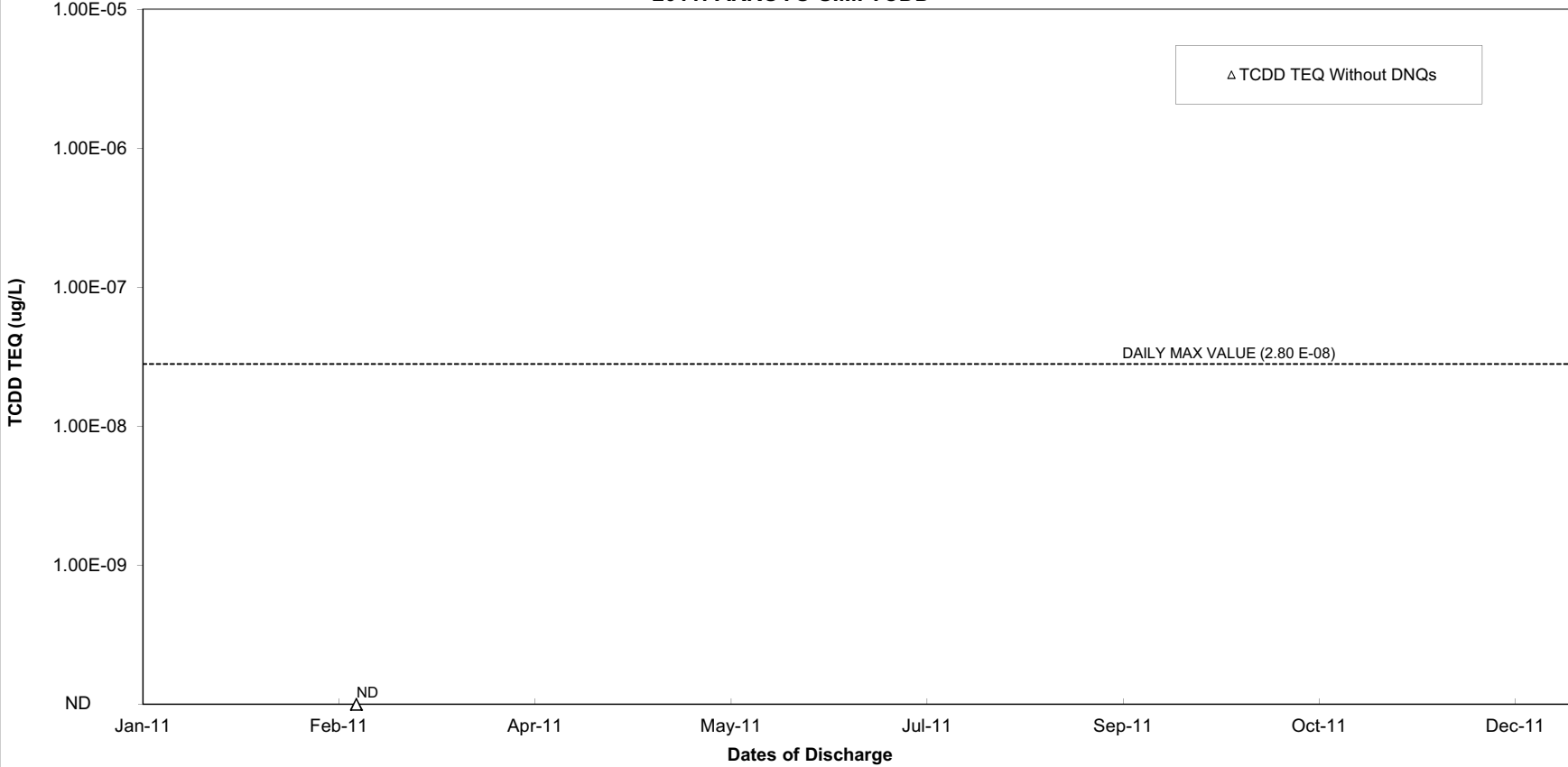
### 2011: ARROYO SIMI DIELDRIN



### 2011: ARROYO SIMI TOXAPHENE



2011: ARROYO SIMI TCDD



## SECTION 11

### 2011 REASONABLE POTENTIAL ANALYSIS SUMMARY

**2011 REASONABLE POTENTIAL ANALYSIS SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

1. The following Reasonable Potential Analysis (RPA) provides the analytical results as performed by the procedures outlined in *Reasonable Potential Analysis Methodology Technical Memo* (MWH and Flow Science, 2006).
2. The monitoring data set utilized to conduct the RPA consists of all applicable and relevant data from August 2004 through the present reporting quarter.
3. As directed by the CTR and the Regional Water Control Board 2,3,7,8-TCDD (Dioxin) values are to be expressed in NPDES permitting and this RPA as TCDD Total Equivalence units (TEQs). A TCDD TEQ is determined by multiplying each of the seventeen dioxin and furan congeners by their respective total equivalence factor (TEF), and summing the results of those products. For the purposes of this RPA, the resulting TCDD TEQ does not include those congener concentrations that are reported as DNQ, as specified on Page 46, Section D of the NPDES Permit Effective April 28, 2006, and Page 56, Section D of the NPDES Permit Effective December 20, 2007.
4. In calculating the average, standard deviation, coefficient of variation, and projected maximum effluent concentration (99/99), one-half of the MDL was used for concentration results reported as ND. Data reported with qualifiers were not included in this RPA as Boeing believes qualified data are not “appropriate, valid, relevant, (nor) representative”<sup>1</sup> of storm water constituents and are therefore not utilized in its RPA.
5. All of the following abbreviations and/or notes may not occur on every table.

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Definition of Acronyms, Abbreviations, and Terminology Used

>=	Greater than or equal to
*	Freshwater aquatic life criteria for metals are expressed as a function of total hardness (mg/L) in the water body. The equations are provided in the CTR, (US EPA, 2000). Values displayed correspond to a total hardness of 100 mg/l.
µg/L	Concentration units, micrograms per liter
All Data Qualified	All available monitoring data are qualified and no statistical analysis is performed.
Annually	The 2007 NPDES Permit requires annual monitoring.
Available Data < DL	All available monitoring data that are not qualified are below detection limits.
B	Background
C	Concentration
CCC	Criterion Continuous Concentration
CMC	Criterion Maximum Concentration
CTR	California Toxics Rule
CV	Coefficient of Variation
DL	Detection Limit
EPA TSD	EPA’s Technical Support Document for Water Quality Based Toxics Control, (see references).

<sup>1</sup> SIP, p. 5.



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Definition of Acronyms, Abbreviations, and Terminology Used (Continued)

Fibers/L	Units for asbestos concentration, fibers per liter
HH O	Human Health criteria for consumption of Organisms only
HH W&O	Human Health criteria for consumption of Water and Organisms
MEC	Maximum Observed Effluent Concentration
Min	Minimum
NA	Not Applicable
Narrative	Water quality criteria are expressed as a narrative objective rather than a numeric objective, and therefore are not part of the statistical RPA calculations.
None	No available CTR or Basin Plan criteria.
pH Dependent	CTR Criteria are based on pH.
Once Per Discharge	The 2007 NPDES Permit requires monitoring once per discharge event.
Qualified Data	Data qualifier definitions are: (a) J- The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL), (b) U/UJ- The analyte was not detected in the sample at the detection limit /estimated detection limit (EDL), (c) B- Analyte found in sample and associated blank, and (d) DNQ- Detected Not Quantified.
Reserved	EPA has reserved the CTR criteria.
RPA	Reasonable Potential Analysis
SIP	The State Water Resources Control Board "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California," (see references).
Tot	Total

Priority Pollutant RPA Column Explanation

CTR	Provides CTR constituent reference number.
Constituent	Provides CTR constituent common name.
Units	Provides the data set's concentration units as referenced by 2007 NPDES Permit.
MEC	Provides the outfall monitoring group's maximum value from the applicable data set.
CV	Equal to the standard deviation divided by the average of the applicable data set. If the number of samples is less than 10, the CV is assumed to be 0.6.
<i>Step 1 identifies all applicable water quality criteria.</i>	
CTR Criteria	Concentration criteria as listed in the CTR.
CMC = Acute	The Freshwater CMC is listed as the acute concentration criterion.
CCC = Chronic	The Freshwater CCC is listed as the chronic concentration criterion.
HH W& O(Not App)	The HH W&O is deemed not applicable based on past Regional Board RPAs.
HH O = HH	The HH O is listed as the CTR human health concentration criterion.
Basin Plan Criteria	Applicable Basin Plan Criteria are listed for the Los Angeles River and/or Calleguas Creek watersheds.

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C = Lowest Criteria	The comparison concentration (C) is equal to the lowest criterion for a constituent based on the CMC, CCC, HH O, and Basin Plan Criteria listed.
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**Priority Pollutant RPA Column Explanation (Continued)**

<i>Step 2 defines the applicable data set.</i>	
Is Effluent Data Available	If there is available monitoring data that is not qualified and above DL, then YES. If not, then NO.
<i>Step 3 determines the maximum observed effluent concentration.</i>	
Was Constituent Detected in Effluent Data	If the constituent was detected, then YES. If all monitoring data are non-detect or qualified then NO.
Are all DL >C	If constituent was detected in effluent data then not applicable (NA). If constituent was not detected and all analysis detection limits are less than the comparison concentration, then YES, if not then NO.
If DL > C MEC = Min (DL)	If the previous cell answer was yes, then the MEC is equal to the minimum detection limit. If not, then NA.
<i>Step 4 compares the MEC to the lowest applicable water quality criteria.</i>	
MEC >= C	If the MEC is greater than or equal to the comparison concentration then YES, if not then NO.
Tier 1 – Need limit?	If the preceding cell was YES, then YES.

Note: Steps 5 and 6 of the Priority Pollutant RPA do not apply to Boeing SSFL because the Regional Board gives no consideration for receiving water background constituent concentrations. Furthermore, Boeing SSFL defers the application of best professional judgment in Step 7 and final determination of reasonable potential in Step 8 to the Regional Board Staff.

**Nonpriority Pollutant RPA Column Explanation**

Constituent	Provides the Non Priority Pollutant constituent common name
Monitoring	Provides the 2007 NPDES Permit directed monitoring frequency
Units	Provides the data set's concentration units as referenced by 2007 NPDES Permit
Number of Samples	Provides the number of available samples that are not qualified
MEC	Provides the outfall monitoring group's maximum value from the applicable data set
CV	Equal to the standard deviation divided by the average of the applicable data set. If the number of samples is less than 10, the CV is assumed to be 0.6.
Multiplier	Utilizes the EPA's TSD calculation to determine multiplier for which the maximum effluent concentration is calculated. (MWH and Flow Science, 2006, or EPA TSD, 1991)
Projected Maximum Effluent Concentration	Utilizes the product of the multiplier and the MEC as an estimate for the projected maximum effluent concentration.
Dilution Ratio	The Regional Board allocates no dilution ratio to Boeing SSFL.
Background Concentration	The Regional Board allocates no background concentration to Boeing SSFL.
Projected Maximum Receiving Water Concentration	The Regional Board estimates the projected maximum receiving water concentration as equal to the projected maximum effluent concentration.

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Nonpriority Pollutant RPA Column Explanation (Continued)

Step 1, Determine Water Quality Objectives	The water quality objective is based on appropriate Basin Plan criteria.
BU – Beneficial Use Protection, NC – Human noncarcinogen, AP- Aquatic Life Protection, TMDL – Total Maximum Daily Load	This is the Regional Board’s Basis for determining if reasonable potential should be evaluated for a non-priority pollutant.

Note: Boeing SSFL has completed appropriate statistical calculations, but defers the application of best professional judgment and the final determination of reasonable potential to the Regional Board Staff.

References

Los Angeles Regional Water Quality Control Board, “Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, (Basin Plan).” June 13, 1994.

MWH and Flow Science, “Reasonable Potential Analysis Methodology Technical Memo- Version 1, Final, Santa Susan Field Laboratory, Ventura County, California.” April 28, 2006.

State Water Resources Control Board, “Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, (SIP)” Resolution No. 2005-0019, February 24, 2005.

US EPA, *40CFR part 131, Water Quality Standards; Establishment of numeric Criteria for Priority Toxic Pollutants for the State of California*,(CTR) Federal Registry, May 18, 2000, pp. 31682-31719.

US EPA, “Technical Support Document for Water Quality-based Toxics Control.” EPA/505/2-90-001, PB-91-127415, March 1991.

**Summary of Reasonable Potential Analysis (RPA) (Section 11)  
RPA FOR PRIORITY POLLUTANTS, (OUTFALLS 001, 002, 011, 018 019)**

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Outfall	CTR	Constituent	Units	MEC	CV	Step 1: Water Quality Criteria, Determine C					C = Lowest Criteria	Step 2 Is Effluent Data Available	Step 3		Step 4 MEC >= C	
						CTR CRITERIA				Basin Plan Title 22 GWR			Was Constituent Detected in Effluent Data	Are all Detection Limits > C		If DL > C, MEC = Min (DL)
						Freshwater CMC = Acute	Human Health CCC = Chronic	HH W&O (Not App)	HH O = HH							
1_2_11_18	001	Antimony	ug/L	0.81	0.6	NONE	NONE	14	4300	6	6	Yes	Yes	NA	NA	No
1_2_11_18	002	Arsenic	ug/L	All Data Qualified	0.6	340	150	NONE	NONE	10	50	No	No	No	NA	No
1_2_11_18	003	Beryllium	ug/L	All Data Qualified	0.6	NONE	NONE	Narrative	Narrative	4	4	No	No	No	NA	No
1_2_11_18	004	Cadmium	ug/L	0.16	0.5		2.46	Narrative	Narrative	5	2.46	Yes	Yes	NA	NA	No
1_2_11_18	005a	Chromium	ug/L	8.3	0.6		206	Narrative	Narrative		206.98	Yes	Yes	NA	NA	No
1_2_11_18	005b	Chromium VI	ug/L	Available Data <DL	0.6	16.3	11.4	Narrative	Narrative	50	11.43	Yes	No	No	NA	No
1_2_11_18	006	Copper	ug/L	6	0.6		9.3	1300	NONE		9.33	Yes	Yes	NA	NA	No
1_2_11_18	007	Lead	ug/L	4.1	1.4		3.18	Narrative	Narrative		3.18	Yes	Yes	NA	NA	Yes
1_2_11_18	008	Mercury	ug/L	All Data Qualified	0.6	Reserved	Reserved	0.05	0.051	2	0.05	No	No	No	NA	No
1_2_11_18	009	Nickel	ug/L	All Data Qualified	0.6		52	610	4600	100	52.16	No	No	No	NA	No
1_2_11_18	010	Selenium	ug/L	0.61	0.37	Reserved	5	Narrative	Narrative	50	5	Yes	Yes	NA	NA	No
1_2_11_18	011	Silver	ug/L	Available Data <DL	0.6	4.06	none	NONE	NONE		4.06	Yes	No	No	NA	No
1_2_11_18	012	Thallium	ug/L	Available Data <DL	0.6	NONE	NONE	1.7	6.3	2	2	Yes	No	No	NA	No
1_2_11_18	013	Zinc	ug/L	30.4	0.6	120	120	none	NONE		119.82	Yes	Yes	NA	NA	No
1_2_11_18	014	Total Cyanide	ug/L	Available Data <DL	0.00000003	22	5.2	700	220000	200	5.2	Yes	No	No	NA	No
1_2_11_18	015	Asbestos	Fibers/L	All Data Qualified	0.6	NONE	NONE	7000000	NONE	7000000	700000	No	No	No	NA	No
1_2_11_18	016	TCDD TEQ_NoDNQ	ug/L	4.98E-08	1.38	NONE	NONE	1.30E-08	0.000000014	3.00E-05	1.40E-08	Yes	Yes	NA	NA	Yes
1_2_11_18	017	Acrolein	ug/L	Available Data <DL	0.6	NONE	NONE	320	780		780	Yes	No	No	NA	No
1_2_11_18	018	Acrylonitrile	ug/L	Available Data <DL	0.6	NONE	NONE	0.059	0.66		0.66	Yes	No	Yes	0.66	No
1_2_11_18	019	Benzene	ug/L	Available Data <DL	0.6	NONE	NONE	1.2	71	1	1	Yes	No	No	NA	No
1_2_11_18	020	Bromoform	ug/L	Available Data <DL	0.6	NONE	NONE	4.3	360		360	Yes	No	No	NA	No
1_2_11_18	021	Carbon Tetrachloride	ug/L	Available Data <DL	0.6	NONE	NONE	0.25	4.4	600	4.4	Yes	No	No	NA	No
1_2_11_18	022	Chlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	680	21000		21000	Yes	No	No	NA	No
1_2_11_18	023	Dibromochloromethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.401	34		34	Yes	No	No	NA	No
1_2_11_18	024	Chloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
1_2_11_18	025	2-Chloroethylvinylether	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
1_2_11_18	026	Chloroform	ug/L	Available Data <DL	0.6	NONE	NONE	Reserved	Reserved		NONE	Yes	No	No	NA	No
1_2_11_18	027	Bromodichloromethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.56	46		46	Yes	No	No	NA	No
1_2_11_18	028	1,1-Dichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE	5	5	Yes	No	No	NA	No
1_2_11_18	029	1,2-Dichloroethane	ug/L	Available Data <DL	0.00000002	NONE	NONE	0.38	99	0.5	0.5	Yes	No	No	NA	No
1_2_11_18	030	1,1-Dichloroethene	ug/L	Available Data <DL	0.00000002	NONE	NONE	0.057	3.2	6	3.2	Yes	No	No	NA	No
1_2_11_18	031	1,2-Dichloropropane	ug/L	Available Data <DL	0.6	NONE	NONE	0.52	39	5	5	Yes	No	No	NA	No
1_2_11_18	032	1,3-Dichloropropene (Total)	ug/L	All Data Qualified	0.6	NONE	NONE	10	1700	0.5	0.5	No	No	No	NA	No
1_2_11_18	033	Ethylbenzene	ug/L	Available Data <DL	0.6	NONE	NONE	3100	29000	0.7	0.7	Yes	No	No	NA	No
1_2_11_18	034	Bromomethane	ug/L	Available Data <DL	0.6	NONE	NONE	48	4000		4000	Yes	No	No	NA	No
1_2_11_18	035	Chloromethane	ug/L	Available Data <DL	0.6	NONE	NONE	Narrative	Narrative		NONE	Yes	No	No	NA	No
1_2_11_18	036	Methylene chloride	ug/L	Available Data <DL	0.6	NONE	NONE	4.7	1600		1600	Yes	No	No	NA	No
1_2_11_18	037	1,1,2,2-Tetrachloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.17	11	1	1	Yes	No	No	NA	No
1_2_11_18	038	Tetrachloroethene	ug/L	Available Data <DL	0.6	NONE	NONE	0.8	8.85	5	5	Yes	No	No	NA	No
1_2_11_18	039	Toluene	ug/L	Available Data <DL	0.6	NONE	NONE	6800	200000	150	150	Yes	No	No	NA	No
1_2_11_18	040	trans-1,2-Dichloroethene	ug/L	Available Data <DL	0.6	NONE	NONE	700	140000	10	10	Yes	No	No	NA	No
1_2_11_18	041	1,1,1-Trichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	Narrative	Narrative	200	200	Yes	No	No	NA	No
1_2_11_18	042	1,1,2-trichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.6	42	5	5	Yes	No	No	NA	No
1_2_11_18	043	Trichloroethene	ug/L	1.8	1.42	NONE	NONE	2.7	81	5	5	Yes	Yes	NA	NA	No
1_2_11_18	044	Vinyl chloride	ug/L	Available Data <DL	0.6	NONE	NONE	2	525	0.5	0.5	Yes	No	No	NA	No
1_2_11_18	045	2-chlorophenol	ug/L	All Data Qualified	0.6	NONE	NONE	120	400		400	No	No	No	NA	No
1_2_11_18	046	2,4-Dichlorophenol	ug/L	All Data Qualified	0.6	NONE	NONE	93	790		790	No	No	No	NA	No

See attached RPA Summary for abbreviations, definitions and other explanations for the data presented.

**Summary of Reasonable Potential Analysis (RPA) (Section 11)  
RPA FOR PRIORITY POLLUTANTS, (OUTFALLS 001, 002, 011, 018 019)**

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						Step 1: Water Quality Criteria, Determine C					Step 2	Step 3			Step 4	
						CTR CRITERIA				Basin Plan Title 22 GWR	C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Are all Detection Limits > C	If DL > C, MEC = Min (DL)	MEC >= C
Outfall	CTR	Constituent	Units	MEC	CV	Freshwater		Human Health								
						CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH							
1_2_11_18	047	2,4-dimethylphenol	ug/L	All Data Qualified	0.6	NONE	NONE	540	2300		2300	No	No	No	NA	No
1_2_11_18	048	2-Methyl-4,6-dinitrophenol	ug/L	All Data Qualified	0.6	NONE	NONE	13.4	765		765	No	No	No	NA	No
1_2_11_18	049	2,4-dinitrophenol	ug/L	All Data Qualified	0.6	NONE	NONE	70	14000		14000	No	No	No	NA	No
1_2_11_18	050	2-nitrophenol	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
1_2_11_18	051	4-nitrophenol	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
1_2_11_18	052	4-Chloro-3-methylphenol	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
1_2_11_18	053	Pentachlorophenol	ug/L	Available Data <DL	0.6	pH dependent	pH dependent	0.28	8.2	1	1	Yes	No	No	NA	No
1_2_11_18	054	Phenol	ug/L	All Data Qualified	0.6	NONE	NONE	21000	4600000		4600000	No	No	No	NA	No
1_2_11_18	055	2,4,6-Trichlorophenol	ug/L	Available Data <DL	0.6	NONE	NONE	2.1	6.5		6.5	Yes	No	No	NA	No
1_2_11_18	056	Acenaphthene	ug/L	All Data Qualified	0.6	NONE	NONE	1200	2700		2700	No	No	No	NA	No
1_2_11_18	057	Acenaphthylene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
1_2_11_18	058	Anthracene	ug/L	All Data Qualified	0.6	NONE	NONE	9600	110000		110000	No	No	No	NA	No
1_2_11_18	059	Benzdine	ug/L	All Data Qualified	0.6	NONE	NONE	0.00012	0.00054		0.00054	No	No	No	NA	No
1_2_11_18	060	Benzo(a)Anthracene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049		0.049	No	No	No	NA	No
1_2_11_18	061	Benzo(a)Pyrene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049		0.049	No	No	No	NA	No
1_2_11_18	062	Benzo(b)Fluoranthene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049		0.049	No	No	No	NA	No
1_2_11_18	063	Benzo(g,h,i)Perylene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
1_2_11_18	064	Benzo(k)Fluoranthene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049		0.049	No	No	No	NA	No
1_2_11_18	065	Bis(2-Chloroethoxy) methane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
1_2_11_18	066	bis (2-Chloroethyl) ether	ug/L	All Data Qualified	0.6	NONE	NONE	0.031	1.4		1.4	No	No	No	NA	No
1_2_11_18	067	Bis(2-Chloroisopropyl) Ether	ug/L	All Data Qualified	0.6	NONE	NONE	1400	170000		170000	No	No	No	NA	No
1_2_11_18	068	bis (2-ethylhexyl) Phthalate	ug/L	Available Data <DL	0.6	NONE	NONE	1.8	5.9	4	4	Yes	No	No	NA	No
1_2_11_18	069	4-Bromophenylphenylether	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
1_2_11_18	070	Butylbenzylphthalate	ug/L	All Data Qualified	0.6	NONE	NONE	3000	5200		5200	No	No	No	NA	No
1_2_11_18	071	2-Chloronaphthalene	ug/L	All Data Qualified	0.6	NONE	NONE	1700	4300		4300	No	No	No	NA	No
1_2_11_18	072	4-Chlorophenylphenylether	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
1_2_11_18	073	Chrysene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049		0.049	No	No	No	NA	No
1_2_11_18	074	Dibenzo(a,h)Anthracene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049		0.049	No	No	No	NA	No
1_2_11_18	075	1,2-Dichlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	2700	17000	600	600	Yes	No	No	NA	No
1_2_11_18	076	1,3-Dichlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	400	2600		2600	Yes	No	No	NA	No
1_2_11_18	077	1,4-Dichlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	400	2600	5	5	Yes	No	No	NA	No
1_2_11_18	078	3,3'-Dichlorobenzidine	ug/L	All Data Qualified	0.6	NONE	NONE	0.04	0.077		0.077	No	No	No	NA	No
1_2_11_18	079	Diethylphthalate	ug/L	All Data Qualified	0.6	NONE	NONE	23000	120000		120000	No	No	No	NA	No
1_2_11_18	080	Dimethylphthalate	ug/L	All Data Qualified	0.6	NONE	NONE	313000	2900000		2900000	No	No	No	NA	No
1_2_11_18	081	Di-n-butylphthalate	ug/L	All Data Qualified	0.6	NONE	NONE	2700	12000		12000	No	No	No	NA	No
1_2_11_18	082	2,4-Dinitrotoluene	ug/L	Available Data <DL	0.6	NONE	NONE	0.11	9.1		9.1	Yes	No	No	NA	No
1_2_11_18	083	2,6-Dinitrotoluene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
1_2_11_18	084	Di-n-octylphthalate	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
1_2_11_18	085	1,2-Diphenylhydrazine	ug/L	All Data Qualified	0.6	NONE	NONE	0.04	0.54		0.54	No	No	No	NA	No
1_2_11_18	086	Fluoranthene	ug/L	All Data Qualified	0.6	NONE	NONE	300	370		370	No	No	No	NA	No
1_2_11_18	087	Fluorene	ug/L	All Data Qualified	0.6	NONE	NONE	1300	14000		14000	No	No	No	NA	No
1_2_11_18	088	Hexachlorobenzene	ug/L	All Data Qualified	0.6	NONE	NONE	0.00075	0.00077		0.00077	No	No	No	NA	No
1_2_11_18	089	Hexachlorobutadiene	ug/L	All Data Qualified	0.6	NONE	NONE	0.44	50		50	No	No	No	NA	No
1_2_11_18	090	Hexachlorocyclopentadiene	ug/L	All Data Qualified	0.6	NONE	NONE	240	17000		17000	No	No	No	NA	No
1_2_11_18	091	Hexachloroethane	ug/L	All Data Qualified	0.6	NONE	NONE	1.9	8.9		8.9	No	No	No	NA	No
1_2_11_18	092	Indeno(1,2,3-cd)Pyrene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049		0.049	No	No	No	NA	No
1_2_11_18	093	Isophorone	ug/L	All Data Qualified	0.6	NONE	NONE	8.4	600		600	No	No	No	NA	No

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**Summary of Reasonable Potential Analysis (RPA) (Section 11)  
RPA FOR PRIORITY POLLUTANTS, (OUTFALLS 001, 002, 011, 018 019)**

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						Step 1: Water Quality Criteria, Determine C					Step 2	Step 3			Step 4	
						CTR CRITERIA				Basin Plan Title 22 GWR	C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Are all Detection Limits > C	If DL > C, MEC = Min (DL)	MEC >= C
Outfall	CTR	Constituent	Units	MEC	CV	Freshwater CMC = Acute	Human Health CCC = Chronic	HH W&O (Not App)	HH O = HH							
1_2_11_18	094	Naphthalene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
1_2_11_18	095	Nitrobenzene	ug/L	All Data Qualified	0.6	NONE	NONE	17	1900		1900	No	No	No	NA	No
1_2_11_18	096	N-Nitrosodimethylamine	ug/L	Available Data <DL	0.6	NONE	NONE	0.00069	8.1		8.1	Yes	No	No	NA	No
1_2_11_18	097	n-Nitroso-di-n-propylamine	ug/L	All Data Qualified	0.6	NONE	NONE	0.005	1.4		1.4	No	No	No	NA	No
1_2_11_18	098	N-Nitrosodiphenylamine	ug/L	All Data Qualified	0.6	NONE	NONE	5	16		16	No	No	No	NA	No
1_2_11_18	099	Phenanthrene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
1_2_11_18	100	Pyrene	ug/L	All Data Qualified	0.6	NONE	NONE	960	11000		11000	No	No	No	NA	No
1_2_11_18	101	1,2,4-Trichlorobenzene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
1_2_11_18	102	Aldrin	ug/L	Available Data <DL	0.6	3	NONE	0.00013	0.00014		0.00014	Yes	No	Yes	0.00014	No
1_2_11_18	103	alpha-BHC	ug/L	Available Data <DL	0.04	NONE	NONE	0.0039	0.013		0.013	Yes	No	No	NA	No
1_2_11_18	104	beta-BHC	ug/L	Available Data <DL	0.6	NONE	NONE	0.014	0.046		0.046	Yes	No	No	NA	No
1_2_11_18	105	Lindane (gamma-BHC)	ug/L	Available Data <DL	0.6	0.95	NONE	0.019	0.063	0.2	0.063	Yes	No	No	NA	No
1_2_11_18	106	delta-BHC	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
1_2_11_18	107	Chlordane	ug/L	Available Data <DL	0.6	2.4	0.0043	0.00057	0.00059		0.00059	Yes	No	Yes	0.00059	No
1_2_11_18	108	4,4'-DDT	ug/L	Available Data <DL	0.6	1.1	0.001	0.00059	0.00059		0.00059	Yes	No	Yes	0.00059	No
1_2_11_18	109	4,4'-DDE	ug/L	Available Data <DL	0.6	NONE	NONE	0.00059	0.00059		0.00059	Yes	No	Yes	0.00059	No
1_2_11_18	110	4,4'-DDD	ug/L	Available Data <DL	0.6	NONE	NONE	0.00083	0.00084		0.00084	Yes	No	Yes	0.00084	No
1_2_11_18	111	Dieldrin	ug/L	Available Data <DL	0.6	0.24	0.056	0.00014	0.00014		0.00014	Yes	No	Yes	0.00014	No
1_2_11_18	112	Endosulfan I	ug/L	Available Data <DL	0.6	0.22	0.056	110	240		0.056	Yes	No	No	NA	No
1_2_11_18	113	Endosulfan II	ug/L	Available Data <DL	0.6	0.22	0.056	110	240		0.056	Yes	No	No	NA	No
1_2_11_18	114	Endosulfan Sulfate	ug/L	Available Data <DL	0.6	NONE	NONE	110	240		240	Yes	No	No	NA	No
1_2_11_18	115	Endrin	ug/L	Available Data <DL	0.6	0.086	0.036	0.76	0.81		0.036	Yes	No	No	NA	No
1_2_11_18	116	Endrin Aldehyde	ug/L	Available Data <DL	0.6	NONE	NONE	0.76	0.81		0.81	Yes	No	No	NA	No
1_2_11_18	117	Heptachlor	ug/L	Available Data <DL	0.6	0.52	0.0038	0.00021	0.00021		0.00021	Yes	No	Yes	0.00021	No
1_2_11_18	118	Heptachlor Epoxide	ug/L	Available Data <DL	0.6	0.52	0.0038	0.0001	0.00011		0.00011	Yes	No	Yes	0.00011	No
1_2_11_18	119	Aroclor-1016	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
1_2_11_18	120	Aroclor-1221	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
1_2_11_18	121	Aroclor-1232	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
1_2_11_18	122	Aroclor-1242	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
1_2_11_18	123	Aroclor-1248	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
1_2_11_18	124	Aroclor-1254	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
1_2_11_18	125	Aroclor-1260	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
1_2_11_18	126	Toxaphene	ug/L	Available Data <DL	0.6	0.73	0.0002	0.0073	0.00075		0.0002	Yes	No	Yes	0.0002	No
1_2_11_18	127	E. Coli	MPN/100 ml	300	0.6	NA	NA	NA	NA	235	MPN/100 ml	Yes	Yes	NA	NA	Yes
19	001	Antimony	ug/L	Available Data <DL	0.6	NONE	NONE	14	4300	6	6	Yes	No	No	NA	No
19	002	Arsenic	ug/L	All Data Qualified	0.6	340	150	NONE	NONE	10	50	No	No	No	NA	No
19	003	Beryllium	ug/L	All Data Qualified	0.6	NONE	NONE	Narrative	Narrative	4	4	No	No	No	NA	No
19	004	Cadmium	ug/L	0.18	0.6		2.46	Narrative	Narrative	5	2.46	Yes	Yes	NA	NA	No
19	005a	Chromium	ug/L	All Data Qualified	0.6		206	Narrative	Narrative		206.98	No	No	No	NA	No
19	005b	Chromium VI	ug/L	Available Data <DL	0.6	16.3	11.4	Narrative	Narrative	50	11.43	Yes	No	No	NA	No
19	006	Copper	ug/L	2.61	0.6		9.3	1300	NONE		9.33	Yes	Yes	NA	NA	No
19	007	Lead	ug/L	0.37	0.6		3.18	Narrative	Narrative		3.18	Yes	Yes	NA	NA	No
19	008	Mercury	ug/L	All Data Qualified	0.6	Reserved	Reserved	0.05	0.051	2	0.05	No	No	No	NA	No
19	009	Nickel	ug/L	All Data Qualified	0.6		52	610	4600	100	52.16	No	No	No	NA	No
19	010	Selenium	ug/L	0.65	0.6	Reserved	5	Narrative	Narrative	50	5	Yes	Yes	NA	NA	No
19	011	Silver	ug/L	Available Data <DL	0.6	4.06	none	NONE	NONE		4.06	Yes	No	No	NA	No
19	012	Thallium	ug/L	Available Data <DL	0.6	NONE	NONE	1.7	6.3	2	2	Yes	No	No	NA	No

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RPA FOR PRIORITY POLLUTANTS, (OUTFALLS 001, 002, 011, 018 019)**

**ANNUAL 2011  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

Outfall	CTR	Constituent	Units	MEC	CV	Step 1: Water Quality Criteria, Determine C					C = Lowest Criteria	Step 2 Is Effluent Data Available	Step 3		Step 4 MEC >= C	
						CTR CRITERIA				Basin Plan Title 22 GWR			Was Constituent Detected in Effluent Data	Are all Detection Limits > C		If DL > C, MEC = Min (DL)
						Freshwater CMC = Acute	Human Health CCC = Chronic	HH W&O (Not App)	HH O = HH							
19	013	Zinc	ug/L	50.2	0.6	120	120	none	NONE		120	Yes	Yes	NA	NA	No
19	014	Total Cyanide	ug/L	Available Data <DL	0.6	22	5.2	700	220000	200	5.2	Yes	No	No	NA	No
19	015	Asbestos	Fibers/L	All Data Qualified	0.6	NONE	NONE	7000000	NONE	7000000	700000	No	No	No	NA	No
19	016	TCDD TEQ_NoDNQ	ug/L	1.20E-10	0.6	NONE	NONE	1.30E-08	0.000000014	3.00E-05	1.40E-08	Yes	Yes	NA	NA	No
19	017	Acrolein	ug/L	Available Data <DL	0.6	NONE	NONE	320	780		780	Yes	No	No	NA	No
19	018	Acrylonitrile	ug/L	Available Data <DL	0.6	NONE	NONE	0.059	0.66		0.66	Yes	No	Yes	0.66	No
19	019	Benzene	ug/L	Available Data <DL	0.6	NONE	NONE	1.2	71	1	1	Yes	No	No	NA	No
19	020	Bromoform	ug/L	Available Data <DL	0.6	NONE	NONE	4.3	360		360	Yes	No	No	NA	No
19	021	Carbon Tetrachloride	ug/L	Available Data <DL	0.6	NONE	NONE	0.25	4.4	600	4.4	Yes	No	No	NA	No
19	022	Chlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	680	21000		21000	Yes	No	No	NA	No
19	023	Dibromochloromethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.401	34		34	Yes	No	No	NA	No
19	024	Chloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
19	025	2-Chloroethylvinylether	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
19	026	Chloroform	ug/L	Available Data <DL	0.6	NONE	NONE	Reserved	Reserved		NONE	Yes	No	No	NA	No
19	027	Bromodichloromethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.56	46		46	Yes	No	No	NA	No
19	028	1,1-Dichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE	5	5	Yes	No	No	NA	No
19	029	1,2-Dichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.38	99	0.5	0.5	Yes	No	No	NA	No
19	030	1,1-Dichloroethene	ug/L	Available Data <DL	0.6	NONE	NONE	0.057	3.2	6	3.2	Yes	No	No	NA	No
19	031	1,2-Dichloropropane	ug/L	Available Data <DL	0.6	NONE	NONE	0.52	39	5	5	Yes	No	No	NA	No
19	032	1,3-Dichloropropene (Total)	ug/L	All Data Qualified	0.6	NONE	NONE	10	1700	0.5	0.5	No	No	No	NA	No
19	033	Ethylbenzene	ug/L	Available Data <DL	0.6	NONE	NONE	3100	29000	0.7	0.7	Yes	No	No	NA	No
19	034	Bromomethane	ug/L	Available Data <DL	0.6	NONE	NONE	48	4000		4000	Yes	No	No	NA	No
19	035	Chloromethane	ug/L	Available Data <DL	0.6	NONE	NONE	Narrative	Narrative		NONE	Yes	No	No	NA	No
19	036	Methylene chloride	ug/L	Available Data <DL	0.6	NONE	NONE	4.7	1600		1600	Yes	No	No	NA	No
19	037	1,1,2,2-Tetrachloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.17	11	1	1	Yes	No	No	NA	No
19	038	Tetrachloroethene	ug/L	Available Data <DL	0.6	NONE	NONE	0.8	8.85	5	5	Yes	No	No	NA	No
19	039	Toluene	ug/L	Available Data <DL	0.6	NONE	NONE	6800	200000	150	150	Yes	No	No	NA	No
19	040	trans-1,2-Dichloroethene	ug/L	Available Data <DL	0.6	NONE	NONE	700	140000	10	10	Yes	No	No	NA	No
19	041	1,1,1-Trichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	Narrative	Narrative	200	200	Yes	No	No	NA	No
19	042	1,1,2-trichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.6	42	5	5	Yes	No	No	NA	No
19	043	Trichloroethene	ug/L	Available Data <DL	0.6	NONE	NONE	2.7	81	5	5	Yes	No	No	NA	No
19	044	Vinyl chloride	ug/L	Available Data <DL	0.6	NONE	NONE	2	525	0.5	0.5	Yes	No	No	NA	No
19	045	2-chlorophenol	ug/L	All Data Qualified	0.6	NONE	NONE	120	400		400	No	No	No	NA	No
19	046	2,4-Dichlorophenol	ug/L	All Data Qualified	0.6	NONE	NONE	93	790		790	No	No	No	NA	No
19	047	2,4-dimethylphenol	ug/L	All Data Qualified	0.6	NONE	NONE	540	2300		2300	No	No	No	NA	No
19	048	2-Methyl-4,6-dinitrophenol	ug/L	All Data Qualified	0.6	NONE	NONE	13.4	765		765	No	No	No	NA	No
19	049	2,4-dinitrophenol	ug/L	All Data Qualified	0.6	NONE	NONE	70	14000		14000	No	No	No	NA	No
19	050	2-nitrophenol	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
19	051	4-nitrophenol	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
19	052	4-Chloro-3-methylphenol	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
19	053	Pentachlorophenol	ug/L	Available Data <DL	0.6	pH dependent	pH dependent	0.28	8.2	1	1	Yes	No	No	NA	No
19	054	Phenol	ug/L	All Data Qualified	0.6	NONE	NONE	21000	4600000		4600000	No	No	No	NA	No
19	055	2,4,6-Trichlorophenol	ug/L	Available Data <DL	0.6	NONE	NONE	2.1	6.5		6.5	Yes	No	No	NA	No
19	056	Acenaphthene	ug/L	All Data Qualified	0.6	NONE	NONE	1200	2700		2700	No	No	No	NA	No
19	057	Acenaphthylene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
19	058	Anthracene	ug/L	All Data Qualified	0.6	NONE	NONE	9600	110000		110000	No	No	No	NA	No
19	059	Benzidine	ug/L	All Data Qualified	0.6	NONE	NONE	0.00012	0.00054		0.00054	No	No	No	NA	No

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						CTR CRITERIA							Was Constituent Detected in Effluent Data	Are all Detection Limits > C	If DL > C, MEC = Min (DL)	
						Freshwater		Human Health								
						CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH							
19	060	Benzo(a)Anthracene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049		0.049	No	No	No	NA	No
19	061	Benzo(a)Pyrene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049		0.049	No	No	No	NA	No
19	062	Benzo(b)Fluoranthene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049		0.049	No	No	No	NA	No
19	063	Benzo(g,h,i)Perylene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
19	064	Benzo(k)Fluoranthene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049		0.049	No	No	No	NA	No
19	065	Bis(2-Chloroethoxy) methane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
19	066	bis (2-Chloroethyl) ether	ug/L	All Data Qualified	0.6	NONE	NONE	0.031	1.4		1.4	No	No	No	NA	No
19	067	Bis(2-Chloroisopropyl) Ether	ug/L	All Data Qualified	0.6	NONE	NONE	1400	170000		170000	No	No	No	NA	No
19	068	bis (2-ethylhexyl) Phthalate	ug/L	2.5	0.6	NONE	NONE	1.8	5.9	4	4	Yes	Yes	NA	NA	No
19	069	4-Bromophenylphenylether	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
19	070	Butylbenzylphthalate	ug/L	All Data Qualified	0.6	NONE	NONE	3000	5200		5200	No	No	No	NA	No
19	071	2-Chloronaphthalene	ug/L	All Data Qualified	0.6	NONE	NONE	1700	4300		4300	No	No	No	NA	No
19	072	4-Chlorophenylphenylether	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
19	073	Chrysene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049		0.049	No	No	No	NA	No
19	074	Dibenzo(a,h)Anthracene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049		0.049	No	No	No	NA	No
19	075	1,2-Dichlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	2700	17000	600	600	Yes	No	No	NA	No
19	076	1,3-Dichlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	400	2600		2600	Yes	No	No	NA	No
19	077	1,4-Dichlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	400	2600	5	5	Yes	No	No	NA	No
19	078	3,3'-Dichlorobenzidine	ug/L	All Data Qualified	0.6	NONE	NONE	0.04	0.077		0.077	No	No	No	NA	No
19	079	Diethylphthalate	ug/L	All Data Qualified	0.6	NONE	NONE	23000	120000		120000	No	No	No	NA	No
19	080	Dimethylphthalate	ug/L	All Data Qualified	0.6	NONE	NONE	313000	2900000		2900000	No	No	No	NA	No
19	081	Di-n-butylphthalate	ug/L	All Data Qualified	0.6	NONE	NONE	2700	12000		12000	No	No	No	NA	No
19	082	2,4-Dinitrotoluene	ug/L	Available Data <DL	0.6	NONE	NONE	0.11	9.1		9.1	Yes	No	No	NA	No
19	083	2,6-Dinitrotoluene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
19	084	Di-n-octylphthalate	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
19	085	1,2-Diphenylhydrazine	ug/L	All Data Qualified	0.6	NONE	NONE	0.04	0.54		0.54	No	No	No	NA	No
19	086	Fluoranthene	ug/L	All Data Qualified	0.6	NONE	NONE	300	370		370	No	No	No	NA	No
19	087	Fluorene	ug/L	All Data Qualified	0.6	NONE	NONE	1300	14000		14000	No	No	No	NA	No
19	088	Hexachlorobenzene	ug/L	All Data Qualified	0.6	NONE	NONE	0.00075	0.00077		0.00077	No	No	No	NA	No
19	089	Hexachlorobutadiene	ug/L	All Data Qualified	0.6	NONE	NONE	0.44	50		50	No	No	No	NA	No
19	090	Hexachlorocyclopentadiene	ug/L	All Data Qualified	0.6	NONE	NONE	240	17000		17000	No	No	No	NA	No
19	091	Hexachloroethane	ug/L	All Data Qualified	0.6	NONE	NONE	1.9	8.9		8.9	No	No	No	NA	No
19	092	Indeno(1,2,3-cd)Pyrene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049		0.049	No	No	No	NA	No
19	093	Isophorone	ug/L	All Data Qualified	0.6	NONE	NONE	8.4	600		600	No	No	No	NA	No
19	094	Naphthalene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
19	095	Nitrobenzene	ug/L	All Data Qualified	0.6	NONE	NONE	17	1900		1900	No	No	No	NA	No
19	096	N-Nitrosodimethylamine	ug/L	Available Data <DL	0.6	NONE	NONE	0.00069	8.1		8.1	Yes	No	No	NA	No
19	097	n-Nitroso-di-n-propylamine	ug/L	All Data Qualified	0.6	NONE	NONE	0.005	1.4		1.4	No	No	No	NA	No
19	098	N-Nitrosodiphenylamine	ug/L	All Data Qualified	0.6	NONE	NONE	5	16		16	No	No	No	NA	No
19	099	Phenanthrene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
19	100	Pyrene	ug/L	All Data Qualified	0.6	NONE	NONE	960	11000		11000	No	No	No	NA	No
19	101	1,2,4-Trichlorobenzene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE		NONE	No	No	No	NA	No
19	102	Aldrin	ug/L	Available Data <DL	0.6	3	NONE	0.00013	0.00014		0.00014	Yes	No	Yes	0.00014	No
19	103	alpha-BHC	ug/L	Available Data <DL	0.6	NONE	NONE	0.0039	0.013		0.013	Yes	No	No	NA	No
19	104	beta-BHC	ug/L	Available Data <DL	0.6	NONE	NONE	0.014	0.046		0.046	Yes	No	No	NA	No
19	105	Lindane (gamma-BHC)	ug/L	Available Data <DL	0.6	0.95	NONE	0.019	0.063	0.2	0.063	Yes	No	No	NA	No
19	106	delta-BHC	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No

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SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

						Step 1: Water Quality Criteria, Determine C					Step 2	Step 3			Step 4	
						CTR CRITERIA				Basin Plan Title 22 GWR	C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Are all Detection Limits > C	If DL > C, MEC = Min (DL)	MEC >= C
Outfall	CTR	Constituent	Units	MEC	CV	Freshwater		Human Health								
						CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH							
19	107	Chlordane	ug/L	Available Data <DL	0.6	2.4	0.0043	0.00057	0.00059		0.00059	Yes	No	Yes	0.00059	No
19	108	4,4'-DDT	ug/L	Available Data <DL	0.6	1.1	0.001	0.00059	0.00059		0.00059	Yes	No	Yes	0.00059	No
19	109	4,4'-DDE	ug/L	Available Data <DL	0.6	NONE	NONE	0.00059	0.00059		0.00059	Yes	No	Yes	0.00059	No
19	110	4,4'-DDD	ug/L	Available Data <DL	0.6	NONE	NONE	0.00083	0.00084		0.00084	Yes	No	Yes	0.00084	No
19	111	Dieldrin	ug/L	Available Data <DL	0.6	0.24	0.056	0.00014	0.00014		0.00014	Yes	No	Yes	0.00014	No
19	112	Endosulfan I	ug/L	Available Data <DL	0.6	0.22	0.056	110	240		0.056	Yes	No	No	NA	No
19	113	Endosulfan II	ug/L	Available Data <DL	0.6	0.22	0.056	110	240		0.056	Yes	No	No	NA	No
19	114	Endosulfan Sulfate	ug/L	Available Data <DL	0.6	NONE	NONE	110	240		240	Yes	No	No	NA	No
19	115	Endrin	ug/L	Available Data <DL	0.6	0.086	0.036	0.76	0.81		0.036	Yes	No	No	NA	No
19	116	Endrin Aldehyde	ug/L	Available Data <DL	0.6	NONE	NONE	0.76	0.81		0.81	Yes	No	No	NA	No
19	117	Heptachlor	ug/L	Available Data <DL	0.6	0.52	0.0038	0.00021	0.00021		0.00021	Yes	No	Yes	0.00021	No
19	118	Heptachlor Epoxide	ug/L	Available Data <DL	0.6	0.52	0.0038	0.0001	0.00011		0.00011	Yes	No	Yes	0.00011	No
19	119	Aroclor-1016	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
19	120	Aroclor-1221	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
19	121	Aroclor-1232	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
19	122	Aroclor-1242	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
19	123	Aroclor-1248	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
19	124	Aroclor-1254	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
19	125	Aroclor-1260	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
19	126	Toxaphene	ug/L	Available Data <DL	0.6	0.73	0.0002	0.0073	0.00075		0.0002	Yes	No	Yes	0.0002	No
19	127	E. Coli	MPN/100 ml	Available Data <DL	0.6	NA	NA	NA	NA	235	MPN/100 ml	Yes	No	Yes	MPN/100 ml	No

**Summary of Reasonable Potential Analysis (RPA) (Section 11)  
RPA FOR PRIORITY POLLUTANTS, (OUTFALLS 003-010)**

**ANNUAL 2011  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

Outfall	CTR	Constituent	Units	MEC	CV	Step 1: Water Quality Criteria, Determine C					C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Step 3		Step 4	
						CTR CRITERIA				Basin Plan Title 22 GWR				C = Lowest Criteria	Are all Detection Limits > C		If DL > C, MEC = Min (DL)
						Freshwater		Human Health									
						CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH								
3_7,9-10	001	Antimony	ug/L	2.3	0.86	NONE	NONE	14	4300	6	6	Yes	Yes	NA	NA	No	
3_7,9-10	002	Arsenic	ug/L	All Data Qualified	0.6	340	150	NONE	NONE	10	50	No	No	No	NA	No	
3_7,9-10	003	Beryllium	ug/L	All Data Qualified	0.6	NONE	NONE	Narrative	Narrative	4	4	No	No	No	NA	No	
3_7,9-10	004	Cadmium	ug/L	0.16	0.53		2.46	Narrative	Narrative	5	2.46	Yes	Yes	NA	NA	No	
3_7,9-10	005a	Chromium	ug/L	5.2	0.6		206	Narrative	Narrative		206.98	Yes	Yes	NA	NA	No	
3_7,9-10	005b	Chromium VI	ug/L	Available Data <DL	0.6	16.3	11.4	Narrative	Narrative	50	11.43	Yes	No	No	NA	No	
3_7,9-10	006	Copper	ug/L	6.5	0.38		9.3	1300	NONE		9.33	Yes	Yes	NA	NA	No	
3_7,9-10	007	Lead	ug/L	5.1	0.75		3.18	Narrative	Narrative		3.18	Yes	Yes	NA	NA	Yes	
3_7,9-10	008	Mercury	ug/L	All Data Qualified	0.6	Reserved	Reserved	0.05	0.051	2	0.05	No	No	No	NA	No	
3_7,9-10	009	Nickel	ug/L	All Data Qualified	0.6		52	610	4600	100	52.16	No	No	No	NA	No	
3_7,9-10	010	Selenium	ug/L	Available Data <DL	0.6	Reserved	5	Narrative	Narrative	50	5	Yes	No	No	NA	No	
3_7,9-10	011	Silver	ug/L	All Data Qualified	0.6		none	NONE	NONE		4.06	No	No	No	NA	No	
3_7,9-10	012	Thallium	ug/L	0.23	0.38	NONE	NONE	1.7	6.3	2	2	Yes	Yes	NA	NA	No	
3_7,9-10	013	Zinc	ug/L	161	0.6		120	none	NONE		120	Yes	Yes	NA	NA	Yes	
3_7,9-10	014	Total Cyanide	ug/L	Available Data <DL	0.00000003	22	5.2	700	220000	200	5.2	Yes	No	No	NA	No	
3_7,9-10	015	Asbestos	Fibers/L	All Data Qualified	0.6	NONE	NONE	7000000	NONE	7000000	700000	No	No	No	NA	No	
3_7,9-10	016	TCDD TEQ_NoDNQ	ug/L	8.26E-08	2.50	NONE	NONE	1.30E-08	0.000000014	3.00E-05	1.40E-08	Yes	Yes	NA	NA	Yes	
3_7,9-10	017	Acrolein	ug/L	Available Data <DL	0.6	NONE	NONE	320	780		780	Yes	No	No	NA	No	
3_7,9-10	018	Acrylonitrile	ug/L	Available Data <DL	0.6	NONE	NONE	0.059	0.66		0.66	Yes	No	Yes	0.66	No	
3_7,9-10	019	Benzene	ug/L	Available Data <DL	0.6	NONE	NONE	1.2	71	1	1	Yes	No	No	NA	No	
3_7,9-10	020	Bromoform	ug/L	Available Data <DL	0.6	NONE	NONE	4.3	360		360	Yes	No	No	NA	No	
3_7,9-10	021	Carbon Tetrachloride	ug/L	Available Data <DL	0.6	NONE	NONE	0.25	4.4	600	4.4	Yes	No	No	NA	No	
3_7,9-10	022	Chlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	680	21000		21000	Yes	No	No	NA	No	
3_7,9-10	023	Dibromochloromethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.401	34		34	Yes	No	No	NA	No	
3_7,9-10	024	Chloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No	
3_7,9-10	025	2-Chloroethylvinylether	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No	
3_7,9-10	026	Chloroform	ug/L	Available Data <DL	0.6	NONE	NONE	Reserved	Reserved		NONE	Yes	No	No	NA	No	
3_7,9-10	027	Bromodichloromethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.56	46		46	Yes	No	No	NA	No	
3_7,9-10	028	1,1-Dichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE	5	5	Yes	No	No	NA	No	
3_7,9-10	029	1,2-Dichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.38	99	0.5	0.5	Yes	No	No	NA	No	
3_7,9-10	030	1,1-Dichloroethene	ug/L	Available Data <DL	0.6	NONE	NONE	0.057	3.2	6	3.2	Yes	No	No	NA	No	
3_7,9-10	031	1,2-Dichloropropane	ug/L	Available Data <DL	0.6	NONE	NONE	0.52	39	5	5	Yes	No	No	NA	No	
3_7,9-10	032	1,3-Dichloropropene (Total)	ug/L	All Data Qualified	0.6	NONE	NONE	10	1700	0.5	0.5	No	No	No	NA	No	
3_7,9-10	033	Ethylbenzene	ug/L	Available Data <DL	0.6	NONE	NONE	3100	29000	0.7	0.7	Yes	No	No	NA	No	
3_7,9-10	034	Bromomethane	ug/L	Available Data <DL	0.6	NONE	NONE	48	4000		4000	Yes	No	No	NA	No	
3_7,9-10	035	Chloromethane	ug/L	Available Data <DL	0.6	NONE	NONE	Narrative	Narrative		NONE	Yes	No	No	NA	No	
3_7,9-10	036	Methylene chloride	ug/L	Available Data <DL	0.6	NONE	NONE	4.7	1600		1600	Yes	No	No	NA	No	
3_7,9-10	037	1,1,2,2-Tetrachloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.17	11	1	1	Yes	No	No	NA	No	
3_7,9-10	038	Tetrachloroethene	ug/L	Available Data <DL	0.6	NONE	NONE	0.8	8.85	5	5	Yes	No	No	NA	No	
3_7,9-10	039	Toluene	ug/L	Available Data <DL	0.6	NONE	NONE	6800	200000	150	150	Yes	No	No	NA	No	
3_7,9-10	040	trans-1,2-Dichloroethene	ug/L	Available Data <DL	0.6	NONE	NONE	700	140000	10	10	Yes	No	No	NA	No	
3_7,9-10	041	1,1,1-Trichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	Narrative	Narrative	200	200	Yes	No	No	NA	No	
3_7,9-10	042	1,1,2-trichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.6	42	5	5	Yes	No	No	NA	No	
3_7,9-10	043	Trichloroethene	ug/L	Available Data <DL	0.6	NONE	NONE	2.7	81	5	5	Yes	No	No	NA	No	
3_7,9-10	044	Vinyl chloride	ug/L	Available Data <DL	0.6	NONE	NONE	2	525	0.5	0.5	Yes	No	No	NA	No	
3_7,9-10	045	2-chlorophenol	ug/L	Available Data <DL	0.6	NONE	NONE	120	400		400	Yes	No	No	NA	No	
3_7,9-10	046	2,4-Dichlorophenol	ug/L	Available Data <DL	0.6	NONE	NONE	93	790		790	Yes	No	No	NA	No	

See attached RPA Summary for abbreviations, definitions and other explanations for the data presented.

**Summary of Reasonable Potential Analysis (RPA) (Section 11)  
RPA FOR PRIORITY POLLUTANTS, (OUTFALLS 003-010)**

**ANNUAL 2011  
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						CTR CRITERIA				Basin Plan Title 22 GWR	C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Are all Detection Limits > C	If DL > C, MEC = Min (DL)	MEC >= C
Outfall	CTR	Constituent	Units	MEC	CV	Freshwater CMC = Acute	Human Health CCC = Chronic	HH W&O (Not App)	HH O = HH							
3_7,9-10	047	2,4-dimethylphenol	ug/L	Available Data <DL	0.6	NONE	NONE	540	2300		2300	Yes	No	No	NA	No
3_7,9-10	048	2-Methyl-4,6-dinitrophenol	ug/L	Available Data <DL	0.6	NONE	NONE	13.4	765		765	Yes	No	No	NA	No
3_7,9-10	049	2,4-dinitrophenol	ug/L	Available Data <DL	0.6	NONE	NONE	70	14000		14000	Yes	No	No	NA	No
3_7,9-10	050	2-nitrophenol	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
3_7,9-10	051	4-nitrophenol	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
3_7,9-10	052	4-Chloro-3-methylphenol	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
3_7,9-10	053	Pentachlorophenol	ug/L	Available Data <DL	0.6	pH dependent	pH dependent	0.28	8.2	1	1	Yes	No	Yes	1	No
3_7,9-10	054	Phenol	ug/L	Available Data <DL	0.6	NONE	NONE	21000	4600000		4600000	Yes	No	No	NA	No
3_7,9-10	055	2,4,6-Trichlorophenol	ug/L	Available Data <DL	0.6	NONE	NONE	2.1	6.5		6.5	Yes	No	No	NA	No
3_7,9-10	056	Acenaphthene	ug/L	Available Data <DL	0.6	NONE	NONE	1200	2700		2700	Yes	No	No	NA	No
3_7,9-10	057	Acenaphthylene	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
3_7,9-10	058	Anthracene	ug/L	Available Data <DL	0.6	NONE	NONE	9600	110000		110000	Yes	No	No	NA	No
3_7,9-10	059	Benzidine	ug/L	Available Data <DL	0.6	NONE	NONE	0.00012	0.00054		0.00054	Yes	No	Yes	0.00054	No
3_7,9-10	060	Benzo(a)Anthracene	ug/L	Available Data <DL	0.6	NONE	NONE	0.0044	0.049		0.049	Yes	No	Yes	0.049	No
3_7,9-10	061	Benzo(a)Pyrene	ug/L	Available Data <DL	0.6	NONE	NONE	0.0044	0.049		0.049	Yes	No	Yes	0.049	No
3_7,9-10	062	Benzo(b)Fluoranthene	ug/L	Available Data <DL	0.6	NONE	NONE	0.0044	0.049		0.049	Yes	No	Yes	0.049	No
3_7,9-10	063	Benzo(g,h,i)Perylene	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
3_7,9-10	064	Benzo(k)Fluoranthene	ug/L	Available Data <DL	0.6	NONE	NONE	0.0044	0.049		0.049	Yes	No	Yes	0.049	No
3_7,9-10	065	Bis(2-Chloroethoxy) methane	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
3_7,9-10	066	bis (2-Chloroethyl) ether	ug/L	Available Data <DL	0.6	NONE	NONE	0.031	1.4		1.4	Yes	No	Yes	1.4	No
3_7,9-10	067	Bis(2-Chloroisopropyl) Ether	ug/L	Available Data <DL	0.6	NONE	NONE	1400	170000		170000	Yes	No	No	NA	No
3_7,9-10	068	bis (2-ethylhexyl) Phthalate	ug/L	Available Data <DL	0.6	NONE	NONE	1.8	5.9	4	4	Yes	No	No	NA	No
3_7,9-10	069	4-Bromophenylphenylether	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
3_7,9-10	070	Butylbenzylphthalate	ug/L	Available Data <DL	0.6	NONE	NONE	3000	5200		5200	Yes	No	No	NA	No
3_7,9-10	071	2-Chloronaphthalene	ug/L	Available Data <DL	0.6	NONE	NONE	1700	4300		4300	Yes	No	No	NA	No
3_7,9-10	072	4-Chlorophenylphenylether	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
3_7,9-10	073	Chrysene	ug/L	Available Data <DL	0.6	NONE	NONE	0.0044	0.049		0.049	Yes	No	Yes	0.049	No
3_7,9-10	074	Dibenzo(a,h)Anthracene	ug/L	Available Data <DL	0.6	NONE	NONE	0.0044	0.049		0.049	Yes	No	Yes	0.049	No
3_7,9-10	075	1,2-Dichlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	2700	17000	600	600	Yes	No	No	NA	No
3_7,9-10	076	1,3-Dichlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	400	2600		2600	Yes	No	No	NA	No
3_7,9-10	077	1,4-Dichlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	400	2600	5	5	Yes	No	No	NA	No
3_7,9-10	078	3,3'-Dichlorobenzidine	ug/L	Available Data <DL	0.6	NONE	NONE	0.04	0.077		0.077	Yes	No	Yes	0.077	No
3_7,9-10	079	Diethylphthalate	ug/L	Available Data <DL	0.6	NONE	NONE	23000	120000		120000	Yes	No	No	NA	No
3_7,9-10	080	Dimethylphthalate	ug/L	Available Data <DL	0.6	NONE	NONE	313000	2900000		2900000	Yes	No	No	NA	No
3_7,9-10	081	Di-n-butylphthalate	ug/L	Available Data <DL	0.6	NONE	NONE	2700	12000		12000	Yes	No	No	NA	No
3_7,9-10	082	2,4-Dinitrotoluene	ug/L	Available Data <DL	0.6	NONE	NONE	0.11	9.1		9.1	Yes	No	No	NA	No
3_7,9-10	083	2,6-Dinitrotoluene	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
3_7,9-10	084	Di-n-octylphthalate	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
3_7,9-10	085	1,2-Diphenylhydrazine	ug/L	All Data Qualified	0.6	NONE	NONE	0.04	0.54		0.54	No	No	No	NA	No
3_7,9-10	086	Fluoranthene	ug/L	Available Data <DL	0.6	NONE	NONE	300	370		370	Yes	No	No	NA	No
3_7,9-10	087	Fluorene	ug/L	Available Data <DL	0.6	NONE	NONE	1300	14000		14000	Yes	No	No	NA	No
3_7,9-10	088	Hexachlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	0.00075	0.00077		0.00077	Yes	No	Yes	0.00077	No
3_7,9-10	089	Hexachlorobutadiene	ug/L	Available Data <DL	0.6	NONE	NONE	0.44	50		50	Yes	No	No	NA	No
3_7,9-10	090	Hexachlorocyclopentadiene	ug/L	Available Data <DL	0.6	NONE	NONE	240	17000		17000	Yes	No	No	NA	No
3_7,9-10	091	Hexachloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	1.9	8.9		8.9	Yes	No	No	NA	No
3_7,9-10	092	Indeno(1,2,3-cd)Pyrene	ug/L	Available Data <DL	0.6	NONE	NONE	0.0044	0.049		0.049	Yes	No	Yes	0.049	No
3_7,9-10	093	Isophorone	ug/L	Available Data <DL	0.6	NONE	NONE	8.4	600		600	Yes	No	No	NA	No

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**Summary of Reasonable Potential Analysis (RPA) (Section 11)  
RPA FOR PRIORITY POLLUTANTS, (OUTFALLS 003-010)**

**ANNUAL 2011  
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Outfall	CTR	Constituent	Units	MEC	CV	Freshwater CMC = Acute	Human Health CCC = Chronic	HH W&O (Not App)	HH O = HH							
3_7,9-10	094	Naphthalene	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
3_7,9-10	095	Nitrobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	17	1900		1900	Yes	No	No	NA	No
3_7,9-10	096	N-Nitrosodimethylamine	ug/L	Available Data <DL	0.6	NONE	NONE	0.00069	8.1		8.1	Yes	No	No	NA	No
3_7,9-10	097	n-Nitroso-di-n-propylamine	ug/L	Available Data <DL	0.6	NONE	NONE	0.005	1.4		1.4	Yes	No	Yes	1.4	No
3_7,9-10	098	N-Nitrosodiphenylamine	ug/L	Available Data <DL	0.6	NONE	NONE	5	16		16	Yes	No	No	NA	No
3_7,9-10	099	Phenanthrene	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
3_7,9-10	100	Pyrene	ug/L	Available Data <DL	0.6	NONE	NONE	960	11000		11000	Yes	No	No	NA	No
3_7,9-10	101	1,2,4-Trichlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
3_7,9-10	102	Aldrin	ug/L	Available Data <DL	0.6	3	NONE	0.00013	0.00014		0.00014	Yes	No	Yes	0.00014	No
3_7,9-10	103	alpha-BHC	ug/L	Available Data <DL	0.6	NONE	NONE	0.0039	0.013		0.013	Yes	No	No	NA	No
3_7,9-10	104	beta-BHC	ug/L	Available Data <DL	0.6	NONE	NONE	0.014	0.046		0.046	Yes	No	No	NA	No
3_7,9-10	105	Lindane (gamma-BHC)	ug/L	Available Data <DL	0.6	0.95	NONE	0.019	0.063	0.2	0.063	Yes	No	No	NA	No
3_7,9-10	106	delta-BHC	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
3_7,9-10	107	Chlordane	ug/L	Available Data <DL	0.6	2.4	0.0043	0.00057	0.00059		0.00059	Yes	No	Yes	0.00059	No
3_7,9-10	108	4,4'-DDT	ug/L	Available Data <DL	0.6	1.1	0.001	0.00059	0.00059		0.00059	Yes	No	Yes	0.00059	No
3_7,9-10	109	4,4'-DDE	ug/L	Available Data <DL	0.6	NONE	NONE	0.00059	0.00059		0.00059	Yes	No	Yes	0.00059	No
3_7,9-10	110	4,4'-DDD	ug/L	Available Data <DL	0.6	NONE	NONE	0.00083	0.00084		0.00084	Yes	No	Yes	0.00084	No
3_7,9-10	111	Dieldrin	ug/L	Available Data <DL	0.6	0.24	0.056	0.00014	0.00014		0.00014	Yes	No	Yes	0.00014	No
3_7,9-10	112	Endosulfan I	ug/L	Available Data <DL	0.6	0.22	0.056	110	240		0.056	Yes	No	No	NA	No
3_7,9-10	113	Endosulfan II	ug/L	Available Data <DL	0.6	0.22	0.056	110	240		0.056	Yes	No	No	NA	No
3_7,9-10	114	Endosulfan Sulfate	ug/L	Available Data <DL	0.6	NONE	NONE	110	240		240	Yes	No	No	NA	No
3_7,9-10	115	Endrin	ug/L	Available Data <DL	0.6	0.086	0.036	0.76	0.81		0.036	Yes	No	No	NA	No
3_7,9-10	116	Endrin Aldehyde	ug/L	Available Data <DL	0.6	NONE	NONE	0.76	0.81		0.81	Yes	No	No	NA	No
3_7,9-10	117	Heptachlor	ug/L	Available Data <DL	0.6	0.52	0.0038	0.00021	0.00021		0.00021	Yes	No	Yes	0.00021	No
3_7,9-10	118	Heptachlor Epoxide	ug/L	Available Data <DL	0.6	0.52	0.0038	0.0001	0.00011		0.00011	Yes	No	Yes	0.00011	No
3_7,9-10	119	Aroclor-1016	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
3_7,9-10	120	Aroclor-1221	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
3_7,9-10	121	Aroclor-1232	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
3_7,9-10	122	Aroclor-1242	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
3_7,9-10	123	Aroclor-1248	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
3_7,9-10	124	Aroclor-1254	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
3_7,9-10	125	Aroclor-1260	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No
3_7,9-10	126	Toxaphene	ug/L	Available Data <DL	0.6	0.73	0.0002	0.0073	0.00075		0.0002	Yes	No	Yes	0.0002	No
3_7,9-10	127	E. Coli	MPN/100 ml	1600	0.6	NA	NA	NA	NA	235	MPN/100 ml	Yes	Yes	NA	NA	Yes
8	001	Antimony	ug/L	0.44	0.6	NONE	NONE	14	4300	6	6	Yes	Yes	NA	NA	No
8	002	Arsenic	ug/L	All Data Qualified	0.6	340	150	NONE	NONE	10	50	No	No	No	NA	No
8	003	Beryllium	ug/L	All Data Qualified	0.6	NONE	NONE	Narrative	Narrative	4	4	No	No	No	NA	No
8	004	Cadmium	ug/L	0.46	0.6		2.46	Narrative	Narrative	5	2.46	Yes	Yes	NA	NA	No
8	005a	Chromium	ug/L	6.9	0.6		206	Narrative	Narrative		206.98	Yes	Yes	NA	NA	No
8	005b	Chromium VI	ug/L	All Data Qualified	0.6	16.3	11.4	Narrative	Narrative	50	11.43	No	No	No	NA	No
8	006	Copper	ug/L	9.33	0.6		9.3	1300	NONE		9.33	Yes	Yes	NA	NA	Yes
8	007	Lead	ug/L	3.8	0.6		3.18	Narrative	Narrative		3.18	Yes	Yes	NA	NA	Yes
8	008	Mercury	ug/L	All Data Qualified	0.6	Reserved	Reserved	0.05	0.051	2	0.05	No	No	No	NA	No
8	009	Nickel	ug/L	All Data Qualified	0.6		52	610	4600	100	52.16	No	No	No	NA	No
8	010	Selenium	ug/L	0.58	0.6	Reserved	5	Narrative	Narrative	50	5	Yes	Yes	NA	NA	No
8	011	Silver	ug/L	All Data Qualified	0.6		none	NONE	NONE		4.06	No	No	No	NA	No
8	012	Thallium	ug/L	Available Data <DL	0.6	NONE	NONE	1.7	6.3	2	2	Yes	No	No	NA	No

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**Summary of Reasonable Potential Analysis (RPA) (Section 11)  
RPA FOR PRIORITY POLLUTANTS, (OUTFALLS 003-010)**

**ANNUAL 2011  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

Outfall	CTR	Constituent	Units	MEC	CV	Step 1: Water Quality Criteria, Determine C					C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Step 3		Step 4
						CTR CRITERIA				Basin Plan Title 22 GWR				Are all Detection Limits > C	If DL > C, MEC = Min (DL)	
						Freshwater	Human Health									
						CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH							
8	013	Zinc	ug/L	28.4	0.6		119.8	none	NONE		119.8	Yes	Yes	NA	NA	No
8	014	Total Cyanide	ug/L	Available Data <DL	0.6	22	5.2	700	220000	200	5.2	Yes	No	No	NA	No
8	015	Asbestos	Fibers/L	Available Data <DL	0.6	NONE	NONE	7000000	NONE	7000000	700000	Yes	No	No	NA	No
8	016	TCDD TEQ_NoDNQ	ug/L	2.40E-10	0.6	NONE	NONE	1.30E-08	0.000000014	3.00E-05	1.40E-08	Yes	Yes	NA	NA	No
8	017	Acrolein	ug/L	Available Data <DL	0.6	NONE	NONE	320	780		780	Yes	No	No	NA	No
8	018	Acrylonitrile	ug/L	Available Data <DL	0.6	NONE	NONE	0.059	0.66		0.66	Yes	No	Yes	0.66	No
8	019	Benzene	ug/L	Available Data <DL	0.6	NONE	NONE	1.2	71	1	1	Yes	No	No	NA	No
8	020	Bromoform	ug/L	Available Data <DL	0.6	NONE	NONE	4.3	360		360	Yes	No	No	NA	No
8	021	Carbon Tetrachloride	ug/L	Available Data <DL	0.6	NONE	NONE	0.25	4.4	600	4.4	Yes	No	No	NA	No
8	022	Chlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	680	21000		21000	Yes	No	No	NA	No
8	023	Dibromochloromethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.401	34		34	Yes	No	No	NA	No
8	024	Chloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	025	2-Chloroethylvinylether	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	026	Chloroform	ug/L	Available Data <DL	0.6	NONE	NONE	Reserved	Reserved		NONE	Yes	No	No	NA	No
8	027	Bromodichloromethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.56	46		46	Yes	No	No	NA	No
8	028	1,1-Dichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE	5	5	Yes	No	No	NA	No
8	029	1,2-Dichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.38	99	0.5	0.5	Yes	No	No	NA	No
8	030	1,1-Dichloroethene	ug/L	Available Data <DL	0.6	NONE	NONE	0.057	3.2	6	3.2	Yes	No	No	NA	No
8	031	1,2-Dichloropropane	ug/L	Available Data <DL	0.6	NONE	NONE	0.52	39	5	5	Yes	No	No	NA	No
8	032	1,3-Dichloropropene (Total)	ug/L	All Data Qualified	0.6	NONE	NONE	10	1700	0.5	0.5	No	No	No	NA	No
8	033	Ethylbenzene	ug/L	Available Data <DL	0.6	NONE	NONE	3100	29000	0.7	0.7	Yes	No	No	NA	No
8	034	Bromomethane	ug/L	Available Data <DL	0.6	NONE	NONE	48	4000		4000	Yes	No	No	NA	No
8	035	Chloromethane	ug/L	Available Data <DL	0.6	NONE	NONE	Narrative	Narrative		NONE	Yes	No	No	NA	No
8	036	Methylene chloride	ug/L	Available Data <DL	0.6	NONE	NONE	4.7	1600		1600	Yes	No	No	NA	No
8	037	1,1,2,2-Tetrachloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.17	11	1	1	Yes	No	No	NA	No
8	038	Tetrachloroethene	ug/L	Available Data <DL	0.6	NONE	NONE	0.8	8.85	5	5	Yes	No	No	NA	No
8	039	Toluene	ug/L	Available Data <DL	0.6	NONE	NONE	6800	200000	150	150	Yes	No	No	NA	No
8	040	trans-1,2-Dichloroethene	ug/L	Available Data <DL	0.6	NONE	NONE	700	140000	10	10	Yes	No	No	NA	No
8	041	1,1,1-Trichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	Narrative	Narrative	200	200	Yes	No	No	NA	No
8	042	1,1,2-trichloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	0.6	42	5	5	Yes	No	No	NA	No
8	043	Trichloroethene	ug/L	Available Data <DL	0.6	NONE	NONE	2.7	81	5	5	Yes	No	No	NA	No
8	044	Vinyl chloride	ug/L	Available Data <DL	0.6	NONE	NONE	2	525	0.5	0.5	Yes	No	No	NA	No
8	045	2-chlorophenol	ug/L	Available Data <DL	0.6	NONE	NONE	120	400		400	Yes	No	No	NA	No
8	046	2,4-Dichlorophenol	ug/L	Available Data <DL	0.6	NONE	NONE	93	790		790	Yes	No	No	NA	No
8	047	2,4-dimethylphenol	ug/L	Available Data <DL	0.6	NONE	NONE	540	2300		2300	Yes	No	No	NA	No
8	048	2-Methyl-4,6-dinitrophenol	ug/L	Available Data <DL	0.6	NONE	NONE	13.4	765		765	Yes	No	No	NA	No
8	049	2,4-dinitrophenol	ug/L	Available Data <DL	0.6	NONE	NONE	70	14000		14000	Yes	No	No	NA	No
8	050	2-nitrophenol	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	051	4-nitrophenol	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	052	4-Chloro-3-methylphenol	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	053	Pentachlorophenol	ug/L	Available Data <DL	0.6	pH dependent	pH dependent	0.28	8.2	1	1	Yes	No	Yes	1	No
8	054	Phenol	ug/L	Available Data <DL	0.6	NONE	NONE	21000	4600000		4600000	Yes	No	No	NA	No
8	055	2,4,6-Trichlorophenol	ug/L	Available Data <DL	0.6	NONE	NONE	2.1	6.5		6.5	Yes	No	No	NA	No
8	056	Acenaphthene	ug/L	Available Data <DL	0.6	NONE	NONE	1200	2700		2700	Yes	No	No	NA	No
8	057	Acenaphthylene	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	058	Anthracene	ug/L	Available Data <DL	0.6	NONE	NONE	9600	110000		110000	Yes	No	No	NA	No
8	059	Benzidine	ug/L	Available Data <DL	0.6	NONE	NONE	0.00012	0.00054		0.00054	Yes	No	Yes	0.00054	No

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**Summary of Reasonable Potential Analysis (RPA) (Section 11)  
RPA FOR PRIORITY POLLUTANTS, (OUTFALLS 003-010)**

**ANNUAL 2011  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

Outfall	CTR	Constituent	Units	MEC	CV	Step 1: Water Quality Criteria, Determine C				Basin Plan Title 22 GWR	C = Lowest Criteria	Step 2 Is Effluent Data Available	Step 3 Was Constituent Detected in Effluent Data	Step 3 Are all Detection Limits > C	Step 3 If DL > C, MEC = Min (DL)	Step 4 MEC >= C
						CTR CRITERIA										
						Freshwater		Human Health								
						CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH							
8	060	Benzo(a)Anthracene	ug/L	Available Data <DL	0.6	NONE	NONE	0.0044	0.049		0.049	Yes	No	Yes	0.049	No
8	061	Benzo(a)Pyrene	ug/L	Available Data <DL	0.6	NONE	NONE	0.0044	0.049		0.049	Yes	No	Yes	0.049	No
8	062	Benzo(b)Fluoranthene	ug/L	Available Data <DL	0.6	NONE	NONE	0.0044	0.049		0.049	Yes	No	Yes	0.049	No
8	063	Benzo(g,h,i)Perylene	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	064	Benzo(k)Fluoranthene	ug/L	Available Data <DL	0.6	NONE	NONE	0.0044	0.049		0.049	Yes	No	Yes	0.049	No
8	065	Bis(2-Chloroethoxy) methane	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	066	bis (2-Chloroethyl) ether	ug/L	Available Data <DL	0.6	NONE	NONE	0.031	1.4		1.4	Yes	No	Yes	1.4	No
8	067	Bis(2-Chloroisopropyl) Ether	ug/L	Available Data <DL	0.6	NONE	NONE	1400	170000		170000	Yes	No	No	NA	No
8	068	bis (2-ethylhexyl) Phthalate	ug/L	Available Data <DL	0.6	NONE	NONE	1.8	5.9	4	4	Yes	No	No	NA	No
8	069	4-Bromophenylphenylether	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	070	Butylbenzylphthalate	ug/L	Available Data <DL	0.6	NONE	NONE	3000	5200		5200	Yes	No	No	NA	No
8	071	2-Chloronaphthalene	ug/L	Available Data <DL	0.6	NONE	NONE	1700	4300		4300	Yes	No	No	NA	No
8	072	4-Chlorophenylphenylether	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	073	Chrysene	ug/L	Available Data <DL	0.6	NONE	NONE	0.0044	0.049		0.049	Yes	No	Yes	0.049	No
8	074	Dibenzo(a,h)Anthracene	ug/L	Available Data <DL	0.6	NONE	NONE	0.0044	0.049		0.049	Yes	No	Yes	0.049	No
8	075	1,2-Dichlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	2700	17000	600	600	Yes	No	No	NA	No
8	076	1,3-Dichlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	400	2600		2600	Yes	No	No	NA	No
8	077	1,4-Dichlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	400	2600	5	5	Yes	No	No	NA	No
8	078	3,3'-Dichlorobenzidine	ug/L	Available Data <DL	0.6	NONE	NONE	0.04	0.077		0.077	Yes	No	Yes	0.077	No
8	079	Diethylphthalate	ug/L	Available Data <DL	0.6	NONE	NONE	23000	120000		120000	Yes	No	No	NA	No
8	080	Dimethylphthalate	ug/L	Available Data <DL	0.6	NONE	NONE	313000	2900000		2900000	Yes	No	No	NA	No
8	081	Di-n-butylphthalate	ug/L	Available Data <DL	0.6	NONE	NONE	2700	12000		12000	Yes	No	No	NA	No
8	082	2,4-Dinitrotoluene	ug/L	Available Data <DL	0.6	NONE	NONE	0.11	9.1		9.1	Yes	No	No	NA	No
8	083	2,6-Dinitrotoluene	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	084	Di-n-octylphthalate	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	085	1,2-Diphenylhydrazine	ug/L	All Data Qualified	0.6	NONE	NONE	0.04	0.54		0.54	No	No	No	NA	No
8	086	Fluoranthene	ug/L	Available Data <DL	0.6	NONE	NONE	300	370		370	Yes	No	No	NA	No
8	087	Fluorene	ug/L	Available Data <DL	0.6	NONE	NONE	1300	14000		14000	Yes	No	No	NA	No
8	088	Hexachlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	0.00075	0.00077		0.00077	Yes	No	Yes	0.00077	No
8	089	Hexachlorobutadiene	ug/L	Available Data <DL	0.6	NONE	NONE	0.44	50		50	Yes	No	No	NA	No
8	090	Hexachlorocyclopentadiene	ug/L	Available Data <DL	0.6	NONE	NONE	240	17000		17000	Yes	No	No	NA	No
8	091	Hexachloroethane	ug/L	Available Data <DL	0.6	NONE	NONE	1.9	8.9		8.9	Yes	No	No	NA	No
8	092	Indeno(1,2,3-cd)Pyrene	ug/L	Available Data <DL	0.6	NONE	NONE	0.0044	0.049		0.049	Yes	No	Yes	0.049	No
8	093	Isophorone	ug/L	Available Data <DL	0.6	NONE	NONE	8.4	600		600	Yes	No	No	NA	No
8	094	Naphthalene	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	095	Nitrobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	17	1900		1900	Yes	No	No	NA	No
8	096	N-Nitrosodimethylamine	ug/L	Available Data <DL	0.6	NONE	NONE	0.00069	8.1		8.1	Yes	No	No	NA	No
8	097	n-Nitroso-di-n-propylamine	ug/L	Available Data <DL	0.6	NONE	NONE	0.005	1.4		1.4	Yes	No	Yes	1.4	No
8	098	N-Nitrosodiphenylamine	ug/L	Available Data <DL	0.6	NONE	NONE	5	16		16	Yes	No	No	NA	No
8	099	Phenanthrene	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	100	Pyrene	ug/L	Available Data <DL	0.6	NONE	NONE	960	11000		11000	Yes	No	No	NA	No
8	101	1,2,4-Trichlorobenzene	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No
8	102	Aldrin	ug/L	Available Data <DL	0.6	3	NONE	0.00013	0.00014		0.00014	Yes	No	Yes	0.00014	No
8	103	alpha-BHC	ug/L	Available Data <DL	0.6	NONE	NONE	0.0039	0.013		0.013	Yes	No	No	NA	No
8	104	beta-BHC	ug/L	Available Data <DL	0.6	NONE	NONE	0.014	0.046		0.046	Yes	No	No	NA	No
8	105	Lindane (gamma-BHC)	ug/L	Available Data <DL	0.6	0.95	NONE	0.019	0.063	0.2	0.063	Yes	No	No	NA	No
8	106	delta-BHC	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	NONE		NONE	Yes	No	No	NA	No

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**Summary of Reasonable Potential Analysis (RPA) (Section 11)  
RPA FOR PRIORITY POLLUTANTS, (OUTFALLS 003-010)**

**ANNUAL 2011  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
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						Step 1: Water Quality Criteria, Determine C					Step 2	Step 3			Step 4			
						CTR CRITERIA						Basin Plan	C = Lowest	Is Effluent Data Available		Was Constituent Detected in Effluent Data	Are all Detection Limits > C	If DL > C, MEC = Min (DL)
						Freshwater		Human Health										
Outfall	CTR	Constituent	Units	MEC	CV	CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH									
8	107	Chlordane	ug/L	Available Data <DL	0.6	2.4	0.0043	0.00057	0.00059		0.00059	Yes	No	Yes	0.00059	No		
8	108	4,4'-DDT	ug/L	Available Data <DL	0.6	1.1	0.001	0.00059	0.00059		0.00059	Yes	No	Yes	0.00059	No		
8	109	4,4'-DDE	ug/L	Available Data <DL	0.6	NONE	NONE	0.00059	0.00059		0.00059	Yes	No	Yes	0.00059	No		
8	110	4,4'-DDD	ug/L	Available Data <DL	0.6	NONE	NONE	0.00083	0.00084		0.00084	Yes	No	Yes	0.00084	No		
8	111	Dieldrin	ug/L	Available Data <DL	0.6	0.24	0.056	0.00014	0.00014		0.00014	Yes	No	Yes	0.00014	No		
8	112	Endosulfan I	ug/L	Available Data <DL	0.6	0.22	0.056	110	240		0.056	Yes	No	No	NA	No		
8	113	Endosulfan II	ug/L	Available Data <DL	0.6	0.22	0.056	110	240		0.056	Yes	No	No	NA	No		
8	114	Endosulfan Sulfate	ug/L	Available Data <DL	0.6	NONE	NONE	110	240		240	Yes	No	No	NA	No		
8	115	Endrin	ug/L	Available Data <DL	0.6	0.086	0.036	0.76	0.81		0.036	Yes	No	No	NA	No		
8	116	Endrin Aldehyde	ug/L	Available Data <DL	0.6	NONE	NONE	0.76	0.81		0.81	Yes	No	No	NA	No		
8	117	Heptachlor	ug/L	Available Data <DL	0.6	0.52	0.0038	0.00021	0.00021		0.00021	Yes	No	Yes	0.00021	No		
8	118	Heptachlor Epoxide	ug/L	Available Data <DL	0.6	0.52	0.0038	0.0001	0.00011		0.00011	Yes	No	Yes	0.00011	No		
8	119	Aroclor-1016	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No		
8	120	Aroclor-1221	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No		
8	121	Aroclor-1232	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No		
8	122	Aroclor-1242	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No		
8	123	Aroclor-1248	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No		
8	124	Aroclor-1254	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No		
8	125	Aroclor-1260	ug/L	Available Data <DL	0.6	NONE	0.014	0.00017	0.00017		0.00017	Yes	No	Yes	0.00017	No		
8	126	Toxaphene	ug/L	Available Data <DL	0.6	0.73	0.0002	0.0073	0.00075		0.0002	Yes	No	Yes	0.0002	No		
8	127	E. Coli	MPN/100 ml	170	0.6	NA	NA	NA	NA	235	MPN/100 ml	Yes	Yes	NA	NA	Yes		

**Summary of Reasonable Potential Analysis (RPA) (Section 11)  
RPA FOR SECONDARY POLLUTANTS, (OUTFALLS 001, 002, 011, 018 019)**

**ANNUAL 2011  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

Outfall	Constituent	Monitoring	Units	Number of Samples	MEC	CV	Multiplier	Projected Maximum Effluent Concentration (99/99)	Dilution Ratio	Background Concentration	Projected Maximum Receiving Water Concentration	Step 1, Determine Water Quality Objectives	BU - Beneficial use protection NC-Human noncarcinogen AP-Aquatic life protection
1_2_11_18	Barium	Annual	mg/L	4	0.04	0.60	4.74	0.20	0	0	0.20	1000	BU
1_2_11_18	Biochemical Oxygen Demand (BOD 5 day)	Discharge	mg/L	12	2.90	0.51	2.43	7.05	0	0	7.05	20	BU
1_2_11_18	Chloride	Discharge	mg/L	13	42.00	0.70	3.13	131.34	0	0	131.34	150	BU
1_2_11_18	Fluoride	Annual	mg/L	4	0.33	0.60	4.74	1.56	0	0	1.56	1.6	BU
1_2_11_18	Nitrate + Nitrite as Nitrogen (N)	Discharge	mg/L	12	0.58	0.80	3.69	2.14	0	0	2.14	8	BU/TMDL
1_2_11_18	Oil & Grease	Discharge	mg/L	12	Available Data <DL	0.03	1.07	Available Data < DL	0	0	NA	10	BU
1_2_11_18	Sulfate	Discharge	mg/L	13	140.00	0.63	2.84	398.22	0	0	398.22	300	BU
1_2_11_18	Surfactants (MBAS)	Discharge	mg/L	12	0.20	0.89	4.12	0.82	0	0	0.82	0.5	BU
1_2_11_18	Total Dissolved Solids	Discharge	mg/L	13	470.00	0.45	2.18	1024.09	0	0	1024.09	150	BU
1_2_11_18	Total Settleable Solids	Discharge	ml/L	12	0.10	0.33	1.83	0.18	0	0	0.18	0.3	BU
1_2_11_18	Total Suspended Solids	Discharge	mg/L	12	63.00	1.38	6.78	426.93	0	0	426.93	45	BU
19	Barium	Annual	mg/L	0	All Data Qualified	0.60	All Data Qualified	All Qualified Data	0	0	NA	1000	BU
19	Biochemical Oxygen Demand (BOD 5 day)	Discharge	mg/L	7	2.60	0.60	3.54	9.21	0	0	9.21	20	BU
19	Chloride	Discharge	mg/L	7	250.00	0.60	3.54	885.80	0	0	885.80	150	BU
19	Fluoride	Discharge	mg/L	1	0.35	0.60	13.20	4.62	0	0	4.62	1.6	BU
19	Nitrate + Nitrite as Nitrogen (N)	Discharge	mg/L	5	Available Data <DL	0.60	4.19	Available Data < DL	0	0	NA	8	BU/TMDL
19	Oil & Grease	Discharge	mg/L	7	Available Data <DL	0.60	3.54	Available Data < DL	0	0	NA	10	BU
19	Sulfate	Discharge	mg/L	6	150.00	0.60	3.82	572.78	0	0	572.78	300	BU
19	Surfactants (MBAS)	Discharge	mg/L	7	0.06	0.60	3.54	0.21	0	0	0.21	0.5	BU
19	Total Dissolved Solids	Discharge	mg/L	7	1100.00	0.60	3.54	3897.54	0	0	3897.54	150	BU
19	Total Settleable Solids	Discharge	ml/L	7	Available Data <DL	0.60	3.54	Available Data < DL	0	0	NA	0.3	BU
19	Total Suspended Solids	Discharge	mg/L	7	1.00	0.60	3.54	3.54	0	0	3.54	45	BU



**Summary of Reasonable Potential Analysis (RPA) (Section 11)  
RPA FOR SECONDARY POLLUTANTS, (OUTFALLS 003-010)**

**ANNUAL 2011  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

Outfall	Constituent	Monitoring	Units	Number of Samples	MEC	CV	Multiplier	Projected Maximum Effluent Concentration (99/99)	Dilution Ratio	Background Concentration	Projected Maximum Receiving Water Concentration	Step 1, Determine Water Quality Objectives	BU - Beneficial use protection NC-Human noncarcinogen AP-Aquatic life protection
3_7,9-10	Boron	Annual	mg/L	0	All Data Qualified	0.60	All Data Qualified	All Qualified Data	0	0	NA	1	BU
3_7,9-10	Chloride	Discharge	mg/L	14	18.00	0.89	3.79	68.14	0	0	68.14	150	BU
3_7,9-10	Fluoride	Annual	mg/L	3	0.35	0.60	5.62	1.97	0	0	1.97	1.6	BU
3_7,9-10	Nitrate + Nitrite as Nitrogen (N)	Discharge	mg/L	14	0.81	0.37	1.85	1.50	0	0	1.50	8	BU/TMDL
3_7,9-10	Oil & Grease	Discharge	mg/L	12	Available Data <DL	0.00	1.00	Available Data < DL	0	0	NA	10	BU
3_7,9-10	Sulfate	Discharge	mg/L	14	36.00	0.94	4.02	144.66	0	0	144.66	300	BU
3_7,9-10	Total Dissolved Solids	Discharge	mg/L	14	230.00	0.59	2.61	599.44	0	0	599.44	150	BU
3_7,9-10	Total Suspended Solids	Annual	mg/L	6	110.00	0.60	3.82	420.04	0	0	420.04	45	BU
8	Boron	Annual	mg/L	1	0.07	0.60	13.20	0.96	0	0	0.96	1	BU
8	Chloride	Discharge	mg/L	3	12.00	0.60	5.62	67.47	0	0	67.47	150	BU
8	Fluoride	Annual	mg/L	1	0.25	0.60	13.20	3.30	0	0	3.30	1.6	BU
8	Nitrate + Nitrite as Nitrogen (N)	Discharge	mg/L	3	0.71	0.60	5.62	3.99	0	0	3.99	8	BU/TMDL
8	Oil & Grease	Discharge	mg/L	3	Available Data <DL	0.60	5.62	Available Data < DL	0	0	NA	10	BU
8	Sulfate	Discharge	mg/L	3	12.00	0.60	5.62	67.47	0	0	67.47	300	BU
8	Total Dissolved Solids	Discharge	mg/L	3	200.00	0.60	5.62	1124.49	0	0	1124.49	150	BU
8	Total Suspended Solids	Annual	mg/L	3	68.00	0.60	5.62	382.33	0	0	382.33	45	BU

SECTION 12

2011 SWPPP ANNUAL EVALUATION REPORT

## 2011 SWPPP ANNUAL EVALUATION REPORT

This Report was prepared for The Boeing Company (Boeing) Santa Susana Site, located in Simi Hills, Ventura County, California (Site) and in general accordance with Attachment B (Section A.9.d.) of the Site's Waste Discharge Requirements (National Pollutant Discharge Elimination System (NPDES) Permit No. CA0001309 and Monitoring and Reporting Program No. 6027). This document evaluates compliance with the Site-Wide Storm Water Pollution Prevention Plan (SWPPP) during 2011. The evaluation was conducted by Eric Walker and Andrew Payne (consultant for Boeing). The evaluation was conducted from September 9 - 20, 2011.

On May 20, 2010, the Los Angeles Regional Water Quality Control Board (Regional Board) issued the 2010 NPDES Permit No. R4-2010-0090 to revise the existing 2009 NPDES Amendment Permit No. R4-2009-0058. The 2010 Permit stipulates additional monitoring and reporting requirements that were observed on and after the 2010 Permit's effective date, July 19, 2010. A revised SWPPP was submitted to the Regional Board in accordance with the terms of the new 2010 Permit on October 15, 2010. The SWPPP was revised again in September and October 2011 due to changes, and was submitted to the Regional Board on October 31, 2011.

### **Review of Visual Observations Records and Sampling and Analysis Results**

The evaluators reviewed all inspection forms that documented inspections/visual observations for 2011. Each inspection form was complete. A process exists for items of non-compliance to be properly evaluated and adjusted to correct these items.

Sampling and analysis results are evaluated in each quarterly monitoring report and summarized in this 2011 Annual NPDES Discharge Monitoring Report dated February 27, 2012.

### **Potential Pollutant Source Visual Inspection**

Visual inspections at the Site were conducted in 2011 from January through May and September through December at buildings, equipment, and surrounding areas to evaluate if any pollutant sources exist. Areas where known potential pollutants exist contain Best Management Practices (BMPs) to minimize and/or eliminate the potential for pollutant releases. No other areas were noticed requiring additional BMPs.

### **Best Management Practice (BMP) Review**

As noted above, the Site has been inspected several times throughout 2011. As a result, BMPs were reviewed and evaluated to see if they were adequate, properly implemented and maintained, or whether additional BMPs are needed. Items that required repair, upgrades, and/or maintenance were identified on the inspection forms. Subsequent inspections noted that they were fixed or upgraded.

In addition, Boeing completed SWPPP reviews, updates, and inspections in accordance with facility and project-specific SWPPPs and BMP Plans (BMPPs). These documents, which are maintained per regulatory requirements, were updated in 2011 to better document Boeing's proactive efforts to mitigate the effects of the Topanga Wildfire and to minimize the potential for sediments, constituents, or onsite activities to impact surface water. Boeing's continued effort to improve and upgrade BMPs at the Site demonstrates

commitment to address previous exceedances and improve surface water discharge quality as indicated in the quarterly reports and summarized in the 2011 Annual Report.

#### **SWPPP Revisions and Schedule**

As noted above, the 2010 Permit was issued to Boeing on May 20, 2010 and became effective on July 19, 2010. The Site-Wide SWPPP was updated in accordance with the terms of the 2010 Permit, and was submitted to the Regional Board on October 15, 2010. The SWPPP was revised again in September and October 2011 due to changes, and was submitted to the Regional Board on October 31, 2011. In addition to the 2010 Permit requirements, changes since the last version (September 2009) have occurred and were noted accordingly in the current Site-Wide SWPPP.

#### **Non-Compliance Incidents and Corrective Actions Taken**

Non-compliance issues and corrective actions are listed in this 2011 Annual Report. In addition to those items, the following items were also noted and corrected as a result of the annual inspection conducted in September 2011.

- Lids and tarp covers on trash bins and large storage containers are being replaced, when necessary, during the rainy season.
- General housekeeping in some areas was, and continues to be, improved.
- Drains and catch-basins were maintained periodically throughout year.
- Conducted SWPPP Training for Key Personnel.
- Updated inspection forms to more efficiently track action items

## SECTION 13

ANALYTICAL LABORATORY METHODS, METHOD  
DETECTION LIMITS, REPORTING LIMITS, QA/QC  
PROCEDURES, AND ELAP CERTIFICATIONS

**SANTA SUSANA FIELD LABORATORY  
SURFACE WATER SAMPLING PROGRAM  
LABORATORY MDLs, REPORTING LIMITS, STATE MINIMUM LEVELS, AND PERMIT LIMITS COMPARISON  
NPDES PERMIT CA0001309  
Order No. R4-2010-0090**

Analyte	Laboratory	Laboratory	SWRCB	Laboratory	Monthly Ave.	Daily Max	Daily Max	Daily Max	Receiving Water	Receiving Water
	2011 MDL	2011 RL	ML	vs ML(1)	Limits	Limits	Limits	Limits	Limits	Limits
					019 Compliance	001 Benchmark 002 Benchmark 011 Compliance 018 Compliance 019 Compliance	003-010 Compliance	012-014 Benchmark	Arroyo Simi	Arroyo Simi
	8260/624	8260/624	SWRCB							
	MDL	RL	Attach B							
	ug/L	ug/L	GCMS ML		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
624 - Low-level										
1,1,1-Trichloroethane	0.30	0.5	2	--						
1,1,2,2-Tetrachloroethane	0.30	0.5	1	--						
1,1,2-Trichloroethane	0.30	0.5	2	--						
1,1-Dichloroethane	0.40	0.5	1	--						
1,1-Dichloroethene	0.42	0.5	2	--	3.2	6.0				
1,2-Dichlorobenzene	0.32	0.5	2	--						
1,2-Dichloroethane	0.28	0.5	2	PL < ML		0.5				
1,2-Dichloropropane	0.35	0.5	1	--						
1,3-Dichlorobenzene	0.35	0.5	2	--						
1,3-Dichloropropene (reported as cis & trans)	0.32	0.5	2	--						
1,4-Dichlorobenzene	0.37	0.5	2	--						
Benzene	0.28	0.5	2	--						
Bromodichloromethane	0.30	0.5	2	--						
Bromoform	0.40	0.5	2	--						
Bromomethane	0.42	0.5	2	--						
Carbon tetrachloride	0.28	0.5	2	--						
Chlorobenzene	0.36	0.5	2	--						
Chloroethane	0.40	0.5	2	--						
Chloroform	0.33	0.5	2	--						
Chloromethane	0.40	0.5	2	--						
Dibromochloromethane	0.40	0.5	2	--						
Ethylbenzene	0.25	0.5	2	--						
Methylene chloride	0.95	1.0	2	--						
Tetrachloroethene	0.32	0.5	2	--						
Toluene	0.36	0.5	2	--						
trans-1,2-Dichloroethene	0.30	0.5	1	--						
Trichloroethene	0.26	0.5	2	--		5.0				
Vinyl chloride	0.40	0.5	2	--						
1,2,3-Trichloropropane	0.40	0.5	n/a	--						
1,2-Dibromoethane (EDB)	0.40	0.5	n/a	--				50		
m,p-Xylenes	0.60	1.0	n/a	--						
Naphthalene	0.41	0.5	n/a	--				21		
o-Xylene	0.30	0.5	n/a	--						
Trichlorofluoromethane	0.34	0.5	n/a	--						
VOC - Add-ons	8260/624	8260/624	SWRCB							
	MDL	RL	Attach B							
	ug/L	ug/L	GCMS ML		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,1,2-Trichloro-1,2,2-Trifluoromethane (Freon 113)	0.5	2	n/a	--						
1,2-Dichloro-1,1,2-Trichloroethane (Freon 123a)	1.1	2	n/a	--						
Cyclohexane (TIC)	0.4	1	n/a	--						

SANTA SUSANA FIELD LABORATORY  
SURFACE WATER SAMPLING PROGRAM  
LABORATORY MDLs, REPORTING LIMITS, STATE MINIMUM LEVELS, AND PERMIT LIMITS COMPARISON  
NPDES PERMIT CA0001309  
Order No. R4-2010-0090

Analyte	Laboratory 2011 MDL	Laboratory 2011 RL	SWRCB ML	Laboratory vs ML(1)	Monthly Ave.	Daily Max	Daily Max	Daily Max	Receiving Water	Receiving Water
					Limits	Limits	Limits	Limits	Limits	Limits
					019 Compliance	001 Benchmark 002 Benchmark 011 Compliance 018 Compliance 019 Compliance	003-010 Compliance	012-014 Benchmark	Arroyo Simi	Arroyo Simi
Oxygenates	8260/624 MDL	8260/624 RL	SWRCB Attach B		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Di-isopropyl Ether (DIPE)	0.25	0.5	n/a	--						
Ethyl tert-Butyl Ether (ETBE)	0.28	0.5	n/a	--						
Methyl-tert-butyl Ether (MTBE)	0.32	0.5	n/a	--						
tert-Amyl Methyl Ether (TAME)	0.33	0.5	n/a	--						
tert-Butanol (TBA)	6.5	10	n/a	--				12		
	8260/624 MDL	8260/624 RL	SWRCB ML							
<b>624/8260B A-A+2CVE LOW</b>	<b>ug/L</b>	<b>ug/L</b>	<b>GCMS (ug/L)</b>		<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>
Acrolein	4	5	5	--						
Acrylonitrile	1.2	2	2	--						
2-Chloroethylvinylether	1.8	2	1	ML< MDL						
	ug/L	ug/L	GCMS ML							
<b>625+NDMA+Hydrazine -Standard</b>	<b>MDL</b>	<b>RL</b>	<b>SWRCB Attach B</b>							
1,2,4-Trichlorobenzene	2.5	10	5	MDL < ML < RL						
1,2-Dichlorobenzene	3	10	2	ML< MDL						
1,2-Diphenylhydrazine/Azobenzene	2.5	20	1	ML< MDL						
1,3-Dichlorobenzene	3	10	1	ML< MDL						
1,4-Dichlorobenzene	2.5	10	1	ML< MDL						
2,4,6-Trichlorophenol	4.5	20	10	MDL < ML < RL	6.5	13				
2,4-Dichlorophenol	3.5	10	5	MDL < ML < RL						
2,4-Dimethylphenol	3.5	20	2	ML< MDL						
2,4-Dinitrophenol	8	20	5	ML< MDL						
2,4-Dinitrotoluene	3.5	10	5	MDL < ML < RL	9.1	18				
2,6-Dinitrotoluene	2	10	5	MDL < ML < RL						
2-Chloronaphthalene	3	10	10	--						
2-Chlorophenol	3	10	5	MDL < ML < RL						
2-Nitrophenol	3.5	10	10	--						
3,3-Dichlorobenzidine	7.5	20	5	ML< MDL						
4,6-Dinitro-2-methylphenol	4	20	5	MDL < ML < RL						
4-Bromophenyl phenyl ether	3	10	5	MDL < ML < RL						
4-Chloro-3-methylphenol	2.5	20	1	ML< MDL						
4-Chlorophenyl phenyl ether	2.5	10	5	MDL < ML < RL						
4-Nitrophenol	5.5	20	10	MDL < ML < RL						
Acenaphthene	3	10	1	ML< MDL						
Acenaphthylene	3	10	10	--						
Anthracene	2.5	10	10	--						
Benzidine	10	20	5	ML< MDL						
Benzo(a)anthracene	2.5	10	5	MDL < ML < RL						
Benzo(a)pyrene	3	10	10	--						
Benzo(b)fluoranthene	2.5	10	n/a	--						





**SANTA SUSANA FIELD LABORATORY  
SURFACE WATER SAMPLING PROGRAM  
LABORATORY MDLs, REPORTING LIMITS, STATE MINIMUM LEVELS, AND PERMIT LIMITS COMPARISON  
NPDES PERMIT CA0001309  
Order No. R4-2010-0090**

Analyte	Laboratory 2011 MDL	Laboratory 2011 RL	SWRCB ML	Laboratory vs ML(1)	Monthly Ave.	Daily Max	Daily Max	Daily Max	Receiving Water	Receiving Water
					Limits	Limits	Limits	Limits	Limits	Limits
					019 Compliance	001 Benchmark 002 Benchmark 011 Compliance 018 Compliance 019 Compliance	003-010 Compliance	012-014 Benchmark	Arroyo Simi	Arroyo Simi
1,2-Dichlorobenzene	0.1	0.5	2	--						
1,2-Diphenylhydrazine/Azobenzene	0.2	1	1	--						
1,3-Dichlorobenzene	0.1	0.5	1	--						
1,4-Dichlorobenzene	0.2	0.5	1	--						
2,4,6-Trichlorophenol	0.2	1	10	--	6.5	13				
2,4-Dichlorophenol	0.2	2	5	--						
2,4-Dimethylphenol	0.3	2	2	--						
2,4-Dinitrophenol	0.9	5	5	--						
2,4-Dinitrotoluene	0.2	5	5	--	9.1	18				
2,6-Dinitrotoluene	0.1	5	5	--						
2-Chloronaphthalene	0.1	0.5	10	--						
2-Chlorophenol	0.2	1	5	--						
2-Nitrophenol	0.1	2	10	--						
3,3-Dichlorobenzidine	0.5	5	5	--						
4,6-Dinitro-2-methylphenol	0.3	5	5	--						
4-Bromophenyl phenyl ether	0.2	1	5	--						
4-Chloro-3-methylphenol	0.2	2	1	ML < RL						
4-Chlorophenyl phenyl ether	0.2	0.5	5	--						
4-Nitrophenol	2.5	5	10	--						
Acenaphthene	0.2	0.5	1	--						
Acenaphthylene	0.2	0.5	10	--						
Anthracene	0.1	0.5	10	--						
Benzidine	1	5	5	--						
Benzo(a)anthracene	0.1	5	5	--						
Benzo(a)pyrene	0.1	2	10	--						
Benzo(b)fluoranthene	0.1	2	10	--						
Benzo(g,h,i)perylene	0.1	5	5	--						
Benzo(k)fluoranthene	0.2	0.5	10	--						
Bis(2-chloroethoxy)methane	0.1	0.5	5	--						
Bis(2-chloroethyl)ether	0.1	0.5	1	--						
Bis(2-chloroisopropyl)ether	0.1	0.5	2	--						
Bis(2-ethylhexyl)phthalate	1.7	5	5	MDL < PL < ML		4.0				
Butyl benzyl phthalate	0.7	5	10	--						
Chrysene	0.1	0.5	10	--						
Dibenz(a,h)anthracene	0.1	0.5	10	--						
Diethyl phthalate	0.1	1	2	--						
Dimethyl phthalate	0.2	0.5	2	--						
Di-n-butyl phthalate	0.3	2	10	--						
Di-n-octyl phthalate	0.2	5	10	--						
Fluoranthene	0.1	0.5	1	--						
Fluorene	0.1	0.5	10	--						
Hexachlorobenzene	0.1	1	1	--						
Hexachlorobutadiene	0.2	2	1	ML < RL						
Hexachlorocyclopentadiene	0.1	5	5	--						
Hexachloroethane	0.2	3	1	ML < RL						
Indeno(1,2,3-cd)pyrene	0.1	2	10	--						
Isophorone	0.1	1	1	--						



**SANTA SUSANA FIELD LABORATORY**  
**SURFACE WATER SAMPLING PROGRAM**  
**LABORATORY MDLs, REPORTING LIMITS, STATE MINIMUM LEVELS, AND PERMIT LIMITS COMPARISON**  
**NPDES PERMIT CA0001309**  
**Order No. R4-2010-0090**

Analyte	Laboratory 2011 MDL	Laboratory 2011 RL	SWRCB ML	Laboratory vs ML(1)	Monthly Ave.	Daily Max	Daily Max	Daily Max	Receiving Water	Receiving Water
					Limits	Limits	Limits	Limits	Limits	Limits
					019 Compliance	001 Benchmark 002 Benchmark 011 Compliance 018 Compliance 019 Compliance	003-010 Compliance	012-014 Benchmark	Arroyo Simi	Arroyo Simi
	ug/L	ug/L	ug/L		ug/L	ug/L	ug/L	ug/L	ug/L	
<b>ICP/MS 200.8</b>										
Antimony	0.3	2	0.5	MDL<ML<RL		6.0	6.0			
Cadmium	0.10	1	0.25	--	2.0	3.1/4.0	3.1 (outfall 008) / 4.0	3.1		
Copper	0.5	2	0.5	--	7.1	14	14	14		
Lead	0.2	1	0.5	MDL<ML<RL	2.6	5.2	5.2	5.2		
Selenium	0.5	2	2	--	4.1	8.2/5	5 (outfall 008)	5		
Silver	0.1	1	0.25	ML<MDL	2.0	4.1				
Thallium	0.2	1	1	--		2.0	2.0			
			<b>SWRCB</b>							
	<b>MDL</b>	<b>RL</b>	<b>ML</b>							
<b>ICP 200.7</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>		<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	
Aluminum	40	50	n/a							
Arsenic	7	10	10	--		10				
Beryllium	0.9	2	2	--		4.0				
Chromium	2	5	10	--	see Cr VI	see Cr VI				
Manganese	7	20	n/a	--		50				
Nickel	2	10	20	--	35	96	100			
Vanadium	3	10	n/a	--						
Zinc	6	20	20	--	54	119	159 (outfall 008)	159		

**SANTA SUSANA FIELD LABORATORY**  
**SURFACE WATER SAMPLING PROGRAM**  
**LABORATORY MDLs, REPORTING LIMITS, STATE MINIMUM LEVELS, AND PERMIT LIMITS COMPARISON**  
**NPDES PERMIT CA0001309**  
**Order No. R4-2010-0090**

Analyte	Laboratory 2011 MDL	Laboratory 2011 RL	SWRCB ML	Laboratory vs ML(1)	Monthly Ave.	Daily Max	Daily Max	Daily Max	Receiving Water	Receiving Water
					Limits	Limits	Limits	Limits	Limits	Limits
					019 Compliance	001 Benchmark 002 Benchmark 011 Compliance 018 Compliance 019 Compliance	003-010 Compliance	012-014 Benchmark	Arroyo Simi	Arroyo Simi
	MDL	RL	SWRCB ML		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
<b>ICP 200.7</b>	mg/L	mg/L	mg/L							
Boron	0.02	0.05	n/a	--			1.0			
Iron	0.015	0.04	n/a	--		0.3				
Barium	0.006	0.01	n/a	--		1.0				
Calcium	0.050	0.1	n/a							
Magnesium	0.012	0.02	n/a							
			SWRCB							
	MDL	RL	ML							
<b>Mercury</b>	ug/L	ug/L	ug/L		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Mercury (245.1)	0.1	0.2	0.5	PL < ML < RL	0.05	0.10	0.13	0.10		
			SWRCB							
	MDL	RL	ML							
<b>Chromium VI</b>	ug/L	ug/L	ug/L		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chromium IV (218.6/7199)	0.25	1	10	PL < ML	8	16				
			SWRCB							
	MDL	RL	Attach B							
	ug/L	ug/L	ML							
<b>Chromium III (calc)</b>	n/a	2	n/a	--						
			SWRCB							
	MDL	RL	ML							
	ug/L	ug/L	ug/L		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
<b>Cyanide by EPA 335.2</b>	2.2	5.0	5.0	PL < ML & RL	4.3	8.5	9.5			
			SWRCB							
	MDL	RL	ML							
	MFL	MFL	MFL		MFL	MFL	MFL	MFL	MFL	MFL
<b>Asbestos by EPA 100.1 (TEM)</b>	2.2	2.2	n/a							
			SWRCB							
	MDL	RL	Attach B							
<b>8260B-Mod</b>	ug/L	ug/L	ML		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,4-Dioxane	1	2	n/a	--				3		
			SWRCB							
	MDL	RL	Attach B							
	mg/L	mg/L	ML		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
<b>8015-Mod</b>										
Gasoline Range Organics (GRO)	0.03	0.05	n/a	--				100		
Diesel Range Organics (DRO)	0.1	0.5	n/a	PL < RL				100		
			SWRCB							
	MDL	RL	Attach B							
	ug/L	ug/L	ML (ug/L)		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

SANTA SUSANA FIELD LABORATORY  
SURFACE WATER SAMPLING PROGRAM  
LABORATORY MDLs, REPORTING LIMITS, STATE MINIMUM LEVELS, AND PERMIT LIMITS COMPARISON  
NPDES PERMIT CA0001309  
Order No. R4-2010-0090

Analyte	Laboratory 2011 MDL	Laboratory 2011 RL	SWRCB ML	Laboratory vs ML(1)	Monthly Ave.	Daily Max	Daily Max	Daily Max	Receiving Water	Receiving Water
					Limits	Limits	Limits	Limits	Limits	Limits
					019 Compliance	001 Benchmark 002 Benchmark 011 Compliance 018 Compliance 019 Compliance	003-010 Compliance	012-014 Benchmark	Arroyo Simi	Arroyo Simi
	ug/L	ug/L	ML (ug/L)		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
<b>Perchlorate by EPA 314.0</b>	0.95	4	n/a	--		6.0	6.0	6.0		
			SWRCB Attach B							
<b>TCDD TEQ (TA West Sacramento)</b>	8.40E-13	5.00E-12	n/a	--	1.40E-08	2.80E-08	2.80E-08	2.80E-08		
			SWRCB Attach B							
	MDL	RL								
<b>General Chemistry</b>	mg/L	mg/L	ML		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Suspended Solids (TSS)	1	10	n/a	--	15	45		45		
BOD	0.5	2	n/a	--	20	30				
Conductivity (umhos/cm)	n/a	1	n/a	--						
Settleable Solids (ml/L)	n/a	0.1	n/a	--	0.1	0.3		0.3		
Oil & Grease (1664-HEM)	1.4	5	n/a	--	10	15	15	15		
Ammonia-N	0.157	0.4	n/a	--	1.96	10.1	10.1 (outfall 008)	10.1		
Turbidity (NTU)	0.04	1	n/a	--						
Total Residual Chlorine	<b>FIELD TEST</b>		n/a	--		0.1				
Total Organic Carbon	0.75	1	n/a	--						
Total Dissolved Solids	1	10	n/a	--		950	850 / 950 (outfall 008)	950		
Chloride	0.4	0.5	n/a	--		150	150	150		
Sulfate	0.4	0.5	n/a	--		300	250 / 300 (outfall 008)	300		
Detergents (MBAS)	0.05	0.1	n/a	--		0.5				
Nitrate + Nitrite-N	0.19	0.26	n/a	--		8	8 (outfall 008) / 10	8		
Nitrate-N	0.08	0.11	n/a	--		8	8 (outfall 008)	8		
Nitrite-N	0.11	0.15	n/a	--		1	1 (outfall 008)	1		
Fluoride	0.02	0.1	n/a	--		1.6	1.6	1.6		
Dissolved Oxygen	<b>FIELD TEST</b>		n/a	--						

**SANTA SUSANA FIELD LABORATORY  
SURFACE WATER SAMPLING PROGRAM  
LABORATORY MDLs, REPORTING LIMITS, STATE MINIMUM LEVELS, AND PERMIT LIMITS COMPARISON  
NPDES PERMIT CA0001309  
Order No. R4-2010-0090**

Analyte	Laboratory	Laboratory	SWRCB	Laboratory	Monthly Ave.	Daily Max	Daily Max	Daily Max	Receiving Water	Receiving Water
	2011 MDL	2011 RL	ML	vs ML(1)	Limits	Limits	Limits	Limits	Limits	Limits
					019 Compliance	001 Benchmark 002 Benchmark 011 Compliance 018 Compliance 019 Compliance	003-010 Compliance	012-014 Benchmark	Arroyo Simi	Arroyo Simi
	<b>MDL</b>	<b>RL</b>	<b>SWRCB</b>							
<b>Radiochemistry (Eberline Lab)</b>	<b>pCi/L</b>	<b>pCi/L</b>	<b>ML</b>		<b>pCi/L</b>	<b>pCi/L</b>	<b>pCi/L</b>	<b>pCi/L</b>	<b>pCi/L</b>	
Gross Alpha**	n/a	3	n/a	--		15	15			
Gross Beta**	n/a	4	n/a	--		50	50			
Radium 226 + 228**	n/a	1	n/a	--		5.0	5.0			
Tritium**	n/a	500	n/a	--		20000	20000			
Strontium 90**	n/a	2	n/a	--		8.0	8.0			
Uranium**	n/a	1	n/a	--		20	20			
Potassium-40**	n/a	25	n/a	--						
Cesium-137**	n/a	20	n/a	--		200	200			
			<b>SWRCB</b>							
	<b>MDL</b>	<b>RL</b>	<b>Attach B</b>							
<b>8315M (Truesdail Lab)</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ML</b>		<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>	<b>ug/L</b>
Monomethyl hydrazine**	1.77	5.0	n/a	--						
Dimethyl hydrazine**	1.13	1.0	n/a							
Hydrazine**	0.439	1.0	n/a							
			<b>SWRCB</b>							
	<b>MDL</b>	<b>RL</b>	<b>Attach B</b>							
<b>Toxicity (Aquatic Lab)</b>	<b>% Survival</b>	<b>% Survival</b>	<b>ML</b>		<b>% Survival</b>	<b>% Survival</b>	<b>% Survival</b>	<b>% Survival</b>	<b>% Survival</b>	<b>% Survival</b>
Acute Toxicity**	n/a	n/a	n/a	--		70	70	70	70	
	<b>TUc</b>	<b>TUc</b>	<b>ML</b>		<b>TUc</b>	<b>TUc</b>	<b>TUc</b>	<b>TUc</b>	<b>TUc</b>	<b>TUc</b>
Chronic Toxicity**	n/a	n/a	n/a	--		1.0	1.0	1.0	1.0	
			<b>SWRCB</b>							
	<b>MDL</b>	<b>RL</b>	<b>Attach B</b>							
<b>Biological</b>	<b>MPN</b>	<b>MPN</b>	<b>ML</b>		<b>MPN</b>	<b>MPN</b>	<b>MPN</b>	<b>MPN</b>	<b>MPN</b>	<b>MPN</b>
Total Coliform**	n/a	n/a	n/a	--						
Fecal Coliform**	n/a	2	n/a	--	200	400	400	400	400	
E. coli**	n/a	2	n/a	--	126	235	235	235	235	

SWRCB = State Water Resources Control Board

\*\* The SWRCB does not have MLs established for these analyses. As required in the NPDES Permit, a full list of MDL/RL's will be supplied to the RWQCB on an annual basis.

Columns are used to compare laboratory's reporting limits (RLs) and method detection limits (MDLs) to the SWRCB MLs and the permit limits

(1) This column indicates the status of analytical capabilities if the ML is < the laboratory RL or MDL.

If nothing is displayed in the cell, the RL meets the ML and the Permit Limit.

The following designations which are in the table, summarize the comparison of RLs, MDLs, MLs, and permit limits:

--	Laboratory reporting limit meets ML and permit limit requirements
ML < MDL	The laboratory method detection limit does not meet the ML
MDL < ML < RL	The ML is less than RL, but greater than the MDL
PL < ML	The established permit limit is less than the ML
PL < ML & RL	The permit limit is less than the ML and the RL
PL < RL	The permit limit is less than the RL



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

**CERTIFICATE OF ENVIRONMENTAL ACCREDITATION**

Is hereby granted to

**AQUATIC BIOASSAY & CONSULTING LABORATORIES, INC.**

29 NORTH OLIVE STREET  
VENTURA, CA 93001

Scope of the certificate is limited to the  
"Fields of Testing"  
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site,  
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of  
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1907**

Expiration Date: **07/31/2011**

Effective Date: **07/01/2009**

George C. Kulasingam, Ph.D./Chief  
Environmental Laboratory Accreditation Program Branch

Richmond, California  
subject to forfeiture or revocation



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

**CERTIFICATE OF ENVIRONMENTAL ACCREDITATION**

Is hereby granted to

**Aquatic Bioassay & Consulting Laboratories, Inc.**

29 North Olive Street

Ventura, CA 93001

Scope of the certificate is limited to the  
"Fields of Testing"  
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site,  
proficiency testing studies, and payment of applicable fees.

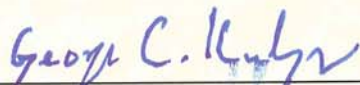
This Certificate is granted in accordance with provisions of  
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1907**

Expiration Date: **07/31/2013**

Effective Date: **08/01/2011**

Richmond, California  
subject to forfeiture or revocation

  
\_\_\_\_\_  
George C. Kulasingam, Ph.D., Chief  
Environmental Laboratory Accreditation Program Branch





CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

**CERTIFICATE OF ENVIRONMENTAL ACCREDITATION**

Is hereby granted to

**AQUATIC TESTING LABORATORIES**

4350 TRANSPORT STREET, UNIT 107

VENTURA, CA 93003

Scope of the certificate is limited to the  
"Fields of Testing"  
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site,  
proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of  
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1775**

Expiration Date: **07/31/2012**

Effective Date: **08/01/2010**

Richmond, California  
subject to forfeiture or revocation

George C. Kulasingam, Ph.D., Chief  
Environmental Laboratory Accreditation Program Branch



MARK B HORTON, MD, MSPH  
Director

State of California—Health and Human Services Agency  
California Department of Public Health



ARNOLD SCHWARZENEGGER  
Governor

July 9, 2010

JOSEPH A. LeMAY  
AQUATIC TESTING LABORATORIES  
4350 TRANSPORT STREET, UNIT 107  
VENTURA, CA 93003

Dear JOSEPH A. LeMAY:

Certificate No. 1775

This is to advise you that the laboratory named above continues to be certified as an environmental testing laboratory pursuant to the provisions of the Health and Safety Code (HSC), Division 101, Part 1, Chapter 4, Section 100825, et seq. Certification for all currently certified Fields of Testing that the laboratory has applied for renewal shall remain in effect until **07/31/2012** unless it is revoked.

**Please note that the renewal application for certification is subject to an on-site process, and the continued use of this certificate is contingent upon:**

- \* **successful completion of the on-site process;**
- \* **acceptable performance in the required proficiency testing (PT) studies;**
- \* **timely payment of all fees, including an annual fee due before July 31, 2011;**
- \* **compliance with Environmental Laboratory Accreditation Program Branch (ELAP) statutes (HSC, Section 100825, et seq.) and Regulations (California Code of Regulations (CCR), Title 22, Division 4, Chapter 19).**

An updated certificate of the "Fields of Testing" will be issued to the laboratory upon successful completion of the on-site process.

The application for the renewal of this certificate must be received before the expiration date to remain in force according to the HSC100845(a).

Please note that the laboratory is required to notify ELAP of any major changes in the laboratory such as the transfer of ownership, change of laboratory director, change in location, or structural alterations which may affect adversely the quality of analyses (HSC, Section 100845(b)(d)). Please include the above certificate number in all your correspondence with ELAP.

If you have any questions, please contact ELAP at (510) 620-3155.

Sincerely,

George C. Kulasingam, Ph.D., Chief  
Environmental Laboratory Accreditation Program Branch



**CALIFORNIA DEPARTMENT OF PUBLIC HEALTH  
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM  
Accredited Fields of Testing**



**AQUATIC TESTING LABORATORIES**

**Lab Phone (805) 650-0546**

4350 TRANSPORT STREET, UNIT 107  
VENTURA, CA 93003

**Certificate No: 1775      Renew Date: 07/31/2010**

**Field of Testing: 113 - Whole Effluent Toxicity of Wastewater**

113.010	001A	Fathead Minnow ( <i>P. promelas</i> )	EPA 600/4-90/027F, Static
113.010	001B	Fathead Minnow ( <i>P. promelas</i> )	EPA 600/4-90/027F, Static Renewal
113.010	003A	Rainbow trout ( <i>O. mykiss</i> )	EPA 600/4-90/027F, Static
113.010	003B	Rainbow trout ( <i>O. mykiss</i> )	EPA 600/4-90/027F, Static Renewal
113.010	005A	Daphnid ( <i>C. dubia</i> )	EPA 600/4-90/027F, Static
113.010	005B	Daphnid ( <i>C. dubia</i> )	EPA 600/4-90/027F, Static Renewal
113.010	006A	Daphnia spp.	EPA 600/4-90/027F, Static
113.010	006B	Daphnia spp.	EPA 600/4-90/027F, Static Renewal
113.010	008A	Topsmelt ( <i>A. affinis</i> )	EPA 600/4-90/027F, Static
113.010	008B	Topsmelt ( <i>A. affinis</i> )	EPA 600/4-90/027F, Static Renewal
113.010	009A	Silverside ( <i>Menidia</i> spp.)	EPA 600/4-90/027F, Static
113.010	009B	Silverside ( <i>Menidia</i> spp.)	EPA 600/4-90/027F, Static Renewal
113.010	012A	Mysid ( <i>M. bahia</i> )	EPA 600/4-90/027F, Static
113.010	012B	Mysid ( <i>M. bahia</i> )	EPA 600/4-90/027F, Static Renewal
113.021	001A	Fathead Minnow ( <i>P. promelas</i> )	EPA 2000 (EPA-821-R-02-012), Static
113.021	001B	Fathead Minnow ( <i>P. promelas</i> )	EPA 2000 (EPA-821-R-02-012), Static Renewal
113.022	003A	Rainbow trout ( <i>O. mykiss</i> )	EPA 2019 (EPA-821-R-02-012), Static
113.022	003B	Rainbow trout ( <i>O. mykiss</i> )	EPA 2019 (EPA-821-R-02-012), Static Renewal
113.023	005A	Daphnid ( <i>C. dubia</i> )	EPA 2002 (EPA-821-R-02-012), Static
113.023	005B	Daphnid ( <i>C. dubia</i> )	EPA 2002 (EPA-821-R-02-012), Static Renewal
113.024	006A	Daphnia spp.	EPA 2021 (EPA-821-R-02-012), Static
113.024	006B	Daphnia spp.	EPA 2021 (EPA-821-R-02-012), Static Renewal
113.025	009A	Silverside ( <i>Menidia</i> spp.)	EPA 2006 (EPA-821-R-02-012), Static
113.025	009B	Silverside ( <i>Menidia</i> spp.)	EPA 2006 (EPA-821-R-02-012), Static Renewal
113.027	012A	Mysid ( <i>M. bahia</i> )	EPA 2007 (EPA-821-R-02-012), Static
113.027	012B	Mysid ( <i>M. bahia</i> )	EPA 2007 (EPA-821-R-02-012), Static Renewal
113.028	008A	Topsmelt ( <i>A. affinis</i> )	EPA-821-R-02-012, Static
113.028	008B	Topsmelt ( <i>A. affinis</i> )	EPA-821-R-02-012, Static Renewal
113.040	001	Fathead Minnow ( <i>P. promelas</i> )	EPA 1000 (EPA/600/4-91/002)
113.041	001	Fathead Minnow ( <i>P. promelas</i> )	EPA 1000 (EPA-821-R-02-013)
113.050	005	Daphnid ( <i>C. dubia</i> )	EPA 1002 (EPA/600/4-91/002)
113.051	005	Daphnid ( <i>C. dubia</i> )	EPA 1002 (EPA-821-R-02-013)
113.060	020	Green algae ( <i>S. capricornutum</i> )	EPA 1003 (EPA/600/4-91/002)
113.061	020	Green algae ( <i>S. capricornutum</i> )	EPA 1003 (EPA-821-R-02-013)
113.080	009	Silverside ( <i>Menidia</i> spp.)	EPA 1006 (EPA/600/4-91/003)
113.081	009	Silverside ( <i>Menidia</i> spp.)	EPA 1006 (EPA-821-R-02-014)

As of 07/21/2008, this list supersedes all previous lists for this certificate number.  
Customers: Please verify the current accreditation standing with the State.

**AQUATIC TESTING LABORATORIES**

**Certificate No:** 1775

**Renew Date:** 07/31/2010

113.120	008	Topsmelt ( <i>A. affinis</i> )	EPA 600/R-95/136
113.120	017D	Purple sea urchin ( <i>S. purpuratus</i> )	EPA 600/R-95/136, Fertilization Test
113.120	022	Giant kelp ( <i>M. pyrifera</i> )	EPA 600/R-95/136
113.120	023	Red abalone ( <i>H. rufescens</i> )	EPA 600/R-95/136

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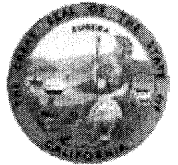
**Field of Testing:** 119 - Toxicity Bioassay of Hazardous Waste

119.010	001	Fathead Minnow ( <i>P. promelas</i> )	Polisini & Miller (CDFG 1988)
119.010	003	Rainbow trout ( <i>O. mykiss</i> )	Polisini & Miller (CDFG 1988)



MARK B HORTON, MD, MSPH  
Director

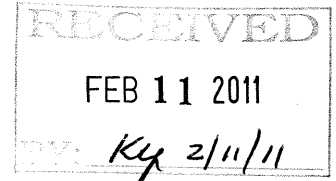
State of California—Health and Human Services Agency  
California Department of Public Health



ARNOLD SCHWARZENEGGER  
Governor

December 17, 2010

MARVIN E. CLAGUE  
EBERLINE ANALYTICAL CORPORATION, RICHMOND LABORATORY  
2030 WRIGHT AVENUE  
RICHMOND, CA 94804-3849



Dear MARVIN E. CLAGUE:

Certificate No. 01120CA

This is to advise you that the laboratory named above has been accredited under National Environmental Laboratory Accreditation Program (NELAP) as an environmental testing laboratory pursuant to the provisions of the Health and Safety Code (HSC), Division 101, Part 1, Chapter 4, Section 100825, et seq.

The Fields of Accreditation for which this laboratory has been accredited are enclosed. Accreditation shall remain in effect until **January 31, 2012** unless revoked by ELAP or withdrawn at your written request. To maintain accreditation, the laboratory shall comply with the National Environmental Laboratory Accreditation Conference (NELAC) Standards and all associated California Environmental Laboratory Accreditation Program Branch (ELAP) regulations and statutes.

The application for renewal of this certificate must be received before the expiration date of this certificate to remain in force according to the HSC 100845(a).

Please note that your laboratory is required to notify California ELAP of any major changes in key accreditation criteria within 30 calendar days of the change. This written notification includes, but is not limited to, changes in ownership, location, key personnel, and major instrumentation (HSC 100845(b) and (d), and NELAC Standard Section 4.3.2). The certificate must be returned to California ELAP upon loss of accredited status.

Your continued cooperation with the above requirements is essential for maintaining the high quality of the data produced by environmental laboratories accredited by the State of California.

If you have any questions, please contact Jane Jensen at (510) 620-3155.

Sincerely,

George C. Kulasingam, Ph.D., Chief  
Environmental Laboratory Accreditation Program Branch

Enclosure



CALIFORNIA DEPARTMENT OF PUBLIC HEALTH  
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM - NELAP RECOGNIZED  
NELAP Fields of Accreditation



Eberline Analytical Corporation, Richmond Laboratory  
Richmond, CA  
2030 Wright Avenue  
Richmond, CA 94804-3849  
Phone: (510) 235-2633

Certificate No.: 01120CA  
Renew Date: 1/31/2012

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**106 - Radiochemistry of Drinking Water**

106.010	001	EPA 900.0	Gross Alpha
106.010	002	EPA 900.0	Gross Beta
106.020	001	EPA 901.0	Radioactive Cesium
106.030	001	EPA 901.1	Radioactive Cesium
106.030	002	EPA 901.1	Radioactive Iodine
106.030	003	EPA 901.1	Gamma Emitters
106.040	001	EPA 902.0	Radioactive Iodine
106.050	001	EPA 903.0	Total Alpha Radium
106.050	002	EPA 903.0	Radium-226
106.051	001	EPA 903.1	Radium-226
106.060	001	EPA 904.0	Radium-228
106.070	001	EPA 905.0	Strontium-89, 90
106.070	002	EPA 905.0	Strontium-89
106.070	003	EPA 905.0	Strontium-90
106.080	001	EPA 906.0	Tritium
106.090	001	EPA 908.0	Uranium
106.120	001	EPA 00-02	Gross Alpha
106.150	002	EPA Ra-03	Radium-226
106.160	001	EPA Ra-04	Radium-226
106.170	001	EPA Ra-05	Radium-228
106.201	001	DOE Ra-04	Radium-226
106.210	001	DOE Sr-01	Strontium-89, 90
106.220	001	DOE Sr-02	Strontium-89, 90
106.230	001	DOE U-02	Uranium
106.250	001	DOE 4.5.2.3	Radioactive Cesium
106.250	003	DOE 4.5.2.3	Gamma Emitters
106.260	001	SM7110B	Gross Alpha
106.260	002	SM7110B	Gross Beta
106.270	001	SM7110C	Gross Alpha
106.280	001	SM7120	Radioactive Cesium
106.280	002	SM7120	Radioactive Iodine
106.280	003	SM7120	Gamma Emitters
106.290	001	SM7500-Cs B	Radioactive Cesium

106.300	001	SM7500-3H B	Tritium
106.320	001	SM7500-I C	Radioactive Iodine
106.340	001	SM7500-Ra B	Total Alpha Radium
106.340	002	SM7500-Ra B	Radium-226
106.350	001	SM7500-Ra C	Radium-226
106.360	001	SM7500-Ra D	Radium-228
106.390	001	SM7500-U C	Uranium
106.431	001	ASTM D3454-97	Radium-226
106.440	001	ASTM D3649-91	Radioactive Cesium
106.440	002	ASTM D3649-91	Radioactive Iodine
106.440	003	ASTM D3649-91	Gamma Emitters
106.452	001	ASTM D3972-97	Uranium
106.480	001	ASTM D5174-97	Uranium
106.620	001	ASTM D5072-92	Radon-222
106.990	002	EPA 00-07	Thorium

**112 - Radiochemistry of Wastewater**

112.010	001	EPA 900.0	Gross Alpha
112.010	002	EPA 900.0	Gross Beta
112.020	001	EPA 903.0	Total Alpha Radium
112.021	001	EPA 903.1	Radium-226
112.030	001	SM7110B	Gross Alpha
112.030	002	SM7110B	Gross Beta
112.040	001	SM7500-Ra B	Total Alpha Radium
112.050	001	SM7500-Ra C	Radium-226
112.060	001	ASTM D1890-90	Gross Beta
112.070	001	ASTM D1943-90	Gross Alpha
112.080	001	ASTM D2460-90	Total Alpha Radium
112.130	001	EPA 901.0	Cesium
112.140	001	EPA 901.1	Cesium
112.140	002	EPA 901.1	Gamma
112.140	003	EPA 901.1	Iodine
112.150	001	EPA 902.0	Iodine
112.160	001	EPA 904.0	Radium-228
112.170	001	EPA 905.0	Strontium
112.180	001	EPA 906.0	Tritium
112.190	001	EPA 908.0	Uranium
112.210	001	EPA Ra-05	Radium-228
112.260	001	SM7120	Gamma
112.260	002	SM7120	Iodine
112.260	003	SM7120	Cesium
112.350	001	SM7500-U C	Uranium

112.380	001	ASTM D3649-91	Cesium
112.380	002	ASTM D3649-91	Gamma
112.380	003	ASTM D3649-91	Iodine
112.400	001	ASTM D4785-88	Iodine
112.490	001	DOE 4.5.2.3	Cesium
112.490	002	DOE 4.5.2.3	Gamma
112.490	003	DOE 4.5.2.3	Iodine
112.500	001	DOE Sr-01	Strontium
112.510	001	DOE Sr-02	Strontium
112.990	001	EPA 00-07	Thorium

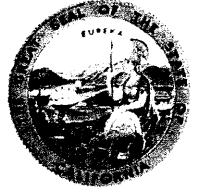
**118 - Radiochemistry of Hazardous Waste**

118.010	001	EPA 9310	Gross Alpha
118.010	002	EPA 9310	Gross Beta
118.020	001	EPA 9315	Radium, Total
118.030	001	EPA 9320	Radium-228
118.060	001	EPA 00-07	Thorium
118.060	002	EPA 00-07	Uranium
118.090	001	EPA AM-01-1	Americium-241
118.100	001	EPA H-01	Tritium
118.110	001	EPA Pu-01	Plutonium
118.130	001	EPA Ra-03	Radium-226
118.140	001	EPA Ra-04	Radium-226
118.150	001	EPA Ra-05	Radium-228
118.200	001	DOE 4.5.2.3	Gamma
118.211	001	DOE Am-02	Americium-241
118.212	001	DOE Am-03	Americium-241
118.220	001	DOE H-03	Tritium
118.230	001	DOE Pu-02	Plutonium
118.270	001	DOE Sr-01	Strontium
118.271	001	DOE Sr-02	Strontium
118.280	001	DOE Tc-01	Technetium
118.290	001	DOE U-02	Uranium





NELAP - RECOGNIZED



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

**CERTIFICATE OF NELAP ACCREDITATION**

Is hereby granted to

**Eberline Analytical Corporation, Richmond Laboratory**

**Richmond, CA**

2030 Wright Avenue

Richmond, CA 94804-3849

Scope of the Certificate is limited to the  
"NELAP Fields of Accreditation"  
which accompany this Certificate.

Continued accredited status depends on successful  
ongoing participation in the program.

This Certificate is granted in accordance with provisions of  
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **01120CA**

Expiration Date: **1/31/2012**

Effective Date: **2/1/2011**

Richmond, California  
subject to forfeiture or revocation

A handwritten signature in black ink, appearing to read "George C. Kulasingam".

George C. Kulasingam, Ph.D., Chief  
Environmental Laboratory Accreditation Program Branch



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

**CERTIFICATE OF ENVIRONMENTAL ACCREDITATION**

Is hereby granted to

**EMS LABORATORIES, INC.**

117 WEST BELLEVUE DRIVE  
PASADENA, CA 91105

Scope of the certificate is limited to the  
"Fields of Testing"  
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site,  
proficiency testing studies, and payment of applicable fees.

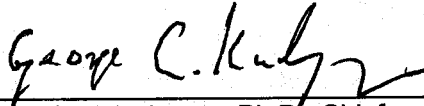
This Certificate is granted in accordance with provisions of  
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1119**

Expiration Date: **2/28/2012**

Effective Date: **3/1/2010**

Richmond, California  
subject to forfeiture or revocation

  
\_\_\_\_\_  
George C. Kulasingam, Ph.D., Chief  
Environmental Laboratory Accreditation Program Branch

**CALIFORNIA DEPARTMENT OF HEALTH SERVICES  
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM  
Accredited Fields of Testing**

**EMS LABORATORIES, INC.**

**Lab Phone (626) 568-4065**

117 WEST BELLEVUE DRIVE  
PASADENA, CA 91105

**Certificate No: 1119      Renew Date: 2/28/2008**

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**Field of Testing: 103 - Toxic Chemical Elements of Drinking Water**

103.150	009	Lead	EPA 200.9
103.300	001	Asbestos	EPA 100.1
103.301	001	Asbestos	EPA 100.2

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**Field of Testing: 108 - Inorganic Chemistry of Wastewater**

108.020	001	Conductivity	EPA 120.1
108.050	001	pH	EPA 150.1
108.060	001	Residue, Filterable	EPA 160.1
108.070	001	Residue, Non-filterable	EPA 160.2
108.080	001	Residue, Total	EPA 160.3
108.090	001	Residue, Volatile	EPA 160.4
108.100	001	Residue, Settleable	EPA 160.5
108.115	001	Calcium	EPA 215.1
108.117	001	Magnesium	EPA 242.1
108.119	001	Sodium	EPA 273.1
108.120	001	Bromide	EPA 300.0
108.120	003	Fluoride	EPA 300.0
108.120	004	Nitrate	EPA 300.0
108.120	005	Nitrite	EPA 300.0
108.141	001	Alkalinity	EPA 310.2
108.162	001	Chloride	EPA 325.3
108.172	001	Chlorine Residual, Total	EPA 330.3
108.180	001	Cyanide, amenable	EPA 335.1
108.181	001	Cyanide, Total	EPA 335.2
108.262	001	Phosphate, Ortho	EPA 365.2
108.263	001	Phosphorus, Total	EPA 365.2
108.281	001	Sulfate	EPA 375.3
108.290	001	Sulfide	EPA 376.1
108.323	001	Chemical Oxygen Demand	EPA 410.4
108.350	001	Total Recoverable Petroleum Hydrocarbons	EPA 418.1
108.380	001	Oil and Grease	EPA 1664

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**Field of Testing: 109 - Toxic Chemical Elements of Wastewater**

109.010	001	Aluminum	EPA 200.7
109.010	002	Antimony	EPA 200.7
109.010	003	Arsenic	EPA 200.7
109.010	004	Barium	EPA 200.7

As of 10/16/2006, this list supersedes all previous lists for this certificate number.  
Customers: Please verify the current accreditation standing with the State.

109.010	005	Beryllium	EPA 200.7
109.010	007	Cadmium	EPA 200.7
109.010	009	Chromium	EPA 200.7
109.010	010	Cobalt	EPA 200.7
109.010	011	Copper	EPA 200.7
109.010	012	Iron	EPA 200.7
109.010	013	Lead	EPA 200.7
109.010	015	Manganese	EPA 200.7
109.010	016	Molybdenum	EPA 200.7
109.010	017	Nickel	EPA 200.7
109.010	019	Selenium	EPA 200.7
109.010	021	Silver	EPA 200.7
109.010	023	Thallium	EPA 200.7
109.010	024	Tin	EPA 200.7
109.010	026	Vanadium	EPA 200.7
109.010	027	Zinc	EPA 200.7
109.030	001	Aluminum	EPA 202.1
109.040	001	Antimony	EPA 204.1
109.050	001	Arsenic	EPA 206.2
109.060	001	Barium	EPA 208.1
109.070	001	Beryllium	EPA 210.1
109.080	001	Cadmium	EPA 213.1
109.100	001	Chromium	EPA 218.1
109.110	001	Cobalt	EPA 219.1
109.120	001	Copper	EPA 220.1
109.150	001	Iron	EPA 236.1
109.160	001	Lead	EPA 239.1
109.180	001	Manganese	EPA 243.1
109.190	001	Mercury	EPA 245.1
109.200	001	Molybdenum	EPA 246.1
109.210	001	Nickel	EPA 249.1
109.280	001	Selenium	EPA 270.2
109.290	001	Silver	EPA 272.1
109.310	001	Thallium	EPA 279.1
109.320	001	Tin	EPA 282.1
109.330	001	Titanium	EPA 283.1
109.340	001	Vanadium	EPA 286.1
109.350	001	Zinc	EPA 289.1
109.811	001	Chromium (VI)	SM3500-Cr D

**Field of Testing: 114 - Inorganic Chemistry of Hazardous Waste**

114.010	001	Antimony	EPA 6010B
114.010	002	Arsenic	EPA 6010B
114.010	003	Barium	EPA 6010B

114.010	004	Beryllium	EPA 6010B
114.010	005	Cadmium	EPA 6010B
114.010	006	Chromium	EPA 6010B
114.010	007	Cobalt	EPA 6010B
114.010	008	Copper	EPA 6010B
114.010	009	Lead	EPA 6010B
114.010	010	Molybdenum	EPA 6010B
114.010	011	Nickel	EPA 6010B
114.010	012	Selenium	EPA 6010B
114.010	013	Silver	EPA 6010B
114.010	014	Thallium	EPA 6010B
114.010	015	Vanadium	EPA 6010B
114.010	016	Zinc	EPA 6010B
114.030	001	Antimony	EPA 7040
114.040	001	Arsenic	EPA 7060A
114.060	001	Barium	EPA 7080A
114.070	001	Beryllium	EPA 7090
114.080	001	Cadmium	EPA 7130
114.090	001	Chromium	EPA 7190
114.103	001	Chromium (VI)	EPA 7196A
114.104	001	Chromium (VI)	EPA 7197
114.110	001	Cobalt	EPA 7200
114.120	001	Copper	EPA 7210
114.130	001	Lead	EPA 7420
114.140	001	Mercury	EPA 7470A
114.141	001	Mercury	EPA 7471A
114.150	001	Molybdenum	EPA 7480
114.160	001	Nickel	EPA 7520
114.170	001	Selenium	EPA 7740
114.180	001	Silver	EPA 7760A
114.190	001	Thallium	EPA 7840
114.200	001	Vanadium	EPA 7910
114.210	001	Zinc	EPA 7950
114.222	001	Cyanide	EPA 9014
114.250	001	Fluoride	EPA 9056

**Field of Testing: 115 - Extraction Test of Hazardous Waste**

115.021	001	TCLP Inorganics	EPA 1311
115.030	001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II

**Field of Testing: 121 - Bulk Asbestos Analysis of Hazardous Waste**

121.010	001	Bulk Asbestos	EPA 600/M4-82-020
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NELAP - RECOGNIZED



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

**CERTIFICATE OF NELAP ACCREDITATION**

Is hereby granted to

**Testamerica Irvine**

**Irvine**

17461 Derian Avenue, Suite 100

Irvine, CA 92614

Scope of the Certificate is limited to the  
"NELAP Fields of Accreditation"  
which accompany this Certificate.

Continued accredited status depends on successful  
ongoing participation in the program.

This Certificate is granted in accordance with provisions of  
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **01108CA**

Expiration Date: **1/31/2012**

Effective Date: **2/1/2011**

Richmond, California  
subject to forfeiture or revocation

A handwritten signature in blue ink that reads "George C. Kulasingam".

George C. Kulasingam, Ph.D., Chief  
Environmental Laboratory Accreditation Program Branch



MARK B HORTON, MD, MSPH  
Director

State of California—Health and Human Services Agency  
California Department of Public Health



EDMUND G. BROWN JR.  
Governor

January 24, 2011

Fred Haley  
Testamerica Irvine  
17461 Derian Avenue, Suite 100  
Irvine, CA 92614

Dear Fred Haley:

Certificate No. 01108CA

This is to advise you that the laboratory named above has been accredited under National Environmental Laboratory Accreditation Program (NELAP) as an environmental testing laboratory pursuant to the provisions of the Health and Safety Code (HSC), Division 101, Part 1, Chapter 4, Section 100825, et seq.

The Fields of Accreditation for which this laboratory has been accredited are enclosed. Accreditation shall remain in effect until **January 31, 2012** unless revoked by ELAP or withdrawn at your written request. To maintain accreditation, the laboratory shall comply with the National Environmental Laboratory Accreditation Conference (NELAC) Standards and all associated California Environmental Laboratory Accreditation Program Branch (ELAP) regulations and statutes.

The application for renewal of this certificate must be received before the expiration date of this certificate to remain in force according to the HSC 100845(a).

Please note that your laboratory is required to notify California ELAP of any major changes in key accreditation criteria within 30 calendar days of the change. This written notification includes, but is not limited to, changes in ownership, location, key personnel, and major instrumentation (HSC 100845(b) and (d), and NELAC Standard Section 4.3.2). The certificate must be returned to California ELAP upon loss of accredited status.

Your continued cooperation with the above requirements is essential for maintaining the high quality of the data produced by environmental laboratories accredited by the State of California.

If you have any questions, please contact Bill Walker at (213) 580-5731.

Sincerely,

George C. Kulasingam, Ph.D., Chief  
Environmental Laboratory Accreditation Program Branch

Enclosure



CALIFORNIA DEPARTMENT OF PUBLIC HEALTH  
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM - NELAP RECOGNIZED  
NELAP Fields of Accreditation



**Testamerica Irvine**

Irvine  
17461 Derian Avenue, Suite 100  
Irvine, CA 92614  
Phone: (949) 261-1022

Certificate No.: 01108CA  
Renew Date: 1/31/2012

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**101 - Microbiology of Drinking Water**

101.010	001	SM9215B	Heterotrophic Bacteria
101.011	001	SimPlate	Heterotrophic Bacteria
101.020	001	SM9221A,B	Total Coliform
101.021	001	SM9221E (MTF/EC)	Fecal Coliform
101.022	001	CFR 141.21(f)(6)(i) (MTF/EC+MUG)	E. coli
101.060	002	SM9223	Total Coliform
101.060	003	SM9223	E. coli
101.070	002	Colisure	Total Coliform
101.070	003	Colisure	E. coli
101.120	001	SM9221A,B,C	Total Coliform (Enumeration)
101.130	001	SM9221E (MTF/EC)	Fecal Coliform (Enumeration)
101.160	001	SM9223	Total Coliform (Enumeration)
101.200	001	SM9223B	E. coli (Enumeration)
101.210	001	SM9221B.1/SM9221F	E. coli (Enumeration)

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**102 - Inorganic Chemistry of Drinking Water**

102.020	001	EPA 180.1	Turbidity
102.022	001	SM2130B	Turbidity
102.030	001	EPA 300.0	Bromide
102.030	003	EPA 300.0	Chloride
102.030	005	EPA 300.0	Fluoride
102.030	006	EPA 300.0	Nitrate
102.030	007	EPA 300.0	Nitrite
102.030	010	EPA 300.0	Sulfate
102.040	001	EPA 300.1	Bromide
102.040	002	EPA 300.1	Chlorite
102.040	003	EPA 300.1	Chlorate
102.040	004	EPA 300.1	Bromate
102.045	001	EPA 314.0	Perchlorate
102.048	001	EPA 332.0	Perchlorate
102.100	001	SM2320B	Alkalinity
102.110	001	SM2330B	Corrosivity (Langlier Index)
102.120	001	SM2340B	Hardness
102.121	001	SM2340C	Hardness



102.130	001	SM2510B	Conductivity
102.140	001	SM2540C	Total Dissolved Solids
102.145	001	EPA 160.1	Total Dissolved Solids
102.163	001	SM4500-CI G	Chlorine, Free and Total
102.190	001	SM4500-CN E	Cyanide, Total
102.192	001	SM4500-CN G	Cyanide, amenable
102.200	001	SM4500-F C	Fluoride
102.210	001	SM4500-H+ B	pH
102.212	001	EPA 150.1	pH
102.263	002	SM5310C	TOC/DOC
102.270	001	SM5540C	Surfactants
102.520	001	EPA 200.7	Calcium
102.520	002	EPA 200.7	Magnesium
102.520	003	EPA 200.7	Potassium
102.520	004	EPA 200.7	Silica
102.520	005	EPA 200.7	Sodium
102.520	006	EPA 200.7	Hardness (calc.)

**103 - Toxic Chemical Elements of Drinking Water**

103.130	001	EPA 200.7	Aluminum
103.130	003	EPA 200.7	Barium
103.130	004	EPA 200.7	Beryllium
103.130	005	EPA 200.7	Cadmium
103.130	007	EPA 200.7	Chromium
103.130	008	EPA 200.7	Copper
103.130	009	EPA 200.7	Iron
103.130	011	EPA 200.7	Manganese
103.130	012	EPA 200.7	Nickel
103.130	015	EPA 200.7	Silver
103.130	017	EPA 200.7	Zinc
103.140	001	EPA 200.8	Aluminum
103.140	002	EPA 200.8	Antimony
103.140	003	EPA 200.8	Arsenic
103.140	004	EPA 200.8	Barium
103.140	005	EPA 200.8	Beryllium
103.140	006	EPA 200.8	Cadmium
103.140	007	EPA 200.8	Chromium
103.140	008	EPA 200.8	Copper
103.140	009	EPA 200.8	Lead
103.140	010	EPA 200.8	Manganese
103.140	012	EPA 200.8	Nickel
103.140	013	EPA 200.8	Selenium

103.140	014	EPA 200.8	Silver
103.140	015	EPA 200.8	Thallium
103.140	016	EPA 200.8	Zinc
103.160	001	EPA 245.1	Mercury

**104 - Volatile Organic Chemistry of Drinking Water**

104.030	001	EPA 504.1	1,2-Dibromoethane
104.030	002	EPA 504.1	1,2-Dibromo-3-chloropropane
104.040	000	EPA 524.2	Volatile Organic Compounds
104.040	001	EPA 524.2	Benzene
104.040	002	EPA 524.2	Bromobenzene
104.040	003	EPA 524.2	Bromochloromethane
104.040	006	EPA 524.2	Bromomethane
104.040	007	EPA 524.2	n-Butylbenzene
104.040	008	EPA 524.2	sec-Butylbenzene
104.040	009	EPA 524.2	tert-Butylbenzene
104.040	010	EPA 524.2	Carbon Tetrachloride
104.040	011	EPA 524.2	Chlorobenzene
104.040	012	EPA 524.2	Chloroethane
104.040	014	EPA 524.2	Chloromethane
104.040	015	EPA 524.2	2-Chlorotoluene
104.040	016	EPA 524.2	4-Chlorotoluene
104.040	018	EPA 524.2	Dibromomethane
104.040	019	EPA 524.2	1,3-Dichlorobenzene
104.040	020	EPA 524.2	1,2-Dichlorobenzene
104.040	021	EPA 524.2	1,4-Dichlorobenzene
104.040	022	EPA 524.2	Dichlorodifluoromethane
104.040	023	EPA 524.2	1,1-Dichloroethane
104.040	024	EPA 524.2	1,2-Dichloroethane
104.040	025	EPA 524.2	1,1-Dichloroethene
104.040	026	EPA 524.2	cis-1,2-Dichloroethene
104.040	027	EPA 524.2	trans-1,2-Dichloroethene
104.040	028	EPA 524.2	Dichloromethane
104.040	029	EPA 524.2	1,2-Dichloropropane
104.040	030	EPA 524.2	1,3-Dichloropropane
104.040	031	EPA 524.2	2,2-Dichloropropane
104.040	032	EPA 524.2	1,1-Dichloropropene
104.040	033	EPA 524.2	cis-1,3-Dichloropropene
104.040	034	EPA 524.2	trans-1,3-Dichloropropene
104.040	035	EPA 524.2	Ethylbenzene
104.040	036	EPA 524.2	Hexachlorobutadiene
104.040	037	EPA 524.2	Isopropylbenzene

104.040	038	EPA 524.2	4-Isopropyltoluene
104.040	039	EPA 524.2	Naphthalene
104.040	040	EPA 524.2	Nitrobenzene
104.040	041	EPA 524.2	N-propylbenzene
104.040	042	EPA 524.2	Styrene
104.040	043	EPA 524.2	1,1,1,2-Tetrachloroethane
104.040	044	EPA 524.2	1,1,2,2-Tetrachloroethane
104.040	045	EPA 524.2	Tetrachloroethene
104.040	046	EPA 524.2	Toluene
104.040	047	EPA 524.2	1,2,3-Trichlorobenzene
104.040	048	EPA 524.2	1,2,4-Trichlorobenzene
104.040	049	EPA 524.2	1,1,1-Trichloroethane
104.040	050	EPA 524.2	1,1,2-Trichloroethane
104.040	051	EPA 524.2	Trichloroethene
104.040	052	EPA 524.2	Trichlorofluoromethane
104.040	053	EPA 524.2	1,2,3-Trichloropropane
104.040	054	EPA 524.2	1,2,4-Trimethylbenzene
104.040	055	EPA 524.2	1,3,5-Trimethylbenzene
104.040	056	EPA 524.2	Vinyl Chloride
104.040	057	EPA 524.2	Xylenes, Total
104.040	058	EPA 524.2	Hexachloroethane
104.040	059	EPA 524.2	Federal regulated VOCs, excluding vinyl chloride
104.040	060	EPA 524.2	Federal unregulated VOCs
104.045	001	EPA 524.2	Bromodichloromethane
104.045	002	EPA 524.2	Bromoform
104.045	003	EPA 524.2	Chloroform
104.045	004	EPA 524.2	Dibromochloromethane
104.045	005	EPA 524.2	Trihalomethanes
104.050	002	EPA 524.2	Methyl tert-butyl Ether (MTBE)
104.050	004	EPA 524.2	tert-Amyl Methyl Ether (TAME)
104.050	005	EPA 524.2	Ethyl tert-butyl Ether (ETBE)
104.050	006	EPA 524.2	Trichlorotrifluoroethane
104.050	011	EPA 524.2	Oxygenates

**105 - Semi-volatile Organic Chemistry of Drinking Water**

105.050	001	EPA 508.1	Alachlor
105.050	005	EPA 508.1	Chlordane (total)
105.050	006	EPA 508.1	4,4'-DDD
105.050	007	EPA 508.1	4,4'-DDE
105.050	008	EPA 508.1	4,4'-DDT
105.050	009	EPA 508.1	Dieldrin
105.050	010	EPA 508.1	Endrin

105.050	011	EPA 508.1	Heptachlor
105.050	012	EPA 508.1	Heptachlor Epoxide
105.050	013	EPA 508.1	Hexachlorobenzene
105.050	014	EPA 508.1	Hexachlorocyclopentadiene
105.050	015	EPA 508.1	Lindane
105.050	016	EPA 508.1	Methoxychlor
105.050	017	EPA 508.1	Metolachlor
105.050	021	EPA 508.1	PCB-1016
105.050	022	EPA 508.1	PCB-1221
105.050	023	EPA 508.1	PCB-1232
105.050	024	EPA 508.1	PCB-1242
105.050	025	EPA 508.1	PCB-1248
105.050	026	EPA 508.1	PCB-1254
105.050	027	EPA 508.1	PCB-1260
105.050	028	EPA 508.1	PCBs as Aroclors
105.050	030	EPA 508.1	Chlorinated Pesticides
105.083	001	EPA 515.4	2,4-D
105.083	002	EPA 515.4	Dinoseb
105.083	003	EPA 515.4	Pentachlorophenol
105.083	004	EPA 515.4	Picloram
105.083	005	EPA 515.4	2,4,5-TP
105.083	006	EPA 515.4	Dalapon
105.083	007	EPA 515.4	Bentazon
105.083	008	EPA 515.4	Dicamba
105.083	009	EPA 515.4	Chlorinated Acids
105.090	001	EPA 525.2	Alachlor
105.090	002	EPA 525.2	Aldrin
105.090	003	EPA 525.2	Atrazine
105.090	004	EPA 525.2	Benzo(a)pyrene
105.090	005	EPA 525.2	Butachlor
105.090	007	EPA 525.2	Dieldrin
105.090	008	EPA 525.2	Di(2-ethylhexyl) Adipate
105.090	009	EPA 525.2	Di(2-ethylhexyl) Phthalate
105.090	013	EPA 525.2	Endrin
105.090	016	EPA 525.2	Hexachlorobenzene
105.090	017	EPA 525.2	Hexachlorocyclopentadiene
105.090	019	EPA 525.2	Methoxychlor
105.090	020	EPA 525.2	Metolachlor
105.090	021	EPA 525.2	Metribuzin
105.090	022	EPA 525.2	Molinate
105.090	024	EPA 525.2	Propachlor

105.090	025	EPA 525.2	Simazine
105.090	029	EPA 525.2	Polynuclear Aromatic Hydrocarbons
105.090	030	EPA 525.2	Adipates
105.090	031	EPA 525.2	Phthalates
105.090	032	EPA 525.2	Other Extractables
105.090	034	EPA 525.2	Pesticides
105.100	000	EPA 531.1	Carbamates
105.100	001	EPA 531.1	Aldicarb
105.100	002	EPA 531.1	Aldicarb Sulfone
105.100	003	EPA 531.1	Aldicarb Sulfoxide
105.100	004	EPA 531.1	Carbaryl
105.100	005	EPA 531.1	Carbofuran
105.100	006	EPA 531.1	3-Hydroxycarbofuran
105.100	007	EPA 531.1	Methomyl
105.100	008	EPA 531.1	Oxamyl
105.120	001	EPA 547	Glyphosate
105.140	001	EPA 548.1	Endothall
105.150	001	EPA 549.2	Diquat
105.200	001	EPA 552.2	Bromoacetic Acid
105.200	002	EPA 552.2	Bromochloroacetic Acid
105.200	003	EPA 552.2	Chloroacetic Acid
105.200	005	EPA 552.2	Dibromoacetic Acid
105.200	006	EPA 552.2	Dichloroacetic Acid
105.200	007	EPA 552.2	Trichloroacetic Acid
105.200	008	EPA 552.2	Haloacetic Acids (HAA5)
105.200	009	EPA 552.2	Haloacetic Acids

**106 - Radiochemistry of Drinking Water**

106.092	001	EPA 200.8	Uranium
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**107 - Microbiology of Wastewater**

107.010	001	SM9215B	Heterotrophic Bacteria
107.020	001	SM9221B	Total Coliform
107.030	001	SM9221B	Total Coliform with Chlorine Present
107.040	001	SM9221C,E (MTF/EC)	Fecal Coliform
107.050	001	SM9221E	Fecal Coliform with Chlorine Present
107.100	001	SM9230B	Fecal Streptococci
107.100	002	SM9230B	Enterococci

**108 - Inorganic Chemistry of Wastewater**

108.020	001	EPA 120.1	Conductivity
108.090	001	EPA 160.4	Residue, Volatile
108.110	001	EPA 180.1	Turbidity
108.112	001	EPA 200.7	Boron

108.112	002	EPA 200.7	Calcium
108.112	003	EPA 200.7	Hardness (calc.)
108.112	004	EPA 200.7	Magnesium
108.112	005	EPA 200.7	Potassium
108.112	006	EPA 200.7	Silica
108.112	007	EPA 200.7	Sodium
108.120	001	EPA 300.0	Bromide
108.120	002	EPA 300.0	Chloride
108.120	003	EPA 300.0	Fluoride
108.120	004	EPA 300.0	Nitrate
108.120	005	EPA 300.0	Nitrite
108.120	006	EPA 300.0	Nitrate-nitrite
108.120	007	EPA 300.0	Phosphate, Ortho
108.120	008	EPA 300.0	Sulfate
108.121	005	EPA 300.1	Nitrite
108.265	001	EPA 365.3	Phosphorus, Total
108.323	001	EPA 410.4	Chemical Oxygen Demand
108.350	001	EPA 418.1	Total Recoverable Petroleum Hydrocarbons
108.360	001	EPA 420.1	Phenols, Total
108.381	001	EPA 1664A	Oil and Grease
108.385	001	SM2120B	Color
108.390	001	SM2130B	Turbidity
108.400	001	SM2310B	Acidity
108.410	001	SM2320B	Alkalinity
108.420	001	SM2340B	Hardness (calc.)
108.421	001	SM2340C	Hardness
108.430	001	SM2510B	Conductivity
108.440	001	SM2540B	Residue, Total
108.441	001	SM2540C	Residue, Filterable
108.442	001	SM2540D	Residue, Non-filterable
108.443	001	SM2540F	Residue, Settleable
108.465	001	SM4500-CI G	Chlorine
108.470	001	SM4500-CN C	Cyanide, Manual Distillation
108.472	001	SM4500-CN E	Cyanide, Total
108.473	001	SM4500-CN G	Cyanide, amenable
108.490	001	SM4500-H+ B	pH
108.492	001	SM4500-NH3 C (19th/20th)	Ammonia
108.493	001	SM4500-NH3 D or E (19th/20th)	Ammonia
108.531	001	SM4500-O G	Dissolved Oxygen
108.580	001	SM4500-S= D	Sulfide
108.590	001	SM5210B	Biochemical Oxygen Demand

108.591	001	SM5210B	Carbonaceous BOD
108.602	001	SM5220D	Chemical Oxygen Demand
108.610	001	SM5310B	Total Organic Carbon
108.640	001	SM5540C	Surfactants

**109 - Toxic Chemical Elements of Wastewater**

109.010	001	EPA 200.7	Aluminum
109.010	002	EPA 200.7	Antimony
109.010	003	EPA 200.7	Arsenic
109.010	004	EPA 200.7	Barium
109.010	005	EPA 200.7	Beryllium
109.010	007	EPA 200.7	Cadmium
109.010	009	EPA 200.7	Chromium
109.010	010	EPA 200.7	Cobalt
109.010	011	EPA 200.7	Copper
109.010	012	EPA 200.7	Iron
109.010	013	EPA 200.7	Lead
109.010	015	EPA 200.7	Manganese
109.010	016	EPA 200.7	Molybdenum
109.010	017	EPA 200.7	Nickel
109.010	019	EPA 200.7	Selenium
109.010	021	EPA 200.7	Silver
109.010	023	EPA 200.7	Thallium
109.010	024	EPA 200.7	Tin
109.010	026	EPA 200.7	Vanadium
109.010	027	EPA 200.7	Zinc
109.020	001	EPA 200.8	Aluminum
109.020	002	EPA 200.8	Antimony
109.020	003	EPA 200.8	Arsenic
109.020	004	EPA 200.8	Barium
109.020	005	EPA 200.8	Beryllium
109.020	006	EPA 200.8	Cadmium
109.020	007	EPA 200.8	Chromium
109.020	008	EPA 200.8	Cobalt
109.020	009	EPA 200.8	Copper
109.020	010	EPA 200.8	Lead
109.020	011	EPA 200.8	Manganese
109.020	012	EPA 200.8	Molybdenum
109.020	013	EPA 200.8	Nickel
109.020	014	EPA 200.8	Selenium
109.020	015	EPA 200.8	Silver
109.020	016	EPA 200.8	Thallium

109.020	017	EPA 200.8	Vanadium
109.020	018	EPA 200.8	Zinc
109.104	001	EPA 218.6	Chromium (VI)
109.190	001	EPA 245.1	Mercury
109.811	001	SM3500-Cr D (18th/19th)	Chromium (VI)
109.824	001	SM3500-Fe B (20th)	Iron
109.825	001	SM3500-Fe D (18th/19th)	Iron

**110 - Volatile Organic Chemistry of Wastewater**

110.040	001	EPA 624	Benzene
110.040	002	EPA 624	Bromodichloromethane
110.040	003	EPA 624	Bromoform
110.040	004	EPA 624	Bromomethane
110.040	005	EPA 624	Carbon Tetrachloride
110.040	006	EPA 624	Chlorobenzene
110.040	007	EPA 624	Chloroethane
110.040	008	EPA 624	2-Chloroethyl Vinyl Ether
110.040	009	EPA 624	Chloroform
110.040	010	EPA 624	Chloromethane
110.040	011	EPA 624	Dibromochloromethane
110.040	012	EPA 624	1,2-Dichlorobenzene
110.040	013	EPA 624	1,3-Dichlorobenzene
110.040	014	EPA 624	1,4-Dichlorobenzene
110.040	015	EPA 624	1,1-Dichloroethane
110.040	016	EPA 624	1,2-Dichloroethane
110.040	017	EPA 624	1,1-Dichloroethene
110.040	018	EPA 624	trans-1,2-Dichloroethene
110.040	019	EPA 624	1,2-Dichloropropane
110.040	020	EPA 624	cis-1,3-Dichloropropene
110.040	021	EPA 624	trans-1,3-Dichloropropene
110.040	022	EPA 624	Ethylbenzene
110.040	023	EPA 624	Methylene Chloride
110.040	024	EPA 624	1,1,2,2-Tetrachloroethane
110.040	025	EPA 624	Tetrachloroethene
110.040	026	EPA 624	Toluene
110.040	027	EPA 624	1,1,1-Trichloroethane
110.040	028	EPA 624	1,1,2-Trichloroethane
110.040	029	EPA 624	Trichloroethene
110.040	030	EPA 624	Trichlorofluoromethane
110.040	031	EPA 624	Vinyl Chloride
110.040	040	EPA 624	Halogenated Hydrocarbons
110.040	041	EPA 624	Aromatic Compounds



110.040	042	EPA 624	Oxygenates
110.040	043	EPA 624	Other Volatile Organics

**111 - Semi-volatile Organic Chemistry of Wastewater**

111.100	001	EPA 625	Acenaphthene
111.100	002	EPA 625	Acenaphthylene
111.100	003	EPA 625	Anthracene
111.100	004	EPA 625	Benzidine
111.100	005	EPA 625	Benz(a)anthracene
111.100	006	EPA 625	Benzo(b)fluoranthene
111.100	007	EPA 625	Benzo(k)fluoranthene
111.100	008	EPA 625	Benzo(g,h,i)perylene
111.100	009	EPA 625	Benzo(a)pyrene
111.100	010	EPA 625	Benzyl Butyl Phthalate
111.100	011	EPA 625	bis(2-chloroethoxy)methane
111.100	012	EPA 625	bis(2-chloroethyl) Ether
111.100	013	EPA 625	Bis(2-chloroisopropyl) Ether
111.100	014	EPA 625	Di(2-ethylhexyl) Phthalate
111.100	015	EPA 625	4-Bromophenyl Phenyl Ether
111.100	016	EPA 625	4-Chloro-3-methylphenol
111.100	017	EPA 625	2-Chloronaphthalene
111.100	018	EPA 625	2-Chlorophenol
111.100	019	EPA 625	4-Chlorophenyl Phenyl Ether
111.100	020	EPA 625	Chrysene
111.100	021	EPA 625	Dibenz(a,h)anthracene
111.100	025	EPA 625	3,3'-Dichlorobenzidine
111.100	026	EPA 625	2,4-Dichlorophenol
111.100	027	EPA 625	Diethyl Phthalate
111.100	028	EPA 625	2,4-Dimethylphenol
111.100	029	EPA 625	Dimethyl Phthalate
111.100	030	EPA 625	Di-n-butyl phthalate
111.100	031	EPA 625	Di-n-octyl phthalate
111.100	032	EPA 625	2,4-Dinitrophenol
111.100	033	EPA 625	2,4-Dinitrotoluene
111.100	034	EPA 625	2,6-Dinitrotoluene
111.100	035	EPA 625	Fluoranthene
111.100	036	EPA 625	Fluorene
111.100	037	EPA 625	Hexachlorobenzene
111.100	038	EPA 625	Hexachlorobutadiene
111.100	039	EPA 625	Hexachlorocyclopentadiene
111.100	040	EPA 625	Hexachloroethane
111.100	041	EPA 625	Indeno(1,2,3-c,d)pyrene

111.100	042	EPA 625	Isophorone
111.100	043	EPA 625	2-Methyl-4,6-dinitrophenol
111.100	044	EPA 625	Naphthalene
111.100	045	EPA 625	Nitrobenzene
111.100	046	EPA 625	2-Nitrophenol
111.100	047	EPA 625	4-Nitrophenol
111.100	048	EPA 625	N-nitrosodimethylamine
111.100	049	EPA 625	N-nitroso-di-n-propylamine
111.100	050	EPA 625	N-nitrosodiphenylamine
111.100	051	EPA 625	Pentachlorophenol
111.100	052	EPA 625	Phenanthrene
111.100	053	EPA 625	Phenol
111.100	054	EPA 625	Pyrene
111.100	055	EPA 625	1,2,4-Trichlorobenzene
111.100	056	EPA 625	2,4,6-Trichlorophenol
111.101	032	EPA 625	Polynuclear Aromatic Hydrocarbons
111.101	036	EPA 625	Other Extractables
111.120	048	EPA 1625	N-nitrosodimethylamine
111.170	001	EPA 608	Aldrin
111.170	002	EPA 608	a-BHC
111.170	003	EPA 608	b-BHC
111.170	004	EPA 608	d-BHC
111.170	005	EPA 608	g-BHC (Lindane)
111.170	006	EPA 608	Chlordane
111.170	007	EPA 608	4,4'-DDD
111.170	008	EPA 608	4,4'-DDE
111.170	009	EPA 608	4,4'-DDT
111.170	010	EPA 608	Dieldrin
111.170	011	EPA 608	Endosulfan I
111.170	012	EPA 608	Endosulfan II
111.170	013	EPA 608	Endosulfan Sulfate
111.170	014	EPA 608	Endrin
111.170	015	EPA 608	Endrin Aldehyde
111.170	016	EPA 608	Heptachlor
111.170	017	EPA 608	Heptachlor Epoxide
111.170	018	EPA 608	Toxaphene
111.170	019	EPA 608	PCB-1016
111.170	020	EPA 608	PCB-1221
111.170	021	EPA 608	PCB-1232
111.170	022	EPA 608	PCB-1242
111.170	023	EPA 608	PCB-1248

111.170	024	EPA 608	PCB-1254
111.170	025	EPA 608	PCB-1260
111.170	030	EPA 608	Organochlorine Pesticides
111.170	031	EPA 608	PCBs
111.273	001	EPA 1664A	Oil and Grease

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**114 - Inorganic Chemistry of Hazardous Waste**

114.010	001	EPA 6010B	Antimony
114.010	002	EPA 6010B	Arsenic
114.010	003	EPA 6010B	Barium
114.010	004	EPA 6010B	Beryllium
114.010	005	EPA 6010B	Cadmium
114.010	006	EPA 6010B	Chromium
114.010	007	EPA 6010B	Cobalt
114.010	008	EPA 6010B	Copper
114.010	009	EPA 6010B	Lead
114.010	010	EPA 6010B	Molybdenum
114.010	011	EPA 6010B	Nickel
114.010	012	EPA 6010B	Selenium
114.010	013	EPA 6010B	Silver
114.010	014	EPA 6010B	Thallium
114.010	015	EPA 6010B	Vanadium
114.010	016	EPA 6010B	Zinc
114.020	001	EPA 6020	Antimony
114.020	002	EPA 6020	Arsenic
114.020	003	EPA 6020	Barium
114.020	004	EPA 6020	Beryllium
114.020	005	EPA 6020	Cadmium
114.020	006	EPA 6020	Chromium
114.020	007	EPA 6020	Cobalt
114.020	008	EPA 6020	Copper
114.020	009	EPA 6020	Lead
114.020	010	EPA 6020	Molybdenum
114.020	011	EPA 6020	Nickel
114.020	012	EPA 6020	Selenium
114.020	013	EPA 6020	Silver
114.020	014	EPA 6020	Thallium
114.020	015	EPA 6020	Vanadium
114.020	016	EPA 6020	Zinc
114.103	001	EPA 7196A	Chromium (VI)
114.106	001	EPA 7199	Chromium (VI)
114.140	001	EPA 7470A	Mercury

114.141	001	EPA 7471A	Mercury
114.222	001	EPA 9014	Cyanide
114.230	001	EPA 9034	Sulfides, Total
114.240	001	EPA 9040B	Corrosivity - pH Determination
114.241	001	EPA 9045C	Corrosivity - pH Determination
114.250	001	EPA 9056	Fluoride
114.270	001	EPA 9214	Fluoride

**115 - Extraction Test of Hazardous Waste**

115.020	001	EPA 1311	Toxicity Characteristic Leaching Procedure (TCLP)
115.021	001	EPA 1311	TCLP Inorganics
115.022	001	EPA 1311	TCLP Extractables
115.023	001	EPA 1311	TCLP Volatiles
115.030	001	CCR Chapter11, Article 5, Appendix II	Waste Extraction Test (WET)
115.040	001	EPA 1312	Synthetic Precipitation Leaching Procedure (SPLP)

**116 - Volatile Organic Chemistry of Hazardous Waste**

116.020	009	EPA 8015B	Ethanol
116.020	015	EPA 8015B	Methanol
116.080	000	EPA 8260B	Volatile Organic Compounds
116.080	001	EPA 8260B	Acetone
116.080	002	EPA 8260B	Acetonitrile
116.080	003	EPA 8260B	Acrolein
116.080	004	EPA 8260B	Acrylonitrile
116.080	005	EPA 8260B	Allyl Alcohol
116.080	006	EPA 8260B	Allyl Chloride
116.080	007	EPA 8260B	Benzene
116.080	008	EPA 8260B	Benzyl Chloride
116.080	009	EPA 8260B	Bromoacetone
116.080	010	EPA 8260B	Bromochloromethane
116.080	011	EPA 8260B	Bromodichloromethane
116.080	012	EPA 8260B	Bromoform
116.080	013	EPA 8260B	Bromomethane
116.080	014	EPA 8260B	n-Butyl Alcohol
116.080	015	EPA 8260B	Carbon Disulfide
116.080	016	EPA 8260B	Carbon Tetrachloride
116.080	017	EPA 8260B	Chloral Hydrate
116.080	018	EPA 8260B	Chlorobenzene
116.080	019	EPA 8260B	Chloroethane
116.080	020	EPA 8260B	2-Chloroethyl Vinyl Ether
116.080	021	EPA 8260B	Chloroform
116.080	022	EPA 8260B	Chloromethane
116.080	026	EPA 8260B	Dibromochloromethane

116.080	027	EPA 8260B	Dibromochloropropane
116.080	028	EPA 8260B	1,2-Dibromoethane
116.080	029	EPA 8260B	Dibromofluoromethane
116.080	030	EPA 8260B	Dibromomethane
116.080	031	EPA 8260B	1,2-Dichlorobenzene
116.080	032	EPA 8260B	1,3-Dichlorobenzene
116.080	033	EPA 8260B	1,4-Dichlorobenzene
116.080	034	EPA 8260B	cis-1,4-Dichloro-2-butene
116.080	035	EPA 8260B	trans-1,4-Dichloro-2-butene
116.080	036	EPA 8260B	Dichlorodifluoromethane
116.080	037	EPA 8260B	1,1-Dichloroethane
116.080	038	EPA 8260B	1,2-Dichloroethane
116.080	039	EPA 8260B	1,1-Dichloroethene
116.080	040	EPA 8260B	trans-1,2-Dichloroethene
116.080	041	EPA 8260B	cis-1,2-Dichloroethene
116.080	042	EPA 8260B	1,2-Dichloropropane
116.080	043	EPA 8260B	1,3-Dichloropropane
116.080	044	EPA 8260B	2,2-Dichloropropane
116.080	045	EPA 8260B	1,1-Dichloropropene
116.080	046	EPA 8260B	cis-1,3-Dichloropropene
116.080	047	EPA 8260B	trans-1,3-Dichloropropene
116.080	050	EPA 8260B	1,4-Dioxane
116.080	053	EPA 8260B	Ethylbenzene
116.080	055	EPA 8260B	Ethyl Methacrylate
116.080	056	EPA 8260B	Hexachlorobutadiene
116.080	057	EPA 8260B	Hexachloroethane
116.080	058	EPA 8260B	2-Hexanone (MBK)
116.080	059	EPA 8260B	Iodomethane
116.080	060	EPA 8260B	Isobutyl Alcohol
116.080	062	EPA 8260B	Methacrylonitrile
116.080	064	EPA 8260B	Methyl tert-butyl Ether (MTBE)
116.080	065	EPA 8260B	Methylene Chloride
116.080	066	EPA 8260B	Methyl Ethyl Ketone
116.080	067	EPA 8260B	Methyl Methacrylate
116.080	068	EPA 8260B	4-Methyl-2-pentanone (MIBK)
116.080	069	EPA 8260B	Naphthalene
116.080	070	EPA 8260B	Nitrobenzene
116.080	071	EPA 8260B	2-Nitropropane
116.080	078	EPA 8260B	Propionitrile
116.080	079	EPA 8260B	N-propylamine
116.080	080	EPA 8260B	Pyridine

116.080	081	EPA 8260B	1,1,1,2-Tetrachloroethane
116.080	082	EPA 8260B	1,1,2,2-Tetrachloroethane
116.080	083	EPA 8260B	Tetrachloroethene
116.080	084	EPA 8260B	Toluene
116.080	086	EPA 8260B	1,2,3-Trichlorobenzene
116.080	087	EPA 8260B	1,2,4-Trichlorobenzene
116.080	088	EPA 8260B	1,1,1-Trichloroethane
116.080	089	EPA 8260B	1,1,2-Trichloroethane
116.080	090	EPA 8260B	Trichloroethene
116.080	091	EPA 8260B	Trichlorofluoromethane
116.080	092	EPA 8260B	1,2,3-Trichloropropane
116.080	093	EPA 8260B	Vinyl Acetate
116.080	094	EPA 8260B	Vinyl Chloride
116.080	095	EPA 8260B	Xylenes, Total
116.080	096	EPA 8260B	tert-Amyl Methyl Ether (TAME)
116.080	097	EPA 8260B	tert-Butyl Alcohol (TBA)
116.080	098	EPA 8260B	Ethyl tert-butyl Ether (ETBE)
116.080	099	EPA 8260B	Bromobenzene
116.080	100	EPA 8260B	n-Butylbenzene
116.080	101	EPA 8260B	sec-Butylbenzene
116.080	102	EPA 8260B	tert-Butylbenzene
116.080	103	EPA 8260B	2-Chlorotoluene
116.080	104	EPA 8260B	4-Chlorotoluene
116.080	105	EPA 8260B	Isopropylbenzene
116.080	106	EPA 8260B	N-propylbenzene
116.080	107	EPA 8260B	Styrene
116.080	108	EPA 8260B	1,2,4-Trimethylbenzene
116.080	109	EPA 8260B	1,3,5-Trimethylbenzene
116.080	120	EPA 8260B	Oxygenates
116.100	001	LUFT GC/MS	Total Petroleum Hydrocarbons - Gasoline
116.110	001	LUFT	Total Petroleum Hydrocarbons - Gasoline

**117 - Semi-volatile Organic Chemistry of Hazardous Waste**

117.010	001	EPA 8015B	Diesel-range Total Petroleum Hydrocarbons
117.017	001	EPA 418.1	TRPH Screening
117.110	000	EPA 8270C	Extractable Organics
117.110	001	EPA 8270C	Acenaphthene
117.110	002	EPA 8270C	Acenaphthylene
117.110	003	EPA 8270C	Acetophenone
117.110	003	EPA 8270C	Acetophenone
117.110	004	EPA 8270C	2-Acetylaminofluorene
117.110	005	EPA 8270C	1-Acetyl-2-thiourea

117.110	006	EPA 8270C	4-Aminobiphenyl
117.110	007	EPA 8270C	Aniline
117.110	008	EPA 8270C	Anthracene
117.110	009	EPA 8270C	Aramite
117.110	010	EPA 8270C	Benzidine
117.110	011	EPA 8270C	Benz(a)anthracene
117.110	012	EPA 8270C	Benzo(b)fluoranthene
117.110	013	EPA 8270C	Benzo(k)fluoranthene
117.110	014	EPA 8270C	Benzo(g,h,i)perylene
117.110	015	EPA 8270C	Benzo(a)pyrene
117.110	016	EPA 8270C	Benzoic Acid
117.110	018	EPA 8270C	Benzyl Alcohol
117.110	019	EPA 8270C	Benzyl Butyl Phthalate
117.110	020	EPA 8270C	bis(2-chloroethoxy)methane
117.110	021	EPA 8270C	bis(2-chloroethyl) Ether
117.110	022	EPA 8270C	Bis(2-chloroisopropyl) Ether
117.110	023	EPA 8270C	Di(2-ethylhexyl) Phthalate
117.110	024	EPA 8270C	4-Bromophenyl Phenyl Ether
117.110	025	EPA 8270C	Carbazole
117.110	026	EPA 8270C	4-Chloroaniline
117.110	027	EPA 8270C	4-Chloro-3-methylphenol
117.110	028	EPA 8270C	1-Chloronaphthalene
117.110	029	EPA 8270C	2-Chloronaphthalene
117.110	030	EPA 8270C	2-Chlorophenol
117.110	031	EPA 8270C	4-Chlorophenyl Phenyl Ether
117.110	032	EPA 8270C	Chrysene
117.110	036	EPA 8270C	Dibenz(a,h)anthracene
117.110	037	EPA 8270C	Dibenzofuran
117.110	039	EPA 8270C	1,2-Dichlorobenzene
117.110	040	EPA 8270C	1,3-Dichlorobenzene
117.110	041	EPA 8270C	1,4-Dichlorobenzene
117.110	042	EPA 8270C	3,3'-Dichlorobenzidine
117.110	043	EPA 8270C	2,4-Dichlorophenol
117.110	044	EPA 8270C	2,6-Dichlorophenol
117.110	045	EPA 8270C	Diethyl Phthalate
117.110	052	EPA 8270C	a,a-Dimethylphenethylamine
117.110	053	EPA 8270C	2,4-Dimethylphenol
117.110	054	EPA 8270C	Dimethyl Phthalate
117.110	055	EPA 8270C	Di-n-butyl phthalate
117.110	056	EPA 8270C	Di-n-octyl phthalate
117.110	057	EPA 8270C	1,2-Dinitrobenzene

117.110	058	EPA 8270C	1,3-Dinitrobenzene
117.110	059	EPA 8270C	1,4-Dinitrobenzene
117.110	060	EPA 8270C	2,4-Dinitrophenol
117.110	061	EPA 8270C	2,4-Dinitrotoluene
117.110	062	EPA 8270C	2,6-Dinitrotoluene
117.110	064	EPA 8270C	1,2-Diphenylhydrazine
117.110	067	EPA 8270C	Fluoranthene
117.110	068	EPA 8270C	Fluorene
117.110	069	EPA 8270C	Hexachlorobenzene
117.110	070	EPA 8270C	Hexachlorobutadiene
117.110	071	EPA 8270C	Hexachlorocyclopentadiene
117.110	072	EPA 8270C	Hexachloroethane
117.110	075	EPA 8270C	Indeno(1,2,3-c,d)pyrene
117.110	076	EPA 8270C	Isophorone
117.110	080	EPA 8270C	2-Methyl-4,6-dinitrophenol
117.110	083	EPA 8270C	2-Methylnaphthalene
117.110	084	EPA 8270C	2-Methylphenol
117.110	085	EPA 8270C	3-Methylphenol
117.110	086	EPA 8270C	4-Methylphenol
117.110	087	EPA 8270C	Naphthalene
117.110	089	EPA 8270C	1-Naphthylamine
117.110	090	EPA 8270C	2-Naphthylamine
117.110	092	EPA 8270C	2-Nitroaniline
117.110	093	EPA 8270C	3-Nitroaniline
117.110	094	EPA 8270C	4-Nitroaniline
117.110	095	EPA 8270C	Nitrobenzene
117.110	096	EPA 8270C	2-Nitrophenol
117.110	097	EPA 8270C	4-Nitrophenol
117.110	100	EPA 8270C	N-nitrosodimethylamine
117.110	101	EPA 8270C	N-nitroso-di-n-propylamine
117.110	102	EPA 8270C	N-nitrosodiphenylamine
117.110	108	EPA 8270C	Pentachlorobenzene
117.110	110	EPA 8270C	Pentachlorophenol
117.110	112	EPA 8270C	Phenanthrene
117.110	113	EPA 8270C	Phenol
117.110	119	EPA 8270C	Pyrene
117.110	120	EPA 8270C	Pyridine
117.110	124	EPA 8270C	1,2,4,5-Tetrachlorobenzene
117.110	129	EPA 8270C	1,2,4-Trichlorobenzene
117.110	130	EPA 8270C	2,4,5-Trichlorophenol
117.110	131	EPA 8270C	2,4,6-Trichlorophenol



117.111	073	EPA 8270C	Polynuclear Aromatic Hydrocarbons
117.111	074	EPA 8270C	Adipates
117.111	075	EPA 8270C	Phthalates
117.111	076	EPA 8270C	Other Extractables
117.116	001	LUFT	Diesel-range Total Petroleum Hydrocarbons
117.210	000	EPA 8081A	Organochlorine Pesticides
117.210	001	EPA 8081A	Aldrin
117.210	002	EPA 8081A	a-BHC
117.210	003	EPA 8081A	b-BHC
117.210	004	EPA 8081A	d-BHC
117.210	005	EPA 8081A	g-BHC (Lindane)
117.210	007	EPA 8081A	a-Chlordane
117.210	008	EPA 8081A	g-Chlordane
117.210	009	EPA 8081A	Chlordane (tech.)
117.210	013	EPA 8081A	4,4'-DDD
117.210	014	EPA 8081A	4,4'-DDE
117.210	015	EPA 8081A	4,4'-DDT
117.210	020	EPA 8081A	Dieldrin
117.210	021	EPA 8081A	Endosulfan I
117.210	022	EPA 8081A	Endosulfan II
117.210	023	EPA 8081A	Endosulfan Sulfate
117.210	024	EPA 8081A	Endrin
117.210	025	EPA 8081A	Endrin Aldehyde
117.210	026	EPA 8081A	Endrin Ketone
117.210	027	EPA 8081A	Heptachlor
117.210	028	EPA 8081A	Heptachlor Epoxide
117.210	033	EPA 8081A	Methoxychlor
117.210	039	EPA 8081A	Toxaphene
117.210	040	EPA 8081A	Trifluralin
117.220	000	EPA 8082	PCBs
117.220	001	EPA 8082	PCB-1016
117.220	002	EPA 8082	PCB-1221
117.220	003	EPA 8082	PCB-1232
117.220	004	EPA 8082	PCB-1242
117.220	005	EPA 8082	PCB-1248
117.220	006	EPA 8082	PCB-1254
117.220	007	EPA 8082	PCB-1260

**120 - Physical Properties of Hazardous Waste**

120.010	001	EPA 1010	Ignitability
120.070	001	EPA 9040B	Corrosivity - pH Determination
120.080	001	EPA 9045C	Corrosivity - pH Determination



NELAP - RECOGNIZED

CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

**CERTIFICATE OF NELAP ACCREDITATION**

Is hereby granted to

**Testamerica West Sacramento**

880 Riverside Parkway  
West Sacramento, CA 95605

Scope of the Certificate is limited to the  
"NELAP Fields of Accreditation"  
which accompany this Certificate.

Continued accredited status depends on successful  
ongoing participation in the program.

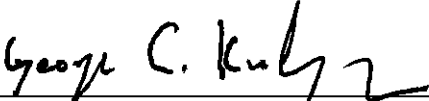
This Certificate is granted in accordance with provisions of  
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **01119CA**

Expiration Date: **1/31/2012**

Effective Date: **2/1/2011**

Richmond, California  
subject to forfeiture or revocation

  
George C. Kulasingam, Ph.D./Chief  
Environmental Laboratory Accreditation Program Branch



MARK B HORTON, MD, MSPH  
Director

State of California—Health and Human Services Agency  
California Department of Public Health



ARNOLD SCHWARZENEGGER  
Governor

December 21, 2010

KARLA S. BUECHLER  
TESTAMERICA WEST SACRAMENTO  
880 RIVERSIDE PARKWAY  
WEST SACRAMENTO, CA 95605

Dear KARLA S. BUECHLER:

Certificate No. 01119CA

This is to advise you that the laboratory named above has been accredited under National Environmental Laboratory Accreditation Program (NELAP) as an environmental testing laboratory pursuant to the provisions of the Health and Safety Code (HSC), Division 101, Part 1, Chapter 4, Section 100825, et seq.

The Fields of Accreditation for which this laboratory has been accredited are enclosed. Accreditation shall remain in effect until **January 31, 2012** unless revoked by ELAP or withdrawn at your written request. To maintain accreditation, the laboratory shall comply with the National Environmental Laboratory Accreditation Conference (NELAC) Standards and all associated California Environmental Laboratory Accreditation Program Branch (ELAP) regulations and statutes.

The application for renewal of this certificate must be received before the expiration date of this certificate to remain in force according to the HSC 100845(a).

Please note that your laboratory is required to notify California ELAP of any major changes in key accreditation criteria within 30 calendar days of the change. This written notification includes, but is not limited to, changes in ownership, location, key personnel, and major instrumentation (HSC 100845(b) and (d), and NELAC Standard Section 4.3.2). The certificate must be returned to California ELAP upon loss of accredited status.

Your continued cooperation with the above requirements is essential for maintaining the high quality of the data produced by environmental laboratories accredited by the State of California.

If you have any questions, please contact Jane Jensen at (510) 620-3155.

Sincerely,

George C. Kulasingam, Ph.D., Chief  
Environmental Laboratory Accreditation Program Branch

Enclosure



CALIFORNIA DEPARTMENT OF PUBLIC HEALTH  
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM - NELAP RECOGNIZED  
NELAP Fields of Accreditation



**Testamerica West Sacramento**

880 Riverside Parkway  
West Sacramento, CA 95605  
Phone: (916) 373-5600

Certificate No.: 01119CA  
Renew Date: 1/31/2012

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**102 - Inorganic Chemistry of Drinking Water**

102.045	001	EPA 314.0	Perchlorate
102.047	001	EPA 331.0	Perchlorate
102.510	006	SM3120B	Hardness (calc.)
102.520	001	EPA 200.7	Calcium
102.520	002	EPA 200.7	Magnesium
102.520	003	EPA 200.7	Potassium
102.520	004	EPA 200.7	Silica
102.520	005	EPA 200.7	Sodium
102.520	006	EPA 200.7	Hardness (calc.)

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**103 - Toxic Chemical Elements of Drinking Water**

103.130	001	EPA 200.7	Aluminum
103.130	003	EPA 200.7	Barium
103.130	004	EPA 200.7	Beryllium
103.130	005	EPA 200.7	Cadmium
103.130	007	EPA 200.7	Chromium
103.130	008	EPA 200.7	Copper
103.130	009	EPA 200.7	Iron
103.130	011	EPA 200.7	Manganese
103.130	012	EPA 200.7	Nickel
103.130	015	EPA 200.7	Silver
103.130	017	EPA 200.7	Zinc
103.140	001	EPA 200.8	Aluminum
103.140	002	EPA 200.8	Antimony
103.140	003	EPA 200.8	Arsenic
103.140	004	EPA 200.8	Barium
103.140	005	EPA 200.8	Beryllium
103.140	006	EPA 200.8	Cadmium
103.140	007	EPA 200.8	Chromium
103.140	008	EPA 200.8	Copper
103.140	009	EPA 200.8	Lead
103.140	010	EPA 200.8	Manganese
103.140	012	EPA 200.8	Nickel
103.140	013	EPA 200.8	Selenium

103.140	014	EPA 200.8	Silver
103.140	015	EPA 200.8	Thallium
103.140	016	EPA 200.8	Zinc
103.160	001	EPA 245.1	Mercury

**105 - Semi-volatile Organic Chemistry of Drinking Water**

105.230	000	EPA 1613	Dioxins
105.230	001	EPA 1613	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)

**108 - Inorganic Chemistry of Wastewater**

108.020	001	EPA 120.1	Conductivity
108.112	001	EPA 200.7	Boron
108.112	002	EPA 200.7	Calcium
108.112	003	EPA 200.7	Hardness (calc.)
108.112	004	EPA 200.7	Magnesium
108.112	005	EPA 200.7	Potassium
108.112	006	EPA 200.7	Silica
108.112	007	EPA 200.7	Sodium
108.120	001	EPA 300.0	Bromide
108.120	002	EPA 300.0	Chloride
108.120	003	EPA 300.0	Fluoride
108.120	004	EPA 300.0	Nitrate
108.120	005	EPA 300.0	Nitrite
108.120	006	EPA 300.0	Nitrate-nitrite
108.120	008	EPA 300.0	Sulfate
108.141	001	EPA 310.2	Alkalinity
108.183	001	EPA 335.4	Cyanide, Total
108.200	001	EPA 350.1	Ammonia
108.211	001	EPA 351.2	Kjeldahl Nitrogen
108.232	001	EPA 353.2	Nitrate-nitrite
108.232	002	EPA 353.2	Nitrite
108.266	001	EPA 365.4	Phosphorus, Total
108.323	001	EPA 410.4	Chemical Oxygen Demand
108.381	001	EPA 1664A	Oil and Grease
108.410	001	SM2320B	Alkalinity
108.420	001	SM2340B	Hardness (calc.)
108.430	001	SM2510B	Conductivity
108.440	001	SM2540B	Residue, Total
108.441	001	SM2540C	Residue, Filterable
108.442	001	SM2540D	Residue, Non-filterable
108.472	001	SM4500-CN E	Cyanide, Total
108.473	001	SM4500-CN G	Cyanide, amenable
108.490	001	SM4500-H+ B	pH

108.580 001 SM4500-S= D Sulfide

**109 - Toxic Chemical Elements of Wastewater**

109.010	001	EPA 200.7	Aluminum
109.010	002	EPA 200.7	Antimony
109.010	003	EPA 200.7	Arsenic
109.010	004	EPA 200.7	Barium
109.010	005	EPA 200.7	Beryllium
109.010	007	EPA 200.7	Cadmium
109.010	009	EPA 200.7	Chromium
109.010	010	EPA 200.7	Cobalt
109.010	011	EPA 200.7	Copper
109.010	012	EPA 200.7	Iron
109.010	013	EPA 200.7	Lead
109.010	015	EPA 200.7	Manganese
109.010	016	EPA 200.7	Molybdenum
109.010	017	EPA 200.7	Nickel
109.010	019	EPA 200.7	Selenium
109.010	021	EPA 200.7	Silver
109.010	023	EPA 200.7	Thallium
109.010	024	EPA 200.7	Tin
109.010	025	EPA 200.7	Titanium
109.010	026	EPA 200.7	Vanadium
109.010	027	EPA 200.7	Zinc
109.020	001	EPA 200.8	Aluminum
109.020	002	EPA 200.8	Antimony
109.020	003	EPA 200.8	Arsenic
109.020	004	EPA 200.8	Barium
109.020	005	EPA 200.8	Beryllium
109.020	006	EPA 200.8	Cadmium
109.020	007	EPA 200.8	Chromium
109.020	008	EPA 200.8	Cobalt
109.020	009	EPA 200.8	Copper
109.020	010	EPA 200.8	Lead
109.020	011	EPA 200.8	Manganese
109.020	012	EPA 200.8	Molybdenum
109.020	013	EPA 200.8	Nickel
109.020	014	EPA 200.8	Selenium
109.020	015	EPA 200.8	Silver
109.020	016	EPA 200.8	Thallium
109.020	017	EPA 200.8	Vanadium
109.020	018	EPA 200.8	Zinc

109.020	021	EPA 200.8	Iron
109.020	022	EPA 200.8	Tin
109.020	023	EPA 200.8	Titanium
109.190	001	EPA 245.1	Mercury

**111 - Semi-volatile Organic Chemistry of Wastewater**

111.111	000	EPA 1613B	Dioxins
111.111	001	EPA 1613B	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)
111.111	002	EPA 1613B	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)
111.111	003	EPA 1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
111.111	004	EPA 1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
111.111	005	EPA 1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)
111.111	006	EPA 1613B	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)
111.111	007	EPA 1613B	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)
111.111	008	EPA 1613B	2,3,7,8-Tetrachlorodibenzofuran (TCDF)
111.111	009	EPA 1613B	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)
111.111	010	EPA 1613B	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)
111.111	011	EPA 1613B	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)
111.111	012	EPA 1613B	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)
111.111	013	EPA 1613B	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)
111.111	014	EPA 1613B	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)
111.111	015	EPA 1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)
111.111	016	EPA 1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)
111.111	017	EPA 1613B	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)
111.111	018	EPA 1613B	Total TCDD
111.111	019	EPA 1613B	Total PeCDD
111.111	020	EPA 1613B	Total HxCDD
111.111	021	EPA 1613B	Total HpCDD
111.111	022	EPA 1613B	Total TCDF
111.111	023	EPA 1613B	Total PeCDF
111.111	024	EPA 1613B	Total HxCDF
111.111	025	EPA 1613B	Total HpCDF

**114 - Inorganic Chemistry of Hazardous Waste**

114.010	001	EPA 6010B	Antimony
114.010	002	EPA 6010B	Arsenic
114.010	003	EPA 6010B	Barium
114.010	004	EPA 6010B	Beryllium
114.010	005	EPA 6010B	Cadmium
114.010	006	EPA 6010B	Chromium
114.010	007	EPA 6010B	Cobalt
114.010	008	EPA 6010B	Copper
114.010	009	EPA 6010B	Lead

114.010	010	EPA 6010B	Molybdenum	
114.010	011	EPA 6010B	Nickel	
114.010	012	EPA 6010B	Selenium	
114.010	013	EPA 6010B	Silver	
114.010	014	EPA 6010B	Thallium	
114.010	015	EPA 6010B	Vanadium	
114.010	016	EPA 6010B	Zinc	
114.010	026	EPA 6010B	Silica	Aqueous Only
114.010	027	EPA 6010B	Sodium	
114.020	001	EPA 6020	Antimony	
114.020	002	EPA 6020	Arsenic	
114.020	003	EPA 6020	Barium	
114.020	004	EPA 6020	Beryllium	
114.020	005	EPA 6020	Cadmium	
114.020	006	EPA 6020	Chromium	
114.020	007	EPA 6020	Cobalt	
114.020	008	EPA 6020	Copper	
114.020	009	EPA 6020	Lead	
114.020	010	EPA 6020	Molybdenum	
114.020	011	EPA 6020	Nickel	
114.020	012	EPA 6020	Selenium	
114.020	013	EPA 6020	Silver	
114.020	014	EPA 6020	Thallium	
114.020	015	EPA 6020	Vanadium	
114.020	016	EPA 6020	Zinc	
114.103	001	EPA 7196A	Chromium (VI)	
114.140	001	EPA 7470A	Mercury	
114.141	001	EPA 7471A	Mercury	
114.221	001	EPA 9012A	Cyanide, Total	
114.240	001	EPA 9040B	Corrosivity - pH Determination	
114.241	001	EPA 9045C	Corrosivity - pH Determination	
114.250	001	EPA 9056	Fluoride	

**115 - Extraction Test of Hazardous Waste**

115.021	001	EPA 1311	TCLP Inorganics	
115.022	001	EPA 1311	TCLP Extractables	
115.030	001	CCR Chapter11, Article 5, Appendix II	Waste Extraction Test (WET)	

**116 - Volatile Organic Chemistry of Hazardous Waste**

116.080	000	EPA 8260B	Volatile Organic Compounds	
116.080	001	EPA 8260B	Acetone	
116.080	003	EPA 8260B	Acrolein	
116.080	004	EPA 8260B	Acrylonitrile	



116.080	005	EPA 8260B	Allyl Alcohol
116.080	006	EPA 8260B	Allyl Chloride
116.080	007	EPA 8260B	Benzene
116.080	010	EPA 8260B	Bromochloromethane
116.080	011	EPA 8260B	Bromodichloromethane
116.080	012	EPA 8260B	Bromoform
116.080	013	EPA 8260B	Bromomethane
116.080	015	EPA 8260B	Carbon Disulfide
116.080	016	EPA 8260B	Carbon Tetrachloride
116.080	018	EPA 8260B	Chlorobenzene
116.080	019	EPA 8260B	Chloroethane
116.080	020	EPA 8260B	2-Chloroethyl Vinyl Ether
116.080	021	EPA 8260B	Chloroform
116.080	022	EPA 8260B	Chloromethane
116.080	023	EPA 8260B	Chloroprene
116.080	026	EPA 8260B	Dibromochloromethane
116.080	027	EPA 8260B	Dibromochloropropane
116.080	028	EPA 8260B	1,2-Dibromoethane
116.080	029	EPA 8260B	Dibromofluoromethane
116.080	030	EPA 8260B	Dibromomethane
116.080	031	EPA 8260B	1,2-Dichlorobenzene
116.080	032	EPA 8260B	1,3-Dichlorobenzene
116.080	033	EPA 8260B	1,4-Dichlorobenzene
116.080	035	EPA 8260B	trans-1,4-Dichloro-2-butene
116.080	036	EPA 8260B	Dichlorodifluoromethane
116.080	037	EPA 8260B	1,1-Dichloroethane
116.080	038	EPA 8260B	1,2-Dichloroethane
116.080	039	EPA 8260B	1,1-Dichloroethene
116.080	040	EPA 8260B	trans-1,2-Dichloroethene
116.080	041	EPA 8260B	cis-1,2-Dichloroethene
116.080	042	EPA 8260B	1,2-Dichloropropane
116.080	043	EPA 8260B	1,3-Dichloropropane
116.080	044	EPA 8260B	2,2-Dichloropropane
116.080	045	EPA 8260B	1,1-Dichloropropene
116.080	046	EPA 8260B	cis-1,3-Dichloropropene
116.080	047	EPA 8260B	trans-1,3-Dichloropropene
116.080	050	EPA 8260B	1,4-Dioxane
116.080	053	EPA 8260B	Ethylbenzene
116.080	055	EPA 8260B	Ethyl Methacrylate
116.080	056	EPA 8260B	Hexachlorobutadiene
116.080	058	EPA 8260B	2-Hexanone (MBK)

116.080	059	EPA 8260B	Iodomethane
116.080	060	EPA 8260B	Isobutyl Alcohol
116.080	062	EPA 8260B	Methacrylonitrile
116.080	064	EPA 8260B	Methyl tert-butyl Ether (MTBE)
116.080	065	EPA 8260B	Methylene Chloride
116.080	066	EPA 8260B	Methyl Ethyl Ketone
116.080	067	EPA 8260B	Methyl Methacrylate
116.080	068	EPA 8260B	4-Methyl-2-pentanone (MIBK)
116.080	069	EPA 8260B	Naphthalene
116.080	078	EPA 8260B	Propionitrile
116.080	081	EPA 8260B	1,1,1,2-Tetrachloroethane
116.080	082	EPA 8260B	1,1,2,2-Tetrachloroethane
116.080	083	EPA 8260B	Tetrachloroethene
116.080	084	EPA 8260B	Toluene
116.080	086	EPA 8260B	1,2,3-Trichlorobenzene
116.080	087	EPA 8260B	1,2,4-Trichlorobenzene
116.080	088	EPA 8260B	1,1,1-Trichloroethane
116.080	089	EPA 8260B	1,1,2-Trichloroethane
116.080	090	EPA 8260B	Trichloroethene
116.080	091	EPA 8260B	Trichlorofluoromethane
116.080	092	EPA 8260B	1,2,3-Trichloropropane
116.080	093	EPA 8260B	Vinyl Acetate
116.080	094	EPA 8260B	Vinyl Chloride
116.080	095	EPA 8260B	Xylenes, Total
116.080	096	EPA 8260B	tert-Amyl Methyl Ether (TAME)
116.080	097	EPA 8260B	tert-Butyl Alcohol (TBA)
116.080	098	EPA 8260B	Ethyl tert-butyl Ether (ETBE)
116.080	099	EPA 8260B	Bromobenzene
116.080	100	EPA 8260B	n-Butylbenzene
116.080	101	EPA 8260B	sec-Butylbenzene
116.080	102	EPA 8260B	tert-Butylbenzene
116.080	103	EPA 8260B	2-Chlorotoluene
116.080	104	EPA 8260B	4-Chlorotoluene
116.080	105	EPA 8260B	Isopropylbenzene
116.080	106	EPA 8260B	N-propylbenzene
116.080	107	EPA 8260B	Styrene
116.080	108	EPA 8260B	1,2,4-Trimethylbenzene
116.080	109	EPA 8260B	1,3,5-Trimethylbenzene
116.080	120	EPA 8260B	Oxygenates
116.100	001	LUFT GC/MS	Total Petroleum Hydrocarbons - Gasoline
116.100	002	LUFT GC/MS	Benzene

116.100	003	LUFT GC/MS	Toluene
116.100	004	LUFT GC/MS	Xylenes
116.100	005	LUFT GC/MS	Methyl tert-butyl Ether (MTBE)
116.100	010	LUFT GC/MS	BTEX and MTBE

**117 - Semi-volatile Organic Chemistry of Hazardous Waste**

117.010	001	EPA 8015B	Diesel-range Total Petroleum Hydrocarbons
117.016	001	LUFT	Diesel-range Total Petroleum Hydrocarbons
117.110	000	EPA 8270C	Extractable Organics
117.110	001	EPA 8270C	Acenaphthene
117.110	002	EPA 8270C	Acenaphthylene
117.110	003	EPA 8270C	Acetophenone
117.110	004	EPA 8270C	2-Acetylaminofluorene
117.110	006	EPA 8270C	4-Aminobiphenyl
117.110	007	EPA 8270C	Aniline
117.110	008	EPA 8270C	Anthracene
117.110	009	EPA 8270C	Aramite
117.110	010	EPA 8270C	Benzidine
117.110	011	EPA 8270C	Benz(a)anthracene
117.110	012	EPA 8270C	Benzo(b)fluoranthene
117.110	013	EPA 8270C	Benzo(k)fluoranthene
117.110	014	EPA 8270C	Benzo(g,h,i)perylene
117.110	015	EPA 8270C	Benzo(a)pyrene
117.110	016	EPA 8270C	Benzoic Acid
117.110	018	EPA 8270C	Benzyl Alcohol
117.110	019	EPA 8270C	Benzyl Butyl Phthalate
117.110	020	EPA 8270C	bis(2-chloroethoxy)methane
117.110	021	EPA 8270C	bis(2-chloroethyl) Ether
117.110	022	EPA 8270C	Bis(2-chloroisopropyl) Ether
117.110	023	EPA 8270C	Di(2-ethylhexyl) Phthalate
117.110	024	EPA 8270C	4-Bromophenyl Phenyl Ether
117.110	025	EPA 8270C	Carbazole
117.110	026	EPA 8270C	4-Chloroaniline
117.110	027	EPA 8270C	4-Chloro-3-methylphenol
117.110	028	EPA 8270C	1-Chloronaphthalene
117.110	029	EPA 8270C	2-Chloronaphthalene
117.110	030	EPA 8270C	2-Chlorophenol
117.110	031	EPA 8270C	4-Chlorophenyl Phenyl Ether
117.110	032	EPA 8270C	Chrysene
117.110	035	EPA 8270C	Dibenz(a,j)acridine
117.110	036	EPA 8270C	Dibenz(a,h)anthracene
117.110	037	EPA 8270C	Dibenzofuran

117.110	039	EPA 8270C	1,2-Dichlorobenzene
117.110	040	EPA 8270C	1,3-Dichlorobenzene
117.110	041	EPA 8270C	1,4-Dichlorobenzene
117.110	042	EPA 8270C	3,3'-Dichlorobenzidine
117.110	043	EPA 8270C	2,4-Dichlorophenol
117.110	044	EPA 8270C	2,6-Dichlorophenol
117.110	045	EPA 8270C	Diethyl Phthalate
117.110	050	EPA 8270C	p-Dimethylaminoazobenzene
117.110	051	EPA 8270C	7,12-Dimethylbenz(a)anthracene
117.110	052	EPA 8270C	a,a-Dimethylphenethylamine
117.110	053	EPA 8270C	2,4-Dimethylphenol
117.110	054	EPA 8270C	Dimethyl Phthalate
117.110	055	EPA 8270C	Di-n-butyl phthalate
117.110	056	EPA 8270C	Di-n-octyl phthalate
117.110	058	EPA 8270C	1,3-Dinitrobenzene
117.110	059	EPA 8270C	1,4-Dinitrobenzene
117.110	060	EPA 8270C	2,4-Dinitrophenol
117.110	061	EPA 8270C	2,4-Dinitrotoluene
117.110	062	EPA 8270C	2,6-Dinitrotoluene
117.110	063	EPA 8270C	Diphenylamine
117.110	064	EPA 8270C	1,2-Diphenylhydrazine
117.110	066	EPA 8270C	Ethyl Methanesulfonate
117.110	067	EPA 8270C	Fluoranthene
117.110	068	EPA 8270C	Fluorene
117.110	069	EPA 8270C	Hexachlorobenzene
117.110	070	EPA 8270C	Hexachlorobutadiene
117.110	071	EPA 8270C	Hexachlorocyclopentadiene
117.110	072	EPA 8270C	Hexachloroethane
117.110	074	EPA 8270C	Hexachloropropene
117.110	075	EPA 8270C	Indeno(1,2,3-c,d)pyrene
117.110	076	EPA 8270C	Isophorone
117.110	077	EPA 8270C	Isosafrole
117.110	079	EPA 8270C	3-Methylcholanthrene
117.110	080	EPA 8270C	2-Methyl-4,6-dinitrophenol
117.110	082	EPA 8270C	Methyl Methanesulfonate
117.110	083	EPA 8270C	2-Methylnaphthalene
117.110	084	EPA 8270C	2-Methylphenol
117.110	085	EPA 8270C	3-Methylphenol
117.110	086	EPA 8270C	4-Methylphenol
117.110	087	EPA 8270C	Naphthalene
117.110	088	EPA 8270C	1,4-Naphthoquinone

Testamerica West Sacramento

Certificate No.: 01119CA  
 Renew Date: 1/31/2012

117.110	089	EPA 8270C	1-Naphthylamine
117.110	090	EPA 8270C	2-Naphthylamine
117.110	092	EPA 8270C	2-Nitroaniline
117.110	093	EPA 8270C	3-Nitroaniline
117.110	094	EPA 8270C	4-Nitroaniline
117.110	095	EPA 8270C	Nitrobenzene
117.110	096	EPA 8270C	2-Nitrophenol
117.110	097	EPA 8270C	4-Nitrophenol
117.110	098	EPA 8270C	N-nitroso-di-n-butylamine
117.110	099	EPA 8270C	N-nitrosodiethylamine
117.110	100	EPA 8270C	N-nitrosodimethylamine
117.110	101	EPA 8270C	N-nitroso-di-n-propylamine
117.110	102	EPA 8270C	N-nitrosodiphenylamine
117.110	103	EPA 8270C	N-nitrosomethylethylamine
117.110	104	EPA 8270C	N-nitrosomorpholine
117.110	105	EPA 8270C	N-nitrosopiperidine
117.110	106	EPA 8270C	N-nitrosopyrrolidine
117.110	107	EPA 8270C	5-Nitro-o-toluidine
117.110	108	EPA 8270C	Pentachlorobenzene
117.110	109	EPA 8270C	Pentachloronitrobenzene
117.110	110	EPA 8270C	Pentachlorophenol
117.110	111	EPA 8270C	Phenacetin
117.110	112	EPA 8270C	Phenanthrene
117.110	113	EPA 8270C	Phenol
117.110	114	EPA 8270C	1,4-Phenylenediamine
117.110	116	EPA 8270C	2-Picoline
117.110	119	EPA 8270C	Pyrene
117.110	120	EPA 8270C	Pyridine
117.110	122	EPA 8270C	Safrole
117.110	124	EPA 8270C	1,2,4,5-Tetrachlorobenzene
117.110	125	EPA 8270C	2,3,4,6-Tetrachlorophenol
117.110	128	EPA 8270C	o-Toluidine
117.110	129	EPA 8270C	1,2,4-Trichlorobenzene
117.110	130	EPA 8270C	2,4,5-Trichlorophenol
117.110	131	EPA 8270C	2,4,6-Trichlorophenol
117.110	132	EPA 8270C	1,3,5-Trinitrobenzene
117.111	015	EPA 8270C	Chlorobenzilate
117.111	021	EPA 8270C	Diallate
117.111	025	EPA 8270C	Dimethoate
117.111	039	EPA 8270C	Isodrin
117.111	054	EPA 8270C	Parathion Ethyl

117.111	055	EPA 8270C	Parathion Methyl
117.111	056	EPA 8270C	Phorate
117.111	058	EPA 8270C	Sulfotepp
117.111	061	EPA 8270C	O,O,O-triethyl Phosphorothioate
117.111	073	EPA 8270C	Polynuclear Aromatic Hydrocarbons
117.111	074	EPA 8270C	Adipates
117.111	075	EPA 8270C	Phthalates
117.111	076	EPA 8270C	Other Extractables
117.120	000	EPA 8280A	Dioxins and Dibenzofurans
117.120	001	EPA 8280A	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)
117.120	002	EPA 8280A	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)
117.120	003	EPA 8280A	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
117.120	004	EPA 8280A	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
117.120	005	EPA 8280A	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)
117.120	006	EPA 8280A	2,3,7,8-Tetrachlorodibenzofuran (TCDF)
117.120	007	EPA 8280A	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)
117.120	008	EPA 8280A	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)
117.120	009	EPA 8280A	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)
117.120	010	EPA 8280A	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)
117.120	011	EPA 8280A	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)
117.120	012	EPA 8280A	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)
117.120	013	EPA 8280A	Total TCDD
117.120	014	EPA 8280A	Total PeCDD
117.120	015	EPA 8280A	Total HxCDD
117.120	016	EPA 8280A	Total TCDF
117.120	017	EPA 8280A	Total PeCDF
117.120	018	EPA 8280A	Total HxCDF
117.120	019	EPA 8280A	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)
117.120	020	EPA 8280A	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)
117.120	021	EPA 8280A	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)
117.120	022	EPA 8280A	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)
117.120	023	EPA 8280A	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)
117.120	024	EPA 8280A	Total HpCDD
117.120	025	EPA 8280A	Total HpCDF
117.130	000	EPA 8290	Dioxins and Dibenzofurans
117.130	001	EPA 8290	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)
117.130	002	EPA 8290	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)
117.130	003	EPA 8290	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
117.130	004	EPA 8290	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
117.130	005	EPA 8290	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)
117.130	006	EPA 8290	2,3,7,8-Tetrachlorodibenzofuran (TCDF)

117.130	007	EPA 8290	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)
117.130	008	EPA 8290	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)
117.130	009	EPA 8290	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)
117.130	010	EPA 8290	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)
117.130	011	EPA 8290	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)
117.130	012	EPA 8290	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)
117.130	013	EPA 8290	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)
117.130	014	EPA 8290	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)
117.130	015	EPA 8290	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)
117.130	016	EPA 8290	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)
117.130	017	EPA 8290	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)
117.170	000	EPA 8330	Nitroaromatics and Nitramines
117.170	001	EPA 8330	4-Amino-2,6-dinitrotoluene
117.170	002	EPA 8330	2-Amino-4,6-dinitrotoluene
117.170	003	EPA 8330	1,3-Dinitrobenzene
117.170	004	EPA 8330	2,4-Dinitrotoluene
117.170	005	EPA 8330	2,6-Dinitrotoluene
117.170	006	EPA 8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)
117.170	007	EPA 8330	Methyl-2,4,6-trinitrophenylnitramine
117.170	008	EPA 8330	Nitrobenzene
117.170	009	EPA 8330	2-Nitrotoluene
117.170	010	EPA 8330	3-Nitrotoluene
117.170	011	EPA 8330	4-Nitrotoluene
117.170	012	EPA 8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
117.170	013	EPA 8330	1,3,5-Trinitrobenzene
117.170	014	EPA 8330	2,4,6-Trinitrotoluene
117.171	000	EPA 8330A	Nitroaromatics and Nitramines
117.171	001	EPA 8330A	4-Amino-2,6-dinitrotoluene
117.171	002	EPA 8330A	2-Amino-4,6-dinitrotoluene
117.171	003	EPA 8330A	1,3-Dinitrobenzene
117.171	004	EPA 8330A	2,4-Dinitrotoluene
117.171	005	EPA 8330A	2,6-Dinitrotoluene
117.171	006	EPA 8330A	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)
117.171	007	EPA 8330A	Methyl-2,4,6-trinitrophenylnitramine
117.171	008	EPA 8330A	Nitrobenzene
117.171	009	EPA 8330A	2-Nitrotoluene
117.171	010	EPA 8330A	3-Nitrotoluene
117.171	011	EPA 8330A	4-Nitrotoluene
117.171	012	EPA 8330A	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
117.171	013	EPA 8330A	1,3,5-Trinitrobenzene
117.171	014	EPA 8330A	2,4,6-Trinitrotoluene

117.210	000	EPA 8081A	Organochlorine Pesticides
117.210	001	EPA 8081A	Aldrin
117.210	002	EPA 8081A	a-BHC
117.210	003	EPA 8081A	b-BHC
117.210	004	EPA 8081A	d-BHC
117.210	005	EPA 8081A	g-BHC (Lindane)
117.210	006	EPA 8081A	Captafol
117.210	007	EPA 8081A	a-Chlordane
117.210	008	EPA 8081A	g-Chlordane
117.210	009	EPA 8081A	Chlordane (tech.)
117.210	010	EPA 8081A	Chlorobenzilate
117.210	013	EPA 8081A	4,4'-DDD
117.210	014	EPA 8081A	4,4'-DDE
117.210	015	EPA 8081A	4,4'-DDT
117.210	016	EPA 8081A	Diallate
117.210	020	EPA 8081A	Dieldrin
117.210	021	EPA 8081A	Endosulfan I
117.210	022	EPA 8081A	Endosulfan II
117.210	023	EPA 8081A	Endosulfan Sulfate
117.210	024	EPA 8081A	Endrin
117.210	025	EPA 8081A	Endrin Aldehyde
117.210	026	EPA 8081A	Endrin Ketone
117.210	027	EPA 8081A	Heptachlor
117.210	028	EPA 8081A	Heptachlor Epoxide
117.210	031	EPA 8081A	Isodrin
117.210	033	EPA 8081A	Methoxychlor
117.210	039	EPA 8081A	Toxaphene
117.220	000	EPA 8082	PCBs
117.220	001	EPA 8082	PCB-1016
117.220	002	EPA 8082	PCB-1221
117.220	003	EPA 8082	PCB-1232
117.220	004	EPA 8082	PCB-1242
117.220	005	EPA 8082	PCB-1248
117.220	006	EPA 8082	PCB-1254
117.220	007	EPA 8082	PCB-1260





MARK B HORTON, MD, MSPH  
Director

State of California—Health and Human Services Agency  
California Department of Public Health



ARNOLD SCHWARZENEGGER  
Governor

July 9, 2010

DR. NORMAN HESTER, Ph.D  
TRUESDAIL LABORATORIES, INC.  
14201 FRANKLIN AVENUE  
TUSTIN, CA 92780

Dear DR. NORMAN HESTER, Ph.D:

Certificate No. 1237

This is to advise you that the laboratory named above continues to be certified as an environmental testing laboratory pursuant to the provisions of the Health and Safety Code (HSC), Division 101, Part 1, Chapter 4, Section 100825, et seq. Certification for all currently certified Fields of Testing that the laboratory has applied for renewal shall remain in effect until **07/31/2012** unless it is revoked.

**Please note that the renewal application for certification is subject to an on-site process, and the continued use of this certificate is contingent upon:**

- \* **successful completion of the on-site process;**
- \* **acceptable performance in the required proficiency testing (PT) studies;**
- \* **timely payment of all fees, including an annual fee due before July 31, 2011;**
- \* **compliance with Environmental Laboratory Accreditation Program Branch (ELAP) statutes (HSC, Section 100825, et seq.) and Regulations (California Code of Regulations (CCR), Title 22, Division 4, Chapter 19).**

An updated certificate of the "Fields of Testing" will be issued to the laboratory upon successful completion of the on-site process.

The application for the renewal of this certificate must be received before the expiration date to remain in force according to the HSC100845(a).

Please note that the laboratory is required to notify ELAP of any major changes in the laboratory such as the transfer of ownership, change of laboratory director, change in location, or structural alterations which may affect adversely the quality of analyses (HSC, Section 100845(b)(d)). Please include the above certificate number in all your correspondence with ELAP.

If you have any questions, please contact ELAP at (510) 620-3155.

Sincerely,

George C. Kulasingam, Ph.D., Chief  
Environmental Laboratory Accreditation Program Branch



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

**CERTIFICATE OF ENVIRONMENTAL ACCREDITATION**

Is hereby granted to

**TRUESDAIL LABORATORIES, INC.**

14201 FRANKLIN AVENUE

TUSTIN, CA 92780

Scope of the certificate is limited to the  
"Fields of Testing"  
which accompany this Certificate.

Continued accredited status depends on successful completion of on-site,  
proficiency testing studies, and payment of applicable fees.

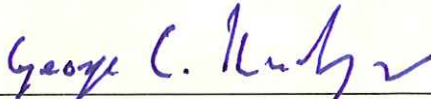
This Certificate is granted in accordance with provisions of  
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **1237**

Expiration Date: **07/31/2012**

Effective Date: **08/01/2010**

Richmond, California  
subject to forfeiture or revocation

  
George C. Kulasingam, Ph.D., Chief  
Environmental Laboratory Accreditation Program Branch



CALIFORNIA DEPARTMENT OF PUBLIC HEALTH  
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM  
Accredited Fields of Testing



TRUESDAIL LABORATORIES, INC.

Lab Phone (714) 730-6239

14201 FRANKLIN AVENUE  
TUSTIN, CA 92780

Certificate No: 1237      Renew Date: 7/31/2010

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Field of Testing: 101 - Microbiology of Drinking Water

101.010	001	Heterotrophic Bacteria	SM9215B
101.060	002	Total Coliform	SM9223
101.060	003	E. coli	SM9223
101.070	002	Total Coliform	Colisure
101.070	003	E. coli	Colisure
101.120	001	Total Coliform (Enumeration)	SM9221A,B,C
101.130	001	Fecal Coliform (Enumeration)	SM9221E (MTF/EC)
101.160	001	Total Coliform (Enumeration)	SM9223
101.200	001	E. coli (Enumeration)	SM9223B

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Field of Testing: 102 - Inorganic Chemistry of Drinking Water

102.030	001	Bromide	EPA 300.0
102.030	003	Chloride	EPA 300.0
102.030	005	Fluoride	EPA 300.0
102.030	006	Nitrate	EPA 300.0
102.030	010	Sulfate	EPA 300.0
102.046	001	Perchlorate	EPA 314.1
102.060	001	Nitrate calc.	EPA 353.2
102.100	001	Alkalinity	SM2320B
102.121	001	Hardness	SM2340C
102.130	001	Conductivity	SM2510B
102.140	001	Total Dissolved Solids	SM2540C
102.150	001	Chloride	SM4110B
102.150	002	Fluoride	SM4110B
102.150	003	Nitrate	SM4110B
102.150	006	Sulfate	SM4110B
102.190	001	Cyanide, Total	SM4500-CN E
102.192	001	Cyanide, amenable	SM4500-CN G
102.220	001	Nitrite	SM4500-NO2 B
102.240	001	Phosphate, Ortho	SM4500-P E
102.262	001	Total Organic Carbon	SM5310C
102.263	001	DOC	SM5310C
102.263	002	TOC/DOC	SM5310C
102.270	001	Surfactants	SM5540C
102.280	001	UV254	SM5910B

102.520	001	Calcium	EPA 200.7
102.520	002	Magnesium	EPA 200.7
102.520	003	Potassium	EPA 200.7
102.520	004	Silica	EPA 200.7
102.520	005	Sodium	EPA 200.7
102.520	006	Hardness (calc.)	EPA 200.7
102.533	001	Silica	SM4500-Si D (18th/19th)
102.549	001	Chlorine, Free, Combined, Total	SM4500-Cl D (20th)

**Field of Testing: 103 - Toxic Chemical Elements of Drinking Water**

103.130	001	Aluminum	EPA 200.7
103.130	003	Barium	EPA 200.7
103.130	004	Beryllium	EPA 200.7
103.130	005	Cadmium	EPA 200.7
103.130	007	Chromium	EPA 200.7
103.130	008	Copper	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.130	012	Nickel	EPA 200.7
103.130	015	Silver	EPA 200.7
103.130	017	Zinc	EPA 200.7
103.130	018	Boron	EPA 200.7
103.140	001	Aluminum	EPA 200.8
103.140	002	Antimony	EPA 200.8
103.140	003	Arsenic	EPA 200.8
103.140	004	Barium	EPA 200.8
103.140	005	Beryllium	EPA 200.8
103.140	006	Cadmium	EPA 200.8
103.140	007	Chromium	EPA 200.8
103.140	008	Copper	EPA 200.8
103.140	009	Lead	EPA 200.8
103.140	010	Manganese	EPA 200.8
103.140	011	Mercury	EPA 200.8
103.140	012	Nickel	EPA 200.8
103.140	013	Selenium	EPA 200.8
103.140	014	Silver	EPA 200.8
103.140	015	Thallium	EPA 200.8
103.140	016	Zinc	EPA 200.8
103.140	017	Boron	EPA 200.8
103.140	018	Vanadium	EPA 200.8
103.160	001	Mercury	EPA 245.1
103.310	001	Chromium (VI)	EPA 218.6

**Field of Testing: 104 - Volatile Organic Chemistry of Drinking Water**

104.030	001	1,2-Dibromoethane	EPA 504.1
104.030	002	1,2-Dibromo-3-chloropropane	EPA 504.1
104.035	001	1,2,3-Trichloropropane	SRL 524M-TCP
104.040	000	Volatile Organic Compounds	EPA 524.2
104.040	001	Benzene	EPA 524.2
104.040	007	n-Butylbenzene	EPA 524.2
104.040	008	sec-Butylbenzene	EPA 524.2
104.040	009	tert-Butylbenzene	EPA 524.2
104.040	010	Carbon Tetrachloride	EPA 524.2
104.040	011	Chlorobenzene	EPA 524.2
104.040	015	2-Chlorotoluene	EPA 524.2
104.040	016	4-Chlorotoluene	EPA 524.2
104.040	019	1,3-Dichlorobenzene	EPA 524.2
104.040	020	1,2-Dichlorobenzene	EPA 524.2
104.040	021	1,4-Dichlorobenzene	EPA 524.2
104.040	022	Dichlorodifluoromethane	EPA 524.2
104.040	023	1,1-Dichloroethane	EPA 524.2
104.040	024	1,2-Dichloroethane	EPA 524.2
104.040	025	1,1-Dichloroethene	EPA 524.2
104.040	026	cis-1,2-Dichloroethene	EPA 524.2
104.040	027	trans-1,2-Dichloroethene	EPA 524.2
104.040	028	Dichloromethane	EPA 524.2
104.040	029	1,2-Dichloropropane	EPA 524.2
104.040	033	cis-1,3-Dichloropropene	EPA 524.2
104.040	034	trans-1,3-Dichloropropene	EPA 524.2
104.040	035	Ethylbenzene	EPA 524.2
104.040	037	Isopropylbenzene	EPA 524.2
104.040	039	Naphthalene	EPA 524.2
104.040	041	N-propylbenzene	EPA 524.2
104.040	042	Styrene	EPA 524.2
104.040	044	1,1,2,2-Tetrachloroethane	EPA 524.2
104.040	045	Tetrachloroethene	EPA 524.2
104.040	046	Toluene	EPA 524.2
104.040	048	1,2,4-Trichlorobenzene	EPA 524.2
104.040	049	1,1,1-Trichloroethane	EPA 524.2
104.040	050	1,1,2-Trichloroethane	EPA 524.2
104.040	051	Trichloroethene	EPA 524.2
104.040	052	Trichlorofluoromethane	EPA 524.2
104.040	054	1,2,4-Trimethylbenzene	EPA 524.2
104.040	055	1,3,5-Trimethylbenzene	EPA 524.2
104.040	056	Vinyl Chloride	EPA 524.2
104.040	057	Xylenes, Total	EPA 524.2

104.045	001	Bromodichloromethane	EPA 524.2
104.045	002	Bromoform	EPA 524.2
104.045	003	Chloroform	EPA 524.2
104.045	004	Dibromochloromethane	EPA 524.2
104.045	005	Trihalomethanes	EPA 524.2
104.050	002	Methyl tert-butyl Ether (MTBE)	EPA 524.2
104.050	004	tert-Amyl Methyl Ether (TAME)	EPA 524.2
104.050	005	Ethyl tert-butyl Ether (ETBE)	EPA 524.2
104.050	006	Trichlorotrifluoroethane	EPA 524.2
104.050	007	tert-Butyl Alcohol (TBA)	EPA 524.2
104.050	008	Carbon Disulfide	EPA 524.2
104.050	009	Methyl Isobutyl Ketone	EPA 524.2

**Field of Testing: 105 - Semi-volatile Organic Chemistry of Drinking Water**

105.040	000	Chlorinated Pesticides	EPA 508
105.040	003	Chlordane (total)	EPA 508
105.040	007	Endrin	EPA 508
105.040	008	Heptachlor	EPA 508
105.040	009	Heptachlor Epoxide	EPA 508
105.040	010	Hexachlorobenzene	EPA 508
105.040	011	Hexachlorocyclopentadiene	EPA 508
105.040	012	Lindane	EPA 508
105.040	013	Methoxychlor	EPA 508
105.040	015	Toxaphene	EPA 508
105.040	016	PCBs as Aroclors (screen)	EPA 508
105.083	001	2,4-D	EPA 515.4
105.083	002	Dinoseb	EPA 515.4
105.083	003	Pentachlorophenol	EPA 515.4
105.083	004	Picloram	EPA 515.4
105.083	005	2,4,5-TP	EPA 515.4
105.083	006	Dalapon	EPA 515.4
105.083	007	Bentazon	EPA 515.4
105.083	008	Dicamba	EPA 515.4
105.083	009	Chlorinated Acids	EPA 515.4
105.090	001	Alachlor	EPA 525.2
105.090	003	Atrazine	EPA 525.2
105.090	004	Benzo(a)pyrene	EPA 525.2
105.090	008	Di(2-ethylhexyl) Adipate	EPA 525.2
105.090	009	Di(2-ethylhexyl) Phthalate	EPA 525.2
105.090	022	Molinate	EPA 525.2
105.090	025	Simazine	EPA 525.2
105.090	028	Thiobencarb	EPA 525.2
105.090	029	Polynuclear Aromatic Hydrocarbons	EPA 525.2

105.090	030	Adipates	EPA 525.2
105.090	031	Phthalates	EPA 525.2
105.090	032	Other Extractables	EPA 525.2
105.200	001	Bromoacetic Acid	EPA 552.2
105.200	003	Chloroacetic Acid	EPA 552.2
105.200	004	Dalapon	EPA 552.2
105.200	005	Dibromoacetic Acid	EPA 552.2
105.200	006	Dichloroacetic Acid	EPA 552.2
105.200	007	Trichloroacetic Acid	EPA 552.2
105.200	008	Haloacetic Acids (HAA5)	EPA 552.2

**Field of Testing: 106 - Radiochemistry of Drinking Water**

106.010	001	Gross Alpha	EPA 900.0
106.010	002	Gross Beta	EPA 900.0
106.050	001	Total Alpha Radium	EPA 903.0
106.051	001	Radium-226	EPA 903.1
106.080	001	Tritium	EPA 906.0
106.090	001	Uranium	EPA 908.0
106.092	001	Uranium	EPA 200.8
106.260	001	Gross Alpha	SM7110B
106.260	002	Gross Beta	SM7110B
106.270	001	Gross Alpha	SM7110C
106.350	001	Radium-226	SM7500-Ra C
106.380	001	Uranium	SM7500-U B
106.610	001	Radon-222	SM7500-Rn
106.620	001	Radon-222	ASTM D5072-92

**Field of Testing: 107 - Microbiology of Wastewater**

107.010	001	Heterotrophic Bacteria	SM9215B
107.020	001	Total Coliform	SM9221B
107.040	001	Fecal Coliform	SM9221C,E (MTF/EC)
107.100	001	Fecal Streptococci	SM9230B
107.100	002	Enterococci	SM9230B
107.245	001	E. coli	SM9223

**Field of Testing: 108 - Inorganic Chemistry of Wastewater**

108.110	001	Turbidity	EPA 180.1
108.112	001	Boron	EPA 200.7
108.112	002	Calcium	EPA 200.7
108.112	003	Hardness (calc.)	EPA 200.7
108.112	004	Magnesium	EPA 200.7
108.112	005	Potassium	EPA 200.7
108.112	007	Sodium	EPA 200.7
108.120	001	Bromide	EPA 300.0
108.120	002	Chloride	EPA 300.0

108.120	003	Fluoride	EPA 300.0
108.120	004	Nitrate	EPA 300.0
108.120	008	Sulfate	EPA 300.0
108.360	001	Phenols, Total	EPA 420.1
108.381	001	Oil and Grease	EPA 1664A
108.390	001	Turbidity	SM2130B
108.400	001	Acidity	SM2310B
108.410	001	Alkalinity	SM2320B
108.420	001	Hardness (calc.)	SM2340B
108.421	001	Hardness	SM2340C
108.430	001	Conductivity	SM2510B
108.440	001	Residue, Total	SM2540B
108.441	001	Residue, Filterable	SM2540C
108.442	001	Residue, Non-filterable	SM2540D
108.443	001	Residue, Settleable	SM2540F
108.462	001	Chlorine	SM4500-CI D
108.470	001	Cyanide, Manual Distillation	SM4500-CN C
108.472	001	Cyanide, Total	SM4500-CN E
108.473	001	Cyanide, amenable	SM4500-CN G
108.490	001	pH	SM4500-H+ B
108.492	001	Ammonia	SM4500-NH3 C (19th/20th)
108.492	002	Kjeldahl Nitrogen	SM4500-NH3 C (19th/20th)
108.493	001	Ammonia	SM4500-NH3 D or E (19th/20th)
108.493	002	Kjeldahl Nitrogen	SM4500-NH3 D or E (19th/20th)
108.510	001	Nitrite	SM4500-NO2 B
108.540	001	Phosphate, Ortho	SM4500-P E
108.541	001	Phosphorus, Total	SM4500-P E
108.550	001	Dissolved Silica	SM4500-Si D (18th/19th)
108.560	001	Sulfite	SM4500-SO3 B
108.580	001	Sulfide	SM4500-S= D
108.590	001	Biochemical Oxygen Demand	SM5210B
108.591	001	Carbonaceous BOD	SM5210B
108.602	001	Chemical Oxygen Demand	SM5220D
108.611	001	Total Organic Carbon	SM5310C
108.630	001	Oil and Grease	SM5520B (20th)
108.640	001	Surfactants	SM5540C
108.660	001	Chemical Oxygen Demand	HACH8000
108.904	001	Calcium	SM3500-Ca D (18th/19th)

**Field of Testing:** 109 - Toxic Chemical Elements of Wastewater

109.010	001	Aluminum	EPA 200.7
109.010	002	Antimony	EPA 200.7
109.010	003	Arsenic	EPA 200.7



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109.010	004	Barium	EPA 200.7
109.010	005	Beryllium	EPA 200.7
109.010	007	Cadmium	EPA 200.7
109.010	009	Chromium	EPA 200.7
109.010	010	Cobalt	EPA 200.7
109.010	011	Copper	EPA 200.7
109.010	012	Iron	EPA 200.7
109.010	013	Lead	EPA 200.7
109.010	015	Manganese	EPA 200.7
109.010	016	Molybdenum	EPA 200.7
109.010	017	Nickel	EPA 200.7
109.010	019	Selenium	EPA 200.7
109.010	021	Silver	EPA 200.7
109.010	023	Thallium	EPA 200.7
109.010	024	Tin	EPA 200.7
109.010	026	Vanadium	EPA 200.7
109.010	027	Zinc	EPA 200.7
109.020	001	Aluminum	EPA 200.8
109.020	002	Antimony	EPA 200.8
109.020	003	Arsenic	EPA 200.8
109.020	004	Barium	EPA 200.8
109.020	005	Beryllium	EPA 200.8
109.020	006	Cadmium	EPA 200.8
109.020	007	Chromium	EPA 200.8
109.020	008	Cobalt	EPA 200.8
109.020	009	Copper	EPA 200.8
109.020	010	Lead	EPA 200.8
109.020	011	Manganese	EPA 200.8
109.020	012	Molybdenum	EPA 200.8
109.020	013	Nickel	EPA 200.8
109.020	014	Selenium	EPA 200.8
109.020	015	Silver	EPA 200.8
109.020	016	Thallium	EPA 200.8
109.020	017	Vanadium	EPA 200.8
109.020	018	Zinc	EPA 200.8
109.020	020	Gold	EPA 200.8
109.020	021	Iron	EPA 200.8
109.020	022	Tin	EPA 200.8
109.020	023	Titanium	EPA 200.8
109.190	001	Mercury	EPA 245.1
109.809	001	Chromium, Total	SM3500-Cr B (20th)
109.809	002	Chromium (VI)	SM3500-Cr B (20th)

**Field of Testing: 110 - Volatile Organic Chemistry of Wastewater**

110.040	040	Halogenated Hydrocarbons	EPA 624
110.040	041	Aromatic Compounds	EPA 624
110.040	042	Oxygenates	EPA 624
110.040	043	Other Volatile Organics	EPA 624

**Field of Testing: 111 - Semi-volatile Organic Chemistry of Wastewater**

111.101	032	Polynuclear Aromatic Hydrocarbons	EPA 625
111.101	033	Adipates	EPA 625
111.101	034	Phthalates	EPA 625
111.170	030	Organochlorine Pesticides	EPA 608
111.170	031	PCBs	EPA 608
111.272	001	Oil and Grease	SM5520B (20th)
111.273	001	Oil and Grease	EPA 1664A

**Field of Testing: 112 - Radiochemistry of Wastewater**

112.010	001	Gross Alpha	EPA 900.0
112.010	002	Gross Beta	EPA 900.0
112.020	001	Total Alpha Radium	EPA 903.0
112.021	001	Radium-226	EPA 903.1
112.030	001	Gross Alpha	SM7110B
112.030	002	Gross Beta	SM7110B
112.050	001	Radium-226	SM7500-Ra C

**Field of Testing: 114 - Inorganic Chemistry of Hazardous Waste**

114.010	001	Antimony	EPA 6010B
114.010	002	Arsenic	EPA 6010B
114.010	003	Barium	EPA 6010B
114.010	004	Beryllium	EPA 6010B
114.010	005	Cadmium	EPA 6010B
114.010	006	Chromium	EPA 6010B
114.010	007	Cobalt	EPA 6010B
114.010	008	Copper	EPA 6010B
114.010	009	Lead	EPA 6010B
114.010	010	Molybdenum	EPA 6010B
114.010	011	Nickel	EPA 6010B
114.010	012	Selenium	EPA 6010B
114.010	013	Silver	EPA 6010B
114.010	014	Thallium	EPA 6010B
114.010	015	Vanadium	EPA 6010B
114.010	016	Zinc	EPA 6010B
114.020	001	Antimony	EPA 6020
114.020	002	Arsenic	EPA 6020
114.020	003	Barium	EPA 6020

114.020	004	Beryllium	EPA 6020
114.020	005	Cadmium	EPA 6020
114.020	006	Chromium	EPA 6020
114.020	007	Cobalt	EPA 6020
114.020	008	Copper	EPA 6020
114.020	009	Lead	EPA 6020
114.020	010	Molybdenum	EPA 6020
114.020	011	Nickel	EPA 6020
114.020	012	Selenium	EPA 6020
114.020	013	Silver	EPA 6020
114.020	014	Thallium	EPA 6020
114.020	015	Vanadium	EPA 6020
114.020	016	Zinc	EPA 6020
114.103	001	Chromium (VI)	EPA 7196A
114.106	001	Chromium (VI)	EPA 7199
114.140	001	Mercury	EPA 7470A
114.141	001	Mercury	EPA 7471A
114.221	001	Cyanide, Total	EPA 9012A
114.222	001	Cyanide	EPA 9014
114.230	001	Sulfides, Total	EPA 9034
114.240	001	Corrosivity - pH Determination	EPA 9040B
114.241	001	Corrosivity - pH Determination	EPA 9045C
114.270	001	Fluoride	EPA 9214

**Field of Testing:** 115 - Extraction Test of Hazardous Waste

115.010	001	Extraction Procedure Toxicity (EPTox)	EPA 1310A
115.020	001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311
115.021	001	TCLP Inorganics	EPA 1311
115.022	001	TCLP Extractables	EPA 1311
115.023	001	TCLP Volatiles	EPA 1311
115.030	001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II
115.040	001	Synthetic Precipitation Leaching Procedure (SPLP)	EPA 1312

**Field of Testing:** 116 - Volatile Organic Chemistry of Hazardous Waste

116.010	000	EDB and DBCP	EPA 8011
116.020	030	Nonhalogenated Volatiles	EPA 8015B
116.020	031	Ethanol and Methanol	EPA 8015B
116.030	001	Gasoline-range Organics	EPA 8015B
116.040	041	Methyl tert-butyl Ether (MTBE)	EPA 8021B
116.040	060	Halogenated Volatiles	EPA 8021B
116.040	061	Aromatic Volatiles	EPA 8021B
116.040	062	BTEX	EPA 8021B
116.080	000	Volatile Organic Compounds	EPA 8260B
116.080	120	Oxygenates	EPA 8260B

116.100	010	BTEX and MTBE	LUFT GC/MS
116.110	001	Total Petroleum Hydrocarbons - Gasoline	LUFT

**Field of Testing: 117 - Semi-volatile Organic Chemistry of Hazardous Waste**

117.010	001	Diesel-range Total Petroleum Hydrocarbons	EPA 8015B
117.016	001	Diesel-range Total Petroleum Hydrocarbons	LUFT
117.110	000	Extractable Organics	EPA 8270C
117.150	000	Carbonyl Compounds	EPA 8315A
117.210	000	Organochlorine Pesticides	EPA 8081A
117.220	000	PCBs	EPA 8082
117.240	000	Organophosphorus Pesticides	EPA 8141A
117.250	000	Chlorinated Herbicides	EPA 8151A

**Field of Testing: 118 - Radiochemistry of Hazardous Waste**

118.010	001	Gross Alpha	EPA 9310
118.010	002	Gross Beta	EPA 9310

**Field of Testing: 120 - Physical Properties of Hazardous Waste**

120.010	001	Ignitability	EPA 1010
120.030	001	Corrosivity	EPA 1110
120.040	001	Reactive Cyanide	Section 7.3 SW-846
120.050	001	Reactive Sulfide	Section 7.3 SW-846
120.070	001	Corrosivity - pH Determination	EPA 9040B
120.080	001	Corrosivity - pH Determination	EPA 9045C

**Field of Testing: 126 - Microbiology of Recreational Water**

126.010	001	Total Coliform (Enumeration)	SM9221A,B,C
126.030	001	Fecal Coliform (Enumeration)	SM9221E
126.050	001	Total Coliform and E. coli	SM9223