The review of historical information and existing analytical data relevant to planned excavation AP/STP-1C-2-Main was based partly on the Group 2 RFI results. Evaluation of these data and other sources of relevant information, including recent sampling conducted specifically for ISRA, suggested that Regulated Metals (CAM17), Volatile Organic Compounds (VOC), Polychlorinated Biphenyls (PCB), and Petroleum Hydrocarbons should be addressed in the AP/STP-1A excavation footprint. A random sampling plan was developed for collection of four (4) samples from the planned excavation footprint, taking into account the relatively small area

INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009

WASTE CHARACTERIZATION SAMPLE RESULTS – AP/STP-1C-2 (Main)
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

			Object Name:		APWC0101	APWC0103	APWC0105	APWC0106
			Sample Name:		APWC0101S001	APWC0103S001	APWC0105S001	APWC0106S001
			Collection Date:		7/29/2010	7/29/2010	7/29/2010	7/29/2010
			Sample Depth (feet):		0.4 - 0.9	0.5 - 1.0	0.5 - 1.0	0.5 - 1.0
ANALYTE	**UNITS**	**TTLC**	**WET Leachate Testing Trigger[a]**	**TCLP Leachate Testing Trigger[b]**	**RESULT[c]**	**RESULT[c]**	**RESULT[c]**	**RESULT[c]**
METALS								
Antimony	mg/kg	500	150	--	1.2 J	1.2 J	0.98 J	1.4 J
Arsenic	mg/kg	500	50	100	4.6	5.1	4.4	4.2
Barium	mg/kg	10,000	1,000	2,000	90	100	210	120
Beryllium	mg/kg	75	7.5	--	0.46 J	0.52	0.42 J	0.44 J
Cadmium	mg/kg	100	10	20	<0.20	<0.20	0.29 J	<0.20
Chromium	mg/kg	500	50	100	17	23	19	17
Cobalt	mg/kg	8,000	800	--	4.3	5.8	5.3	4.8
Copper	mg/kg	2,500	250	--	11	10	16	21
Lead	mg/kg	1,000	50	100	9.9	6.2	31	11
Mercury	mg/kg	20	2	4	0.019 J	<0.012	0.042	0.023
Molybdenum	mg/kg	3,500	3,500	--	0.58 J	0.58 J	0.78 J	0.64 J
Nickel	mg/kg	2,000	200	--	10	14	12	11
Selenium	mg/kg	100	10	20	<1	<1	<1	<1
Silver	mg/kg	500	50	100	<0.8	<0.8	6.3	<0.8
Thallium	mg/kg	700	70	--	<0.8	<0.8	<0.8	<0.8
Vanadium	mg/kg	2,400	240	--	28	35	30	30
Zinc	mg/kg	5,000	2,500	--	60	60	96	83
PCBs								
Aroclor 1016	ug/kg	50,000	50,000	--	<50 {<12}	<50 {<12}	<50 {<12}	<50 {<12}
Aroclor 1221	ug/kg	50,000	50,000	--	<50 {<12}	<50 {<12}	<50 {<12}	<50 {<12}
Aroclor 1232	ug/kg	50,000	50,000	--	<50 {<12}	<50 {<12}	<50 {<12}	<50 {<12}
Aroclor 1242	ug/kg	50,000	50,000	--	<50 {<12}	<50 {<12}	<50 {<12}	<50 {<12}
Aroclor 1248	ug/kg	50,000	50,000	--	<50 {<12}	<50 {<12}	<50 {<12}	<50 {<12}
Aroclor 1254	ug/kg	50,000	50,000	--	<50 {<12}	<50 {<12}	<50 {<12}	<50 {<12}
Aroclor 1260	ug/kg	50,000	50,000	--	<50 {<12}	<50 {<12}	<50 {<12}	<50 {<12}
TPH								
Gasoline Range Organics (C6-C12	mg/kg	--	--	--	<0.42 {<0.16}	<0.38 {<0.14}	<0.37 {<0.14}	<0.44 {<0.17}
EFH (C10 - C24)	mg/kg	--	--	--	<5 {<3.5}	<5 {<3.5}	10	<5 {<3.5}
EFH (C10 - C40)	mg/kg	--	--	--	11	9.6	52	21
EFH (C25 - C40)	mg/kg	--	--	--	8.2	8.2	41	18
VOCs								
1,1,1,2-Tetrachloroethane	ug/kg	--	--	--	<2 {<0.57}	<2 {<0.57}	<2 {<0.57}	<2 {<0.57}
1,1,1-Trichloroethane	ug/kg	--	--	--	<1 {<0.7}	<0.99 {<0.7}	<0.99 {<0.7}	<1 {<0.7}
1,1,2,2-Tetrachloroethane	ug/kg	--	--	--	<2 {<0.86}	<2 {<0.85}	<2 {<0.85}	<2 {<0.86}
1,1,2-Trichloroethane	ug/kg	--	--	--	<1 {<0.87}	<0.99 {<0.86}	<0.99 {<0.86}	<1 {<0.87}

INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009

WASTE CHARACTERIZATION SAMPLE RESULTS – AP/STP-1C-2 (Main)
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

			Object Name:		APWC0101	APWC0103	APWC0105	APWC0106
			Sample Name:		APWC0101S001	APWC0103S001	APWC0105S001	APWC0106S001
			Collection Date:		7/29/2010	7/29/2010	7/29/2010	7/29/2010
			Sample Depth (feet):		0.4 - 0.9	0.5 - 1.0	0.5 - 1.0	0.5 - 1.0
ANALYTE	**UNITS**	**TTLC**	**WET Leachate Testing Trigger[a]**	**TCLP Leachate Testing Trigger[b]**	**RESULT[c]**	**RESULT[c]**	**RESULT[c]**	**RESULT[c]**
1,1-Dichloroethane	ug/kg	--	--	--	<1 {<0.5}	<0.99 {<0.5}	<0.99 {<0.5}	<1 {<0.5}
1,1-Dichloroethene	ug/kg	--	--	14,000	<2 {<0.6}	<2 {<0.6}	<2 {<0.6}	<2 {<0.6}
1,1-Dichloropropene	ug/kg	--	--	--	<1 {<0.4}	<0.99 {<0.4}	<0.99 {<0.4}	<1 {<0.4}
1,2,3-Trichlorobenzene	ug/kg	--	--	--	<2 {<1}	<2 {<0.99}	<2 {<0.99}	<2 {<1}
1,2,3-Trichloropropane	ug/kg	--	--	--	<2 {<1}	<2 {<0.99}	<2 {<0.99}	<2 {<1}
1,2,4-Trichlorobenzene	ug/kg	--	--	--	<2 {<1}	<2 {<0.99}	<2 {<0.99}	<2 {<1}
1,2,4-Trimethylbenzene	ug/kg	--	--	--	<1 {<0.78}	<0.99 {<0.78}	<0.99 {<0.78}	<1 {<0.78}
1,2-Dibromo-3-chloropropane	ug/kg	--	--	--	<10 {<1.5}	<9.9 {<1.5}	<9.9 {<1.5}	<10 {<1.5}
1,2-Dibromoethane (EDB)	ug/kg	--	--	--	<1 {<0.8}	<0.99 {<0.8}	<0.99 {<0.8}	<1 {<0.8}
1,2-Dichlorobenzene	ug/kg	--	--	--	<1 {<0.95}	<0.99 {<0.94}	<0.99 {<0.94}	<1 {<0.95}
1,2-Dichloroethane	ug/kg	--	--	10,000	<1 {<0.8}	<0.99 {<0.8}	<0.99 {<0.8}	<1 {<0.8}
1,2-Dichloropropane	ug/kg	--	--	--	<1 {<0.8}	<0.99 {<0.8}	<0.99 {<0.8}	<1 {<0.8}
1,3,5-Trimethylbenzene	ug/kg	--	--	--	<1 {<0.63}	<0.99 {<0.63}	<0.99 {<0.63}	<1 {<0.63}
1,3-Dichlorobenzene	ug/kg	--	--	--	<1 {<0.84}	<0.99 {<0.83}	<0.99 {<0.83}	<1 {<0.84}
1,3-Dichloropropane	ug/kg	--	--	--	<1 {<0.63}	<0.99 {<0.63}	<0.99 {<0.63}	<1 {<0.63}
1,4-Dichlorobenzene	ug/kg	--	--	--	<1 {<0.94}	<0.99 {<0.93}	<0.99 {<0.93}	<1 {<0.94}
2,2-Dichloropropane	ug/kg	--	--	--	<1 {<0.6}	<0.99 {<0.6}	<0.99 {<0.6}	<1 {<0.6}
2-Butanone (MEK)	ug/kg	--	--	4,000,000	<10 {<6}	<9.9 {<6}	<9.9 {<6}	<10 {<6}
		--	--	--	<1 {<0.6}			

INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009

WASTE CHARACTERIZATION SAMPLE RESULTS – AP/STP-1C-2 (Main)
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY

			Object Name:		APWC0101	APWC0103	APWC0105	APWC0106
			Sample Name:		APWC0101S001	APWC0103S001	APWC0105S001	APWC0106S001
			Collection Date:		7/29/2010	7/29/2010	7/29/2010	7/29/2010
			Sample Depth (feet):		0.4 - 0.9	0.5 - 1.0	0.5 - 1.0	0.5 - 1.0
ANALYTE	**UNITS**	**TTLC**	**WET Leachate Testing Trigger[a]**	**TCLP Leachate Testing Trigger[b]**	**RESULT[c]**	**RESULT[c]**	**RESULT[c]**	**RESULT[c]**
cis-1,3-Dichloropropene	ug/kg	--	--	--	<1 {<0.44}	<0.99 {<0.44}	<0.99 {<0.44}	<1 {<0.44}
Dibromochloromethane	ug/kg	--	--	--	<1 {<0.7}	<0.99 {<0.7}	<0.99 {<0.7}	<1 {<0.7}
Dibromomethane	ug/kg	--	--	--	<1 {<0.9}	<0.99 {<0.89}	<0.99 {<0.89}	<1 {<0.9}
Dichlorodifluoromethane	ug/kg	--	--	--	<5 {<1.5}	<5 {<1.5}	<5 {<1.5}	<5 {<1.5}
Ethylbenzene	ug/kg	--	--	--	<1 {<0.5}	<0.99 {<0.5}	<0.99 {<0.5}	<1 {<0.5}
Hexachlorobutadiene	ug/kg	--	--	--	<2 {<0.8}	<2 {<0.8}	<2 {<0.8}	<2 {<0.8}
Isopropylbenzene	ug/kg	--	--	--	<1 {<0.54}	<0.99 {<0.54}	<0.99 {<0.54}	<1 {<0.54}
m,p-Xylenes	ug/kg	--	--	--	<2 {<0.8}	<2 {<0.8}	<2 {<0.8}	<2 {<0.8}
Methylene chloride	ug/kg	--	--	--	<10 {<6.5}	<9.9 {<6.5}	<9.9 {<6.5}	<10 {<6.5}
Methyl-tert-butyl Ether (MTBE)	ug/kg	--	--	--	<2 {<1}	<2 {<0.99}	<2 {<0.99}	<2 {<1}
n-Butylbenzene	ug/kg	--	--	--	<2 {<0.72}	<2 {<0.72}	<2 {<0.72}	<2 {<0.72}
n-Propylbenzene	ug/kg	--	--	--	<1 {<0.61}	<0.99 {<0.61}	<0.99 {<0.61}	<1 {<0.61}
Naphthalene	ug/kg	--	--	--	<2 {<1.1}	<2 {<1.1}	<2 {<1.1}	<2 {<1.1}
o-Xylene	ug/kg	--	--	--	<1 {<0.5}	<0.99 {<0.5}	<0.99 {<0.5}	<1 {<0.5}
p-Isopropyltoluene	ug/kg	--	--	--	<1 {<0.72}	<0.99 {<0.72}	<0.99 {<0.72}	<1 {<0.72}
sec-Butylbenzene	ug/kg	--	--	--	<2 {<0.67}	<2 {<0.67}	<2 {<0.67}	<2 {<0.67}
Styrene	ug/kg	--	--	--	<1 {<0.58}	<0.99 {<0.58}	<0.99 {<0.58}	<1 {<0.58}
tert-Butylbenzene	ug/kg	--	--	--	<2 {<0.62}	<2 {<0.62}	<2 {<0.62}	<2 {<0.62}
Tetrachloroethene	ug/kg	--	--	14,000	<1 {<0.49}	<0.99 {<0.49}	<0.99 {<0.49}	<1 {<0.49}
Toluene	ug/kg	--	--	--	<1 {<0.5}	<0.99 {<0.5}	<0.99 {<0.5}	<1 {<0.5}
trans-1,2-Dichloroethene	ug/kg	--	--	--	<1 {<0.7}	<0.99 {<0.7}	<0.99 {<0.7}	<1 {<0.7}
trans-1,3-Dichloropropene	ug/kg	--	--	--	<1 {<0.61}	<0.99 {<0.61}	<0.99 {<0.61}	<1 {<0.61}
Trichloroethene	ug/kg	2,040,000	2,040,000	10,000	<1 {<0.5}	<0.99 {<0.5}	<0.99 {<0.5}	<1 {<0.5}
Trichlorofluoromethane	ug/kg	--	--	--	<2 {<0.54}	<2 {<0.54}	<2 {<0.54}	<2 {<0.54}
Vinyl acetate	ug/kg	--	--	--	<5 {<2.5}	<5 {<2.5}	<5 {<2.5}	<5 {<2.5}
Vinyl chloride	ug/kg	--	--	4,000	<2 {<0.91}	<2 {<0.9}	<2 {<0.9}	<2 {<0.91}
RADIONUCLIDES	--	--	--	--	R	R	R	R

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Notes: