

Table 7.1a. Statistical Data Summary of Chemicals Detected in Surface Soil (0 to 2 feet bgs)

Site 39

**Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California**

Chemical	Number of Detections	Number of Analyses	Frequency of Detection (percent)	Minimum Detected Value (mg/kg)	Maximum Detected Value (mg/kg)	Arithmetic Mean (mg/kg)	Standard Deviation of the Arithmetic Mean (mg/kg)	95% Upper Confidence Limit (UCL) of the Arithmetic Mean (mg/kg)	Lesser of 95% UCL and Maximum Concentrations (mg/kg)
2-Amino-dinitrotoluene	11	166	6.6	0.10	1.20	0.14	0.11	0.36	0.36
4-Amino-dinitrotoluene	12	166	7.2	0.10	1.50	0.14	0.13	0.40	0.40
Antimony	48	223	21.5	0.46	100.00	1.87	7.83	17.22	17.22
Arsenic	167	221	75.6	0.46	10.50	1.46	1.13	3.68	3.68
Beryllium	59	218	27.1	0.12	66.90	0.47	4.52	9.34	9.34
Bis(2-ethylhexyl)phthalate	10	21	47.6	0.05	0.42	0.33	0.41	1.14	0.42
Cadmium	40	218	18.4	0.93	104.00	3.06	12.16	26.90	26.90
Chromium	212	219	96.8	3.70	380.00	15.06	29.00	71.91	71.91
Copper	100	220	45.5	0.49	12900.00	138.39	941.43	1983.59	1983.59
Di-n-octyl phthalate	1	21	4.8	0.06	0.06	0.34	0.40	1.13	0.06
HMX	31	189	16.4	0.10	1100.00	10.33	82.27	171.57	171.57
Lead	231	233	99.1	1.10	4060.00	88.39	381.35	835.83	835.83
Mercury	3	218	1.4	0.05	0.08	0.03	0.01	0.05	0.05
2-Methylnaphthalene	1	21	4.8	2.60	2.60	0.42	0.62	1.64	1.64
Nickel	157	218	72.0	4.90	344.00	10.71	25.09	59.90	59.90
Nitroglycerin	3	166	1.8	0.28	8.10	0.30	0.61	1.49	1.49
4-Nitrophenol	1	21	4.8	0.07	0.07	1.63	1.98	5.50	0.07
Pentachlorophenol	3	21	14.3	0.05	0.08	1.55	2.02	5.52	0.08
PETN	1	166	0.6	1.50	1.50	0.26	0.10	0.45	0.45
Phenanthrene	1	21	4.8	0.21	0.21	0.31	0.37	1.04	0.21
Pyrene	1	21	4.8	0.19	0.19	0.31	0.37	1.04	0.19

Table 7.1a. Statistical Data Summary of Chemicals Detected in Surface Soil (0 to 2 feet bgs)

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Fort Ord, California**

Chemical	Number of Detections	Number of Analyses	Frequency of Detection (percent)	Minimum Detected Value (mg/kg)	Maximum Detected Value (mg/kg)	Arithmetic Mean (mg/kg)	Standard Deviation of the Arithmetic Mean (mg/kg)	95% Upper Confidence Limit (UCL) of the Arithmetic Mean (mg/kg)	Lesser of 95% UCL and Maximum Concentrations (mg/kg)
RDX	29	189	15.3	0.11	16.50	0.45	1.73	3.83	3.83
Selenium	6	220	2.7	0.55	1.00	0.42	0.11	0.63	0.63
Silver	9	218	4.1	0.38	12.30	0.37	0.99	2.32	2.32
Tetryl	1	189	0.5	0.39	0.39	0.14	0.03	0.20	0.20
1,3,5-Trinitrobenzene	1	189	0.5	0.14	0.14	0.12	0.01	0.14	0.14
2,4,6-Trinitrotoluene	2	189	1.1	0.16	4.00	0.15	0.28	0.71	0.71
Zinc	140	218	64.2	5.20	8910.00	108.97	673.83	1429.67	1429.67
bgs									
mg/kg									
--									
HMX									
PETN									
RDX									

Below ground surface.

Milligrams per kilogram.

Not applicable.

Cyclotetramethylene tetranitramine.

Pentaerythritol tetranitrate.

Cyclotrimethylene trinitramine.

Table 7.1b. Statistical Data Summary of Chemicals Detected in Subsurface Soil (2 to 10 feet bgs)
Site 39

Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California

Chemical	Number of Detections	Number of Analyses	Frequency of Detection (percent)	Minimum Value Detected (mg/kg)	Depth of Minimum (feet)	Maximum Value Detected (mg/kg)	Depth of Maximum (feet)	Arithmetic Mean (mg/kg)	Standard Deviation of the Arithmetic Mean (mg/kg)	95% Upper Confidence Limit (UCL) of the Arithmetic Mean (mg/kg)	Lesser of 95% UCL and Maximum Concentrations (mg/kg)
2-Amino-dinitrotoluene	1	140	0.7	0.10	2.50	0.10	2.50	0.12	2.10E-03	0.13	0.10
Antimony	13	227	5.7	0.50	2.50	0.84	2.50	0.38	0.49	1.33	0.84
Arsenic	161	226	71.2	0.53	2.50	7.90	2.50	1.41	0.95	3.27	3.27
Beryllium	87	226	38.5	0.13	2.50	1.30	10.00	0.26	0.25	0.74	0.74
Bis(2-ethylhexyl)phthalate	1	9	11.1	0.14	2.50	0.14	2.50	0.18	1.48E-02	0.21	0.14
Cadmium	5	226	2.2	0.65	6.00	3.30	2.50	0.51	0.30	1.10	1.10
Chromium	219	227	96.5	4.40	5.00	69.20	5.00	16.04	11.24	38.08	38.08
Copper	76	226	33.6	1.80	2.50	1220.00	2.50	11.35	82.83	173.69	173.69
HMX	15	149	10.1	0.18	2.50	56.00	2.50	0.71	4.77	10.06	10.06
Lead	235	235	100.0	0.62	2.50	362.00	2.50	7.28	26.63	59.48	59.48
Mercury	18	223	8.1	0.05	2.50	0.19	10.00	0.03	0.02	0.07	0.07
Nickel	155	226	68.6	5.10	5.00	43.10	5.00	9.22	6.95	22.83	22.83
4-Nitrophenol	1	9	11.1	0.10	2.50	0.10	2.50	0.80	0.27	1.32	0.10
Pentachlorophenol	1	9	11.1	0.07	2.50	0.07	2.50	0.80	0.28	1.34	0.07
RDX	6	149	4.0	0.11	5.00	0.50	2.50	0.13	0.03	0.20	0.20
Selenium	10	228	4.4	0.66	6.00	1.80	2.50	0.46	0.15	0.76	0.76
Silver	2	226	0.9	0.55	6.00	0.91	10.00	0.25	0.06	0.36	0.36
Zinc	121	227	53.3	5.70	2.50	542.00	2.50	15.80	39.10	92.44	92.44

bgs Below ground surface.
mg/kg Milligrams per kilogram.
-- Not applicable.
2.10E-03 2.10×10^{-3} .
HMX Cyclotetramethylene tetranitramine.
RDX Cyclotrimethylene trinitramine.

Table 7.1c. Statistical Data Summary of Chemicals Detected in Deep Soil (>10 feet bgs)
Site 39

Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California

Chemical	Number of Detections	Number of Analyses	Frequency of Detection (percent)	Minimum Detected Value (mg/kg)	Depth of Minimum (feet)	Maximum Detected Value (mg/kg)	Depth of Maximum (feet)	Arithmetic Mean (mg/kg)	Standard Deviation of the Arithmetic Mean (mg/kg)	95% Upper Confidence Limit (UCL) of the Arithmetic Mean (mg/kg)	Lesser of 95% UCL and Maximum Concentrations (mg/kg)
Arsenic	64	89	71.9	0.40	21.00	4.50	50.50	1.65	0.88	3.37	3.37
Beryllium	36	88	40.9	0.19	20.50	0.76	16.00	0.23	0.17	0.56	0.56
Cadmium	2	89	2.3	0.62	30.50	0.86	30.50	0.32	0.08	0.49	0.49
Chromium	87	89	97.8	5.00	30.50	38.90	16.00	13.09	7.73	28.23	28.23
Copper	43	89	48.3	1.40	30.50	11.20	11.00	2.30	1.99	6.19	6.19
Lead	78	89	87.6	0.87	60.50	8.20	11.00	2.01	1.38	4.71	4.71
Mercury	3	83	3.6	0.11	21.00	0.12	120.50	0.05	0.01	0.08	0.08
Nickel	56	89	62.9	6.10	21.00	25.00	180.50	8.78	5.87	20.29	20.29
Selenium	1	89	1.1	1.30	140.50	1.30	140.50	0.29	0.12	0.52	0.52
Silver	2	89	2.3	0.43	16.00	0.73	11.00	0.20	0.07	0.32	0.32
Thallium	1	89	1.1	0.39	50.50	0.39	50.50	0.21	0.08	0.36	0.36
Zinc	70	89	78.7	2.80	11.00	25.40	11.00	9.21	5.96	20.89	20.89

bgs Below ground surface.
mg/kg Milligrams per kilogram.

**Table 7.2. Statistical Data Summary of Chemicals Detected in Groundwater, Uppermost Aquifer
Site 39
Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California**

Chemical	Number of Detections	Number of Analyses	Frequency of Detection (percent)	Minimum Detected Value (mg/l)	Maximum Detected Value (mg/l)	Arithmetic Mean (mg/l)	Standard Deviation of the Arithmetic Mean (mg/l)	95% Upper Confidence Limit (UCL) of the Arithmetic Mean (mg/l)	Lesser of 95% UCL and Maximum Concentrations (mg/l)
Antimony	3	9	33.3	1.06E-02	1.14E-02	1.40E-02	2.34E-03	1.86E-02	1.14E-02
Arsenic	2	9	22.2	2.50E-03	3.20E-03	1.48E-03	8.10E-04	3.07E-03	3.07E-03
Beryllium	1	9	11.1	5.40E-04	5.40E-04	3.10E-04	9.00E-05	4.90E-04	4.90E-04
Calcium	8	8	100.0	10.30	33.60	18.81	8.91	36.27	33.60
Chloride	5	5	100.0	41.00	220.00	112.42	85.15	279.31	220.00
Chromium	5	9	55.6	3.60E-03	5.40E-03	3.39E-03	1.86E-03	7.03E-03	5.40E-03
Copper	1	9	11.1	9.20E-03	9.20E-03	1.82E-03	2.77E-03	7.24E-03	7.24E-03
Iron	3	6	50.0	1.90E-02	4.31E-02	2.18E-02	1.26E-02	4.65E-02	4.31E-02
Lead	1	9	11.1	1.80E-03	1.80E-03	1.08E-03	4.60E-04	1.99E-03	1.80E-03
Magnesium	8	8	100.0	6.14	24.90	12.14	7.30	26.44	24.90
Mercury	3	9	33.3	2.30E-04	2.80E-04	1.50E-04	8.00E-05	3.00E-04	2.80E-04
Nitrate as N	8	8	100.0	2.10	22.00	6.76	7.46	21.39	21.39
Potassium	6	8	75.0	2.04	4.15	2.30	1.05	4.36	4.15
Sodium	8	8	100.0	28.80	91.80	55.69	25.11	104.90	91.80
Sulfate	5	5	100.0	5.40	11.00	7.76	2.60	12.85	11.00
Zinc	3	9	33.3	8.90E-03	1.41E-02	7.55E-03	4.24E-03	1.59E-02	1.41E-02

mg/l Milligrams per liter.

**Table 7.3. Statistical Data Summary of Chemicals Detected in Groundwater, Paso Robles Aquifer
Site 39**

**Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California**

Chemical	Number of Detections	Number of Analyses	Frequency of Detection (percent)	Minimum Detected Value (mg/l)	Maximum Detected Value (mg/l)	Arithmetic Mean (mg/l)	Standard Deviation of the Arithmetic Mean (mg/l)	95% Upper Confidence Limit (UCL) of the Arithmetic Mean (mg/l)	Lesser of 95% UCL and Maximum Concentrations (mg/l)
Antimony	2	7	28.6	8.80E-03	1.36E-02	1.43E-02	2.53E-03	1.93E-02	1.36E-02
Arsenic	1	7	14.3	5.70E-03	5.70E-03	1.72E-03	1.76E-03	5.17E-03	5.17E-03
Bromide	1	3	33.3	0.51	0.51	0.34	0.15	0.63	0.51
Calcium	8	8	100.0	5.11	27.00	13.25	8.55	30.01	27.00
Chloride	6	6	100.0	67.70	112.00	80.73	15.88	111.85	111.85
Chromium	3	7	42.9	3.60E-03	4.90E-03	2.74E-03	1.58E-03	5.85E-03	4.90E-03
Copper	2	7	28.6	5.30E-03	5.30E-03	2.16E-03	2.15E-03	6.37E-03	5.30E-03
Iron	3	5	60.0	1.88E-02	4.85E-02	2.45E-02	1.75E-02	5.87E-02	4.85E-02
Magnesium	8	8	100.0	2.15	10.30	6.22	2.80	11.72	10.30
Mercury	1	7	14.3	3.10E-04	3.10E-04	1.30E-04	8.00E-05	2.90E-04	2.90E-04
Nitrate as N	10	11	90.9	0.77	1.50	0.88	0.36	1.58	1.50
Nitrite as N	1	6	16.7	0.90	0.90	0.32	0.30	0.90	0.90
Potassium	8	8	100.0	2.62	4.77	3.80	0.69	5.16	4.77
Sodium	8	8	100.0	51.20	143.00	79.43	34.81	147.66	143.00
Sulfate	6	6	100.0	7.70	91.00	36.37	31.25	97.63	91.00
Zinc	3	7	42.9	3.10E-03	1.81E-02	8.03E-03	5.17E-03	1.82E-02	1.81E-02

mg/l Milligrams per liter.

Table 7.4. Selection of COPCs for Chemicals Detected in Surface Soil (0 to 2 feet bgs) /a/
Site 39

Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California

Chemicals Detected	Maximum /b/ Concentration (mg/kg)	Background Concentration (mg/kg)	Essential Nutrient EDD /c/ (mg/day)	HBSL /d/ (mg/kg)	Screening Results /e/		COPC (Yes/No)
					Hazard Quotient	Cancer Risk	
2-Amino-dinitrotoluene	1.20	--	--	--	0.003	2E-08	YES
4-Amino-dinitrotoluene	1.50	--	--	--	0.004	3E-08	YES
Antimony	100	--	--	--	0.4	--	YES
Arsenic	10.50	3.4	--	--	0.05	2E-04	YES
Beryllium	66.90	0.35	--	--	0.02	1E-03	YES
Bis(2-ethylhexyl)phthalate	0.42	--	--	--	0.00003	4E-09	NO
Cadmium	104	ND	--	--	0.3	2E-03	YES
Chromium /f/	380	46.1	--	--	0.0005	--	NO
Copper	12900	18.2	--	--	0.5	--	YES
Di-n-octyl phthalate	0.06	--	--	--	0.000004	--	NO
HMX	1100	--	--	--	0.03	--	YES
Lead	4060	51.8	--	240	--	--	NO
Mercury	0.08	0.12	--	--	--	--	NO
2-Methylnaphthalene	2.60	--	--	--	0.00006	--	NO
Nickel	344.00	58	--	--	0.02	4E-04	YES
Nitroglycerin	8.10	--	--	--	--	--	NO
4-Nitrophenol	0.07	--	--	--	--	--	NO
Pentachlorophenol	0.08	--	--	--	0.000004	6E-09	NO
PETN	1.50	--	--	--	--	--	NO
Phenanthrene	0.21	--	--	--	0.000001	--	NO
Pyrene	0.19	--	--	--	0.000009	--	NO
RDX	16.50	--	--	--	0.008	1E-06	YES
Selenium	1.00	--	0.0002	--	--	--	NO
Silver	12.30	0.36	--	--	0.004	--	NO
Tetryl	0.39	--	--	--	0.00006	--	NO

Harding Lawson Associates

Table 7.4. Selection of COPCs for Chemicals Detected in Surface Soil (0 to 2 feet bgs) /a/
Site 39

Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California

Chemicals Detected	Maximum /b/ Concentration (mg/kg)	Background Concentration (mg/kg)	Essential Nutrient EDD /c/ (mg/day)	HBSL /d/ (mg/kg)	Screening Results /e/		COPC (Yes/No)
					Hazard Quotient	Cancer Risk	
1,3,5-Trinitrobenzene	0.14	--	--	--	0.004	--	NO
2,4,6-Trinitrotoluene	4.00	--	--	--	0.01	7E-08	YES
Zinc	8910	75.80	1.78	--	--	--	NO

COPCs
bgs
mg/kg
--
ND
3.43E-03
HMX
PETN
RDX

Chemicals of potential concern.
Below ground surface.
Milligrams per kilogram.
Not applicable or not available.
Not detected.
 3.43×10^{-3} .
Cyclotetramethylene tetranitramine.
Pentaerythritol tetranitrate.
Cyclotrimethylene trinitramine.

/a/ See Section 7.3.1 for explanation. If a chemical is eliminated by any of the steps shown, no further screening information is provided in this table for that chemical.
/b/ From: Table 7.1a.
/c/ Estimated daily dose (see Appendix B for explanation). This was compared to the Recommended Daily Allowances of 0.01 to 0.02 mg/day for selenium and 5 to 10 mg/day for zinc (National Research Council, 1989).
/d/ Health based screening level for a child receptor (Harding Lawson Associates, Draft Technical Memorandum, Preliminary Remediation Goals, Fort Ord, California, June 14, 1993).
/e/ See Table C16 of Appendix C for development of screening values.
/f/ Evaluated as chromium III. Chromium VI was not detected.

**Table 7.5. Selection of COPCs for Chemicals Detected in Groundwater, Uppermost Aquifer /a/
Site 39
Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California**

Chemicals Detected	Maximum /b/ Concentration (mg/l)	Essential Nutrient EDD /c/	Screening Results /d/		COPC (Yes/No)
			Hazard Quotient	Cancer Risk	
Antimony	0.0114	--	0.8	--	YES
Arsenic	0.00307	--	0.3	7E-05	YES
Beryllium	0.00049	--	0.003	4E-05	YES
Calcium	33.6	33.6	--	--	NO
Chloride	220	--	--	--	NO
Chromium	0.0054	--	0.0002	--	NO
Copper	0.00724	--	0.007	--	NO
Iron	0.0431	0.0431	--	--	NO
Lead	0.0018	--	--	--	NO
Magnesium	24.9	24.9	--	--	NO
Mercury	0.00028	--	0.03	--	YES
Nitrate as N	21.39	--	0.4	--	YES
Potassium	4.15	--	--	--	NO
Sodium	91.8	--	--	--	NO
Sulfate	11	--	--	--	NO
Zinc	0.0141	0.0141	0.001	--	NO

COPCs Chemicals of potential concern.
mg/l Milligrams per liter.
-- Not applicable or not available.
1.14E-02 1.14×10^{-2} .

/a/ See Section 7.3.2.1 for explanation. If a chemical is eliminated by any of the steps shown, no further screening information is provided in this table for that chemical.

/b/ From: Table 2.2.

/c/ Estimated daily dose in milligrams per day (mg/day; see Appendix B for explanation). This was compared to Recommended Daily Allowances of 400 to 800 mg/day for calcium, 6 to 10 mg/day for iron, 40 to 120 mg/day for magnesium, and 5 to 10 mg/day for zinc (National Research Council, 1989).

/d/ See Table C17 of Appendix C for development of screening values.

**Table 7.6. Selection of COPCs for Chemicals Detected in Groundwater, Paso Robles Aquifer /a/
Site 39
Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California**

Chemicals Detected	Maximum /b/ Concentration (mg/l)	Essential Nutrient EDD /c/	Screening Results /d/		COPC (Yes/No)
			Hazard Quotient	Cancer Risk	
Antimony	0.0136	--	1.0	--	Y
Arsenic	0.0057	--	0.5	1.0E-04	Y
Bromide	0.51	--	--	--	N
Calcium	27	27.0	--	--	N
Chloride	112	--	--	--	N
Chromium	0.0049	--	0.0001	--	N
Copper	0.0053	--	0.004	--	N
Iron	0.0485	0.0485	--	--	N
Magnesium	10.3	10.3	--	--	N
Mercury	0.00031	--	0.03	--	Y
Nitrate as N	1.5	--	0.03	--	Y
Nitrite as N	0.9	--	0.3	--	Y
Potassium	4.77	--	--	--	N
Sodium	143	--	--	--	N
Sulfate	91	--	--	--	N
Zinc	0.0181	0.0181	0.002	--	N

COPCs Chemicals of potential concern.
mg/l Milligrams per liter.
-- Not applicable or not available.
1.36E-02 1.36 x 10⁻².

- /a/ See Section 7.3.2.2 for explanation. If a chemical is eliminated by any of the steps shown, no further screening information is provided in this table for that chemical.
- /b/ From: Table 7.3.
- /c/ Estimated daily dose in milligrams per day (mg/day; see Appendix B for explanation). This was compared to Recommended Daily Allowances of 400 to 800 mg/day for calcium, 6 to 10 mg/day for iron, 40 to 120 mg/day for magnesium, and 5 to 10 mg/day for zinc (National Research Council, 1989).
- /d/ See Table C18 of Appendix C for development of screening values.

**Table 7.7. Site-Specific Intake Assumptions /a/
Site 39
Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California**

Scenario/Receptor	Intake Assumptions			
	Exposure Time ET (hours/day)	Fraction of Intake FI (unitless)	Exposure Frequency EF (days/year)	Exposure Duration ED (years)
<u>Average Exposure Scenario</u>				
Habitat Management Worker	8	0.5	250	10
Offsite Resident (0-6 years)	20	NA	350	6
Offsite Resident (6-9 years)	20	NA	350	3
<u>RME Scenario</u>				
Habitat Management Worker	8	1.0	250	25
Offsite Resident (0-6 years)	24	NA	350	6
Offsite Resident (6-18 years)	24	NA	350	12
Offsite Resident (18-30 years)	24	NA	350	12

RME Reasonable maximum exposure.

/a/ See Section 6.4.3 for explanation.

**Table 7.8. Exposure Point Concentrations (EPCs) for Soil and Air
Site 39
Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California**

Chemicals of Potential Concern	Average Exposure Scenario		RME Scenario	
	Soil	Air	Soil	Air
	Concentration /a/ (mg/kg)	Concentration /b/ (mg/m ³)	Concentration /c/ (mg/kg)	Concentration /b/ (mg/m ³)
2-Amino-dinitrotoluene	1.40E-01	1.61E-09	3.60E-01	4.14E-09
4-Amino-dinitrotoluene	1.40E-01	1.61E-09	4.00E-01	4.60E-09
Antimony	1.87E+00	2.15E-08	1.72E+01	1.98E-07
Arsenic	1.46E+00	1.68E-08	3.68E+00	4.23E-08
Beryllium	4.70E-01	5.41E-09	9.34E+00	1.07E-07
Cadmium	3.06E+00	3.52E-08	2.69E+01	3.09E-07
Copper	1.38E+02	1.59E-06	1.98E+03	2.28E-05
HMX	1.03E+01	1.19E-07	1.72E+02	1.97E-06
Lead	8.84E+01	1.02E-06	8.36E+02	9.61E-06
Nickel	1.07E+01	1.23E-07	5.99E+01	6.89E-07
RDX	4.50E-01	5.18E-09	3.83E+00	4.40E-08
2,4,6-Trinitrotoluene	1.50E-01	1.73E-09	7.10E-01	8.17E-09

RME Reasonable maximum exposure.
mg/kg Milligrams per kilogram.
mg/m³ Milligrams per cubic meter.
bgs Below ground surface.
1.40E-01 1.40 x 10⁻¹.
HMX Cyclotetramethylene tetranitramine.
RDX Cyclotrimethylene trinitramine.
PM10 Particles with a diameter less than or equal to 10 microns.

/a/ Arithmetic mean.

/b/ Air concentration (mg/m³) = soil concentration (mg/kg) x site-specific PM10 (1.15E-2 mg/m³) x conversion factor (1E-6 kg/mg).

/c/ Lesser of the maximum concentration and 95 percent upper confidence limit of the arithmetic mean.

**Table 7.9. Exposure Point Concentrations (EPCs) for Groundwater
Site 39
Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California**

<u>Aquifer</u> Chemicals of Potential Concern	<u>Average Scenario</u> Groundwater Concentration /a/ (mg/l)	<u>RME Scenario</u> Groundwater Concentration /b/ (mg/l)
<u>Uppermost Aquifer</u>		
Antimony	1.40E-02	1.14E-02
Arsenic	1.48E-03	3.07E-03
Beryllium	3.10E-04	4.90E-04
Mercury	1.50E-04	2.80E-04
Nitrate as N	6.76E+00	2.14E+01
<u>Paso Robles Aquifer</u>		
Antimony	1.43E-02	1.36E-02
Arsenic	1.72E-03	5.17E-03
Mercury	1.30E-04	2.90E-04
Nitrate	8.80E-01	1.50E+00
Nitrite	3.20E-01	9.00E-01

RME Reasonable maximum exposure.
mg/l Milligrams per liter.
1.40E-02 1.40×10^{-2} .

/a/ Arithmetic mean.

/b/ Lesser of the maximum concentration and 95 percent upper confidence limit of the arithmetic mean.

**Table 7.10. Total Hazard Index for the Habitat Management Worker Receptor /a/
Site 39
Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California**

Scenario	Ingestion of Soil	Dermal Contact with Soil	Inhalation of Dust	Ingestion of Groundwater	Total HI
<u>Average Scenario</u>	0.005	0.008	0.00002	0.1	0.1
<u>RME Scenario</u>	0.2	0.4	0.0002	0.5	1

HI Hazard index.
RME Reasonable maximum exposure.

/a/ Chemical-specific hazard quotients are presented in Tables E53-E56 (Appendix E).
HIs are reported to 1 significant figure.

**Table 7.11. Total Hazard Index for the Offsite Resident Receptor /a/
Site 39
Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California**

<u>Scenario Receptor</u>	HI (Inhalation of Dust)
<u>Average Exposure Scenario</u>	
Resident (0 - 6 years)	0.0004
Resident (6 - 9 years)	0.0003
<u>RME Scenario</u>	
Resident (0 - 6 years)	0.004
Resident (6 - 18 years)	0.002
Resident (18 - 30 years)	0.0008

HI Hazard index.
RME Reasonable maximum exposure.

/a/ Chemical-specific hazard quotients are presented in Tables E59-E63 (Appendix E). HIs are reported to 1 significant figure.

**Table 7.12. Total Cancer Risk for the Habitat Management Worker Receptor /a/
Site 39
Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California**

Scenario	Ingestion of Soil	Dermal Contact with Soil	Inhalation of Dust	Ingestion of Groundwater	Total Risk
<u>Average Scenario</u>	2.06E-07	1.27E-07	8.71E-09	1.66E-06	2E-06
<u>RME Scenario</u>	2.52E-05	2.17E-05	2.38E-07	3.08E-05	8E-05

9.14E-08 9.14 x 10⁻⁸.
RME Reasonable maximum exposure.

/a/ Chemical-specific risks are presented in Tables E53-E56 (Appendix E).

**Table 7.14. Summary of Model Predicted Blood-Lead Levels from Multipathway Exposures
Site 39
Volume III - Baseline Risk Assessment, Basewide RI/FS
Fort Ord, California**

<u>Receptor, Model Application, Name Exposure Pathway</u>	<u>Blood-Lead Level ($\mu\text{g}/\text{dl}$)</u>			
	<u>Average</u>		<u>RME</u>	
<u>Child Receptors, LEAD6 UBK Model /a,b/</u>				
Offsite Child Resident (0 - 6 years)	2.76		2.76	
<u>Child and Adult Receptors, LEADSPREAD Model /b,c/</u>				
	<u>Average</u>		<u>RME</u>	
	<u>95th Percentile</u>	<u>99th Percentile</u>	<u>95th Percentile</u>	<u>99th Percentile</u>
Offsite Child Resident (6 - 9 years)	3.06	3.90	NA	NA
Offsite Child Resident (6 - 18 years)	NA	NA	3.08	3.93
Offsite Adult Resident	NA	NA	3.08	3.93
Onsite Habitat Management Worker	3.16	4.02	4.03	5.13

$\mu\text{g}/\text{dl}$ Micrograms lead per deciliter blood.
RME Reasonable maximum exposure.
UBK Uptake/Biokinetic.
Cal/EPA California Environmental Protection Area.
NA Not applicable.

- /a/ Value represents the highest blood-lead level estimated in the child receptor 0 through 6 years of age. Age-specific blood-lead level estimates from the LEAD6 model are presented in Tables F31 and F32 in Appendix F.
- /b/ Concentrations of lead in air were well below ambient background levels. Therefore estimated blood-lead levels in this table are based almost exclusively on exposure to background levels of lead.
- /c/ LEADSPREAD Model results are presented in Tables F33 through F36 in Appendix F.