

APPENDIX F

THIRD QUARTER 2007 REASONABLE POTENTIAL ANALYSIS (RPA) SUMMARY TABLES

THIRD QUARTER 2007 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 of the NPDES permit.
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"¹ 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.

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 2006 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).

¹ 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 2006 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 2006 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

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	and/or Calleguas Creek watersheds.
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.

Priority Pollutant RPA Column Explanation (Continued)

Step 2 defines the applicable data set.

Is Effluent Data Available	If there is available monitoring data that is not qualified and above DL, then YES. If not, then NO.
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Step 3 determines the maximum observed effluent concentration.

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.

Step 4 compares the MEC to the lowest applicable water quality criteria.

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 2006 NPDES Permit directed monitoring frequency
Units	Provides the data set's concentration units as referenced by 2006 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	The Regional Board estimates the projected maximum receiving

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Receiving Water Concentration	water concentration as equal to the projected maximum effluent concentration.
<u>Nonpriority Pollutant RPA Column Explanation (Continued)</u>	
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.

Table F1
REASONABLE POTENTIAL ANALYSIS FOR PRIORITY POLLUTANTS, (OUTFALLS 001, 002, 011, 018)

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					Step 1: Water Quality Criteria, Determine C							Step 2	Step 3			Step 4				
					CTR CRITERIA			Basin Plan	C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Are all Detection Limits > C								
					Freshwater		Human Health		Title 22 GWR											
Outfall	CTR	Constituent	Units	MEC	CV	CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH	Basin Plan	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				
1_2_11_18	001	Antimony	ug/L	Available Data <DL	0.6	NONE	NONE	14	4300	6	6	Yes	No	No	NA	No				
1_2_11_18	002	Arsenic	ug/L	35	0.6	340	150	NONE	NONE	50	50	Yes	Yes	NA	NA	No				
1_2_11_18	003	Beryllium	ug/L	11	0.6	NONE	NONE	Narrative	Narrative	4	4	Yes	Yes	NA	NA	Yes				
1_2_11_18	004	Cadmium	ug/L	6.9	0.6	NONE	2.5	Narrative	Narrative	5	2.5	Yes	Yes	NA	NA	Yes				
1_2_11_18	005a	Chromium	ug/L	100	0.6	NONE	207.0	Narrative	Narrative	NONE	207.0	Yes	Yes	NA	NA	No				
1_2_11_18	005b	Chromium VI	ug/L	Available Data <DL	0.6	16.29	11.4	Narrative	Narrative	50	11.4	Yes	No	No	NA	No				
1_2_11_18	006	Copper	ug/L	100	2.0	NONE	9.3	1300	NONE	NONE	9.3	Yes	Yes	NA	NA	Yes				
1_2_11_18	007	Lead	ug/L	310	4.2	NONE	3.2	Narrative	Narrative	NONE	3.2	Yes	Yes	NA	NA	Yes				
1_2_11_18	008	Mercury	ug/L	0.32	1.3	Reserved	Reserved	0.05	0.051	2	0.051	Yes	Yes	NA	NA	Yes				
1_2_11_18	009	Nickel	ug/L	110	0.6	NONE	52.2	610	4600	100	52.2	Yes	Yes	NA	NA	Yes				
1_2_11_18	010	Selenium	ug/L	Available Data <DL	0.6	Reserved	5	Narrative	Narrative	50	5	Yes	No	No	NA	No				
1_2_11_18	011	Silver	ug/L	Available Data <DL	0.6	4.06	NONE	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	790	2.2	120	120	NONE	NONE	NONE	120	Yes	Yes	NA	NA	Yes				
1_2_11_18	014	Total Cyanide	ug/L	18	1.5	22	5.2	700	220000	200	5.2	Yes	Yes	NA	NA	Yes				
1_2_11_18	015	Asbestos	Fibers/L	All Data Qualified	0.6	NONE	NONE	7000000	NONE	700000	700000	No	No	No	NA	No				
1_2_11_18	016	TCDD TEQ_NoDNQ	ug/L	4.26E-05	4.4	NONE	NONE	1.30E-08	1.40E-08	3.00E-05	1.40E-08	Yes	Yes	NA	NA	Yes				
1_2_11_18	017	Acrolein	ug/L	All Data Qualified	0.6	NONE	NONE	320	780	NONE	780	No	No	No	NA	No				
1_2_11_18	018	Acrylonitrile	ug/L	All Data Qualified	0.6	NONE	NONE	0.059	0.66	NONE	0.66	No	No	No	NA	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	All Data Qualified	0.6	NONE	NONE	4.3	360	NONE	360	No	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	All Data Qualified	0.6	NONE	NONE	680	21000	NONE	21000	No	No	No	NA	No				
1_2_11_18	023	Dibromochloromethane	ug/L	All Data Qualified	0.6	NONE	NONE	0.401	34	NONE	34	No	No	No	NA	No				
1_2_11_18	024	Chloroethane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	NONE	NONE	No	No	No	NA	No				
1_2_11_18	025	2-Chloroethylvinylether	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	NONE	NONE	No	No	No	NA	No				
1_2_11_18	026	Chloroform	ug/L	Available Data <DL	0.6	NONE	NONE	Reserved	Reserved	NONE	NONE	Yes	No	No	NA	No				
1_2_11_18	027	Bromodichloromethane	ug/L	All Data Qualified	0.6	NONE	NONE	0.56	46	NONE	46	No	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	0.6	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	0.6	NONE	NONE	0.057	3.2	6	3.2	Yes	No	No	NA	No				
1_2_11_18	031	1,2-Dichloropropane	ug/L	All Data Qualified	0.6	NONE	NONE	0.52	39	5	5	No	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	All Data Qualified	0.6	NONE	NONE	48	4000	NONE	4000	No	No	No	NA	No				
1_2_11_18	035	Chloromethane	ug/L	All Data Qualified	0.6	NONE	NONE	Narrative	Narrative	NONE	NONE	No	No	No	NA	No				
1_2_11_18	036	Methylene chloride	ug/L	All Data Qualified	0.6	NONE	NONE	4.7	1600	NONE	1600	No	No	No	NA	No				
1_2_11_18	037	1,1,2-Tetrachloroethane	ug/L	All Data Qualified	0.6	NONE	NONE	0.17	11	1	1	No	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	All Data Qualified	0.6	NONE	NONE	700	140000	10	10	No	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	Available Data <DL	0.6	NONE	NONE	2.7	81	5	5	Yes	No	No	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	NONE	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	NONE	790	No	No	No	NA	No				
1_2_11_18	047	2,4-dimethylphenol	ug/L	All Data Qualified	0.6	NONE	NONE	540	2300	NONE	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	NONE	765	No	No	No	NA	No				
1_2_11_18	049	2,4-dinitrophenol																		

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					Freshwater		Human Health		Title 22 GWR									
Outfall	CTR	Constituent	Units	MEC	CV	CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH	Basin Plan	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		
1_2_11_18	050	2-nitrophenol	ug/L	All Data Qualified	0.6	NONE	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	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	NONE	No	No	No	NA	No		
1_2_11_18	053	Pentachlorophenol	ug/L	Available Data <DL	0.7	pH dependent	pH dependent	0.28	8.2	1	1	Yes	No	No	NA	No		
1_2_11_18	054	Phenol	ug/L	3.2	0.6	NONE	NONE	21000	4600000	NONE	4600000	Yes	Yes	NA	NA	No		
1_2_11_18	055	2,4,6-Trichlorophenol	ug/L	Available Data <DL	0.4	NONE	NONE	2.1	6.5	NONE	6.5	Yes	No	No	NA	No		
1_2_11_18	056	Acenaphthene	ug/L	All Data Qualified	0.6	NONE	NONE	1200	2700	NONE	2700	No	No	No	NA	No		
1_2_11_18	057	Acenaphthylene	ug/L	All Data Qualified	0.6	NONE	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	NONE	110000	No	No	No	NA	No		
1_2_11_18	059	Benzidine	ug/L	All Data Qualified	0.6	NONE	NONE	0.00012	0.00054	NONE	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	NONE	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	NONE	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	NONE	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	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	NONE	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	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	NONE	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	NONE	170000	No	No	No	NA	No		
1_2_11_18	068	bis (2-ethylhexyl) Phthalate	ug/L	Available Data <DL	0.4	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	NONE	No	No	No	NA	No		
1_2_11_18	070	Butylbenzylphthalate	ug/L	All Data Qualified	0.6	NONE	NONE	3000	5200	NONE	5200	No	No	No	NA	No		
1_2_11_18	071	2-Chloronaphthalene	ug/L	All Data Qualified	0.6	NONE	NONE	1700	4300	NONE	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	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	NONE	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	NONE	0.049	No	No	No	NA	No		
1_2_11_18	075	1,2-Dichlorobenzene	ug/L	All Data Qualified	0.6	NONE	NONE	2700	17000	600	600	No	No	No	NA	No		
1_2_11_18	076	1,3-Dichlorobenzene	ug/L	All Data Qualified	0.6	NONE	NONE	400	2600	NONE	2600	No	No	No	NA	No		
1_2_11_18	077	1,4-Dichlorobenzene	ug/L	All Data Qualified	0.6	NONE	NONE	400	2600	5	5	No	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	NONE	0.077	No	No	No	NA	No		
1_2_11_18	079	Diethylphthalate	ug/L	All Data Qualified	0.6	NONE	NONE	23000	120000	NONE	120000	No	No	No	NA	No		
1_2_11_18	080	Dimethylphthalate	ug/L	All Data Qualified	0.6	NONE	NONE	313000	2900000	NONE	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	NONE	12000	No	No	No	NA	No		
1_2_11_18	082	2,4-Dinitrotoluene	ug/L	Available Data <DL	0.4	NONE	NONE	0.11	9.1	NONE	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	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	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	NONE	0.54	No	No	No	NA	No		
1_2_11_18	086	Fluoranthene	ug/L	All Data Qualified	0.6	NONE	NONE	300	370	NONE	370	No	No	No	NA	No		
1_2_11_18	087	Fluorene	ug/L	All Data Qualified	0.6	NONE	NONE	1300	14000	NONE	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	NONE	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	NONE	50	No	No	No	NA	No		
1_2_11_18	090	Hexachlorocyclopentadiene	ug/L	All Data Qualified	0.6	NONE	NONE	240	17000	NONE	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	NONE	8.9	No	No	No	NA	No		
1_2_11_18	092	Indeno(1,2-3cd)Pyrene	ug/L	All Data Qualified	0.6	NONE	NONE	0.0044	0.049	NONE	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	NONE	600	No	No	No	NA	No		
1_2_11_18	094	Naphthalene	ug/L	All Data Qualified	0.6	NONE	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	NONE	1900	No	No	No	NA	No		
1_2_11_18	096	N-Nitrosodimethylamine	ug/L	Available Data <DL	1.6	NONE	NONE	0.00069	8.1	NONE	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	NONE	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	NONE	16	No	No	No	NA	No		
1_2_11_																		

Table F1
REASONABLE POTENTIAL ANALYSIS FOR PRIORITY POLLUTANTS, (OUTFALLS 001, 002, 011, 018)

THIRD QUARTER 2007
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

					Step 1: Water Quality Criteria, Determine C							Step 2	Step 3			Step 4				
					CTR CRITERIA			Basin Plan	C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Are all Detection Limits > C								
					Freshwater		Human Health		Title 22 GWR											
Outfall	CTR	Constituent	Units	MEC	CV	CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH	Basin Plan	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				
1_2_11_18	100	Pyrene	ug/L	All Data Qualified	0.6	NONE	NONE	960	11000	NONE	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	NONE	No	No	No	NA	No				
1_2_11_18	102	Aldrin	ug/L	All Data Qualified	0.6	3	NONE	0.00013	0.00014	NONE	0.00014	No	No	No	NA	No				
1_2_11_18	103	alpha-BHC	ug/L	Available Data <DL	0.2	NONE	NONE	0.0039	0.013	NONE	0.013	Yes	No	No	NA	No				
1_2_11_18	104	beta-BHC	ug/L	All Data Qualified	0.6	NONE	NONE	0.014	0.046	NONE	0.046	No	No	No	NA	No				
1_2_11_18	105	Lindane (gamma-BHC)	ug/L	All Data Qualified	0.6	0.95	NONE	0.019	0.063	0.2	0.063	No	No	No	NA	No				
1_2_11_18	106	delta-BHC	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	NONE	NONE	No	No	No	NA	No				
1_2_11_18	107	Chlordane	ug/L	All Data Qualified	0.6	2.4	0.0043	0.00057	0.00059	NONE	0.00059	No	No	No	NA	No				
1_2_11_18	108	4,4'-DDT	ug/L	All Data Qualified	0.6	1.1	0.001	0.00059	0.00059	NONE	0.00059	No	No	No	NA	No				
1_2_11_18	109	4,4'-DDE	ug/L	All Data Qualified	0.6	NONE	NONE	0.00059	0.00059	NONE	0.00059	No	No	No	NA	No				
1_2_11_18	110	4,4'-DDD	ug/L	All Data Qualified	0.6	NONE	NONE	0.00083	0.00084	NONE	0.00084	No	No	No	NA	No				
1_2_11_18	111	Dieldrin	ug/L	All Data Qualified	0.6	0.24	0.056	0.00014	0.00014	NONE	0.00014	No	No	No	NA	No				
1_2_11_18	112	Endosulfan I	ug/L	All Data Qualified	0.6	0.22	0.056	110	240	NONE	0.056	No	No	No	NA	No				
1_2_11_18	113	Endosulfan II	ug/L	All Data Qualified	0.6	0.22	0.056	110	240	NONE	0.056	No	No	No	NA	No				
1_2_11_18	114	Endosulfan Sulfate	ug/L	All Data Qualified	0.6	NONE	NONE	110	240	NONE	240	No	No	No	NA	No				
1_2_11_18	115	Endrin	ug/L	All Data Qualified	0.6	0.086	0.036	0.76	0.81	NONE	0.036	No	No	No	NA	No				
1_2_11_18	116	Endrin Aldehyde	ug/L	All Data Qualified	0.6	NONE	NONE	0.76	0.81	NONE	0.81	No	No	No	NA	No				
1_2_11_18	117	Heptachlor	ug/L	All Data Qualified	0.6	0.52	0.0038	0.00021	0.00021	NONE	0.00021	No	No	No	NA	No				
1_2_11_18	118	Heptachlor Epoxide	ug/L	All Data Qualified	0.6	0.52	0.0038	0.0001	0.00011	NONE	0.00011	No	No	No	NA	No				
1_2_11_18	119	Aroclor-1016	ug/L	All Data Qualified	0.6	NONE	0.014	0.00017	0.00017	NONE	0.00017	No	No	No	NA	No				
1_2_11_18	120	Aroclor-1221	ug/L	All Data Qualified	0.6	NONE	0.014	0.00017	0.00017	NONE	0.00017	No	No	No	NA	No				
1_2_11_18	121	Aroclor-1232	ug/L	All Data Qualified	0.6	NONE	0.014	0.00017	0.00017	NONE	0.00017	No	No	No	NA	No				
1_2_11_18	122	Aroclor-1242	ug/L	All Data Qualified	0.6	NONE	0.014	0.00017	0.00017	NONE	0.00017	No	No	No	NA	No				
1_2_11_18	123	Aroclor-1248	ug/L	All Data Qualified	0.6	NONE	0.014	0.00017	0.00017	NONE	0.00017	No	No	No	NA	No				
1_2_11_18	124	Aroclor-1254	ug/L	All Data Qualified	0.6	NONE	0.014	0.00017	0.00017	NONE	0.00017	No	No	No	NA	No				
1_2_11_18	125	Aroclor-1260	ug/L	All Data Qualified	0.6	NONE	0.014	0.00017	0.00017	NONE	0.00017	No	No	No	NA	No				
1_2_11_18	126	Toxaphene	ug/L	All Data Qualified	0.6	0.73	0.0002	0.0073	0.00075	NONE	0.0002	No	No	No	NA	No				

Table F2
REASONABLE POTENTIAL ANALYSIS FOR NONPRIORITY POLLUTANTS, (OUTFALLS 001, 002, 011, 018)

THIRD QUARTER 2007
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	15	2.3	3.06	13.40	30.83	0	0	30.83	1000	BU
1_2_11_18	Biochemical Oxygen Demand (BOD 5 day)	Discharge	mg/L	52	33	1.45	2.75	90.87	0	0	90.87	20	BU
1_2_11_18	Chloride	Discharge	mg/L	86	56	0.64	1.51	84.32	0	0	84.32	150	BU
1_2_11_18	Fluoride	Annual	mg/L	0	All Data Qualified	0.60	All Data Qualified	All Qualified Data	0	0	NA	1.6	BU
1_2_11_18	Nitrate + Nitrite as Nitrogen (N)	Discharge	mg/L	76	10	1.48	2.27	22.68	0	0	22.68	8	BU/TMDL
1_2_11_18	Oil & Grease	Discharge	mg/L	44	17	2.24	4.04	68.65	0	0	68.65	10	BU
1_2_11_18	Sulfate	Discharge	mg/L	85	400	1.05	1.84	734.93	0	0	734.93	300	BU
1_2_11_18	Surfactants (MBAS)	Discharge	mg/L	18	1	2.62	9.58	9.58	0	0	9.58	0.5	BU
1_2_11_18	Total Dissolved Solids	Discharge	mg/L	86	1000	0.66	1.52	1524.01	0	0	1524.01	150	BU
1_2_11_18	Total Settleable Solids	Discharge	ml/L	56	10	4.69	5.05	50.48	0	0	50.48	0.3	BU
1_2_11_18	Total Suspended Solids	Discharge	mg/L	70	33000	7.31	4.97	163918.71	0	0	163918.71	45	BU

Table F3
REASONABLE POTENTIAL ANALYSIS FOR PRIORITY POLLUTANTS, (OUTFALLS 003-007, 009, 010)

THIRD QUARTER 2007
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

						Step 1: Water Quality Criteria, Determine C						Step 2	Step 3			Step 4			
						CTR CRITERIA							Basin Plan	C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Are all Detection Limits > C		
						Freshwater			Human Health										
Outfall	CTR	Constituent	Units	MEC	CV	CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH	Title 22 GWR									
3-7, 9,10	001	Antimony	ug/L	35	2.02	NONE	NONE	14	4300	6	6	Yes	Yes	NA	NA	Yes			
3-7, 9,10	002	Arsenic	ug/L	27	0.60	340	150	NONE	NONE	50	50	Yes	Yes	NA	NA	No			
3-7, 9,10	003	Beryllium	ug/L	<DL Available Data	0.60	NONE	NONE	Narrative	Narrative	4	4	Yes	No	No	NA	No			
3-7, 9,10	004	Cadmium	ug/L		9.2	4.12	2.5	Narrative	Narrative	5	2.5	Yes	Yes	NA	NA	Yes			
3-7, 9,10	005a	Chromium	ug/L	14	0.60		207.0	Narrative	Narrative	NONE	207.0	Yes	Yes	NA	NA	No			
3-7, 9,10	005b	Chromium VI	ug/L	All Data Qualified	0.60	16.293279022	11.4	Narrative	Narrative	50	11.4	No	No	No	NA	No			
3-7, 9,10	006	Copper	ug/L		39	0.97	9.3	1300	NONE	NONE	9.3	Yes	Yes	NA	NA	Yes			
3-7, 9,10	007	Lead	ug/L	260	3.03		3.2	Narrative	Narrative	NONE	3.2	Yes	Yes	NA	NA	Yes			
3-7, 9,10	008	Mercury	ug/L	0.89	1.65	Reserved	Reserved	0.05	0.051	2	0.1	Yes	Yes	NA	NA	Yes			
3-7, 9,10	009	Nickel	ug/L	10	0.60		52.2	610	4600	100	52.2	Yes	Yes	NA	NA	No			
3-7, 9,10	010	Selenium	ug/L	All Data Qualified	0.60	Reserved	5	Narrative	Narrative	50	5	No	No	No	NA	No			
3-7, 9,10	011	Silver	ug/L		<DL Available Data	0.60		NONE	NONE	NONE	4.06	Yes	No	Yes	4.06	No			
3-7, 9,10	012	Thallium	ug/L	<DL Available Data	0.08	NONE	NONE	1.7	6.3	2	2	Yes	No	No	NA	No			
3-7, 9,10	013	Zinc	ug/L		91	0.60		119.8	none	NONE	119.8	Yes	Yes	NA	NA	No			
3-7, 9,10	014	Total Cyanide	ug/L	<DL Available Data	0.60	22	5.2	700	220000	200	5.2	Yes	No	No	NA	No			
3-7, 9,10	015	Asbestos	Fibers/L		All Data Qualified	0.60	NONE	NONE	7000000	NONE	7x10^6	700000	No	No	No	NA	No		
3-7, 9,10	016	TCDD TEQ_NoDNQ	ug/L	9.10E-04	7.01	NONE	NONE	1.3e-008	1.4e-008	3x10^-5	1.40E-08	Yes	Yes	NA	NA	Yes			
3-7, 9,10	017	Acrolein	ug/L	<DL Available Data	0.60	NONE	NONE	320	780	NONE	780	Yes	No	No	NA	No			
3-7, 9,10	018	Acrylonitrile	ug/L		0.60	NONE	NONE	0.059	0.66	NONE	0.66	Yes	No	Yes	0.66	No			
3-7, 9,10	019	Benzene	ug/L	<DL Available Data	0.60	NONE	NONE	1.2	71	1	1	Yes	No	No	NA	No			
3-7, 9,10	020	Bromoform	ug/L		0.60	NONE	NONE	4.3	360	NONE	360	Yes	No	No	NA	No			
3-7, 9,10	021	Carbon Tetrachloride	ug/L	<DL Available Data	0.60	NONE	NONE	0.25	4.4	600	4.4	Yes	No	No	NA	No			
3-7, 9,10	022	Chlorobenzene	ug/L		<DL Available Data	0.60	NONE	NONE	680	21000	NONE	21000	Yes	No	No	NA	No		
3-7, 9,10	023	Dibromochloromethane	ug/L	2.8	0.60	NONE	NONE	0.401	34	NONE	34	Yes	Yes	NA	NA	No			
3-7, 9,10	024	Chloroethane	ug/L	<DL Available Data	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No			
3-7, 9,10	025	2-Chloroethylvinylether	ug/L		0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No			
3-7, 9,10	026	Chloroform	ug/L	<DL Available Data	0.60	NONE	NONE	Reserved	Reserved	NONE	NONE	Yes	No	No	NA	No			

Table F3
REASONABLE POTENTIAL ANALYSIS FOR PRIORITY POLLUTANTS, (OUTFALLS 003-007, 009, 010)

THIRD QUARTER 2007
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

						Step 1: Water Quality Criteria, Determine C						Step 2	Step 3			Step 4			
						CTR CRITERIA							Basin Plan	C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Are all Detection Limits > C		
						Freshwater			Human Health										
Outfall	CTR	Constituent	Units	MEC	CV	CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH	Title 22 GWR									
3-7, 9,10	027	Bromodichloromethane	ug/L	Available Data <DL	0.60	NONE	NONE	0.56	46	NONE	46	Yes	No	No	NA	NA	No		
3-7, 9,10	028	1,1-Dichloroethane	ug/L	Available Data <DL	0.60	NONE	NONE	NONE	NONE	5	5	Yes	No	No	NA	NA	No		
3-7, 9,10	029	1,2-Dichloroethane	ug/L	Available Data <DL	0.60	NONE	NONE	0.38	99	0.5	0.5	Yes	No	No	NA	NA	No		
3-7, 9,10	030	1,1-Dichloroethene	ug/L	Available Data <DL	0.60	NONE	NONE	0.057	3.2	6	3.2	Yes	No	No	NA	NA	No		
3-7, 9,10	031	1,2-Dichloropropane	ug/L	Available Data <DL	0.60	NONE	NONE	0.52	39	5	5	Yes	No	No	NA	NA	No		
3-7, 9,10	032	1,3-Dichloropropene (Total)	ug/L	All Data Qualified	0.60	NONE	NONE	10	1700	0.5	0.5	No	No	No	NA	NA	No		
3-7, 9,10	033	Ethylbenzene	ug/L	Available Data <DL	0.60	NONE	NONE	3100	29000	0.7	0.7	Yes	No	No	NA	NA	No		
3-7, 9,10	034	Bromomethane	ug/L	Available Data <DL	0.60	NONE	NONE	48	4000	NONE	4000	Yes	No	No	NA	NA	No		
3-7, 9,10	035	Chloromethane	ug/L	Available Data <DL	0.60	NONE	NONE	Narrative	Narrative	NONE	NONE	Yes	No	No	NA	NA	No		
3-7, 9,10	036	Methylene chloride	ug/L	Available Data <DL	0.60	NONE	NONE	4.7	1600	NONE	1600	Yes	No	No	NA	NA	No		
3-7, 9,10	037	1,1,2,2-Tetrachloroethane	ug/L	Available Data <DL	0.60	NONE	NONE	0.17	11	1	1	Yes	No	No	NA	NA	No		
3-7, 9,10	038	Tetrachloroethene	ug/L	Available Data <DL	0.60	NONE	NONE	0.8	8.85	5	5	Yes	No	No	NA	NA	No		
3-7, 9,10	039	Toluene	ug/L	Available Data <DL	0.60	NONE	NONE	6800	200000	150	150	Yes	No	No	NA	NA	No		
3-7, 9,10	040	trans-1,2-Dichloroethene	ug/L	Available Data <DL	0.60	NONE	NONE	700	140000	10	10	Yes	No	No	NA	NA	No		
3-7, 9,10	041	1,1,1-Trichloroethane	ug/L	Available Data <DL	0.60	NONE	NONE	Narrative	Narrative	200	200	Yes	No	No	NA	NA	No		
3-7, 9,10	042	1,1,2-trichloroethane	ug/L	Available Data <DL	0.60	NONE	NONE	0.6	42	5	5	Yes	No	No	NA	NA	No		
3-7, 9,10	043	Trichloroethene	ug/L	Available Data <DL	0.60	NONE	NONE	2.7	81	5	5	Yes	No	No	NA	NA	No		
3-7, 9,10	044	Vinyl chloride	ug/L	Available Data <DL	0.60	NONE	NONE	2	525	0.5	0.5	Yes	No	No	NA	NA	No		
3-7, 9,10	045	2-chlorophenol	ug/L	Available Data <DL	0.60	NONE	NONE	120	400	NONE	400	Yes	No	No	NA	NA	No		
3-7, 9,10	046	2,4-Dichlorophenol	ug/L	Available Data <DL	0.60	NONE	NONE	93	790	NONE	790	Yes	No	No	NA	NA	No		
3-7, 9,10	047	2,4-dimethylphenol	ug/L	Available Data <DL	0.60	NONE	NONE	540	2300	NONE	2300	Yes	No	No	NA	NA	No		
3-7, 9,10	048	2-Methyl-4,6-dinitrophenol	ug/L	Available Data <DL	0.60	NONE	NONE	13.4	765	NONE	765	Yes	No	No	NA	NA	No		

Table F3
REASONABLE POTENTIAL ANALYSIS FOR PRIORITY POLLUTANTS, (OUTFALLS 003-007, 009, 010)

THIRD QUARTER 2007
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

						Step 1: Water Quality Criteria, Determine C						Step 2	Step 3			Step 4
						CTR CRITERIA				Basin Plan	C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Are all Detection Limits > C		
						Freshwater		Human Health								
Outfall	CTR	Constituent	Units	MEC	CV	CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH	Title 22 GWR						
3-7, 9,10	049	2,4-dinitrophenol	ug/L	Available Data <DL	0.60	NONE	NONE	70	14000	NONE	14000	Yes	No	No	NA	No
3-7, 9,10	050	2-nitrophenol	ug/L	Available Data <DL	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No
3-7, 9,10	051	4-nitrophenol	ug/L	Available Data <DL	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No
3-7, 9,10	052	4-Chloro-3-methylphenol	ug/L	Available Data <DL	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No
3-7, 9,10	053	Pentachlorophenol	ug/L	Available Data <DL	0.60	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	0.60	NONE	NONE	21000	4600000	NONE	4600000	Yes	No	No	NA	No
3-7, 9,10	055	2,4,6-Trichlorophenol	ug/L	Available Data <DL	0.60	NONE	NONE	2.1	6.5	NONE	6.5	Yes	No	No	NA	No
3-7, 9,10	056	Acenaphthene	ug/L	Available Data <DL	0.60	NONE	NONE	1200	2700	NONE	2700	Yes	No	No	NA	No
3-7, 9,10	057	Acenaphthylene	ug/L	Available Data <DL	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No
3-7, 9,10	058	Anthracene	ug/L	Available Data <DL	0.60	NONE	NONE	9600	110000	NONE	110000	Yes	No	No	NA	No
3-7, 9,10	059	Benzidine	ug/L	Available Data <DL	0.60	NONE	NONE	0.00012	0.00054	NONE	0.00054	Yes	No	Yes	0.00054	No
3-7, 9,10	060	Benzo(a)Anthracene	ug/L	Available Data <DL	0.60	NONE	NONE	0.0044	0.049	NONE	0.049	Yes	No	Yes	0.049	No
3-7, 9,10	061	Benzo(a)Pyrene	ug/L	Available Data <DL	0.60	NONE	NONE	0.0044	0.049	NONE	0.049	Yes	No	Yes	0.049	No
3-7, 9,10	062	Benzo(b)Fluoranthene	ug/L	Available Data <DL	0.60	NONE	NONE	0.0044	0.049	NONE	0.049	Yes	No	Yes	0.049	No
3-7, 9,10	063	Benzo(g,h,i)Perylene	ug/L	Available Data <DL	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No
3-7, 9,10	064	Benzo(k)Fluoranthene	ug/L	Available Data <DL	0.60	NONE	NONE	0.0044	0.049	NONE	0.049	Yes	No	Yes	0.049	No
3-7, 9,10	065	Bis(2-Chloroethoxy) methane	ug/L	Available Data <DL	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No
3-7, 9,10	066	bis (2-Chloroethyl) ether	ug/L	Available Data <DL	0.60	NONE	NONE	0.031	1.4	NONE	1.4	Yes	No	Yes	1.4	No
3-7, 9,10	067	Bis(2-Chloroisopropyl) Ether	ug/L	Available Data <DL	0.60	NONE	NONE	1400	170000	NONE	170000	Yes	No	No	NA	No
3-7, 9,10	068	bis (2-ethylhexyl) Phthalate	ug/L	Available Data <DL	0.60	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	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No
3-7, 9,10	070	Butylbenzylphthalate	ug/L	Available Data <DL	0.60	NONE	NONE	3000	5200	NONE	5200	Yes	No	No	NA	No

Table F3
REASONABLE POTENTIAL ANALYSIS FOR PRIORITY POLLUTANTS, (OUTFALLS 003-007, 009, 010)

THIRD QUARTER 2007
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

						Step 1: Water Quality Criteria, Determine C						Step 2	Step 3			Step 4		
						CTR CRITERIA							Basin Plan	C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Are all Detection Limits > C	
						Freshwater		Human Health		HH W&O (Not App)	HH O = HH	Title 22 GWR						
Outfall	CTR	Constituent	Units	MEC	CV	CMC = Acute	CCC = Chronic											
3-7, 9,10	071	2-Chloronaphthalene	ug/L	Available Data <DL	0.60	NONE	NONE	1700	4300	NONE	4300	Yes	No	No	NA	No		
3-7, 9,10	072	4-Chlorophenylphenylether	ug/L	Available Data <DL	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No		
3-7, 9,10	073	Chrysene	ug/L	Available Data <DL	0.60	NONE	NONE	0.0044	0.049	NONE	0.049	Yes	No	Yes	0.049	No		
3-7, 9,10	074	Dibenzo(a,h)Anthracene	ug/L	Available Data <DL	0.60	NONE	NONE	0.0044	0.049	NONE	0.049	Yes	No	Yes	0.049	No		
3-7, 9,10	075	1,2-Dichlorobenzene	ug/L	Available Data <DL	0.60	NONE	NONE	2700	17000	600	600	Yes	No	No	NA	No		
3-7, 9,10	076	1,3-Dichlorobenzene	ug/L	Available Data <DL	0.60	NONE	NONE	400	2600	NONE	2600	Yes	No	No	NA	No		
3-7, 9,10	077	1,4-Dichlorobenzene	ug/L	Available Data <DL	0.60	NONE	NONE	400	2600	5	5	Yes	No	No	NA	No		
3-7, 9,10	078	3,3'-Dichlorobenzidine	ug/L	Available Data <DL	0.60	NONE	NONE	0.04	0.077	NONE	0.077	Yes	No	Yes	0.077	No		
3-7, 9,10	079	Diethylphthalate	ug/L	Available Data <DL	0.60	NONE	NONE	23000	120000	NONE	120000	Yes	No	No	NA	No		
3-7, 9,10	080	Dimethylphthalate	ug/L	Available Data <DL	0.60	NONE	NONE	313000	2900000	NONE	2900000	Yes	No	No	NA	No		
3-7, 9,10	081	Di-n-butylphthalate	ug/L	Available Data <DL	0.60	NONE	NONE	2700	12000	NONE	12000	Yes	No	No	NA	No		
3-7, 9,10	082	2,4-Dinitrotoluene	ug/L	Available Data <DL	0.60	NONE	NONE	0.11	9.1	NONE	9.1	Yes	No	No	NA	No		
3-7, 9,10	083	2,6-Dinitrotoluene	ug/L	Available Data <DL	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No		
3-7, 9,10	084	Di-n-octylphthalate	ug/L	Available Data <DL	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No		
3-7, 9,10	085	1,2-Diphenylhydrazine	ug/L	All Data Qualified	0.60	NONE	NONE	0.04	0.54	NONE	0.54	No	No	No	NA	No		
3-7, 9,10	086	Fluoranthene	ug/L	Available Data <DL	0.60	NONE	NONE	300	370	NONE	370	Yes	No	No	NA	No		
3-7, 9,10	087	Fluorene	ug/L	Available Data <DL	0.60	NONE	NONE	1300	14000	NONE	14000	Yes	No	No	NA	No		
3-7, 9,10	088	Hexachlorobenzene	ug/L	Available Data <DL	0.60	NONE	NONE	0.00075	0.00077	NONE	0.00077	Yes	No	Yes	0.00077	No		
3-7, 9,10	089	Hexachlorobutadiene	ug/L	Available Data <DL	0.60	NONE	NONE	0.44	50	NONE	50	Yes	No	No	NA	No		
3-7, 9,10	090	Hexachlorocyclopentadiene	ug/L	Available Data <DL	0.60	NONE	NONE	240	17000	NONE	17000	Yes	No	No	NA	No		
3-7, 9,10	091	Hexachloroethane	ug/L	Available Data <DL	0.60	NONE	NONE	1.9	8.9	NONE	8.9	Yes	No	No	NA	No		
3-7, 9,10	092	Indeno(1,2,3-cd)Pyrene	ug/L	Available Data <DL	0.60	NONE	NONE	0.0044	0.049	NONE	0.049	Yes	No	Yes	0.049	No		

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

Table F3
REASONABLE POTENTIAL ANALYSIS FOR PRIORITY POLLUTANTS, (OUTFALLS 003-007, 009, 010)

THIRD QUARTER 2007
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

						Step 1: Water Quality Criteria, Determine C						Step 2	Step 3			Step 4
						CTR CRITERIA				Basin Plan	C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Are all Detection Limits > C		
						Freshwater		Human Health								
Outfall	CTR	Constituent	Units	MEC	CV	CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH	Title 22 GWR						
3-7, 9,10	093	Isophorone	ug/L	Available Data <DL	0.60	NONE	NONE	8.4	600	NONE	600	Yes	No	No	NA	No
3-7, 9,10	094	Naphthalene	ug/L	Available Data <DL	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No
3-7, 9,10	095	Nitrobenzene	ug/L	Available Data <DL	0.60	NONE	NONE	17	1900	NONE	1900	Yes	No	No	NA	No
3-7, 9,10	096	N-Nitrosodimethylamine	ug/L	Available Data <DL	0.60	NONE	NONE	0.00069	8.1	NONE	8.1	Yes	No	No	NA	No
3-7, 9,10	097	n-Nitroso-di-n-propylamine	ug/L	Available Data <DL	0.60	NONE	NONE	0.005	1.4	NONE	1.4	Yes	No	Yes	1.4	No
3-7, 9,10	098	N-Nitrosodiphenylamine	ug/L	Available Data <DL	0.60	NONE	NONE	5	16	NONE	16	Yes	No	No	NA	No
3-7, 9,10	099	Phenanthrene	ug/L	Available Data <DL	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No
3-7, 9,10	100	Pyrene	ug/L	Available Data <DL	0.60	NONE	NONE	960	11000	NONE	11000	Yes	No	No	NA	No
3-7, 9,10	101	1,2,4-Trichlorobenzene	ug/L	Available Data <DL	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No
3-7, 9,10	102	Aldrin	ug/L	Available Data <DL	0.60	3	NONE	0.00013	0.00014	NONE	0.00014	Yes	No	Yes	0.00014	No
3-7, 9,10	103	alpha-BHC	ug/L	Available Data <DL	0.60	NONE	NONE	0.0039	0.013	NONE	0.013	Yes	No	Yes	0.013	No
3-7, 9,10	104	beta-BHC	ug/L	Available Data <DL	0.60	NONE	NONE	0.014	0.046	NONE	0.046	Yes	No	No	NA	No
3-7, 9,10	105	Lindane (gamma-BHC)	ug/L	Available Data <DL	0.60	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	0.60	NONE	NONE	NONE	NONE	NONE	NONE	Yes	No	No	NA	No
3-7, 9,10	107	Chlordane	ug/L	Available Data <DL	0.60	2.4	0.0043	0.00057	0.00059	NONE	0.00059	Yes	No	Yes	0.00059	No
3-7, 9,10	108	4,4'-DDT	ug/L	Available Data <DL	0.60	1.1	0.001	0.00059	0.00059	NONE	0.00059	Yes	No	Yes	0.00059	No
3-7, 9,10	109	4,4'-DDE	ug/L	Available Data <DL	0.60	NONE	NONE	0.00059	0.00059	NONE	0.00059	Yes	No	Yes	0.00059	No
3-7, 9,10	110	4,4'-DDD	ug/L	Available Data <DL	0.60	NONE	NONE	0.00083	0.00084	NONE	0.00084	Yes	No	Yes	0.00084	No
3-7, 9,10	111	Dieldrin	ug/L	Available Data <DL	0.60	0.24	0.056	0.00014	0.00014	NONE	0.00014	Yes	No	Yes	0.00014	No
3-7, 9,10	112	Endosulfan I	ug/L	Available Data <DL	0.60	0.22	0.056	110	240	NONE	0.056	Yes	No	No	NA	No
3-7, 9,10	113	Endosulfan II	ug/L	Available Data <DL	0.60	0.22	0.056	110	240	NONE	0.056	Yes	No	No	NA	No
3-7, 9,10	114	Endosulfan Sulfate	ug/L	Available Data <DL	0.60	NONE	NONE	110	240	NONE	240	Yes	No	No	NA	No

Table F3
REASONABLE POTENTIAL ANALYSIS FOR PRIORITY POLLUTANTS, (OUTFALLS 003-007, 009, 010)

THIRD QUARTER 2007
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

						Step 1: Water Quality Criteria, Determine C						Step 2	Step 3			Step 4			
						CTR CRITERIA							Basin Plan	C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Are all Detection Limits > C		
						Freshwater			Human Health										
Outfall	CTR	Constituent	Units	MEC	CV	CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH	Title 22 GWR									
3-7, 9,10	115	Endrin	ug/L	Available Data <DL	0.60	0.086	0.036	0.76	0.81	NONE	0.036	Yes	No	No	NA	No			
3-7, 9,10	116	Endrin Aldehyde	ug/L	Available Data <DL	0.60	NONE	NONE	0.76	0.81	NONE	0.81	Yes	No	No	NA	No			
3-7, 9,10	117	Heptachlor	ug/L	Available Data <DL	0.60	0.52	0.0038	0.00021	0.00021	NONE	0.00021	Yes	No	Yes	0.00021	No			
3-7, 9,10	118	Heptachlor Epoxide	ug/L	Available Data <DL	0.60	0.52	0.0038	0.0001	0.00011	NONE	0.00011	Yes	No	Yes	0.00011	No			
3-7, 9,10	119	Aroclor-1016	ug/L	Available Data <DL	0.60	NONE	0.014	0.00017	0.00017	NONE	0.00017	Yes	No	Yes	0.00017	No			
3-7, 9,10	120	Aroclor-1221	ug/L	Available Data <DL	0.60	NONE	0.014	0.00017	0.00017	NONE	0.00017	Yes	No	Yes	0.00017	No			
3-7, 9,10	121	Aroclor-1232	ug/L	Available Data <DL	0.60	NONE	0.014	0.00017	0.00017	NONE	0.00017	Yes	No	Yes	0.00017	No			
3-7, 9,10	122	Aroclor-1242	ug/L	Available Data <DL	0.60	NONE	0.014	0.00017	0.00017	NONE	0.00017	Yes	No	Yes	0.00017	No			
3-7, 9,10	123	Aroclor-1248	ug/L	Available Data <DL	0.60	NONE	0.014	0.00017	0.00017	NONE	0.00017	Yes	No	Yes	0.00017	No			
3-7, 9,10	124	Aroclor-1254	ug/L	Available Data <DL	0.60	NONE	0.014	0.00017	0.00017	NONE	0.00017	Yes	No	Yes	0.00017	No			
3-7, 9,10	125	Aroclor-1260	ug/L	Available Data <DL	0.60	NONE	0.014	0.00017	0.00017	NONE	0.00017	Yes	No	Yes	0.00017	No			
3-7, 9,10	126	Toxaphene	ug/L	Available Data <DL	0.60	0.73	0.0002	0.0073	0.00075	NONE	0.0002	Yes	No	Yes	0.0002	No			

Table F4
REASONABLE POTENTIAL ANALYSIS FOR NONPRIORITY POLLUTANTS, (OUTFALLS 003-010)

THIRD QUARTER 2007
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	7	0.21	0.6	3.54	0.74	0	0	0.74	1	BU
3-7, 9,10	Chloride	Discharge	mg/L	155	210	1.6	1.62	339.54	0	0	339.54	150	BU
3-7, 9,10	Fluoride	Annual	mg/L	0	All Data Qualified	0.6	All Data Qualified	All Qualified Data	0	0	NA	1.6	BU
3-7, 9,10	Nitrate + Nitrite as Nitrogen (N)	Discharge	mg/L	149	51	2.6	1.90	96.86	0	0	96.86	8	BU/TMDL
3-7, 9,10	Oil & Grease	Discharge	mg/L	92	16	2.4	2.52	40.33	0	0	40.33	10	BU
3-7, 9,10	Sulfate	Discharge	mg/L	155	240	1.6	1.61	385.64	0	0	385.64	300	BU
3-7, 9,10	Total Dissolved Solids	Discharge	mg/L	157	980	0.9	1.38	1354.91	0	0	1354.91	150	BU
3-7, 9,10	Total Suspended Solids	Annual	mg/L	101	4000	3.7	2.79	11152.76	0	0	11152.76	45	BU