

TABLE 1
Area IV Soil Interim Screening Levels
Draft for Review

Chemicals	Units	"Interim" Background Comparison Value (2005)	Recent Most Frequently Achieved Low RLs ¹			Interim Screening Level	Risk Based Screening Level (to be determined)
			Lancaster Lab - Co-located HSA 5C & 5B ²	TestAmerica Lab - RFI Group 6 ³	Columbia Lab - Site-Specific MDL Study RL ⁴		
Volatile Organics Compounds (VOCs)							
1,1,1,2-Tetrachloroethane	µg/kg	none	4.0	1.06	5	5	
1,1,1-Trichloroethane	µg/kg	none	4.0	1.98	5	5	
1,1,2,2-Tetrachloroethane	µg/kg	none	4.0	1.98	5	5	
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/kg	none	4.0	5.37	5	5.37	
1,1,2-Trichloroethane	µg/kg	none	4.0	1.98	5	5	
1,1-Dichloroethane	µg/kg	none	4.0	1.98	5	5	
1,1-Dichloroethene	µg/kg	none	4.0	4.94	5	5	
1,1-Dichloropropene	µg/kg	none	4.0	1.98	5	5	
1,2,3-Trichlorobenzene	µg/kg	none	4.0	5.37	20	20	
1,2,3-Trichloropropane	µg/kg	none	4.0	1.06	5	5	
1,2,4-Trichlorobenzene	µg/kg	none	4.0	4.94	20	20	
1,2,4-Trimethylbenzene	µg/kg	none	4.0	1.98	20	20	
1,2-Dibromo-3-chloropropane	µg/kg	none	4.0	5.37	20	20	
1,2-Dibromoethane (EDB)	µg/kg	none	4.0	1.98	20	20	
1,2-Dichlorobenzene	µg/kg	none	4.0	1.98	5	5	
1,2-Dichloroethane	µg/kg	none	4.0	1.98	5	5	
1,2-Dichloropropane	µg/kg	none	4.0	1.98	5	5	
1,3,5-Trimethylbenzene	µg/kg	none	4.0	1.98	20	20	
1,3-Dichlorobenzene	µg/kg	none	4.0	1.98	5	5	
1,3-Dichloropropane	µg/kg	none	4.0	1.98	5	5	
1,3-Dichloropropene	µg/kg	none	na	na	na	2	
1,4-Dichlorobenzene	µg/kg	none	4.0	1.98	5	5	
1,4-Dioxane	µg/kg	none	13.0	na	3.8	13	
1-Chlorohexane	µg/kg	none	na	na	na	2	
2,2-Dichloropropane	µg/kg	none	4.0	1.06	5	5	
2-Butanone (MEK)	µg/kg	none	8.1	10.6	20	20	
2-Chloro-1,1,1-trifluoroethane	µg/kg	none	5.0	5.37	na	5.37	
2-Chloroethyl vinyl ether	µg/kg	none	4.0	53.7	10	53.7	
2-Chlorotoluene	µg/kg	none	4.0	5.37	20	20	
2-Hexanone	µg/kg	none	8.3	10.6	20	20	
4-Chlorotoluene	µg/kg	none	4.0	5.37	20	20	
4-Methyl-2-pentanone (MIBK)	µg/kg	none	8.3	5.37	20	20	
Acetone	µg/kg	none	7.9	10.6	20	20	
Benzene	µg/kg	none	4.0	1.98	5	5	
Bromobenzene	µg/kg	none	4.0	5.37	5	5.37	
Bromochloromethane	µg/kg	none	4.0	5.37	5	5.37	
Bromodichloromethane	µg/kg	none	4.0	1.98	5	5	
Bromoform	µg/kg	none	4.0	5.37	5	5.37	
Bromomethane	µg/kg	none	4.0	5.37	5	5.37	
Carbon disulfide	µg/kg	none	na	na	na	5	
Carbon tetrachloride	µg/kg	none	4.0	1.06	5	5	
Chlorobenzene	µg/kg	none	4.0	1.98	5	5	
Chloroethane	µg/kg	none	4.0	5.37	5	5.37	
Chloroform	µg/kg	none	4.0	1.98	5	5	
Chloromethane	µg/kg	none	4.0	5.37	5	5.37	
Chlorotrifluoroethylene	µg/kg	none	5.0	5.37	na	5.37	
cis-1,2-Dichloroethene	µg/kg	none	4.0	1.98	5	5	
cis-1,3-Dichloropropene	µg/kg	none	4.0	1.98	5	5	
Di isopropyl ether	µg/kg	none	na	na	na	5	
Dibromochloromethane	µg/kg	none	4.0	1.98	5	5	
Dibromomethane	µg/kg	none	4.0	1.06	5	5	
Dichlorobenzenes	µg/kg	none	na	na	na	10	
Dichlorodifluoromethane	µg/kg	none	4.0	5.37	5	5.37	
Ethyl tertiary butyl ether	µg/kg	none	na	na	na	5	
Ethylbenzene	µg/kg	none	4.0	1.98	5	5	
Hexachlorobutadiene	µg/kg	none	4.0	5.37	20	20	
Isopropylbenzene	µg/kg	none	4.0	1.98	20	20	
m, p-Xylene	µg/kg	none	4.0	5.37	5	5.37	
m+p Cresol	µg/kg	none	na	na	na	320	
Methylene chloride	µg/kg	none	4.0	5.37	10	10	
Methyl-tert-butyl Ether (MTBE)	µg/kg	none	4.0	5.37	5	5.37	
n-Butylbenzene	µg/kg	none	4.0	5.37	20	20	
n-Propylbenzene	µg/kg	none	4.0	1.98	20	20	
o-Xylene	µg/kg	none	4.0	1.98	5	5	
p-Isopropyltoluene	µg/kg	none	4.0	1.98	20	20	
sec-Butylbenzene	µg/kg	none	4.0	5.37	20	20	
Styrene	µg/kg	none	4.0	1.98	5	5	
tert-Butylbenzene	µg/kg	none	4.0	5.37	20	20	
Tertiary amyl methyl ether	µg/kg	none	na	na	na	5	
Tertiary butyl alcohol	µg/kg	none	na	na	na	5	
Tetrachloroethene	µg/kg	none	4.0	1.98	5	5	
Toluene	µg/kg	none	4.0	1.98	5	5	
Total 1,2-Dichloroethene	µg/kg	none	na	na	na	5	
trans-1,2-Dichloroethene	µg/kg	none	4.0	1.98	5	5	
trans-1,3-Dichloropropene	µg/kg	none	4.0	1.98	5	5	
Trichloroethene	µg/kg	none	4.0	1.98	5	5	
Trichlorofluoromethane	µg/kg	none	4.0	5.37	5	5.37	
Trichlorotrifluoroethane	µg/kg	none	na	na	na	5	
Vinyl acetate	µg/kg	none	na	na	na	5	
Vinyl chloride	µg/kg	none	4.0	1.98	5	5	
Xylenes, Total	µg/kg	none	na	na	na	5	
Polynuclear Aromatic Hydrocarbons (PAHs) (8270CSIM)							
1-Methyl naphthalene	µg/kg	none	1.8	21.1	2.5	21.1	
2-Methylnaphthalene	µg/kg	none	1.8	21.1	2.5	21.1	
Acenaphthene	µg/kg	none	1.8	21.1	2.5	21.1	
Acenaphthylene	µg/kg	none	1.8	21.1	2.5	21.1	
Anthracene	µg/kg	none	1.8	21.1	2.5	21.1	
Benzo(a)anthracene	µg/kg	none	1.9	19.9	2.5	19.9	
Benzo(a)pyrene	µg/kg	none	1.9	21.1	2.5	21.1	
Benzo(b)fluoranthene	µg/kg	none	1.9	21.1	2.5	21.1	
Benzo(ghi)perylene	µg/kg	none	1.9	21.1	2.5	21.1	
Benzo(k)fluoranthene	µg/kg	none	1.9	20.4	2.5	20.4	
Chrysene	µg/kg	none	1.9	21.3	2.5	21.3	
Dibenzo(a,h)anthracene	µg/kg	none	1.8	20	2.5	20	
Fluoranthene	µg/kg	none	1.9	20.5	2.5	20.5	
Fluorene	µg/kg	none	1.8	21.1	2.5	21.1	
Indeno(1,2,3-cd)pyrene	µg/kg	none	1.9	21.3	2.5	21.3	
Naphthalene	µg/kg	none	1.8	21.1	2.5	21.1	
Phenanthrene	µg/kg	none	1.9	21.1	2.5	21.1	
Pyrene	µg/kg	none	1.9	20.2	2.5	20.2	
Benzo(a)pyrene [BaP] TEQ ⁵	µg/kg	none	nc	nc	nc	21.1	

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			Lancaster Lab - Co-located HSA 5C & 5B ²	TestAmerica Lab - RFI Group 6 ³	Columbia Lab - Site-Specific MDL Study RL ⁴		
Other Semi-Volatile Organics Compounds (SVOCs)							
1,2,3,4-Tetrahydronaphthalene (Tetralin) ⁶	µg/kg	none	167	na	na	167	
1,2-Diphenylhydrazine/Azobenzene	µg/kg	none	180	338	5	338	
2,4,5-Trichlorophenol	µg/kg	none	180	338	5	338	
2,4,6-Trichlorophenol	µg/kg	none	180	338	5	338	
2,4-Dichlorophenol	µg/kg	none	180	338	5	338	
2,4-Dimethylphenol	µg/kg	none	180	338	25	338	
2,4-Dinitrophenol	µg/kg	none	2,200	677	100	2,200	
2,6-Dichlorophenol	µg/kg	none	na	na	na	250	
2-butoxyethanol (Dowanol EB) ⁶	µg/kg	none	167	na	na	167	
2-Chloronaphthalene	µg/kg	none	180	338	5	338	
2-Chlorophenol	µg/kg	none	180	338	5	338	
2-Methylphenol	µg/kg	none	180	338	5	338	
2-Nitroaniline	µg/kg	none	180	338	10	338	
2-Nitrophenol	µg/kg	none	180	338	50	338	
2-phenoxyethanol (Dowanol EP) ⁶	µg/kg	none	167	na	na	167	
3,3-Dichlorobenzidine	µg/kg	none	370	851	50	851	
3,5-Dimethylphenol	µg/kg	none	180	na	25	180	
3-Nitroaniline	µg/kg	none	180	338	10	338	
4,6-Dinitro-2-methylphenol	µg/kg	none	550	677	50	677	
4-Bromophenyl-phenylether	µg/kg	none	180	338	5	338	
4-Chloro-3-methylphenol	µg/kg	none	180	338	5	338	
4-Chloroaniline	µg/kg	none	180	338	5	338	
4-Chlorophenyl-phenylether	µg/kg	none	180	338	5	338	
4-Methylphenol	µg/kg	none	180	338	5	338	
4-Nitroaniline	µg/kg	none	180	851	10	851	
4-Nitrophenol	µg/kg	none	550	851	5	851	
Acrolein	µg/kg	none	na	na	na	100	
Acrylonitrile	µg/kg	none	na	na	na	100	
Aniline	µg/kg	none	550	431	10	550	
Azobenzene	µg/kg	none	na	na	na	5	
Benzidine	µg/kg	none	3,700	1,700	200	3,700	
Benzo(e)pyrene	µg/kg	none	na	na	na	1.96	
Benzoic acid	µg/kg	none	550	851	100	851	
Benzyl alcohol	µg/kg	none	550	338	10	550	
Biphenyl	µg/kg	none	na	na	na	5	
bis(2-Chloroethoxy)methane	µg/kg	none	180	338	5	338	
Bis(2-chloroethyl)ether	µg/kg	none	180	338	5	338	
Bis(2-chloroisopropyl)ether	µg/kg	none	180	338	5	338	
bis(2-Ethylhexyl) phthalate	µg/kg	none	360	338	50	360	
Butyl benzyl phthalate	µg/kg	none	180	338	5	338	
Carbazole	µg/kg	none	180	na	5	180	
Dibenzofuran	µg/kg	none	180	338	5	338	
Diethyl phthalate	µg/kg	none	180	338	5	338	
Dimethyl phthalate	µg/kg	none	180	335	5	335	
Di-n-butyl phthalate	µg/kg	none	180	338	10	338	
Di-n-octyl phthalate	µg/kg	none	180	338	5	338	
Diphenylamine	µg/kg	none	na	na	na	5	
Hexachlorobenzene	µg/kg	none	180	338	5	338	
Hexachlorocyclopentadiene	µg/kg	none	550	851	29	851	
Hexachloroethane	µg/kg	none	180	338	5	338	
Isophorone	µg/kg	none	180	338	5	338	
n-Nitroso-di-n-propylamine	µg/kg	none	180	338	5	338	
n-Nitrosodiphenylamine	µg/kg	none	180	na	5	180	
n-Nitrosodiphenylamine as Diphenylamine	µg/kg	none	na	338	na	338	
Pentachlorophenol	µg/kg	none	550	851	50	851	
Perylene	µg/kg	none	na	na	na	1.96	
Phenol	µg/kg	none	180	338	15	338	
Pyridine	µg/kg	none	na	170	na	170	
NDMA by 8270C_SIM							
n-Nitrosodimethylamine	µg/kg	none	1.8	18.4	25	25	
NDMA by 1625							
n-Nitrosodimethylamine	µg/kg	none	0.037	na	na	0.037	

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Perchlorate by 6850							
Perchlorate	µg/kg	none	5.5	na	2	5.5	
Perchlorate by 314.1							
Perchlorate (soil)	µg/kg	none	30	na	20	30	
Perchlorate (as 1:1 water extraction/leachate) ⁷	µg/kg	none	na	4	na	4	
Metals							
Aluminum	mg/kg	20,000	19.8	8.5	10	20,000	
Antimony	mg/kg	8.7	0.212	1.5	0.05	8.7	
Arsenic	mg/kg	15	0.4	0.39	0.5	15	
Barium	mg/kg	140	0.4	0.39	0.05	140	
Beryllium	mg/kg	1.1	0.10	0.44	0.02	1.1	
Boron	mg/kg	9.7	4.85	4.9	0.5	9.7	
Cadmium	mg/kg	1	0.109	0.2	0.02	1	
Calcium	mg/kg	none	20	na	10	20	
Chromium	mg/kg	36.8	0.4	0.39	0.2	36.8	
Chromium VI	mg/kg	none	1.1	0.21	3.2	3.2	
Cobalt	mg/kg	21	0.10	0.10	0.02	21	
Copper	mg/kg	29	0.4	0.17	0.1	29	
Iron	mg/kg	28,000	20	na	2	28,000	
Lead	mg/kg	34	17	0.20	0.05	34	
Lithium	mg/kg	37	28.4	2	0.1	37	
Magnesium	mg/kg	none	10	na	4	10	
Manganese	mg/kg	495	0.5	na	0.2	495	
Mercury	mg/kg	0.09	0.108	0.017	0.02	0.09	
Molybdenum	mg/kg	5.3	0.23	0.099	0.05	5.3	
Nickel	mg/kg	29	12.7	0.34	0.2	29	
Phosphorus	mg/kg	none	10	na	6	10	
Potassium	mg/kg	6,400	50	na	60	6,400	
Selenium	mg/kg	0.655	0.43	1	1	0.655	
Silver	mg/kg	0.79	0.10	0.2	0.02	0.79	
Sodium	mg/kg	110	100	110	40	110	
Strontium	mg/kg	none	0.50	na	0.2	0.495	
Thallium	mg/kg	0.46	0.35	0.21	0.02	0.46	
Tin	mg/kg	none	10.9	na	0.05	10.9	
Titanium	mg/kg	none	1.00	na	0.2	0.995	
Vanadium	mg/kg	62	0.10	0.10	0.2	62	
Zinc	mg/kg	110	3.0	2.93	0.5	110	
Zirconium	mg/kg	8.6	5.42	23	0.1	8.6	
Anions							
Ammonia	mg/kg	none	na	na	na	5	
Bromide	mg/kg	none	na	5	na	5	
Chloride	mg/kg	none	na	na	na	5	
Fluoride	mg/kg	6.7	1.1	5	na	6.7	
Nitrate-NO3	mg/kg	none	1.5	na	na	1.5	
Nitrite-NO2	mg/kg	none	na	na	na	5	
Phosphate	mg/kg	none	na	21	na	21	
Sulfate	mg/kg	none	na	5.2	na	5.2	
Cyanide							
Cyanide	mg/kg	none	0.55	na	na	0.55	
Others							
pH	pH Units	8.9	6.45	6.88	na	8.86	
Formaldehyde							
Formaldehyde	mg/kg	none	1.7	1.2	na	1.7	
Polychlorinated Biphenyls (PCBs) and Polychlorinated Terphenyls (PCTs)							
Aroclor 1016 (PCB mixture)	µg/kg	none	1.9	20.5	7.7	20.5	
Aroclor 1221 (PCB mixture)	µg/kg	none	1.9	20.5	16	20.5	
Aroclor 1232 (PCB mixture)	µg/kg	none	1.9	20.5	7.7	20.5	
Aroclor 1242 (PCB mixture)	µg/kg	none	1.9	20.5	7.7	20.5	
Aroclor 1248 (PCB mixture)	µg/kg	none	1.9	20.5	7.7	20.5	
Aroclor 1254 (PCB mixture)	µg/kg	none	1.9	20.5	7.7	20.5	
Aroclor 1260 (PCB mixture)	µg/kg	none	1.9	20.5	7.7	20.5	
Aroclor 1262 (PCB mixture)	µg/kg	none	1.9	na	7.7	7.7	
Aroclor 1268 (PCB mixture)	µg/kg	none	1.9	na	7.7	7.7	
Aroclor 5432 (PCT mixture)	µg/kg	none	3.6	51.6	16	51.6	
Aroclor 5442 (PCT mixture)	µg/kg	none	3.6	51.6	16	51.6	
Aroclor 5460 (PCT mixture)	µg/kg	none	3.7	51.6	77	77	
PCB 105 (congener)	µg/kg	none	na	na	na	0.1	
PCB 114 (congener)	µg/kg	none	na	na	na	0.05	
PCB 118 (congener)	µg/kg	none	na	na	na	0.05	
PCB 123 (congener)	µg/kg	none	na	na	na	0.05	
PCB 126 (congener)	µg/kg	none	na	na	na	0.05	
PCB 128 (congener)	µg/kg	none	na	na	na	0.05	
PCB 138 (congener)	µg/kg	none	na	na	na	0.05	
PCB 153 (congener)	µg/kg	none	na	na	na	0.05	
PCB 156 (congener)	µg/kg	none	na	na	na	0.05	
PCB 157 (congener)	µg/kg	none	na	na	na	0.05	
PCB 167 (congener)	µg/kg	none	na	na	na	0.05	
PCB 169 (congener)	µg/kg	none	na	na	na	0.05	
PCB 170 (congener)	µg/kg	none	na	na	na	0.05	
PCB 18 (congener)	µg/kg	none	na	na	na	0.05	
PCB 180 (congener)	µg/kg	none	na	na	na	0.05	
PCB 187 (congener)	µg/kg	none	na	na	na	0.05	
PCB 189 (congener)	µg/kg	none	na	na	na	0.05	
PCB 195 (congener)	µg/kg	none	na	na	na	0.12	
PCB 206 (congener)	µg/kg	none	na	na	na	0.1	
PCB 28 (congener)	µg/kg	none	na	na	na	0.05	
PCB 44 (congener)	µg/kg	none	na	na	na	0.05	
PCB 52 (congener)	µg/kg	none	na	na	na	0.05	
PCB 66 (congener)	µg/kg	none	na	na	na	0.05	
PCB 77 (congener)	µg/kg	none	na	na	na	0.05	
PCB 8 (congener)	µg/kg	none	na	na	na	0.01	
PCB 81 (congener)	µg/kg	none	na	na	na	0.05	
PCB 90/101 (congener) ⁸	µg/kg	none	na	na	na	nv	
Polychlorinated biphenyls	µg/kg	none	na	na	na	50	

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Total Petroleum Hydrocarbons (TPH)							
Gasoline (C4-C12)	mg/kg	none	1.0	na	na	1	
EFH(C8-C11)	mg/kg	none	1.3	5.05	na	5.05	
EFH(C12-C14)	mg/kg	none	1.3	5.05	na	5.05	
EFH(C15-C20)	mg/kg	none	1.3	5.09	na	5.09	
EFH(C21-C30)	mg/kg	none	1.4	5.09	na	5.09	
Oil (C30-C40)	mg/kg	none	1.4	na	na	1.4	
Terphenyls							
o-Terphenyl	mg/kg	none	3.9	0.17	na	3.9	
m-Terphenyl	mg/kg	none	3.9	0.17	na	3.9	
p-Terphenyl	mg/kg	none	3.9	0.17	na	3.9	
Glycols							
Diethylene Glycol	mg/kg	none	14	25	na	25	
Ethylene Glycol	mg/kg	none	14	25	na	25	
Propylene Glycol	mg/kg	none	14	25	na	25	
Triethylene glycol	mg/kg	none	na	25	na	25	
Alcohols							
Ethanol	mg/kg	none	0.57	6.21	na	6.21	
Isopropanol	mg/kg	none	0.55	na	na	0.55	
Methanol	mg/kg	none	0.55	na	na	0.55	
Energetics							
1,3,5-Trinitrobenzene	µg/kg	none	170	na	400	400	
1,3-Dinitrobenzene	µg/kg	none	170	na	400	400	
2,4,6-Trinitrotoluene	µg/kg	none	170	na	400	400	
2,4-diamino-6-nitrotoluene	µg/kg	none	330	na	400	400	
2,4-Dinitrotoluene	µg/kg	none	170	na	400	400	
2,6-diamino-4-nitrotoluene	µg/kg	none	330	na	400	400	
2,6-Dinitrotoluene	µg/kg	none	170	na	400	400	
2-Amino-4,6-dinitrotoluene	µg/kg	none	170	na	400	400	
2-Nitrotoluene	µg/kg	none	170	na	400	400	
3-Nitrotoluene	µg/kg	none	170	na	400	400	
4-Amino-2,6-dinitrotoluene	µg/kg	none	170	na	400	400	
4-Nitrotoluene	µg/kg	none	170	na	400	400	
HMX	µg/kg	none	410	na	400	410	
Nitrobenzene	µg/kg	none	170	na	400	400	
Nitroglycerin	µg/kg	none	3,300	na	400	3,300	
PETN	µg/kg	none	3,300	na	400	3,300	
RDX	µg/kg	none	170	na	400	400	
Tetryl	µg/kg	none	170	na	400	400	
Pesticides							
4,4'-DDD	µg/kg	none	0.37	5.13	0.77	5.13	
4,4'-DDE	µg/kg	none	0.37	5.13	0.77	5.13	
4,4'-DDT	µg/kg	none	0.37	5.13	na	5.13	
a-Chlordane	µg/kg	none	na	na	na	5	
Aldrin	µg/kg	none	0.18	5.13	0.77	5.13	
alpha-BHC	µg/kg	none	0.18	5.13	0.77	5.13	
beta-BHC	µg/kg	none	0.18	5.13	0.77	5.13	
Chlordane	µg/kg	none	3.7	11.3	7.7	11.3	
delta-BHC	µg/kg	none	0.18	10.5	0.77	10.5	
Dieldrin	µg/kg	none	0.37	5.13	0.77	5.13	
Endosulfan I	µg/kg	none	0.18	5.13	0.77	5.13	
Endosulfan II	µg/kg	none	0.37	10.5	0.77	10.5	
Endosulfan sulfate	µg/kg	none	0.37	5.13	0.77	5.13	
Endrin	µg/kg	none	0.37	5.13	0.77	5.13	
Endrin aldehyde	µg/kg	none	0.37	5.13	0.77	5.13	
Endrin ketone	µg/kg	none	0.37	5.13	0.77	5.13	
gamma-BHC	µg/kg	none	0.18	10.5	0.77	10.5	
gamma-Chlordane	µg/kg	none	na	na	na	5	
Heptachlor	µg/kg	none	0.18	5.13	0.77	5.13	
Heptachlor epoxide	µg/kg	none	0.18	5.13	0.77	5.13	
Mirex	µg/kg	none	0.37	na	0.77	0.77	
p,p'-Methoxychlor	µg/kg	none	1.8	5.13	0.77	5.13	
Toxaphene	µg/kg	none	7.2	68.8	39	68.8	
Herbicides							
2,4,5-T	µg/kg	none	0.18	20.9	25	25	
2,4,5-Trichlorophenoxypropionic acid	µg/kg	none	0.18	81.1	25	81.1	
2,4-Dichlorophenoxyacetic Acid (2,4-D)	µg/kg	none	3.9	20.9	25	25	
2,4-Dichlorophenoxybutyric acid	µg/kg	none	1.8	83.7	25	83.7	
Dalapon	µg/kg	none	10	50.7	25	50.7	
Dicamba	µg/kg	none	1.3	40.6	25	40.6	
Dichlorprop	µg/kg	none	1.8	81.1	25	81.1	
Dinoseb	µg/kg	none	2.6	12.5	25	25	
Iodomethane	µg/kg	none	550	na	na	10	
MCPA	µg/kg	none	270	8,110	5,000	8,110	
MCPP	µg/kg	none	270	8,110	5,000	8,110	
Dioxins/Furans							
1,2,3,4,6,7,8-HpCDD	ng/kg	13	5.69	4.9	na	13	
1,2,3,4,6,7,8-HpCDF	ng/kg	2.5	5.56	4.9	na	2.5	
1,2,3,4,7,8,9-HpCDF	ng/kg	0.19	5.48	5	na	0.19	
1,2,3,4,7,8-HxCDD	ng/kg	0.34	5.56	5	na	0.34	
1,2,3,4,7,8-HxCDF	ng/kg	0.73	5.56	5	na	0.73	
1,2,3,6,7,8-HxCDD	ng/kg	0.95	5.48	4.9	na	0.95	
1,2,3,6,7,8-HxCDF	ng/kg	0.3	5.56	5	na	0.3	
1,2,3,7,8,9-HxCDD	ng/kg	1.1	5.48	5	na	1.1	
1,2,3,7,8,9-HxCDF	ng/kg	0.43	5.46	5	na	0.43	
1,2,3,7,8-PeCDD	ng/kg	0.18	5.48	5	na	0.18	
1,2,3,7,8-PeCDF	ng/kg	0.59	5.56	5	na	0.59	
2,3,4,6,7,8-HxCDF	ng/kg	0.45	5.46	5	na	0.45	
2,3,4,7,8-PeCDF	ng/kg	0.64	5.56	5	na	0.64	
2,3,7,8-TCDD	ng/kg	0.5	1.1	1	na	0.5	
2,3,7,8-TCDF	ng/kg	1.8	1.1	1	na	1.8	
OCDD	ng/kg	140	11.4	9.8	na	140	
OCDF	ng/kg	8.1	11	9.8	na	8.1	
TCDD TEQ ⁹	ng/kg	0.87	nc	nc	nc	0.87	
Total HpCDD	ng/kg	none	na	4.9	na	4.9	
Total HpCDF	ng/kg	none	na	4.9	na	4.9	
Total HxCDD	ng/kg	none	na	4.9	na	4.9	
Total HxCDF	ng/kg	none	na	4.9	na	4.9	
Total PeCDD	ng/kg	none	na	4.9	na	4.9	
Total PeCDF	ng/kg	none	na	4.9	na	4.9	
Total TCDD	ng/kg	none	na	0.99	na	0.99	
Total TCDF	ng/kg	none	na	0.97	na	0.97	

TABLE 1
Area IV Soil Interim Screening Levels
Draft for Review

Chemicals	Units	"Interim" Background Comparison Value (2005)	Recent Most Frequently Achieved Low RLs ¹			Interim Screening Level	Risk Based Screening Level (to be determined)
			Lancaster Lab - Co-located HSA 5C & 5B ²	TestAmerica Lab - RFI Group 6 ³	Columbia Lab - Site-Specific MDL Study RL ⁴		
Hydrazine Compounds							
Hydrazine	µg/kg	none	2.2	na	na	2.2	
Monomethyl hydrazine	µg/kg	none	5.3	na	na	5.3	
Unsymmetrical Dimethyl Hydrazine	µg/kg	none	5.3	na	na	5.3	
Organic Metals							
Tributyl tin	mg/kg	none	na	1.57	na	1.57	
Organic Lead	mg/kg	none	na	na	na	0.3	
Methyl Mercury	mg/kg	none	na	0.12	na	0.12	
Asbestos							
Chrysotile	Percent	none	na	na	na	1	
Amosite	Percent	none	na	na	na	1	
Crocidolite	Percent	none	na	na	na	1	
Anthophyllite	Percent	none	na	na	na	1	
Tremolite	Percent	none	na	na	na	1	
Actinolite	Percent	none	na	na	na	1	

Color Key for ISL Source Value:

2005 Background Comparison Value
Combined co-located HSA 5C & 5B, most frequently achieved non-detect RL by Lancaster Laboratories
2010 Group 6 sampling event, most frequently achieved non-detect RL by Test America Laboratories
Columbia Site-Specific MDL Study RL
Current RFI QAPP RL (MECx 2009- Update in progress, not published)
Lowest Reported RLs in Area IV RFI Data
Calculated Value

General Notes:

- a) Interim Screening Levels (ISLs) - ISLs will be used to screen Area IV data in Technical Memoranda (TM) prior to development of Lookup Table values by DTSC. Data will be rescreened and reevaluated based on DTSC Look-up Table values when published. On TM figures, sampling data will be screened against ISLs. The maximum ratio for any chemical to its respective ISL within an analytical group (e.g., VOCs, PAHs, metals) will be used to color code sample "dots" at regular intervals (1X, 2X, 10X ISL, etc.). Color coding will also be used below the 1X interval to display where lower screening levels (RLs) are exceeded, so that a full range of RLs/SLs can be evaluated relative to data trends.
- b) Interim Screening Level (ISL) selection criteria:
- If an "Interim" 2005 background comparison value is established that was used.
 - If no "Interim" background value available then the highest of: Co-located HSA 5C & 5B Most Frequently Achieved Low RL or Group 6 Most Frequently Achieved Low RL, or Columbia Site-Specific MDL Study Low RL.
 - If no co-located, Group 6 or Columbia value available the recent RFI QAPP RL was used.
 - If no QAPP RL the lowest RL in historical RFI Area IV data is presented.
- c) Chemicals listed in this table represent those analyzed during RFI or co-located sampling in Area IV or ongoing or previous investigations.
- d) Values provided in standard units most commonly reported by laboratories and as requested in the QAPP (mg/kg, µg/kg, ng/kg).
- e) TPH reported by non standard RFI carbon range names will be listed by current reporting ranges (e.g. EFH C12 - C14).
- f) Lancaster Lab - Co-located RLs and TestAmerica Lab-Group 6 RLs (with the exception of Perchlorate as 1:1 water extraction/leachate; see footnote 7) are adjusted to account for moisture in the individual soil samples and are reported in dry weight units. Columbia RLs are reported in dry weight. Current QAPP RLs are laboratory target RLs and are not adjusted for dry weight. Historical RFI Area IV Data predating the RFI may not be adjusted for dry weight.

Footnotes:

- Recent Most Frequently Achieved Low RLs are the most frequently achieved non-detect RLs reported in validated data; if all results for a chemical are detects within a dataset, the lowest associated RL is used. Data was restricted to dilutions less than 5 times (5X):
- Lancaster Lab - Co-located HSA 5C & 5B: Recent Most Frequently Achieved Low RLs from combined co-located HSA 5c & 5B data set comprised of 679 samples. All analyses were performed in-house by Lancaster Laboratories, Inc., a California State Certified Laboratory.
- TestAmerica Lab - RFI Group 6: Recent Most Frequently Achieved Low RLs from RFI Group 6 data set (collected 08/25/2011-10/19/2011) comprised of 440 samples. TestAmerica Laboratories, Inc. Denver, a California State Certified Laboratory, was the primary laboratory. Most analyses were analyzed in-house, with the exception of those listed below which were analyzed at subcontracted laboratories as follows:
 - Glycols subcontracted to TestAmerica Austin Lab
 - Tributyltin subcontracted to TestAmerica Burlington Lab
 - Formaldehyde subcontracted to TestAmerica Knoxville Lab
 - Asbestos subcontracted to EMLab P&K Laboratories
- Columbia Lab - Site-Specific MDL Study RL: The values presented here are calculated Reporting Limit (RL) values based on a Columbia Laboratories Inc. (a California State Certified Laboratory) Method Detection Limit (MDL) study representing 7 replicate analytical runs performed on a single site-specific soil sample. These values are adjusted for dry weight.
- Benzo(a)pyrene [BaP] TEQ: PAHs will be screened using BaP TEQs, calculated using Cal/EPA Cancer Potency Equivalency Factors (PEFs) (DTSC HERO HHRA note Number :4, June 2011). These are calculated results and therefore will have no associated RL source. The BaP ISL was selected as the BaP TEQ ISL.
- Tentatively Identified Compounds (TICs) not included in data presentations for Data Screening Technical Memoranda, with the exception of 1,2,3,4- Tetrahydronaphthalene, ("tetralin"), 2-butoxyethanol (Dowanol EB) and 2-phenoxyethanol (Dowanol EP) since these are known site-related chemicals. None of these have been detected in any of the data sets considered in this table. All three compounds would have been reported as SVOC TICs if detected in co-located samples. The RLs presented here were quantified using a single point calibration analyzed at the beginning of each 12-hour time period. 1,2,3,4-Tetrahydronaphthalene was reported in Area IV only once (as a TIC) at a value of 54.1 µg/kg. By definition, TICs have no associated RL.
- RFI perchlorate samples were analyzed using USEPA Method 314 as 1:1 soil weight to water volume leachate; results are equivalent to ppb and can be reported in either µg/kg or µg/L. Typically the lab reports perchlorate leachates in wet units (µg/L), but for consistency in the table they are presented here as µg/kg. These RLs do not reflect dry weight.
- PCB Congener PCB 90/101 was analyzed and reported only once in historical Area IV Data. The result was a detect of 22 µg/kg, with no associated RL was reported; Therefore this congener has no ISL value (nv).
- TCDD TEQ: Dioxin toxicity equivalents (TEQs) are calculated using 2005 World Health Organization (WHO) toxic equivalency factors (TEFs) and non-detect (ND) = 0. These values are formula driven (calculated results) from the "Interim" Background Comparison Values for Dioxins.

TABLE 1
Area IV Soil Interim Screening Levels
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Abbreviations:

BaP = Benzo(a)Pyrene
BHC = Benzene hexachloride
CAS = Chemical Abstracts Service
DDD = Dichlorodiphenyldichloroethane
DDE = Dichlorodiphenyldichloroethylene
DDT = dichlorodiphenyltrichloroethane
DTSC = California Department of Toxic Substances Control
EDB = Ethylene dibromide
EFH = Extractable Fuel Hydrocarbons
HERO = Office of Human and Ecological Risk
HHRA = Human Health Risk Assessment
HpCDD = Heptachlorodibenzo-p-dioxin
HpCDF = Heptachlorodibenzofuran
HSA = Historical Site Assessment
HxCDD = Hexachlorodibenzo-p-dioxin
HxCDF = Hexachlorodibenzofuran
MCPA = 2-methyl-4-chlorophenoxyacetic acid
MCPD = methylchlorophenoxypropionic acid
MDL = Method Detection Limit
MECx = MECx, LP.
MEK = Methyl Ethyl Keytone
MIBK = Methyl Isobutyl Keytone
MTBE = Methyl tert-butyl ether
NDMA = N-Nitrosodimethylamine
OCDD = Octachlorodibenzo-p-dioxin
OCDF = Octachlorodibenzofuran
PAH = Polynuclear Aromatic Hydrocarbons
PCB = Polychlorinated Biphenyls
PCT = Polychlorinated Terphenyls
PeCDD = Pentachlorodibenzo-p-dioxin
PeCDF = Pentachlorodibenzofuran
PETN = Pentaerythritol tetranitrate
QAPP = Quality Assurance Project Plan
RFI = RCRA Facility Investigation
RFI QAPP = Quality Assurance Project Plan, 2009 (MECx) and 2011 Errata (table corrections)
RLs = Reporting limits
SIM = Selective Ion Monitoring
SVOC = Semi-Volatile Organic Compounds
TCDD = Tetrachlorodibenzo-p-dioxin
TCDF = Tetrachlorodibenzofuran
TEF = Toxic Equivalency Factor
TEQ = Toxicity equivalent
TIC = Tentatively Identified Compound
TM = technical memoranda
TPH = Total Petroleum Hydrocarbons
VOC = Volatile Organic Compounds
WHO = World Health Organization

na = Not analyzed

nc = Not calculated

nv = No value

none = No "Interim" Background Comparison Value (2005) established

µg/kg = micrograms per kilogram = ppb

mg/kg = milligrams per kilogram

ng/kg = nanograms per kilogram

ppb = parts per billion

ppm = parts per million

ppt = parts per trillion