

Table H-2.3-1
EPCs at SWMUs 12-001(a) and 12-001(b) for the Industrial and Recreational Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	41	0	0.433 (U)	1.45 (U)	n/a*	1.45 (U)	Maximum detection limit
Barium	41	41	19.6	503	Nonparametric	226	95% Chebyshev (Mean, Sd)
Chromium (Total)	41	41	2.33	74.3	Gamma	25.3	95% Adjusted Gamma
Cobalt	41	41	0.888	17.3	Nonparametric	7.02	95% Chebyshev (Mean, Sd)
Copper	41	41	2.12	29	Gamma	9.61	95% Adjusted Gamma
Manganese	41	41	145	802	Normal	422	95% Student's-t
Perchlorate	41	8	0.000621	0.00271 (U)	Normal	0.00125	95% KM (t)
Selenium	41	0	1.05 (UJ)	1.34 (U)	n/a	1.34 (U)	Maximum detection limit
Uranium	41	41	0.798	19.1	Lognormal	5.59	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Amino-2,6-dinitrotoluene[4-]	41	1	0.127	0.5 (U)	n/a	0.127	Maximum detected concentration
HMX	41	3	0.173	11.4	n/a	11.4	Maximum detected concentration
PETN	41	1	1 (U)	5.82	n/a	5.82	Maximum detected concentration
RDX	41	5	0.113	49.4	Nonparametric	7.16	95% KM Chebyshev
Tetryl	41	1	0.333	0.5 (UJ)	n/a	0.333	Maximum detected concentration
Radionuclides (pCi/g)							
Plutonium-239/240	41	6	-0.00425 (U)	0.0682	Normal	0.0082	95% KM (t)
Uranium-234	41	41	0.593	4.15	Gamma	1.86	95% Adjusted Gamma
Uranium-238	41	41	0.743	4.47	Lognormal	2.15	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-2
EPCs at SWMUs 12-001(a) and 12-001(b) for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	80	80	2230	23,200	Normal	11,900	95% Student's-t
Antimony	80	1	0.372 (U)	1.45 (U)	n/a*	1.15	Maximum detected concentration
Barium	80	80	19.6	503	Nonparametric	213	95% Chebyshev (Mean, Sd)
Chromium (Total)	80	80	2.33	74.3	Nonparametric	24.6	95% Chebyshev (Mean, Sd)
Cobalt	80	80	0.801	22.8	Nonparametric	7.1	95% Chebyshev (Mean, Sd)
Copper	80	80	1.87	29	Nonparametric	8.09	95% Student's-t
Iron	80	80	7800	22,100	Nonparametric	13,900	95% Student's-t
Manganese	80	80	145	2150	Nonparametric	456	95% Student's-t
Nickel	80	80	1.76	12.1	Nonparametric	7.67	95% Student's-t
Perchlorate	80	13	0.000546	0.00271 (U)	Lognormal	0.001	95% KM (t)
Selenium	80	0	0.979 (U)	1.34 (U)	n/a	1.34 (U)	Maximum detection limit
Uranium	80	80	0.397	19.1	Nonparametric	3.52	95% Chebyshev (Mean, Sd)
Vanadium	80	80	5.29	35.4	Nonparametric	27.6	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Amino-2,6-dinitrotoluene[4-]	80	1	0.127	0.5 (U)	n/a	0.127	Maximum detected concentration
HMX	80	6	0.173	11.4	Gamma	0.749	95% KM (t)
PETN	80	1	1 (U)	5.82	n/a	5.82	Maximum detected concentration
RDX	80	8	0.113	49.4	Nonparametric	3.73	95% KM (Chebyshev)
Tetryl	80	1	0.333	0.5 (UJ)	n/a	0.333	Maximum detected concentration
Radionuclides (pCi/g)							
Cesium-137	79	38	-0.0517 (U)	0.838	Nonparametric	0.234	95% KM Chebyshev
Plutonium-239/240	80	7	-0.0056 (U)	0.0682	Normal	0.00149	95% KM (t)
Uranium-234	80	80	0.391	4.15	Lognormal	1.45	95% Student's-t
Uranium-238	80	80	0.326	4.47	Lognormal	1.65	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-3
EPCs at SWMU 12-002 for the Industrial and Recreational Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	1	0	1.03 (U)	1.03 (U)	n/a*	1.03 (U)	Maximum detection limit
Barium	1	1	74.3	74.3	n/a	74.3	Maximum detected concentration
Cobalt	1	1	13.4	13.4	n/a	13.4	Maximum detected concentration
Copper	1	1	7.83	7.83	n/a	7.83	Maximum detected concentration
Selenium	1	0	1.06 (U)	1.06 (U)	n/a	1.06 (U)	Maximum detection limit

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-4
EPCs at SWMU 12-002 for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	2	2	6010	14,200	n/a*	14,200	Maximum detected concentration
Antimony	2	0	0.369 (U)	1.03 (U)	n/a	1.03 (U)	Maximum detection limit
Barium	2	2	74.3	191	n/a	191	Maximum detected concentration
Chromium (Total)	2	2	6.97	13.5	n/a	13.5	Maximum detected concentration
Cobalt	2	2	13.4	14.2	n/a	14.2	Maximum detected concentration
Copper	2	2	7.83	11.1	n/a	11.1	Maximum detected concentration
Iron	2	2	13,700	18,900	n/a	18,900	Maximum detected concentration
Nickel	2	2	5.07	9.28	n/a	9.28	Maximum detected concentration
Selenium	2	0	1.06 (U)	1.1 (U)	n/a	1.1 (U)	Maximum detection limit
Vanadium	2	2	12.5	27.1	n/a	27.1	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-5
EPCs at AOC 12-004(a) for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	16	4	0.364	1.36	n/a*	1.36	Maximum detected concentration
Barium	16	16	18.9	211	Normal	100	95% Student's-t
Chromium (Total)	16	16	1.98	60.4	Normal	24.9	95% Student's-t
Cobalt	16	16	0.76	8.12	Normal	4.43	95% Student's-t
Copper	16	16	2.3	8.83	Normal	6.34	95% Student's-t
Perchlorate	16	1	0.00078	0.00255 (U)	n/a	0.00078	Maximum detected concentration
Selenium	16	0	1.08 (UJ)	1.26 (U)	n/a	1.26 (U)	Maximum detection limit
Uranium	16	16	0.709	7.12	Normal	3.74	95% Student's-t
Vanadium	16	16	4.47	30.3	Normal	17.2	95% Student's-t
Organic Chemicals (mg/kg)							
Benzoic acid	16	1	0.608	0.877 (U)	n/a	0.608	Maximum detected concentration
Radionuclides (pCi/g)							
Cesium-137	16	13	-0.0229 (U)	0.971	Normal	0.468	95% KM (t)
Uranium-234	16	16	0.859	3.81	Normal	1.82	95% Student's-t
Uranium-235/236	16	8	0.0389 (U)	0.253	Normal	0.124	95% KM (t)
Uranium-238	16	16	0.923	6.81	Normal	2.92	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-6
EPCs at AOC 12-004(a) for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	31	31	1600	18,300	Normal	6410	95% Student's-t
Antimony	31	8	0.364	1.36	Lognormal	0.677	95% KM (t)
Arsenic	31	31	0.451	3.14	Normal	1.83	95% Student's-t
Barium	31	31	10.4	214	Gamma	88.5	95% Adjusted Gamma
Chromium (Total)	31	31	1.98	60.4	Gamma	22.1	95% Adjusted Gamma
Cobalt	31	31	0.399	8.12	Gamma	3.98	95% Adjusted Gamma
Copper	31	31	1.76	8.83	Normal	5.31	95% Student's-t
Nickel	31	31	0.837	12	Normal	5.98	95% Student's-t
Perchlorate	31	2	0.000553	0.00255 (U)	n/a*	0.00078	Maximum detected concentration
Selenium	31	0	0.996 (U)	1.26 (U)	n/a	1.26 (U)	Maximum detection limit
Uranium	31	31	0.385	7.12	Gamma	2.64	95% Adjusted Gamma
Vanadium	31	31	2.7	30.3	Normal	13.8	95% Student's-t
Organic Chemicals (mg/kg)							
Benzoic acid	31	1	0.608	0.877 (U)	n/a	0.608	Maximum detected concentration
Di-n-butylphthalate	31	1	0.121	0.438 (U)	n/a	0.121	Maximum detected concentration
Radionuclides (pCi/g)							
Cesium-137	31	17	-0.0388 (U)	0.971	Normal	0.263	95% KM (t)
Uranium-234	31	31	0.705	3.81	Lognormal	1.44	95% Student's-t
Uranium-235/236	31	16	0.0302 (U)	0.253	Normal	0.0956	95% KM (t)
Uranium-238	31	31	0.709	6.81	Nonparametric	2.79	95% Chebyshev (Mean, Sd)

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-7
EPCs at AOC 12-004(b) for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	4	0	0.21 (U)	1.05 (U)	n/a*	1.05 (U)	Maximum detection limit
Cobalt	4	4	5.12	9.62	n/a	9.62	Maximum detected concentration
Lead	4	4	11.2	23.4	n/a	23.4	Maximum detected concentration
Uranium	4	4	1.5	5.8	n/a	5.8	Maximum detected concentration
Vanadium	4	4	20	47.5	n/a	47.5	Maximum detected concentration
Organic Chemicals (mg/kg)							
Aroclor-1254	2	1	0.00366 (U)	0.015	n/a	0.015	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-8
EPCs at AOC 12-004(b) for the Residential Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	12	12	1580	16,400	Normal	10,700	95% Student's-t
Antimony	12	1	0.094 (U)	1.05 (U)	n/a*	0.373	Maximum detected concentration
Arsenic	12	12	0.772	3.8	Normal	2.74	95% Student's-t
Barium	12	12	22.9	406	Normal	188	95% Student's-t
Chromium (Total)	12	12	2.42	21.3	Normal	13.7	95% Student's-t
Cobalt	12	12	1.1	9.62	Normal	6.79	95% Student's-t
Copper	12	12	2.14	18	Normal	10.4	95% Student's-t
Lead	12	11	3	23.4	Normal	15.2	95% KM (t)
Nickel	12	12	2.35	13.9	Normal	8.44	95% Student's-t
Perchlorate	12	1	0.000832	0.006 (U)	n/a	0.000832	Maximum detected concentration
Selenium	12	6	0.69	1.3	Normal	1.03	95% KM (t)
Uranium	12	12	0.42	5.8	Lognormal	2.57	95% BCA Bootstrap
Vanadium	12	12	3.62	47.5	Gamma	29.2	95% Adjusted Gamma
Organic Chemicals (mg/kg)							
Aroclor-1254	6	1	0.00342 (U)	0.04 (U)	n/a	0.015	Maximum detected concentration
Aroclor-1260	6	1	0.00342 (U)	0.039 (U)	n/a	0.011	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-9
EPCs at AOC 12-004(b) for Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	8	1	0.21 (U)	1.05 (U)	n/a*	0.373	Maximum detected concentration
Arsenic	8	8	1.76	3.5	Normal	2.92	95% Student's-t
Barium	8	8	113	406	Normal	246	95% Student's-t
Chromium (Total)	8	8	7.7	18.7	Normal	13.3	95% Student's-t
Cobalt	8	8	5.12	9.62	Normal	7.49	95% Student's-t
Copper	8	8	4.12	12.1	Normal	9.38	95% Student's-t
Lead	8	8	7.83	23.4	Normal	18.5	95% Student's-t
Nickel	8	8	4.94	8.5	Normal	7.82	95% Student's-t
Selenium	8	4	0.69	1.1	n/a	1.1	Maximum detected concentration
Uranium	8	8	0.42	5.8	Normal	2.97	95% Student's-t
Vanadium	8	8	12.7	47.5	Lognormal	30.3	95% Student's-t
Organic Chemicals (mg/kg)							
Aroclor-1254	4	1	0.00366 (U)	0.039 (U)	n/a	0.015	Maximum detected concentration
Radionuclides (pCi/g)							
Plutonium-238	8	1	-0.00124 (U)	0.043	n/a	0.043	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-10
EPCs at AOC C-12-001 for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	5	0	1.08 (U)	1.25 (U)	n/a*	1.25 (U)	Maximum detection limit
Uranium	5	5	1.29	4.07	n/a	4.07	Maximum detected concentration
Organic Chemicals (mg/kg)							
Aroclor-1242	2	1	0.00375 (U)	0.114	n/a	0.114	Maximum detected concentration
Aroclor-1254	2	1	0.00375 (U)	0.109	n/a	0.109	Maximum detected concentration
Aroclor-1260	2	1	0.00375 (U)	0.0477	n/a	0.0477	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-11
EPCs at AOC C-12-001 for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	10	10	7200	11,500	Normal	9750	95% Student's-t
Antimony	10	1	0.426	1.25 (U)	n/a*	0.426	Maximum detected concentration
Barium	10	10	66.8	161	Normal	132	95% Student's-t
Chromium (Total)	10	10	6.73	27	Gamma	16.3	95% Adjusted Gamma
Cobalt	10	10	2.46	6.26	Normal	4.97	95% Student's-t
Nickel	10	10	5.23	9.28	Normal	7.75	95% Student's-t
Perchlorate	10	2	0.000754	0.00252 (U)	n/a	0.00241	Maximum detected concentration
Selenium	10	0	1.03 (U)	1.26 (U)	n/a	1.26 (U)	Maximum detection limit
Uranium	10	10	0.398	4.07	Normal	1.96	95% Student's-t
Organic Chemicals (mg/kg)							
Aroclor-1242	4	1	0.00358 (U)	0.114	n/a	0.114	Maximum detected concentration
Aroclor-1254	4	1	0.00358 (U)	0.109	n/a	0.109	Maximum detected concentration
Aroclor-1260	4	1	0.00358 (U)	0.0477	n/a	0.0477	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-12
EPCs at AOC C-12-002 for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	5	0	1.03 (U)	1.11 (U)	n/a*	1.11 (U)	Maximum detection limit
Cobalt	5	5	4.66	12.1	n/a	12.1	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-13
EPCs at AOC C-12-002 for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	10	10	6790	12,800	Normal	11,100	95% Student's-t
Antimony	10	0	1.03 (U)	1.11 (U)	n/a*	1.11 (U)	Maximum detection limit
Barium	10	10	95.5	275	Normal	223	95% Student's-t
Chromium (Total)	10	10	8.79	23	Normal	15	95% Student's-t
Cobalt	10	10	4.66	12.1	Lognormal	7.49	95% Student's-t
Copper	10	10	5.04	8.7	Normal	7.65	95% Student's-t
Nickel	10	10	5.73	10.2	Normal	7.8	95% Student's-t
Perchlorate	10	2	0.000655	0.00233 (U)	n/a	0.00164	Maximum detected concentration
Selenium	10	0	1.04 (U)	1.15 (U)	n/a	1.15 (U)	Maximum detection limit
Vanadium	10	10	18.8	30.8	Normal	28.2	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-14
EPCs at AOC C-12-003 for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	5	0	1.79 (U)	2.61 (U)	n/a*	2.61 (U)	Maximum detection limit
Chromium (Total)	5	5	11.8	104	n/a	104	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-15
EPCs at AOC C-12-003 for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	10	1	1.02 (U)	2.74	n/a*	2.74	Maximum detected concentration
Barium	10	10	36.2	161	Normal	117	95% Student's-t
Chromium (Total)	10	10	4.82	104	Normal	45	95% Student's-t
Cobalt	10	10	1.92	6.66	Normal	4.99	95% Student's-t
Perchlorate	10	1	0.0019	0.00233 (U)	n/a	0.0019	Maximum detected concentration
Selenium	10	0	0.997 (UJ)	1.12 (UJ)	n/a	1.12 (UJ)	Maximum detection limit

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-16
EPCs at AOC C-12-004 for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	5	0	0.649 (U)	1.21 (UJ)	n/a*	1.21 (UJ)	Maximum detection limit
Chromium (Total)	5	5	9.16	33.5	n/a	33.5	Maximum detected concentration
Copper	5	5	7.65	28.1	n/a	28.1	Maximum detected concentration
Lead	5	5	8.61	58.6	n/a	58.6	Maximum detected concentration
Silver	5	5	0.431	2.56	n/a	2.56	Maximum detected concentration
Uranium	5	1	1.33 (U)	3.86	n/a	3.86	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-17
EPCs at AOC C-12-004 for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	10	10	5470	18,500	Normal	15,100	95% Student's-t
Antimony	10	0	0.649 (U)	1.21 (UJ)	n/a*	1.21 (UJ)	Maximum detection limit
Barium	10	10	143	279	Nonparametric	214	95% Student's-t
Chromium (Total)	10	10	9.16	33.5	Nonparametric	18.4	95% Student's-t
Cobalt	10	10	4.56	7.27	Normal	5.85	95% Student's-t
Copper	10	10	5.77	28.1	Nonparametric	13.7	95% Student's-t
Lead	10	10	7.8	58.6	Nonparametric	39.2	95% Chebyshev (Mean, Sd)
Nickel	10	10	6.25	9.29	Normal	8.38	95% Student's-t
Perchlorate	10	3	0.00104	0.00243 (U)	n/a	0.0012	Maximum detected concentration
Selenium	10	0	0.949 (U)	1.14 (U)	n/a	1.14 (U)	Maximum detection limit
Silver	10	10	0.431	2.56	Nonparametric	1.63	95% Chebyshev (Mean, Sd)
Uranium	10	1	0.578 (U)	3.86	n/a	3.86	Maximum detected concentration
Vanadium	10	10	19.2	30.9	Normal	28.1	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-18
EPCs at AOC C-12-005 for the Industrial and Recreational Scenarios

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	5	1	1.08 (U)	3.89	n/a*	3.89	Maximum detected concentration
Chromium (Total)	5	5	11.8	196	n/a	196	Maximum detected concentration
Perchlorate	5	1	0.00197	0.00267 (U)	n/a	0.00197	Maximum detected concentration
Uranium	5	5	1.15	2.77	n/a	2.77	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-19
EPCs at AOC C-12-005 for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	10	1	1.08 (U)	3.89	n/a*	3.89	Maximum detected concentration
Chromium (Total)	10	10	8.68	196	Nonparametric	114	95% Chebyshev (Mean, Sd)
Perchlorate	10	2	0.00124	0.00267 (U)	n/a	0.00197	Maximum detected concentration
Uranium	10	10	0.828	2.77	Normal	1.81	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-20
EPCs at AOC C-14-006 for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	5	3	0.548	1.27 (UJ)	n/a*	1.1	Maximum detected concentration
Chromium (Total)	5	5	9.33	20.7	n/a	20.7	Maximum detected concentration
<u>Nitrate</u>	<u>5</u>	<u>2</u>	<u>1.18 (U)</u>	<u>1.82</u>	<u>n/a</u>	<u>1.82</u>	<u>Maximum detected concentration</u>
Perchlorate	5	1	0.00135	0.00273 (U)	n/a	0.00135	Maximum detected concentration
Organic Chemicals (mg/kg)							
Acetone	5	2	0.00363	0.00973	n/a	0.00973	Maximum detected concentration
Isopropyltoluene[4-]	5	2	0.00075	0.00229	n/a	0.00229	Maximum detected concentration
TATB	5	5	0.404	11.3	n/a	11.3	Maximum detected concentration
Toluene	5	2	0.00067	0.00129 (U)	n/a	0.000887	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-21

EPCs at AOC C-14-006 for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	10	8	0.399	1.27 (UJ)	Normal	0.933	95% KM (t)
Chromium (Total)	10	10	9.33	20.7	Normal	13.9	95% Student's-t
<u>Nitrate</u>	<u>10</u>	<u>7</u>	<u>1.18 (U)</u>	<u>1.82</u>	<u>Normal</u>	<u>1.54</u>	<u>95% KM (t)</u>
Perchlorate	10	4	0.00125	0.00273 (U)	n/a*	0.00188	Maximum detected concentration
Organic Chemicals (mg/kg)							
Acetone	10	2	0.00363	0.00973	n/a	0.00973	Maximum detected concentration
Isopropyltoluene[4-]	10	2	0.00075	0.00229	n/a	0.00229	Maximum detected concentration
TATB	10	5	0.404	11.3	Normal	4.63	95% KM (t)
Toluene	10	2	0.00067	0.0013 (U)	n/a	0.000887	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-22
EPCs at AOC 15-005(c) for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	10	5	0.503	1.38 (U)	Normal	0.836	95% KM (t)
Barium	10	10	102	214	Normal	198	95% Student's-t
Chromium (Total)	10	10	5.94	13.9	Normal	11.9	95% Student's-t
Cobalt	10	10	2.93	9.87	Normal	6.81	95% Student's-t
Copper	10	10	8.11	30.6	Lognormal	16.3	95% Student's-t
Iron	10	10	7940	14,800	Normal	13,900	95% Student's-t
Lead	10	10	13.3	69.6	Nonparametric	55.6	95% Chebyshev (Mean, Sd)
Perchlorate	10	1	0.00149	0.00311 (U)	n/a*	0.00149	Maximum detected concentration
Selenium	10	0	1.17 (U)	1.48 (U)	n/a	1.48 (U)	Maximum detection limit
Uranium	10	10	3.95	17.4	Normal	9.48	95% Student's-t
Vanadium	10	10	14.3	31.8	Normal	27.9	95% Student's-t
Organic Chemicals (mg/kg)							
Acetone	10	2	0.00564 (UJ)	0.0188	n/a	0.0188	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	10	1	0.0995	0.514 (U)	n/a	0.0995	Maximum detected concentration
Ethylbenzene	10	1	0.000395	0.00149 (U)	n/a	0.000395	Maximum detected concentration
Isopropyltoluene[4-]	10	2	0.00049	0.00151	n/a	0.00151	Maximum detected concentration
Toluene	10	2	0.000538	0.00148 (U)	n/a	0.000754	Maximum detected concentration
Xylene[1,3-]+1,4-Xylene	10	4	0.000406	0.00299 (U)	n/a	0.000984	Maximum detected concentration
Radionuclides (pCi/g)							
Uranium-234	10	10	1.82	7.59	Normal	4.55	95% Student's-t
Uranium-235/236	10	10	0.108	0.405	Normal	0.252	95% Student's-t
Uranium-238	10	10	2.95	7.77	Normal	5.6	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-23
EPCs at AOC 15-005(c) for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	20	9	0.503	1.41 (U)	Normal	0.855	95% KM (t)
Barium	20	20	102	216	Nonparametric	199	95% Student's-t
Chromium (Total)	20	20	5.94	13.9	Normal	11.3	95% Student's-t
Cobalt	20	20	2.93	9.87	Normal	6.13	95% Student's-t
Copper	20	20	4.9	30.6	Gamma	12	95% Adjusted Gamma
Iron	20	20	7940	16,000	Normal	13,800	95% Student's-t
Lead	20	20	9.03	69.6	Nonparametric	35.3	95% Chebyshev (Mean, Sd)
Perchlorate	20	4	0.000618	0.00311 (U)	n/a*	0.00149	Maximum detected concentration
Selenium	20	0	1.07 (U)	1.48 (U)	n/a	1.48 (U)	Maximum detection limit
Uranium	20	20	0.843	17.4	Gamma	6.35	95% Adjusted Gamma
Vanadium	20	20	14.3	31.8	Normal	27.4	95% Student's-t
Organic Chemicals (mg/kg)							
Acetone	20	2	0.00513 (UJ)	0.0188	n/a	0.0188	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	20	1	0.0995	0.514 (U)	n/a	0.0995	Maximum detected concentration
Ethylbenzene	20	2	0.000395	0.00149 (U)	n/a	0.00063	Maximum detected concentration
Isopropyltoluene[4-]	20	2	0.00049	0.00151	n/a	0.00151	Maximum detected concentration
Toluene	20	2	0.000538	0.00148 (U)	n/a	0.000754	Maximum detected concentration
Xylene[1,3-]+1,4-Xylene	20	5	0.000406	0.00299 (U)	Normal	0.000787	95% KM (t)
Radionuclides (pCi/g)							
Uranium-234	20	20	0.984	7.59	Gamma	3.15	95% Adjusted Gamma
Uranium-235/236	20	14	0.0405 (U)	0.405	Normal	0.169	95% KM (t)
Uranium-238	20	20	1.07	7.77	Nonparametric	4.96	95% Chebyshev (Mean, Sd)

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-24
EPCs at SWMU 15-007(c) for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	22	1	0.646 (U)	243	n/a*	243	Maximum detected concentration
Chromium (Total)	22	22	6.34	41.4	Normal	18.9	95% Student's-t
Lead	22	22	5.89	63,700	Nonparametric	15,500	95% Chebyshev (Mean, Sd)
Perchlorate	22	1	0.000831	0.00314 (U)	n/a	0.000831	Maximum detected concentration
Selenium	22	0	1.07 (U)	1.48 (U)	n/a	1.48 (U)	Maximum detection limit
Silver	22	12	0.188	14.7	Nonparametric	3.9	95% KM Chebyshev
Zinc	22	22	23.5	206	Nonparametric	58.1	95% Student's-t
Organic Chemicals (mg/kg)							
Aroclor-1254	3	1	0.00397 (U)	0.0055	n/a	0.0055	Maximum detected concentration
TATB	22	3	0.36	1 (U)	n/a	0.496	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-25
EPCs at SWMU 15-007(c) for the Residential Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	47	2	0.414 (U)	243	n/a*	243	Maximum detected concentration
Chromium (Total)	47	47	1.66	151	Nonparametric	31.8	95% Chebyshev (Mean, Sd)
Copper	47	47	0.784	10.8	Nonparametric	8.17	95% Student's-t
Lead	47	47	3.68	63,700	Nonparametric	7290	95% Chebyshev (Mean, Sd)
Nickel	47	45	0.849 (U)	16.8	Normal	8.79	95% KM (t)
Perchlorate	47	5	0.000576	0.00314 (U)	Normal	0.00122	95% KM (t)
Selenium	47	0	0.946 (U)	2.11 (U)	n/a	2.11 (U)	Maximum detection limit
Silver	47	23	0.153	14.7	Nonparametric	1.15	95% KM (t)
Zinc	47	47	23.5	206	Nonparametric	46.7	95% Student's-t
Organic Chemicals (mg/kg)							
Aroclor-1242	9	1	0.00337 (U)	0.0043 (U)	n/a	0.0034	Maximum detected concentration
Aroclor-1254	9	1	0.00334 (U)	0.0055	n/a	0.0055	Maximum detected concentration
TATB	47	3	0.36	1 (U)	n/a	0.496	Maximum detected concentration
Radionuclides (pCi/g)							
Tritium	3	2	1.42	7.45	n/a	7.45	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-26
EPCs at SWMU 15-007(c) for Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	47	2	0.414 (U)	243	n/a*	243	Maximum detected concentration
Chromium (Total)	47	47	1.66	151	Nonparametric	31.8	95% Chebyshev (Mean, Sd)
Copper	47	47	0.784	10.8	Nonparametric	8.17	95% Student's-t
Lead	47	47	3.68	63,700	Nonparametric	7290	95% Chebyshev (Mean, Sd)
Nickel	47	45	0.849 (U)	16.8	Normal	8.79	95% KM (t)
Selenium	47	0	0.946 (U)	2.11 (U)	n/a	2.11 (U)	Maximum detection limit
Silver	47	23	0.153	14.7	Nonparametric	1.15	95% KM (t)
Zinc	47	47	23.5	206	Nonparametric	46.7	95% Student's-t
Organic Chemicals (mg/kg)							
Aroclor-1242	9	1	0.00337 (U)	0.0043 (U)	n/a	0.0034	Maximum detected concentration
Aroclor-1254	9	1	0.00334 (U)	0.0055	n/a	0.0055	Maximum detected concentration
Radionuclides (pCi/g)							
Tritium	3	2	1.42	7.45	n/a	7.45	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-27
EPCs at SWMU 15-007(d) for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	2	0	0.991 (UJ)	0.998 (U)	n/a*	0.998 (U)	Maximum detection limit
Selenium	2	0	0.965 (U)	1 (U)	n/a	1 (U)	Maximum detection limit
Radionuclides (pCi/g)							
Tritium	2	2	1.64	6.11	n/a	6.11	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-28
EPCs at SWMU 15-008(b) for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	87	29	0.56 (U)	256	Lognormal	10.3	95% KM (BCA)
Barium	87	87	17.2	195	Normal	85.3	95% Student's-t
Beryllium	87	87	0.325	47.5	Nonparametric	6.95	95% Chebyshev (Mean, Sd)
Cadmium	87	39	0.12	7.98	Nonparametric	0.569	95% KM (t)
Chromium (Total)	87	87	3.69	55.8	Lognormal	14.3	95% Bootstrap-t
Copper	79	79	1.73	36,400	Nonparametric	2710	95% Chebyshev (Mean, Sd)
Iron	87	87	5260	22,300	Lognormal	10,700	95% Student's-t
Lead	87	87	2.48	138,000	Lognormal	8610	95% Chebyshev (Mean, Sd)
Manganese	87	87	102	765	Lognormal	292	95% Student's-t
Nickel	87	85	2.67	21	Lognormal	7.17	95% KM (BCA)
Perchlorate	83	1	0.000629	0.00383 (U)	Gamma	0.000629	Maximum detected concentration
Selenium	87	1	0.54 (U)	1.86 (UJ)	n/a*	0.696	Maximum detected concentration
Silver	87	45	0.129	6.95	Lognormal	0.69	95% KM (t)
Uranium	87	87	0.638	659	Lognormal	107	95% Bootstrap-t
Vanadium	87	84	2.59	34.9	Normal	16.4	95% KM (t)
Zinc	87	87	13.1	13,300	Nonparametric	862	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Aroclor-1242	20	1	0.00369 (U)	0.282	n/a	0.282	Maximum detected concentration
Aroclor-1254	20	13	0.0034	0.143	Lognormal	0.0478	95% KM Chebyshev
Aroclor-1260	20	11	0.00369 (U)	0.0608	Lognormal	0.0182	95% KM (t)
Aroclor-1268	2	2	0.0079	0.0205	n/a	0.0205	Maximum detected concentration
HMX	83	13	0.193	35.3	Gamma	2.22	95% KM (t)
RDX	83	4	0.242	7.72	n/a	7.72	Maximum detected concentration

Table H-2.3-28 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
TATB	83	10	0.5	28.6	Normal	2.15	95% KM (t)
Trinitrotoluene[2,4,6-]	83	2	0.185	0.5 (U)	n/a	0.205	Maximum detected concentration
Radionuclides (pCi/g)							
Americium-241	83	6	-0.0108 (U)	0.0769	Normal	0.000676	95% KM (Percentile Bootstrap)
Cesium-137	79	51	-0.0263 (U)	1.96	Gamma	0.338	95% KM (Percentile Bootstrap)
Plutonium-239/240	83	34	-0.00287 (U)	0.333	Nonparametric	0.049	95% KM Chebyshev
Tritium	83	73	0.00436 (U)	73.2	Lognormal	11.4	95% KM Chebyshev
Uranium-234	83	83	0.597	43.4	Lognormal	10.5	95% Chebyshev (Mean, Sd)
Uranium-235/236	83	79	0.0432 (U)	6.57	Lognormal	1.31	95% KM (Chebyshev)
Uranium-238	83	83	0.652	291	Lognormal	50	95% Bootstrap-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-29
EPCs at SWMU 15-008(b) for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	171	42	0.41 (U)	256	Lognormal	5.63	95% KM (BCA)
Arsenic	171	167	0.469	6.6	Lognormal	2.01	95% KM (BCA)
Barium	171	169	8.66	344	Gamma	73.2	95% KM (BCA)
Beryllium	171	168	0.18	47.5	Lognormal	4.46	95% KM (Chebyshev)
Cadmium	171	50	0.102	7.98	Nonparametric	0.394	95% KM (t)
Chromium (Total)	171	169	1.8 (U)	55.8	Lognormal	13.6	95% KM (BCA)
Copper	156	153	1.73	36,400	Lognormal	1410	95% KM Chebyshev
Iron	171	171	4250	22,300	Gamma	10,500	95% Approximate Gamma
Lead	171	170	2.48	138,000	Lognormal	4400	95% KM Chebyshev
Manganese	171	171	102	765	Lognormal	266	95% Student's-t
Nickel	171	166	2.22	21	Gamma	6.58	95% KM (BCA)
Perchlorate	163	15	0.000569	0.00383 (U)	Gamma	0.0011	95% KM (t)
Selenium	171	4	0.54 (U)	1.86 (UJ)	n/a*	0.696	Maximum detected concentration
Silver	171	77	0.111	6.95	Lognormal	0.51	95% KM (t)
Uranium	171	169	0.438	659	Lognormal	90.4	95% KM Chebyshev
Vanadium	171	164	1.99	34.9	Normal	13.3	95% KM (t)
Zinc	171	171	13.1	13,300	Nonparametric	457	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Aroclor-1242	40	1	0.00344 (U)	0.282	n/a	0.282	Maximum detected concentration
Aroclor-1254	40	20	0.0021	0.143	Lognormal	0.0168	95% KM (BCA)
Aroclor-1260	40	16	0.0024	0.0608	Lognormal	0.0105	95% KM (t)
Aroclor-1268	3	3	0.0045	0.0205	n/a	0.0205	Maximum detected concentration
HMX	163	17	0.158	35.3	Nonparametric	1.98	95% KM (Chebyshev)
RDX	163	6	0.135	7.72	Normal	0.475	95% KM (t)
TATB	163	13	0.331	28.6	Normal	1.43	95% KM (t)
Trinitrotoluene[2,4,6-]	163	2	0.185	0.5 (U)	n/a	0.205	Maximum detected concentration

Table H-2.3-29 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Radionuclides (pCi/g)							
Americium-241	163	7	-0.0173 (U)	0.0769	Normal	0.00575	95% Student's-t
Cesium-137	156	59	-0.0473 (U)	1.96	Gamma	0.161	95% KM (t)
Plutonium-239/240	163	36	-0.00734 (U)	0.333	Nonparametric	0.0254	95% KM Chebyshev
Tritium	163	143	-0.00664 (U)	199	Nonparametric	10.6	95% KM Chebyshev
Uranium-234	163	163	0.249	43.4	Nonparametric	6.53	95% Chebyshev (Mean, Sd)
Uranium-235/236	163	130	0.0141 (U)	6.57	Lognormal	0.795	95% KM (Chebyshev)
Uranium-238	163	163	0.254	291	Nonparametric	38.4	95% Chebyshev (Mean, Sd)

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-30
EPCs at AOC 15-008(g) for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	4	1	1.02 (U)	3.77	n/a*	3.77	Maximum detected concentration
Cobalt	4	4	0.966	14	n/a	14	Maximum detected concentration
Copper	4	4	7.13	41.3	n/a	41.3	Maximum detected concentration
Lead	4	4	4.33	370	n/a	370	Maximum detected concentration
Uranium	4	4	1.27	3.8	n/a	3.8	Maximum detected concentration
Organic Chemicals (mg/kg)							
TATB	4	2	0.327	20.8	n/a	20.8	Maximum detected concentration
Radionuclides (pCi/g)							
Tritium	4	1	0.00533 (U)	0.031 (U)	n/a	0.0162	Maximum detected concentration
Uranium-238	4	4	1.14	4.14	n/a	4.14	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-31
EPCs at AOC 15-008(g) for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	8	2	1.01 (U)	3.77	n/a*	3.77	Maximum detected concentration
Cobalt	8	8	0.958	14	Gamma	9.43	95% Adjusted Gamma
Copper	8	8	3.15	41.3	Normal	25.7	95% Student's-t
Lead	8	8	3.67	370	Gamma	309	95% Adjusted Gamma
Selenium	8	0	1.01 (U)	1.28 (U)	n/a	1.28 (U)	Maximum detection limit
Uranium	8	8	1.08	7.77	Normal	4.95	95% Student's-t
Organic Chemicals (mg/kg)							
TATB	8	6	0.327	27.3	Normal	16.5	95% KM (t)
Radionuclides (pCi/g)							
Tritium	8	3	0.00533 (U)	0.0374	n/a	0.0374	Maximum detected concentration
Uranium-238	8	8	1.14	4.14	Normal	2.8	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-32
EPCs at SWMU 15-009(b) for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	4	0	0.571_(U)	1.44_(UJ)	n/a*	1.44 (UJ)	Maximum detection limit
Barium	4	4	18.7	134	n/a	134	Maximum detected concentration
Cadmium	4	0	0.621_(U)	0.757_(U)	n/a	0.757 (U)	Maximum detection limit
Chromium (Total)	4	4	5.82	14	n/a	14	Maximum detected concentration
Copper	4	4	2.3	17.8	n/a	17.8	Maximum detected concentration
Cyanide (Total)	4	1	0.278_(U)	1.22	n/a	1.22	Maximum detected concentration
Lead	4	4	2.74	28.2	n/a	28.2	Maximum detected concentration
<u>Nitrate</u>	<u>4</u>	<u>1</u>	<u>1.37 (UJ)</u>	<u>2.76</u>	<u>n/a</u>	<u>2.76</u>	<u>Maximum detected concentration</u>
Selenium	4	0	1.26 (U)	1.59_(U)	n/a	1.59 (U)	Maximum detection limit
Uranium	4	4	1.5	615	n/a	615	Maximum detected concentration
Organic Chemicals (mg/kg)							
Acetone	4	2	0.00635_(UJ)	0.0141	n/a	0.0141	Maximum detected concentration
Isopropyltoluene[4-]	4	3	0.000942	0.0167	n/a	0.0167	Maximum detected concentration
Toluene	4	1	0.00112	0.00144_(U)	n/a	0.00112	Maximum detected concentration
Radionuclides (pCi/g)							
Cesium-137	4	3	-0.0378_(U)	2.54	n/a	2.54	Maximum detected concentration
Plutonium-239/240	4	3	0.00997_(U)	0.134	n/a	0.134	Maximum detected concentration
Tritium	4	1	0_(U)	0.101	n/a	0.101	Maximum detected concentration
Uranium-234	4	4	1.11	303	n/a	303	Maximum detected concentration
Uranium-235/236	4	4	0.0937	20.3	n/a	20.3	Maximum detected concentration
Uranium-238	4	4	1.41	311	n/a	311	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-33
EPCs at SWMU 15-009(b) for the Residential Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	11	0	0.498 (U)	1.44 (UJ)	n/a*	1.44 (UJ)	Maximum detection limit
Barium	11	11	18.7	134	Normal	80.8	95% Student's-t
Cadmium	11	3	0.112	0.757 (U)	n/a	0.257	Maximum detected concentration
Chromium (Total)	11	11	2.16	19.1	Normal	10.5	95% Student's-t
Copper	11	10	2.3	17.8	Normal	8.97	95% KM (t)
Cyanide (Total)	11	1	0.24 (U)	1.22	n/a	1.22	Maximum detected concentration
Lead	11	11	2.74	28.2	Gamma	15.8	95% Adjusted Gamma
<u>Nitrate</u>	<u>11</u>	<u>3</u>	<u>1.03 (U)</u>	<u>2.76</u>	<u>n/a</u>	<u>2.76</u>	<u>Maximum detected concentration</u>
Perchlorate	11	2	0.000892	0.00325 (U)	n/a	0.00247	Maximum detected concentration
Selenium	11	0	0.669 (U)	1.59 (U)	n/a	1.59 (U)	Maximum detection limit
Uranium	11	11	1.37	615	Nonparametric	305	95% Chebyshev (Mean, Sd)
Zinc	11	11	31	114	Nonparametric	60.7	95% Student's-t
Organic Chemicals (mg/kg)							
Acetone	11	4	0.00514 (U)	0.131	n/a	0.131	Maximum detected concentration
Aroclor-1242	3	1	0.00354 (U)	0.0272	n/a	0.0272	Maximum detected concentration
Aroclor-1254	3	1	0.00354 (U)	0.0312	n/a	0.0312	Maximum detected concentration
Aroclor-1260	3	1	0.00354 (U)	0.0131	n/a	0.0131	Maximum detected concentration
Butanone[2-]	11	1	0.0024	0.00811 (UJ)	n/a	0.0024	Maximum detected concentration
Isopropyltoluene[4-]	11	6	0.000427	0.0167	Normal	0.0065	95% KM (t)
Methylene chloride	11	1	0.0024	0.00811 (U)	n/a	0.0024	Maximum detected concentration
Toluene	11	3	0.00103 (U)	0.0102	n/a	0.0102	Maximum detected concentration
Trimethylbenzene[1,2,4-]	11	2	0.000538	0.00162 (U)	n/a	0.000651	Maximum detected concentration
Xylene[1,2-]	11	2	0.000349	0.00162 (U)	n/a	0.000574	Maximum detected concentration
Xylene[1,3-]+1,4-Xylene	11	2	0.00047	0.00325 (U)	n/a	0.000702	Maximum detected concentration

Table H-2.3-33 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Radionuclides (pCi/g)							
Cesium-137	11	7	−0.0378 (U)	2.54	Gamma	0.831	95% KM (BCA)
Plutonium-239/240	11	3	−0.00344 (U)	0.134	n/a	0.134	Maximum detected concentration
Tritium	11	7	0 (U)	0.151	Normal	0.151	95% KM (t)
Uranium-234	11	11	0.913	303	Nonparametric	158	95% Chebyshev (Mean, Sd)
Uranium-235/236	11	7	0.0553 (U)	20.3	Gamma	6.06	95% KM (BCA)
Uranium-238	11	11	0.866	311	Lognormal	163	95% Chebyshev (Mean, Sd)

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-34
EPCs at SWMU 15-009(b) for the Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	8	0	0.571 (U)	1.44 (UJ)	n/a*	1.44 (UJ)	Maximum detection limit
Barium	8	8	18.7	134	Normal	94	95% Student's-t
Cadmium	8	0	0.506 (U)	0.757 (U)	n/a	0.757 (U)	Maximum detection limit
Chromium (Total)	8	8	5.82	19.1	Gamma	14.4	95% Adjusted Gamma
Copper	8	8	2.3	17.8	Normal	10	95% Student's-t
Cyanide (Total)	8	1	0.242 (U)	1.22	n/a	1.22	Maximum detected concentration
Lead	8	8	2.74	28.2	Normal	16.2	95% Student's-t
Selenium	8	0	0.669 (U)	1.59 (U)	n/a	1.59 (U)	Maximum detection limit
Uranium	8	8	1.5	615	Lognormal	417	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acetone	8	2	0.00532 (UJ)	0.0141	n/a	0.0141	Maximum detected concentration
Toluene	8	1	0.00106 (U)	0.00144 (U)	n/a	0.00112	Maximum detected concentration
Radionuclides (pCi/g)							
Cesium-137	8	5	-0.0378 (U)	2.54	Gamma	1.04	95% KM (BCA)
Plutonium-239/240	8	3	0.00113 (U)	0.134	n/a	0.134	Maximum detected concentration
Tritium	8	4	0 (U)	0.123	n/a	0.123	Maximum detected concentration
Uranium-234	8	8	1.11	303	Lognormal	215	95% Chebyshev (Mean, Sd)
Uranium-235/236	8	7	0.0585 (U)	20.3	Gamma	14.4	95% KM (Chebyshev)
Uranium-238	8	8	1.41	311	Lognormal	221	95% Chebyshev (Mean, Sd)

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-35
EPCs at SWMU 15-009(c) for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	17	0	0.534 (U)	11 (U)	n/a*	11 (U)	Maximum detection limit
Chromium (Total)	17	17	1.6	21.9	Normal	10.9	95% Student's-t
Perchlorate	13	1	0.000642	0.00276 (U)	n/a	0.000642	Maximum detected concentration
Selenium	17	0	1 (U)	1.3 (U)	n/a	1.3 (U)	Maximum detection limit
Silver	17	3	0.171	2.1 (U)	n/a	0.272	Maximum detected concentration
Uranium	13	13	0.77	8.8	Normal	4.18	95% Student's-t
Organic Chemicals (mg/kg)							
Acetone	15	1	0.00586 (UJ)	0.0527	n/a	0.0527	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	16	1	0.105	0.457 (U)	n/a	0.105	Maximum detected concentration
Isopropyltoluene[4-]	17	3	0.000477	0.0053 (U)	n/a	0.00428	Maximum detected concentration
Toluene	16	3	0.000438	0.0122	n/a	0.0122	Maximum detected concentration
Trimethylbenzene[1,2,4-]	16	1	0.00049	0.0053 (U)	n/a	0.00049	Maximum detected concentration
Xylene[1,3-]+1,4-Xylene	13	2	0.000422	0.00276 (U)	n/a	0.000572	Maximum detected concentration
Radionuclides (pCi/g)							
Tritium	17	6	-0.01 (U)	0.169	Normal	0.0504	95% KM (t)
Uranium-234	17	17	0.495	2.75	Normal	1.53	95% Student's-t
Uranium-238	17	17	0.879	3.93	Normal	2.39	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-36
EPCs at SWMU 15-009(c) for the Residential Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	40	2	0.386	11 (U)	n/a*	0.602	Maximum detected concentration
Chromium (Total)	40	40	1.6	23.6	Gamma	9.73	95% Adjusted Gamma
Cyanide (Total)	31	1	0.118 (U)	1.69	n/a	1.69	Maximum detected concentration
<u>Nitrate</u>	<u>31</u>	<u>6</u>	<u>1.04 (U)</u>	<u>2.24</u>	<u>Normal</u>	<u>1.26</u>	<u>95% KM (t)</u>
Perchlorate	31	6	0.000562	0.00276 (U)	Lognormal	0.00105	95% KM (t)
Selenium	40	0	0.945 (UJ)	1.3 (U)	n/a	1.3 (U)	Maximum detection limit
Silver	40	9	0.132	2.2 (U)	Normal	0.202	95% KM (t)
Uranium	31	31	0.728	8.8	Normal	3.43	95% Student's-t
Organic Chemicals (mg/kg)							
Acetone	38	5	0.00213	0.0527	Normal	0.00765	95% KM (t)
Anthracene	38	1	0.0128	0.36 (U)	n/a	0.0128	Maximum detected concentration
Benzo(a)anthracene	38	3	0.0183	0.36 (U)	n/a	0.0626	Maximum detected concentration
Benzo(a)pyrene	38	3	0.0117	0.36 (U)	n/a	0.0384	Maximum detected concentration
Benzo(b)fluoranthene	38	4	0.0153	0.36 (U)	n/a	0.072	Maximum detected concentration
Benzo(g,h,i)perylene	37	1	0.0226	0.35 (U)	n/a	0.0226	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	38	1	0.105	0.457 (U)	n/a	0.105	Maximum detected concentration
Chrysene	38	2	0.0202	0.36 (U)	n/a	0.0527	Maximum detected concentration
Fluoranthene	38	4	0.023	0.36 (U)	n/a	0.127	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	38	1	0.0208	0.36 (U)	n/a	0.0208	Maximum detected concentration
Isopropyltoluene[4-]	40	5	0.000477	0.0054 (U)	Normal	0.00101	95% KM (t)
Phenanthrene	38	3	0.0165	0.36 (U)	n/a	0.0812	Maximum detected concentration
Pyrene	38	4	0.0169	0.36 (U)	n/a	0.0783	Maximum detected concentration
Toluene	39	7	0.000328	0.0122	Normal	0.00143	95% KM (t)
Trimethylbenzene[1,2,4-]	39	1	0.00049	0.0054 (U)	n/a	0.00049	Maximum detected concentration
Xylene[1,3-]+1,4-Xylene	31	2	0.000422	0.00276 (U)	n/a	0.000572	Maximum detected concentration

Table H-2.3-36 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Radionuclides (pCi/g)							
Tritium	40	21	-0.01 (U)	0.173	Gamma	0.0399	95% KM (t)
Uranium-234	40	40	0.495	13.9	Nonparametric	2.93	95% Chebyshev (Mean, Sd)
Uranium-235/236	40	27	0.0317	0.78	Lognormal	0.121	95% KM (BCA)
Uranium-238	40	40	0.734	15.1	Nonparametric	3.93	95% Chebyshev (Mean, Sd)

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-37
EPCs at SWMU 15-009(c) for Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	37	1	0.386	11 (U)	n/a*	0.386	Maximum detected concentration
Chromium (Total)	37	37	1.6	23.6	Gamma	10.3	95% Adjusted Gamma
Cyanide (Total)	28	1	0.118 (U)	1.69	n/a	1.69	Maximum detected concentration
Selenium	37	0	0.945 (UJ)	1.3 (U)	n/a	1.3 (U)	Maximum detection limit
Silver	37	8	0.138	2.2 (U)	Normal	0.209	95% KM (t)
Uranium	28	28	0.728	8.8	Gamma	3.73	95% Adjusted Gamma
Organic Chemicals (mg/kg)							
Acetone	35	5	0.00213	0.0527	Normal	0.00811	95% KM (t)
Anthracene	35	1	0.0128	0.36 (U)	n/a	0.0128	Maximum detected concentration
Benzo(a)anthracene	35	2	0.0292	0.36 (U)	n/a	0.0626	Maximum detected concentration
Benzo(a)pyrene	35	2	0.0149	0.36 (U)	n/a	0.0384	Maximum detected concentration
Benzo(b)fluoranthene	35	2	0.0286	0.36 (U)	n/a	0.072	Maximum detected concentration
Benzo(g,h,i)perylene	34	1	0.0226	0.35 (U)	n/a	0.0226	Maximum detected concentration

Table H-2.3-37 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Bis(2-ethylhexyl)phthalate	35	1	0.105	0.457 (U)	n/a	0.105	Maximum detected concentration
Chrysene	35	2	0.0202	0.36 (U)	n/a	0.0527	Maximum detected concentration
Fluoranthene	35	2	0.0345 (U)	0.36 (U)	n/a	0.127	Maximum detected concentration
Indeno(1,2,3-cd)pyrene	35	1	0.0208	0.36 (U)	n/a	0.0208	Maximum detected concentration
Phenanthrene	35	2	0.0345 (U)	0.36 (U)	n/a	0.0812	Maximum detected concentration
Pyrene	35	2	0.0345 (U)	0.36 (U)	n/a	0.0783	Maximum detected concentration
Toluene	36	7	0.000328	0.0122	Normal	0.00152	95% KM (t)
Radionuclides (pCi/g)							
Tritium	37	18	-0.01 (U)	0.173	Gamma	0.0413	95% KM (t)
Uranium-234	37	37	0.495	13.9	Nonparametric	3.09	95% Chebyshev (Mean, Sd)
Uranium-235/236	37	26	0.0317	0.78	Lognormal	0.13	95% KM (BCA)
Uranium-238	37	37	0.734	15.1	Nonparametric	4.14	95% Chebyshev (Mean, Sd)

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-38
EPCs at SWMU 15-009(h) for the Residential Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	12	0	0.992 (UJ)	1.11 (UJ)	n/a*	1.11 (UJ)	Maximum detection limit
Barium	12	12	39.1	164	Normal	124	95% Student's-t
Nickel	12	12	4.65	9.68	Normal	7.91	95% Student's-t
<u>Nitrate</u>	<u>12</u>	<u>6</u>	<u>1.05 (UJ)</u>	<u>9.71</u>	<u>Nonparametric</u>	<u>5.22</u>	<u>95% KM Chebyshev</u>
Perchlorate	12	6	0.000631	0.0025 (U)	Normal	0.0012	95% KM (t)
Selenium	12	0	0.919 (UJ)	1.23 (UJ)	n/a	1.23 (UJ)	Maximum detection limit
Uranium	12	12	0.507	6.41	Normal	4.03	95% Student's-t
Organic Chemicals (mg/kg)							
Acetone	12	2	0.00523 (UJ)	0.00919	n/a	0.00919	Maximum detected concentration
Ethylbenzene	12	1	0.00105 (U)	0.00125 (U)	n/a	0.00117	Maximum detected concentration
Hexanone[2-]	12	1	0.00201	0.00626 (U)	n/a	0.00201	Maximum detected concentration
Radionuclides (pCi/g)							
Plutonium-239/240	12	1	-0.00246 (U)	0.0286	n/a	0.0286	Maximum detected concentration
Tritium	12	6	-0.0271 (U)	19.6	Nonparametric	9.09	95% KM Chebyshev
Uranium-234	12	12	0.419	2.74	Normal	1.58	95% Student's-t
Uranium-235/236	12	7	0.0166 (U)	0.291	Normal	0.13	95% KM (t)
Uranium-238	12	12	0.46	3.96	Normal	2.14	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-39
EPCs at SWMU 15-009(h) for Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	3	0	1.03 (UJ)	1.09 (UJ)	n/a*	1.09 (UJ)	Maximum detection limit
Uranium	3	3	1.12	4.06	n/a	4.06	Maximum detected concentration
Organic Chemicals (mg/kg)							
Hexanone[2-]	3	1	0.00201	0.00574 (U)	n/a	0.00201	Maximum detected concentration
Radionuclides (pCi/g)							
Tritium	3	2	0.0282 (U)	0.0424	n/a	0.0424	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-40
EPCs at SWMU 15-010(b) for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	9	0	1.07 (U)	1.35 (U)	n/a*	1.35 (U)	Maximum detection limit
Cadmium	9	0	0.534 (U)	0.673 (U)	n/a	0.673 (U)	Maximum detection limit
Chromium (Total)	9	9	3.87	12.8	Normal	9.19	95% Student's-t
Iron	9	9	8680	14,600	Normal	11,900	95% Student's-t
Mercury	9	9	0.0203	0.688	Gamma	0.422	95% Adjusted Gamma
<u>Nitrate</u>	<u>9</u>	<u>2</u>	<u>1.07 (UJ)</u>	<u>1.65</u>	<u>n/a</u>	<u>1.65</u>	<u>Maximum detected concentration</u>
Perchlorate	9	1	0.000598	0.00286 (U)	n/a	0.000598	Maximum detected concentration
Selenium	9	1	0.72	1.38 (U)	n/a	0.72	Maximum detected concentration
Uranium	9	9	0.663	13.3	Normal	5.94	95% Student's-t
Organic Chemicals (mg/kg)							
Acetone	9	3	0.00285	0.0133	n/a	0.0133	Maximum detected concentration
Aroclor-1254	2	1	0.00443 (U)	0.0046	n/a	0.0046	Maximum detected concentration
Aroclor-1260	2	1	0.0025	0.00443 (U)	n/a	0.0025	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	9	2	0.117	0.474 (U)	n/a	0.17	Maximum detected concentration
Di-n-butylphthalate	9	3	0.206	3.64	n/a	3.64	Maximum detected concentration
Dichloroethene[1,1-]	9	1	0.00037	0.00143 (U)	n/a	0.00037	Maximum detected concentration
Methylene chloride	9	3	0.00275	0.00716 (U)	n/a	0.00371	Maximum detected concentration
Tetrachloroethene	9	1	0.000584	0.00143 (U)	n/a	0.000584	Maximum detected concentration
Toluene	9	3	0.000501	0.00723	n/a	0.00723	Maximum detected concentration
Xylene[1,3-]+1,4-Xylene	9	1	0.0004	0.00286 (U)	n/a	0.0004	Maximum detected concentration
Radionuclides (pCi/g)							
Cesium-137	9	9	0.0717	2.34	Normal	1.03	95% Student's-t
Plutonium-239/240	9	3	0.00466 (U)	0.121	n/a	0.121	Maximum detected concentration
Uranium-238	9	9	1.03	6.93	Gamma	3.78	95% Adjusted Gamma

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-41
EPCs at SWMU 15-010(b) for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	17	0	1.01 (U)	1.35 (U)	n/a*	1.35 (U)	Maximum detection limit
Cadmium	17	0	0.505 (U)	0.673 (U)	n/a	0.673 (U)	Maximum detection limit
Chromium (Total)	17	17	3.87	18.2	Normal	10	95% Student's-t
Iron	17	17	8350	19,100	Gamma	13,100	95% Adjusted Gamma
Mercury	17	17	0.00744	0.688	Lognormal	0.292	95% Chebyshev (Mean, Sd)
Nitrate	17	3	1.04 (UJ)	1.65	n/a	1.65	Maximum detected concentration
Perchlorate	17	2	0.000598	0.00286 (U)	n/a	0.000762	Maximum detected concentration
Selenium	17	2	0.579	1.38 (U)	n/a	0.72	Maximum detected concentration
Uranium	17	17	0.395	13.3	Gamma	4.21	95% Adjusted Gamma
Vanadium	17	17	7.19	23.7	Normal	15.7	95% Student's-t
Organic Chemicals (mg/kg)							
Acetone	17	7	0.00217	0.689	Gamma	0.121	95% KM (t)
Aroclor-1254	4	2	0.00393 (U)	0.0065	n/a	0.0065	Maximum detected concentration
Aroclor-1260	4	1	0.0025	0.00443 (U)	n/a	0.0025	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	17	2	0.117	0.474 (U)	n/a	0.17	Maximum detected concentration
Di-n-butylphthalate	17	5	0.206	3.64	Normal	0.86	95% KM (t)
Dichloroethene[1,1-]	17	1	0.00037	0.00143 (U)	n/a	0.00037	Maximum detected concentration
Methylene chloride	17	5	0.00275	0.00716 (U)	Normal	0.00414	95% KM (t)
Styrene	17	1	0.000555	0.00143 (U)	n/a	0.000555	Maximum detected concentration
Tetrachloroethene	17	1	0.000584	0.00143 (U)	n/a	0.000584	Maximum detected concentration
Toluene	17	6	0.000501	0.0185	Normal	0.00421	95% KM (t)
Xylene[1,3-]+1,4-Xylene	17	2	0.0004	0.00286 (U)	n/a	0.000732	Maximum detected concentration
Radionuclides (pCi/g)							
Cesium-137	17	12	-0.0134 (U)	2.34	Normal	0.626	95% KM (t)
Plutonium-239/240	17	5	0 (U)	0.121	Gamma	0.0281	95% KM (t)
Uranium-238	17	17	0.739	6.93	Lognormal	2.68	95% BCA Bootstrap

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-42
EPCs at AOC 15-014(h) for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	23	0	0.439 (U)	1.57 (U)	n/a*	1.57 (U)	Maximum detection limit
Barium	23	23	49.1	195	Normal	152	95% Student's-t
Cadmium	23	6	0.141	0.928	Normal	0.39	95% KM (t)
Chromium (Total)	23	23	4.45	29.6	Normal	15.1	95% Student's-t
Cobalt	23	23	2.41	6.83	Normal	4.93	95% Student's-t
Copper	23	23	3.71	34.5	Nonparametric	17.6	95% Chebyshev (Mean, Sd)
Iron	23	23	7860	15,300	Normal	12,200	95% Student's-t
Lead	23	23	8.89	48.9	Gamma	22.9	95% Adjusted Gamma
Mercury	23	23	0.00927	1.54	Nonparametric	0.521	95% Chebyshev (Mean, Sd)
Nickel	23	23	3.81	10.8	Normal	8.43	95% Student's-t
Perchlorate	23	2	0.014	0.349 (U)	Normal	0.00118	95% KM (t)
Selenium	23	0	0.969 (UJ)	1.5 (U)	n/a	1.5 (U)	Maximum detection limit
Silver	23	15	0.196	21	Nonparametric	6.07	95% KM Chebyshev
Uranium	23	23	0.624	13.9	Gamma	5.72	95% Adjusted Gamma
Vanadium	23	23	11.3	29.5	Normal	23.8	95% Student's-t

Table H-2.3-42 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Organic Chemicals (mg/kg)							
Acetone	23	3	0.00335	0.0295	n/a	0.0295	Maximum detected concentration
Aroclor-1254	7	2	0.00412 (U)	0.704	n/a	0.704	Maximum detected concentration
Aroclor-1260	7	2	0.00412 (U)	0.258	n/a	0.258	Maximum detected concentration
Benzoic acid	23	3	0.392	6.99 (UJ)	n/a	1.01	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	23	2	0.0959	3.49 (U)	n/a	0.343	Maximum detected concentration
Di-n-butylphthalate	23	1	0.129	3.49 (U)	n/a	0.129	Maximum detected concentration
Di-n-octylphthalate	23	1	0.36 (U)	3.49 (U)	n/a	1.43	Maximum detected concentration
Dichloroethene[1,1-]	23	1	0.000772	0.00152 (U)	n/a	0.000772	Maximum detected concentration
Ethylbenzene	23	1	0.00076	0.00152 (U)	n/a	0.00076	Maximum detected concentration
Isopropyltoluene[4-]	23	5	0.000447	0.0425	Gamma	0.00604	95% KM (t)
Methylene chloride	23	6	0.00319	0.00941	Normal	0.00508	95% KM (t)
Tetrachloroethene	23	7	0.000452	0.00155	Normal	0.000948	95% KM (t)
Toluene	23	7	0.000466	0.00152 (U)	Normal	0.000802	95% KM (t)
Xylene[1,3-]+1,4-Xylene	23	5	0.00046	0.00305 (U)	Normal	0.00108	95% KM (t)
Radionuclides (pCi/g)							
Cesium-137	23	19	-0.0227 (U)	1.53	Normal	0.549	95% KM (t)
Plutonium-238	23	1	-0.00215 (U)	0.0599	n/a	0.0599	Maximum detected concentration
Plutonium-239/240	23	11	0.00287 (U)	0.0622	Normal	0.0243	95% KM (t)
Tritium	23	4	-0.0186 (U)	0.0901	n/a	0.0901	Maximum detected concentration
Uranium-234	23	23	0.856	4.17	Normal	2.24	95% Student's-t
Uranium-238	23	23	0.775	5.21	Normal	2.86	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-43
EPCs at AOC 15-014(h) for the Residential Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	52	52	3840	16,100	Normal	9740	95% Student's-t
Antimony	52	0	0.357 (U)	1.57 (U)	n/a*	1.57 (U)	Maximum detection limit
Barium	52	52	46.5	195	Normal	140	95% Student's-t
Cadmium	52	9	0.115	1.54	Normal	0.344	95% KM (t)
Chromium (Total)	52	52	4.45	48.9	Lognormal	18.2	95% Student's-t
Cobalt	52	52	1.07	9.41	Normal	4.99	95% Student's-t
Copper	52	52	2.2	53.6	Nonparametric	14.7	95% Chebyshev (Mean, Sd)
Iron	52	52	7860	16,900	Normal	13,100	95% Student's-t
Lead	52	52	6.65	80.2	Nonparametric	19.3	95% Student's-t
Mercury	52	52	0.00851	1.54	Nonparametric	0.322	95% Chebyshev (Mean, Sd)
Nickel	52	52	2.85	12.1	Normal	8.25	95% Student's-t
Perchlorate	52	18	0.000616	0.00305 (U)	Normal	0.00113	95% KM (t)
Selenium	52	0	0.969 (UJ)	1.5 (U)	n/a	1.5 (U)	Maximum detection limit
Silver	52	35	0.196	21	Nonparametric	3.57	95% KM (Chebyshev)
Uranium	52	52	0.261	13.9	Nonparametric	4.41	95% Chebyshev (Mean, Sd)
Vanadium	52	52	7.65	31.2	Normal	23.9	95% Student's-t

Table H-2.3-43 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Organic Chemicals (mg/kg)							
Acetone	52	6	0.00335	0.0295	Gamma	0.0059	95% KM (t)
Aroclor-1254	16	4	0.00359 (U)	0.704	n/a	0.704	Maximum detected concentration
Aroclor-1260	16	4	0.0033	0.258	n/a	0.258	Maximum detected concentration
Benzoic acid	52	3	0.392	6.99 (UJ)	n/a	1.01	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	52	3	0.0793	3.49 (U)	n/a	0.343	Maximum detected concentration
Chloroform	52	1	0.000687	0.00152 (U)	n/a	0.000687	Maximum detected concentration
Di-n-butylphthalate	52	2	0.093	3.49 (U)	n/a	0.129	Maximum detected concentration
Di-n-octylphthalate	52	1	0.357 (U)	3.49 (U)	n/a	1.43	Maximum detected concentration
Dichloroethene[1,1-]	52	1	0.000772	0.00152 (U)	n/a	0.000772	Maximum detected concentration
Ethylbenzene	52	2	0.000489	0.00152 (U)	n/a	0.00076	Maximum detected concentration
Isopropyltoluene[4-]	52	6	0.000447	0.0425	Lognormal	0.00538	95% KM (Chebyshev)
Methylene chloride	52	7	0.00319	0.00941	Normal	0.00477	95% KM (t)
Tetrachloroethene	52	14	0.000404	0.00155	Normal	0.000721	95% KM (t)
Toluene	52	15	0.000394	0.00244	Normal	0.000771	95% KM (t)
Trimethylbenzene[1,2,4-]	52	1	0.000383	0.00152 (UJ)	n/a	0.000383	Maximum detected concentration
Xylene[1,2-]	52	2	0.00036	0.00152 (U)	n/a	0.000371	Maximum detected concentration
Xylene[1,3-]+1,4-Xylene	52	19	0.000369	0.00305 (U)	Normal	0.000748	95% KM (t)
Radionuclides (pCi/g)							
Cesium-137	51	25	-0.0337 (U)	1.53	Normal	0.291	95% KM (t)
Plutonium-238	52	1	-0.00483 (U)	0.0599	n/a	0.0599	Maximum detected concentration
Plutonium-239/240	52	13	-0.00868 (U)	0.0622	Normal	0.00605	95% KM (t)
Tritium	52	11	-0.0233 (U)	0.883	Nonparametric	0.0882	95% KM Chebyshev
Uranium-234	52	52	0.46	4.17	Gamma	1.68	95% Approximate Gamma
Uranium-238	52	52	0.393	5.21	Lognormal	2.1	95% Bootstrap-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-44
EPCs at AOC 15-014(h) for Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	49	0	0.357 (U)	1.57 (U)	n/a*	1.57 (U)	Maximum detection limit
Barium	49	49	46.5	195	Normal	142	95% Student's-t
Cadmium	49	9	0.115	1.54	Normal	0.348	95% KM (t)
Chromium (Total)	49	49	4.45	48.9	Lognormal	18.4	95% Student's-t
Cobalt	49	49	1.79	9.41	Normal	5.08	95% Student's-t
Copper	49	49	3.71	53.6	Nonparametric	15.2	95% Chebyshev (Mean, Sd)
Lead	49	49	6.65	80.2	Nonparametric	19.8	95% Student's-t
Mercury	49	49	0.00851	1.54	Nonparametric	0.34	95% Chebyshev (Mean, Sd)
Nickel	49	49	3.81	12.1	Normal	8.35	95% Student's-t
Selenium	49	0	0.969 (UJ)	1.5 (U)	n/a	1.5 (U)	Maximum detection limit
Silver	49	32	0.196	21	Nonparametric	3.72	95% KM (Chebyshev)
Uranium	49	49	0.581	13.9	Nonparametric	4.62	95% Chebyshev (Mean, Sd)
Vanadium	49	49	10.8	31.2	Normal	24.2	95% Student's-t
Organic Chemicals (mg/kg)							
Acetone	49	6	0.00335	0.0295	Gamma	0.00598	95% KM (t)
Aroclor-1254	15	4	0.00359 (U)	0.704	n/a	0.704	Maximum detected concentration
Aroclor-1260	15	4	0.0033	0.258	n/a	0.258	Maximum detected concentration
Benzoic acid	49	3	0.392	6.99 (UJ)	n/a	1.01	Maximum detected concentration
Bis(2-ethylhexyl)phthalate	49	3	0.0793	3.49 (U)	n/a	0.343	Maximum detected concentration
Chloroform	49	1	0.000687	0.00152 (U)	n/a	0.000687	Maximum detected concentration
Di-n-butylphthalate	49	2	0.093	3.49 (U)	n/a	0.129	Maximum detected concentration
Di-n-octylphthalate	49	1	0.357 (U)	3.49 (U)	n/a	1.43	Maximum detected concentration
Dichloroethene[1,1-]	49	1	0.000772	0.00152 (U)	n/a	0.000772	Maximum detected concentration
Ethylbenzene	49	2	0.000489	0.00152 (U)	n/a	0.00076	Maximum detected concentration
Isopropyltoluene[4-]	49	6	0.000447	0.0425	Lognormal	0.00566	95% KM (Chebyshev)

Table H-2.3-44 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Methylene chloride	49	7	0.00319	0.00941	Normal	0.00478	95% KM (t)
Tetrachloroethene	49	14	0.000404	0.00155	Normal	0.000723	95% KM (t)
Toluene	49	15	0.000394	0.00244	Normal	0.000778	95% KM (t)
Trimethylbenzene[1,2,4-]	49	1	0.000383	0.00152 (UJ)	n/a	0.000383	Maximum detected concentration
Xylene[1,2-]	49	2	0.00036	0.00152 (U)	n/a	0.000371	Maximum detected concentration
Xylene[1,3-]+1,4-Xylene	49	19	0.000369	0.00305 (U)	Normal	0.000749	95% KM (t)
Radionuclides (pCi/g)							
Cesium-137	48	25	-0.0337 (U)	1.53	Normal	0.31	95% KM (t)
Plutonium-238	49	1	-0.00483 (U)	0.0599	n/a	0.0599	Maximum detected concentration
Plutonium-239/240	49	13	-0.00868 (U)	0.0622	Normal	0.00693	95% KM (t)
Tritium	49	10	-0.0233 (U)	0.1	Gamma	0.00467	95% KM (BCA)
Uranium-234	49	49	0.477	4.17	Lognormal	1.74	95% Student's-t
Uranium-238	49	49	0.573	5.21	Lognormal	2.54	95% Chebyshev (Mean, Sd)

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-45
EPCs at SWMU 36-002 for the Residential Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	4	4	1730	13,800	n/a*	13,800	Maximum detected concentration
Antimony	4	0	0.913 (UJ)	1.07 (UJ)	n/a	1.07 (UJ)	Maximum detection limit
Barium	4	4	20.4	84.6	n/a	84.6	Maximum detected concentration
Beryllium	4	4	0.512	2.69	n/a	2.69	Maximum detected concentration
Cobalt	4	4	0.657	4.2	n/a	4.2	Maximum detected concentration
Copper	4	3	2.18 (U)	9.92	n/a	9.92	Maximum detected concentration
Nickel	4	4	1.87	10.6	n/a	10.6	Maximum detected concentration
Perchlorate	4	3	0.00127	0.00377	n/a	0.00377	Maximum detected concentration
Selenium	4	0	0.922 (UJ)	1.02 (UJ)	n/a	1.02 (UJ)	Maximum detection limit
Organic Chemicals (mg/kg)							
Ethylbenzene	4	1	0.000482	0.00108 (U)	n/a	0.000482	Maximum detected concentration
Radionuclides (pCi/g)							
Plutonium-238	4	1	0.00265 (U)	0.033	n/a	0.033	Maximum detected concentration
Tritium	4	1	-0.00145 (U)	0.0101	n/a	0.0101	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-46
EPCs at SWMU 36-002 for Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	1	0	0.913 (UJ)	0.913 (UJ)	n/a*	0.913 (UJ)	Maximum detection limit
Barium	1	1	84.6	84.6	n/a	84.6	Maximum detected concentration
Cobalt	1	1	4.2	4.2	n/a	4.2	Maximum detected concentration
Copper	1	1	5.98	5.98	n/a	5.98	Maximum detected concentration
Nickel	1	1	6.82	6.82	n/a	6.82	Maximum detected concentration
Selenium	1	0	0.922 (UJ)	0.922 (UJ)	n/a	0.922 (UJ)	Maximum detection limit
Radionuclides (pCi/g)							
Plutonium-238	1	1	0.033	0.033	n/a	0.033	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-47
EPCs at SWMU 36-003(a) for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	1	0	1.11 (U)	1.11 (U)	n/a*	1.11 (U)	Maximum detection limit
<u>Nitrate</u>	<u>1</u>	<u>1</u>	<u>1.92</u>	<u>1.92</u>	<u>n/a</u>	<u>1.92</u>	<u>Maximum detection limit</u>

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-48
EPCs at SWMU 36-003(a) for the Residential Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	16	0	0.984 (U)	1.29 (UJ)	n/a*	1.29 (UJ)	Maximum detection limit
Beryllium	16	16	0.43	5.57	Nonparametric	2.23	95% Chebyshev (Mean, Sd)
Cobalt	16	16	0.732	6.75	Lognormal	2.89	95% Jackknife
Nickel	16	16	2.46	39.9	Nonparametric	15.9	95% Chebyshev (Mean, Sd)
<u>Nitrate</u>	<u>16</u>	<u>10</u>	<u>1.02 (UJ)</u>	<u>2.38</u>	<u>Normal</u>	<u>1.71</u>	<u>95% KM (t)</u>
Perchlorate	16	5	0.000631	0.00229 (U)	Lognormal	0.00101	95% KM (t)
Selenium	16	0	0.986 (U)	1.28 (U)	n/a	1.28 (U)	Maximum detection limit
Organic Chemicals (mg/kg)							
Isopropyltoluene[4-]	16	2	0.000603	0.00811	n/a	0.00811	Maximum detected concentration
RDX	16	1	0.184	0.5 (U)	n/a	0.184	Maximum detected concentration
Trimethylbenzene[1,2,4-]	16	1	0.000343	0.00131 (U)	n/a	0.000343	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-49
EPCs at SWMU 36-003(a) for Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	13	0	0.984 (U)	1.29 (UJ)	n/a*	1.29 (UJ)	Maximum detection limit
Beryllium	13	13	0.452	5.57	Nonparametric	2.63	95% Chebyshev (Mean, Sd)
Cobalt	13	13	0.732	6.75	Lognormal	2.81	95% Jackknife
Nickel	13	13	2.46	39.9	Nonparametric	18.6	95% Chebyshev (Mean, Sd)
Perchlorate	13	5	0.000631	0.00229 (U)	Lognormal	0.00108	95% KM (t)
Selenium	13	0	1.02 (U)	1.28 (U)	n/a	1.28 (U)	Maximum detection limit
Organic Chemicals (mg/kg)							
Isopropyltoluene[4-]	13	1	0.000603	0.00131 (U)	n/a	0.000603	Maximum detected concentration
RDX	13	1	0.184	0.5 (U)	n/a	0.184	Maximum detected concentration
Trimethylbenzene[1,2,4-]	13	1	0.000343	0.00131 (U)	n/a	0.000343	Maximum detected concentration

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-50
EPCs at SWMUs 36-008 and C-36-003 for the Industrial Scenario

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Antimony	57	0	0.581 (U)	5.62 (U)	n/a*	5.62 (U)	Maximum detection limit
Cadmium	57	21	0.149	1.36	Normal	0.41	95% KM (t)
Chromium (Total)	57	57	4.07	192	Nonparametric	38.6	95% Chebyshev (Mean, Sd)
Copper	57	57	1.79	4870	Nonparametric	567	95% Chebyshev (Mean, Sd)
Cyanide (Total)	57	43	0.0826	2.88	Gamma	0.678	95% KM (BCA)
Lead	57	57	4.82	202	Nonparametric	41	95% Chebyshev (Mean, Sd)
Mercury	57	57	0.00856	25	Nonparametric	3.09	95% Chebyshev (Mean, Sd)
Nickel	57	56	0.43 (U)	53	Lognormal	10.1	95% KM (Chebyshev)
<u>Nitrate</u>	<u>57</u>	<u>41</u>	<u>1.15 (UJ)</u>	<u>540</u>	<u>Nonparametric</u>	<u>55.7</u>	<u>95% KM (Chebyshev)</u>
Perchlorate	57	38	0.000689	0.688	Lognormal	0.0715	95% KM Chebyshev
Selenium	57	0	0.971 (U)	2.03 (U)	n/a	2.03 (U)	Maximum detection limit
Silver	57	31	0.126	348	Nonparametric	44.7	95% KM Chebyshev
Uranium	57	56	0.043 (U)	10.4	Gamma	2.44	95% KM (BCA)
Zinc	57	57	24.9	1320	Nonparametric	208	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acetone	57	9	0.00286	0.0394	Nonparametric	0.00596	95% KM (t)
Aroclor-1254	16	13	0.0043	1.03	Gamma	0.378	95% KM (Chebyshev)
Aroclor-1260	16	9	0.00401 (U)	0.617	Gamma	0.138	95% KM (BCA)
Benzoic acid	57	9	0.355	36.3 (UJ)	Lognormal	0.671	95% KM (t)
Bis(2-ethylhexyl)phthalate	57	2	0.112	18.1 (U)	n/a	0.436	Maximum detected concentration
Bromodichloromethane	57	1	0.00107 (UJ)	0.00204 (U)	n/a	0.00117	Maximum detected concentration
Chlorodibromomethane	57	1	0.000635	0.00204 (U)	n/a	0.000635	Maximum detected concentration
Chloroform	57	1	0.00107 (UJ)	0.00982	n/a	0.00982	Maximum detected concentration
Chloromethane	57	1	0.000633	0.00204 (U)	n/a	0.000633	Maximum detected concentration
Di-n-butylphthalate	57	10	0.0913	8.07	Lognormal	0.705	95% KM (BCA)

Table H-2.3-50 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Dibenzofuran	57	5	0.341	18.1 (U)	Lognormal	0.493	95% KM (t)
Dichloroethene[1,1-]	57	4	0.000495	0.00246	n/a	0.00246	Maximum detected concentration
Isopropyltoluene[4-]	57	24	0.000399	0.149 (UJ)	Nonparametric	0.016	95% KM (Chebyshev)
Methylene chloride	57	7	0.00268	0.0102 (U)	Normal	0.00419	95% KM (t)
RDX	57	1	0.106	0.5 (U)	n/a	0.106	Maximum detected concentration
Styrene	57	1	0.00107 (UJ)	0.00197	n/a	0.00197	Maximum detected concentration
TATB	57	2	0.303	1 (U)	n/a	0.331	Maximum detected concentration
Toluene	57	23	0.000334	0.00552	Lognormal	0.00133	95% KM (t)
Trichloroethene	57	5	0.000605	0.00204 (U)	Normal	0.00079	95% KM (t)
Trimethylbenzene[1,2,4-]	57	4	0.000406	0.00499	n/a	0.00499	Maximum detected concentration
Trimethylbenzene[1,3,5-]	57	1	0.00107 (UJ)	0.00279	n/a	0.00279	Maximum detected concentration
Xylene[1,2-]	57	2	0.000513	0.00204 (U)	n/a	0.000616	Maximum detected concentration
Xylene[1,3-]+1,4-Xylene	57	8	0.00043	0.00362 (U)	Normal	0.000764	95% KM (t)
Radionuclides (pCi/g)							
Americium-241	57	6	-0.00142 (U)	0.0465	Normal	0.00385	95% KM (t)
Cesium-137	56	53	0.00741 (U)	3.31	Gamma	0.833	95% KM (BCA)
Plutonium-239/240	57	39	-0.00455 (U)	0.0953	Gamma	0.0355	95% KM (Percentile Bootstrap)
Tritium	57	8	-0.0584 (U)	0.98	Nonparametric	0.0639	95% KM Chebyshev
Uranium-234	57	57	0.682	6.1	Nonparametric	1.73	95% Student's-t
Uranium-235/236	57	22	0.0226 (U)	0.278	Normal	0.08	95% KM (t)
Uranium-238	57	57	1	5.17	Nonparametric	1.93	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-51

EPCs at SWMUs 36-008 and C-36-003 for the Residential Scenario and Ecological Risk

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Inorganic Chemicals (mg/kg)							
Aluminum	107	107	1680	14,100	Lognormal	6080	95% Student's-t
Antimony	107	0	0.581 (U)	5.62 (U)	n/a*	5.62 (U)	Maximum detection limit
Barium	107	107	15.5	184	Gamma	77.6	95% Approximate Gamma
Beryllium	107	106	0.108 (U)	2.44	Lognormal	0.654	95% KM (BCA)
Cadmium	107	36	0.102	3.35	Lognormal	0.397	95% KM (t)
Chromium (Total)	107	107	4.07	192	Nonparametric	30.3	95% Chebyshev (Mean, Sd)
Copper	107	107	1.79	4870	Nonparametric	315	95% Chebyshev (Mean, Sd)
Cyanide (Total)	107	74	0.0718	4.24	Gamma	0.538	95% KM (Percentile Bootstrap)
Lead	107	107	4.41	202	Nonparametric	29.7	95% Chebyshev (Mean, Sd)
Mercury	107	104	0.00598	25	Lognormal	2.34	95% KM Chebyshev
Nickel	107	106	0.43 (U)	53	Lognormal	6.79	95% KM (BCA)
<u>Nitrate</u>	<u>107</u>	<u>76</u>	<u>1.01</u>	<u>540</u>	<u>Nonparametric</u>	<u>32.7</u>	<u>95% KM (Chebyshev)</u>
Perchlorate	107	71	0.000602	0.688	Lognormal	0.0438	95% KM Chebyshev
Selenium	107	1	0.635	2.03 (U)	n/a	0.635	Maximum detected concentration
Silver	107	58	0.107	348	Lognormal	41.7	95% KM Chebyshev
Uranium	107	106	0.043 (U)	10.4	Lognormal	1.89	95% KM (BCA)
Vanadium	107	107	2.46	26.6	Gamma	13.9	95% Approximate Gamma
Zinc	107	107	24.9	1320	Nonparametric	135	95% Chebyshev (Mean, Sd)
Organic Chemicals (mg/kg)							
Acetone	107	14	0.00218 (U)	0.0394	Nonparametric	0.00444	95% KM (t)
Aroclor-1254	31	19	0.00356 (U)	1.03	Gamma	0.124	95% KM (BCA)
Aroclor-1260	31	15	0.0031	0.617	Gamma	0.0725	95% KM (t)
Benzoic acid	107	13	0.245	36.3 (UJ)	Lognormal	0.63	95% KM (t)
Bis(2-ethylhexyl)phthalate	107	5	0.112	18.1 (U)	Normal	0.236	95% KM (t)
Bromodichloromethane	107	1	0.00106 (U)	0.00204 (U)	n/a	0.00117	Maximum detected concentration
Butylbenzylphthalate	107	1	0.214	18.1 (U)	n/a	0.214	Maximum detected concentration
Chlorodibromomethane	107	1	0.000635	0.00204 (U)	n/a	0.000635	Maximum detected concentration

Table H-2.3-51 (continued)

COPC	Number of Analyses	Number of Detects	Minimum Concentration	Maximum Concentration	Distribution	EPC	EPC Method
Chloroform	107	2	0.00052	0.00982	n/a	0.00982	Maximum detected concentration
Chloromethane	107	1	0.000633	0.00204 (U)	n/a	0.000633	Maximum detected concentration
Chloronaphthalene[2-]	107	1	0.0215	1.81 (U)	n/a	0.0215	Maximum detected concentration
Chlorotoluene[4-]	107	1	0.000496	0.00204 (U)	n/a	0.000496	Maximum detected concentration
Di-n-butylphthalate	107	13	0.0913	8.07	Lognormal	0.448	95% KM (BCA)
Dibenzofuran	107	6	0.341	18.1 (U)	Lognormal	0.421	95% KM (t)
Dichloroethene[1,1-]	107	4	0.000495	0.00246	n/a	0.00246	Maximum detected concentration
Isopropyltoluene[4-]	107	40	0.000399	0.149 (U)	Nonparametric	0.00711	95% KM (BCA)
Methylene chloride	107	8	0.0026	0.0102 (U)	Normal	0.00384	95% KM (t)
RDX	107	1	0.106	0.5 (U)	n/a	0.106	Maximum detected concentration
Styrene	107	1	0.00106 (U)	0.00197	n/a	0.00197	Maximum detected concentration
TATB	107	2	0.303	1 (U)	n/a	0.331	Maximum detected concentration
Toluene	107	42	0.000331	0.015	Lognormal	0.00127	95% KM (t)
Trichloroethene	107	7	0.000448	0.00204 (U)	Normal	0.000729	95% KM (t)
Trimethylbenzene[1,2,4-]	107	7	0.000388	0.00499	Gamma	0.000826	95% KM (t)
Trimethylbenzene[1,3,5-]	107	2	0.00106 (U)	0.00569	n/a	0.00569	Maximum detected concentration
Xylene[1,2-]	107	4	0.000366	0.00204 (U)	n/a	0.000616	Maximum detected concentration
Xylene[1,3-]+1,4-Xylene	107	15	0.000343	0.00362 (U)	Normal	0.000658	95% KM (t)
Radionuclides (pCi/g)							
Americium-241	107	7	-0.00335 (U)	0.0465	Normal	0.000591	95% KM (Percentile Bootstrap)
Cesium-137	104	85	-0.0496 (U)	3.31	Gamma	0.559	95% KM (BCA)
Plutonium-239/240	107	43	-0.00455 (U)	0.0953	Gamma	0.0186	95% KM (t)
Tritium	107	13	-0.0584 (U)	0.98	Nonparametric	0.0125	95% KM Chebyshev
Uranium-234	107	107	0.682	6.1	Nonparametric	1.55	95% Student's-t
Uranium-235/236	107	42	0.0226 (U)	0.278	Normal	0.0699	95% KM (t)
Uranium-238	107	107	0.857	5.17	Nonparametric	1.69	95% Student's-t

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-52
EPCs at SWMU C-36-003 for the Industrial Scenario

<u>COPC</u>	<u>Number of Analyses</u>	<u>Number of Detects</u>	<u>Minimum Concentration</u>	<u>Maximum Concentration</u>	<u>Distribution</u>	<u>EPC</u>	<u>EPC Method</u>
<u>Inorganic Chemicals (mg/kg)</u>							
<u>Antimony</u>	<u>8</u>	<u>0</u>	<u>1 (U)</u>	<u>1.49 (U)</u>	<u>n/a*</u>	<u>1.49 (U)</u>	<u>Maximum detection limit</u>
<u>Cadmium</u>	<u>8</u>	<u>4</u>	<u>0.324</u>	<u>1.36</u>	<u>n/a</u>	<u>1.36</u>	<u>Maximum detected concentration</u>
<u>Calcium</u>	<u>8</u>	<u>8</u>	<u>2430</u>	<u>11,700</u>	<u>Normal</u>	<u>6830</u>	<u>95% Student's-t</u>
<u>Copper</u>	<u>8</u>	<u>8</u>	<u>4.75</u>	<u>2720</u>	<u>Nonparametric</u>	<u>1830</u>	<u>95% Chebyshev (Mean, Sd)</u>
<u>Cyanide (Total)</u>	<u>8</u>	<u>8</u>	<u>0.364</u>	<u>2.18</u>	<u>Normal</u>	<u>1.47</u>	<u>95% Student's-t</u>
<u>Lead</u>	<u>8</u>	<u>8</u>	<u>9.31</u>	<u>144</u>	<u>Nonparametric</u>	<u>101</u>	<u>95% Chebyshev (Mean, Sd)</u>
<u>Manganese</u>	<u>8</u>	<u>8</u>	<u>88.4</u>	<u>860</u>	<u>Normal</u>	<u>597</u>	<u>95% Student's-t</u>
<u>Mercury</u>	<u>8</u>	<u>8</u>	<u>0.0531</u>	<u>0.582</u>	<u>Normal</u>	<u>0.403</u>	<u>95% Student's-t</u>
<u>Nickel</u>	<u>8</u>	<u>8</u>	<u>3.36</u>	<u>53</u>	<u>Nonparametric</u>	<u>37.2</u>	<u>95% Chebyshev (Mean, Sd)</u>
<u>Nitrate</u>	<u>8</u>	<u>7</u>	<u>1.67 (U)</u>	<u>540</u>	<u>Gamma</u>	<u>370</u>	<u>95% KM (Chebyshev)</u>
<u>Perchlorate</u>	<u>8</u>	<u>6</u>	<u>0.000991</u>	<u>0.688</u>	<u>Gamma</u>	<u>0.474</u>	<u>95% KM (Chebyshev)</u>
<u>Selenium</u>	<u>8</u>	<u>0</u>	<u>0.971 (U)</u>	<u>1.56 (U)</u>	<u>n/a</u>	<u>1.56 (U)</u>	<u>Maximum detection limit</u>
<u>Silver</u>	<u>8</u>	<u>6</u>	<u>0.609 (U)</u>	<u>348</u>	<u>Normal</u>	<u>177</u>	<u>95% KM (t)</u>
<u>Uranium</u>	<u>8</u>	<u>8</u>	<u>1.72</u>	<u>10.4</u>	<u>Normal</u>	<u>6.06</u>	<u>95% Student's-t</u>
<u>Zinc</u>	<u>8</u>	<u>8</u>	<u>41.6</u>	<u>1320</u>	<u>Nonparametric</u>	<u>904</u>	<u>95% Chebyshev (Mean, Sd)</u>
<u>Organic Chemicals (mg/kg)</u>							
<u>Aroclor-1254</u>	<u>8</u>	<u>5</u>	<u>0.00442</u>	<u>1.03</u>	<u>Gamma</u>	<u>0.392</u>	<u>95% KM (BCA)</u>
<u>Aroclor-1260</u>	<u>8</u>	<u>4</u>	<u>0.00447 (U)</u>	<u>0.617</u>	<u>n/a</u>	<u>0.617</u>	<u>Maximum detected concentration</u>
<u>Benzoic Acid</u>	<u>8</u>	<u>1</u>	<u>0.355</u>	<u>36.3 (UJ)</u>	<u>n/a</u>	<u>0.355</u>	<u>Maximum detected concentration</u>
<u>Bromodichloromethane</u>	<u>8</u>	<u>1</u>	<u>0.00107 (UJ)</u>	<u>0.00167 (U)</u>	<u>n/a</u>	<u>0.00117</u>	<u>Maximum detected concentration</u>
<u>Chlorodibromomethane</u>	<u>8</u>	<u>1</u>	<u>0.000635</u>	<u>0.00167 (U)</u>	<u>n/a</u>	<u>0.000635</u>	<u>Maximum detected concentration</u>
<u>Chloroform</u>	<u>8</u>	<u>1</u>	<u>0.00107 (UJ)</u>	<u>0.00982</u>	<u>n/a</u>	<u>0.00982</u>	<u>Maximum detected concentration</u>
<u>Di-n-butylphthalate</u>	<u>8</u>	<u>4</u>	<u>0.441</u>	<u>8.07</u>	<u>n/a</u>	<u>8.07</u>	<u>Maximum detected concentration</u>
<u>Isopropyltoluene[4-]</u>	<u>8</u>	<u>6</u>	<u>0.000453</u>	<u>0.0124</u>	<u>Normal</u>	<u>0.00777</u>	<u>95% KM (t)</u>

Table H-2.3-52 (continued)

<u>COPC</u>	<u>Number of Analyses</u>	<u>Number of Detects</u>	<u>Minimum Concentration</u>	<u>Maximum Concentration</u>	<u>Distribution</u>	<u>EPC</u>	<u>EPC Method</u>
<u>Methylene Chloride</u>	<u>8</u>	<u>2</u>	<u>0.00315</u>	<u>0.00835 (U)</u>	<u>n/a</u>	<u>0.00378</u>	<u>Maximum detected concentration</u>
<u>RDX</u>	<u>8</u>	<u>1</u>	<u>0.106</u>	<u>0.5 (UJ)</u>	<u>n/a</u>	<u>0.106</u>	<u>Maximum detected concentration</u>
<u>Toluene</u>	<u>8</u>	<u>6</u>	<u>0.000334</u>	<u>0.00139 (U)</u>	<u>Normal</u>	<u>0.0012</u>	<u>95% KM (t)</u>
<u>Trimethylbenzene[1,2,4-]</u>	<u>8</u>	<u>1</u>	<u>0.001</u>	<u>0.00167 (U)</u>	<u>n/a</u>	<u>0.001</u>	<u>Maximum detected concentration</u>
<u>Xylene[1,3-]+Xylene[1,4-]</u>	<u>8</u>	<u>1</u>	<u>0.000822</u>	<u>0.00334 (U)</u>	<u>n/a</u>	<u>0.000822</u>	<u>Maximum detected concentration</u>
<u>Radionuclides (pCi/g)</u>							
<u>Cesium-137</u>	<u>8</u>	<u>8</u>	<u>0.335</u>	<u>2.02</u>	<u>Lognormal</u>	<u>1.21</u>	<u>95% BCA Bootstrap</u>
<u>Plutonium-239/240</u>	<u>8</u>	<u>7</u>	<u>0.0166 (U)</u>	<u>0.0762</u>	<u>Normal</u>	<u>0.053</u>	<u>95% KM (t)</u>
<u>Tritium</u>	<u>8</u>	<u>3</u>	<u>-0.0476094 (U)</u>	<u>0.0913562</u>	<u>n/a</u>	<u>0.0914</u>	<u>Maximum detected concentration</u>
<u>Uranium-234</u>	<u>8</u>	<u>8</u>	<u>1.26</u>	<u>6.1</u>	<u>Lognormal</u>	<u>5.05</u>	<u>95% Bootstrap-t</u>
<u>Uranium-235/236</u>	<u>8</u>	<u>6</u>	<u>0.0521 (U)</u>	<u>0.278</u>	<u>Normal</u>	<u>0.178</u>	<u>95% KM (t)</u>
<u>Uranium-238</u>	<u>8</u>	<u>8</u>	<u>1.4</u>	<u>4.51</u>	<u>Normal</u>	<u>3.29</u>	<u>95% Student's-t</u>

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-2.3-53
EPCs at SWMU C-36-003 for the Residential Scenario and Ecological Receptors

<u>COPC</u>	<u>Number of Analyses</u>	<u>Number of Detects</u>	<u>Minimum Concentration</u>	<u>Maximum Concentration</u>	<u>Distribution</u>	<u>EPC</u>	<u>EPC Method</u>
<u>Inorganic Chemicals (mg/kg)</u>							
<u>Antimony</u>	<u>16</u>	<u>0</u>	<u>0.955 (U)</u>	<u>1.49 (U)</u>	<u>n/a*</u>	<u>1.49 (U)</u>	<u>Maximum detection limit</u>
<u>Cadmium</u>	<u>16</u>	<u>8</u>	<u>0.182</u>	<u>3.35</u>	<u>Normal</u>	<u>1.09</u>	<u>95% KM (t)</u>
<u>Chromium (Total)</u>	<u>16</u>	<u>16</u>	<u>4.28</u>	<u>192</u>	<u>Gamma</u>	<u>90.4</u>	<u>95% Adjusted Gamma</u>
<u>Copper</u>	<u>16</u>	<u>16</u>	<u>3.67</u>	<u>2720</u>	<u>Nonparametric</u>	<u>936</u>	<u>95% Chebyshev (Mean, Sd)</u>
<u>Cyanide (Total)</u>	<u>16</u>	<u>16</u>	<u>0.105</u>	<u>2.18</u>	<u>Normal</u>	<u>1.06</u>	<u>95% Student's-t</u>
<u>Lead</u>	<u>16</u>	<u>16</u>	<u>7.22</u>	<u>144</u>	<u>Lognormal</u>	<u>58.5</u>	<u>95% Chebyshev (Mean, Sd)</u>
<u>Manganese</u>	<u>16</u>	<u>16</u>	<u>78.1</u>	<u>860</u>	<u>Normal</u>	<u>452</u>	<u>95% Student's-t</u>
<u>Mercury</u>	<u>16</u>	<u>14</u>	<u>0.00927 (U)</u>	<u>0.815</u>	<u>Normal</u>	<u>0.342</u>	<u>95% KM (t)</u>
<u>Nickel</u>	<u>16</u>	<u>16</u>	<u>2.87</u>	<u>53</u>	<u>Nonparametric</u>	<u>20.7</u>	<u>95% Chebyshev (Mean, Sd)</u>
<u>Nitrate</u>	<u>16</u>	<u>14</u>	<u>1.07 (U)</u>	<u>540</u>	<u>Nonparametric</u>	<u>197</u>	<u>95% KM Chebyshev</u>
<u>Perchlorate</u>	<u>16</u>	<u>13</u>	<u>0.000642</u>	<u>0.688</u>	<u>Lognormal</u>	<u>0.256</u>	<u>95% KM Chebyshev</u>
<u>Selenium</u>	<u>16</u>	<u>1</u>	<u>0.635</u>	<u>1.56 (U)</u>	<u>n/a</u>	<u>0.635</u>	<u>Maximum detected concentration</u>
<u>Silver</u>	<u>16</u>	<u>12</u>	<u>0.22 (U)</u>	<u>348</u>	<u>Normal</u>	<u>161</u>	<u>95% KM (t)</u>
<u>Uranium</u>	<u>16</u>	<u>16</u>	<u>0.437</u>	<u>10.4</u>	<u>Normal</u>	<u>4.43</u>	<u>95% Student's-t</u>
<u>Zinc</u>	<u>16</u>	<u>16</u>	<u>39.8</u>	<u>1320</u>	<u>Nonparametric</u>	<u>490</u>	<u>95% Chebyshev (Mean, Sd)</u>
<u>Organic Chemicals (mg/kg)</u>							
<u>Aroclor-1254</u>	<u>16</u>	<u>8</u>	<u>0.00356 (U)</u>	<u>1.03</u>	<u>Gamma</u>	<u>0.209</u>	<u>95% KM (t)</u>
<u>Aroclor-1260</u>	<u>16</u>	<u>7</u>	<u>0.00356 (U)</u>	<u>0.617</u>	<u>Lognormal</u>	<u>0.132</u>	<u>95% KM (BCA)</u>
<u>Benzoic Acid</u>	<u>16</u>	<u>1</u>	<u>0.355</u>	<u>36.3 (UJ)</u>	<u>n/a</u>	<u>0.355</u>	<u>Maximum detected concentration</u>
<u>Bromodichloromethane</u>	<u>16</u>	<u>1</u>	<u>0.00106 (UJ)</u>	<u>0.00167 (U)</u>	<u>n/a</u>	<u>0.00117</u>	<u>Maximum detected concentration</u>
<u>Chlorodibromomethane</u>	<u>16</u>	<u>1</u>	<u>0.000635</u>	<u>0.00167 (U)</u>	<u>n/a</u>	<u>0.000635</u>	<u>Maximum detected concentration</u>
<u>Chloroform</u>	<u>16</u>	<u>2</u>	<u>0.00052</u>	<u>0.00982</u>	<u>n/a</u>	<u>0.00982</u>	<u>Maximum detected concentration</u>
<u>Di-n-butylphthalate</u>	<u>16</u>	<u>6</u>	<u>0.258</u>	<u>8.07</u>	<u>Gamma</u>	<u>1.84</u>	<u>95% KM (t)</u>
<u>Isopropyltoluene[4-]</u>	<u>16</u>	<u>8</u>	<u>0.000453</u>	<u>0.0124</u>	<u>Normal</u>	<u>0.00516</u>	<u>95% KM (t)</u>
<u>Methylene Chloride</u>	<u>16</u>	<u>2</u>	<u>0.00315</u>	<u>0.00835 (U)</u>	<u>n/a</u>	<u>0.00378</u>	<u>Maximum detected concentration</u>

Table H-2.3-53 (continued)

<u>COPC</u>	<u>Number of Analyses</u>	<u>Number of Detects</u>	<u>Minimum Concentration</u>	<u>Maximum Concentration</u>	<u>Distribution</u>	<u>EPC</u>	<u>EPC Method</u>
<u>RDX</u>	<u>16</u>	<u>1</u>	<u>0.106</u>	<u>0.5 (UJ)</u>	<u>n/a</u>	<u>0.106</u>	<u>Maximum detected concentration</u>
<u>Toluene</u>	<u>16</u>	<u>11</u>	<u>0.000331</u>	<u>0.00139 (U)</u>	<u>Lognormal</u>	<u>0.000815</u>	<u>95% KM (BCA)</u>
<u>Trimethylbenzene[1,2,4-]</u>	<u>16</u>	<u>1</u>	<u>0.001</u>	<u>0.00167 (U)</u>	<u>n/a</u>	<u>0.001</u>	<u>Maximum detected concentration</u>
<u>Xylene[1,3-]+Xylene[1,4-]</u>	<u>16</u>	<u>1</u>	<u>0.000822</u>	<u>0.00334 (U)</u>	<u>n/a</u>	<u>0.000822</u>	<u>Maximum detected concentration</u>
<u>Radionuclides (pCi/g)</u>							
<u>Cesium-137</u>	<u>16</u>	<u>13</u>	<u>-0.00545 (U)</u>	<u>2.02</u>	<u>Gamma</u>	<u>0.711</u>	<u>95% KM (BCA)</u>
<u>Tritium</u>	<u>16</u>	<u>5</u>	<u>-0.0476094 (U)</u>	<u>0.15437</u>	<u>Normal</u>	<u>0.0219</u>	<u>95% KM (t)</u>
<u>Uranium-234</u>	<u>16</u>	<u>16</u>	<u>0.937</u>	<u>6.1</u>	<u>Gamma</u>	<u>3.23</u>	<u>95% Adjusted Gamma</u>
<u>Uranium-235/236</u>	<u>16</u>	<u>11</u>	<u>0.0515 (U)</u>	<u>0.278</u>	<u>Normal</u>	<u>0.144</u>	<u>95% KM (t)</u>
<u>Uranium-238</u>	<u>16</u>	<u>16</u>	<u>0.857</u>	<u>4.51</u>	<u>Normal</u>	<u>2.63</u>	<u>95% Student's-t</u>

Note: Data qualifiers are defined in Appendix A.

*n/a = Not applicable.

Table H-3.2-1
Physical and Chemical Properties of
Inorganic COPCs for the Threemile Canyon Aggregate Area

COPC	K _d ^a (cm ³ /g)	Water Solubility ^{a, b} (g/L)
Aluminum	1500	Insoluble
Antimony	45	Insoluble
Arsenic	29	Insoluble
Barium	41	Insoluble
Beryllium	790	Insoluble
Cadmium	75	Insoluble
Chromium (Total)	850	Insoluble
Cobalt	45	Insoluble
Copper	35	Insoluble
Cyanide (Total)	9.9	na ^c
Iron	25	Insoluble
Lead	900	Insoluble
Manganese	65	Insoluble
Mercury	52	Insoluble
Nickel	65	Insoluble
Perchlorate	na	245
Selenium	5	Insoluble
Silver	8.3	Insoluble
Thallium	71	Insoluble
Uranium	0.4	Insoluble
Vanadium	1000	Insoluble
Zinc	62	Insoluble

^a Information from http://rais.ornl.gov/cgi-bin/tox/TOX_search.

^b Denotes reference information from <http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm>.

^c na = Not available.

Table H-3.2-2
Physical and Chemical Properties of Organic COPCs for the Threemile Canyon Aggregate Area

COPC	Water Solubility ^a (mg/L)	Organic Carbon Coefficient K _{oc} ^a (L/kg)	Log Octanol-Water Partition Coefficient K _{ow} ^a	Vapor Pressure ^a (mm Hg at 25°C)
Acetone	1.00E+06 ^b	1.98E+00	-2.40E-01 ^b	2.31E+02 ^b
Amino-2,6-dinitrotoluene[4-]	1.01E+02	1.84E+00	1.22E+03	3.65E-06
Anthracene	4.34E-02 ^b	2.04E+04	4.45E+00 ^b	2.67E-06 ^b
Aroclor-1242	2.77E-01	7.81E+04	6.29E+00	8.63E-05
Aroclor-1254	3.40E-03 ^b	5.30E+05 ^c	6.79E+00 ^b	6.53E-06 ^b
Aroclor-1260	2.84E-04 ^b	5.30E+05 ^c	8.27E+00 ^b	4.05E-05 ^b
Aroclor-1268	na ^d	na	na	na
Benzo(a)anthracene	9.40E-03 ^b	2.31E+05	5.76+00 ^b	1.90E-06 ^b
Benzo(a)pyrene	1.62E-03 ^b	7.87E+05	6.13E+00 ^b	5.49E-09 ^b
Benzo(b)fluoranthene	1.50E-03 ^b	8.03E+05	5.78E+00 ^b	5.00E-07 ^b
Benzo(g,h,i)perylene	2.60E-04 ^b	2.68E+06	6.63E+00 ^b	1.00E-10 ^b
Benzo(k)fluoranthene	8.00E-04 ^b	7.87E+05	6.1E+00 ^b	9.65E-10 ^b
Benzoic acid	3.40E+03 ^b	1.45E+01	1.87E+00 ^b	7.00E-04 ^b
Bis(2-ethylhexyl)phthalate	2.70E-01 ^b	1.65E+05	7.60E+00 ^b	1.42E-07 ^b
Bromodichloromethane	3.03E+03	3.18E+01	2.00E+00	5.00E+01
Butanone[2-]	2.23E+05	3.83E+00	2.90E-01	9.06E+01
Butylbenzylphthalate	2.69E+00	9.36E+03	4.73E+00	8.25E-06
Chlorodibromomethane	2.70E+03	3.18E+01	2.16E+00	1.56E+01
Chloroform	7.95E+03	3.18E+01	1.97E+00	1.97E+02
Chloromethane	5.32E+03	1.43E+01	9.10E-01	4.30E+03
Chloronaphthalene[2-]	2.98E+03	3.98E+00	1.17E+01	9.03E-03
Chlorotoluene[4-]	1.06E+02 ^e	3.75E+02 ^e	3.33E+00 ^e	2.69E+00 ^e
Chrysene	6.30E-03 ^b	2.36E+05	5.81E+00 ^b	6.23E-09 ^b
Di-n-butylphthalate	1.46E+03	4.50E+00	4.70E+00 ^b	2.01E-05
Di-n-octylphthalate	2.20E-02	1.45E+05	8.10E+00	1.00E-07
Dibenzofuran	3.10E+00	1.13E+04	4.12E+00	2.48E-03
Dichloroethene[1,1-]	2.42E+03	3.18E+01	2.13E+00	6.34E+02
Ethylbenzene	1.69E+02	5.18E+02	3.15E+00	9.60E+00
Fluoranthene	2.06E-01 ^c	7.09E+04 ^c	5.16E+00 ^c	9.22E-06 ^c
Hexanone[2-]	1.75E+04	1.30E+01	1.38E+00	1.16E+01
HMX	1.85E+03 ^c	1.60E-01	9.44E+03 ^c	3.30E-14
Indeno(1,2,3-cd)pyrene	1.90E-04	1.95E+06	6.70E+00	1.25E-12
Isopropyltoluene[4-]	2.34E+01 ^b	na	4.10E+00 ^b	1.64E+00 ^b
Methylene chloride	1.30E+04 ^b	2.37E+01	1.30E+00 ^b	4.30E+02 ^b
PETN	4.30E+01 ^e	6.48E+02 ^e	2.38E+00 ^e	5.45E-09 ^e
Phenanthrene	1.15E+00 ^b	2.08E+04	4.46E+00 ^b	1.12E-04 ^b
Pyrene	1.35E-01 ^b	6.94E+04	4.88E+00 ^b	4.50E-06 ^b

Table H-3.2-2 (continued)

COPC	Water Solubility ^a (mg/L)	Organic Carbon Coefficient K_{oc} ^a (L/kg)	Log Octanol-Water Partition Coefficient K_{ow} ^a	Vapor Pressure ^a (mm Hg at 25°C)
RDX	1.95E+02 ^c	8.70E-01	5.97E+00 ^c	4.10E-09
Styrene	3.10E+02	5.18E+02	2.95E+00	6.40E+00
TATB	na	na	-2.93E+00	8.67E-18
Tetrachloroethene	2.06E+02	9.49E+01	3.40E+00	1.85E+01
Tetryl	7.40E+01	4.61E+03	1.64E+00	1.17E-07
Toluene	5.26E+02	2.68E+02	2.73E+00	2.84E+01
Trichloroethene	1.28E+03	6.07E+01	2.42E+00	6.90E+01
Trimethylbenzene[1,2,4-]	5.70E+01	7.18E+02	3.63E+00	2.10E+00
Trimethylbenzene[1,3,5-]	4.82E+01	6.02E+02	3.42E+00	2.10E+00
Trinitrotoluene[2,4,6-]	1.85E+03	1.60E+00	1.38E+02	8.02E-06
Xylene[1,2-]	1.61E+02	4.34E+02	3.20E+00	8.29E+00
Xylene[1,3-]+1,4-Xylene ^f	1.78E+02	3.83E+02	3.12E+00	7.99E+00

^a Information from http://rais.ornl.gov/cgi-bin/tools/TOX_search.

^b Information from <http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm>.

^c Information from NMED (2015, 600915).

^d na = Not available.

^e EPA regional screening tables (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^f Xylenes used as a surrogate.

Table H-3.2-3
Physical and Chemical Properties of
Radionuclide COPCs for the Threemile Canyon Aggregate Area

COPC	Soil-Water Partition Coefficient, K_d ^a (cm ³ /g)	Water Solubility ^b (g/L)
Americium-241	680	Insoluble
Cesium-137	1000	Insoluble
Plutonium-238	4500	Insoluble
Plutonium-239/240	4500	Insoluble
Tritium	9.9	Soluble
Uranium-234	0.4	Insoluble
Uranium-235/236	0.4	Insoluble
Uranium-238	0.4	Insoluble

^a Superfund Chemical Data Matrix (EPA 1996, 064708).

^b Information from <http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm>.

Table H-4.1-1
Exposure Parameters Used to Calculate
Chemical SSLs for the Industrial, Residential, and Recreational Scenarios

Parameters	Residential Values	Industrial Values	Recreational Values
Target HQ	1	1	1
Target cancer risk	10^{-5}	10^{-5}	10^{-5}
Averaging time (carcinogen/mutagen)	70 yr \times 365 d	70 yr \times 365 d	70 yr \times 365 d
Averaging time (noncarcinogen)	Exposure duration \times 365 d	Exposure duration \times 365 d	Exposure duration \times 365 d
Skin absorption factor	Semivolatile organic compound (SVOC) = 0.1	SVOC = 0.1	SVOC = 0.1
	Chemical-specific	Chemical-specific	Chemical-specific
Adherence factor–child	0.2 mg/cm ²	n/a ^a	0.2 mg/cm ²
Body weight–child	15 kg (0–6 yr of age)	n/a	31 kg
Cancer slope factor–oral (chemical-specific)	(mg/kg-d) ⁻¹	(mg/kg-d) ⁻¹	(mg/kg-d) ⁻¹
Inhalation unit risk (chemical-specific)	(μ g/m ³)	(μ g/m ³)	(μ g/m ³)
Exposure frequency	350 d/yr	225 d/yr	200 d/yr
Exposure time	24 h/d	8 h/day	1 h/d
Exposure duration–child	6 yr ^b	n/a	6 yr (6 to <12 yr of age)
Age-adjusted ingestion factor for carcinogens	36,750 mg/kg	n/a	n/a
Age-adjusted ingestion factor for mutagens	25,550 mg/kg	n/a	n/a
Soil ingestion rate–child	200 mg/d	n/a	91 mg/d
Particulate emission factor	6.61×10^9 m ³ /kg	6.61×10^9 m ³ /kg	6.61×10^9 m ³ /kg
Reference dose–oral (chemical-specific)	(mg/kg-d)	(mg/kg-d)	(mg/kg-d)
Reference dose–inhalation (chemical-specific)	(mg/kg-d)	(mg/kg-d)	(mg/kg-d)
Exposed surface area–child	2690 cm ² /d	n/a	4030 cm ²
Age-adjusted skin contact factor for carcinogens	112,266 mg/kg	n/a	n/a
Age-adjusted skin contact factor for mutagens	166,833 mg/kg	n/a	n/a
Volatilization factor for soil (chemical-specific)	(m ³ /kg)	(m ³ /kg)	(m ³ /kg)
Body weight–adult	80 kg	80 kg	80 kg ^b
Exposure duration ^c	30 yr ^d	25 yr	26 yr (20 yr carcinogens)
Adherence factor–adult	0.07 mg/cm ²	0.12 mg/cm ²	0.07 mg/cm ²
Soil ingestion rate–adult	100 mg/d	100 mg/d	30 mg/d
Exposed surface area–adult	6032 cm ² /d	3470 cm ² /d	6032 cm ²

Note: Parameter values from NMED (2015, 600915) and LANL (2015, 600336).

^a n/a = Not applicable.

^b The child exposure duration for mutagens is subdivided into 0–2 yr and 2–6 yr.

^c Exposure duration for lifetime resident is 26 yr. For carcinogens, the exposures are combined for child (6 yr) and adult (20 yr).

^d The adult exposure duration for mutagens is subdivided into 6–16 yr and 16–30 yr.

Table H-4.1-2
Parameter Values Used to Calculate Radionuclide SALs for the Residential Scenario

Parameters	Residential, Child	Residential, Adult
Inhalation rate (m ³ /yr)	4712 ^a	7780 ^b
Mass loading (g/m ³)	1.5×10^{-7c}	1.5×10^{-7c}
Outdoor time fraction	0.0926 ^d	0.0934 ^e
Indoor-time fraction	0.8656 ^f	0.8648 ^g
Soil ingestion (g/yr)	73 ^h	36.5 ⁱ

- ^a Calculated as $12.9 \text{ m}^3/\text{d} \times 365.25 \text{ d/yr}$, where $12.9 \text{ m}^3/\text{d}$ is the mean upper percentile daily inhalation rate of a child (EPA 2011, 208374, Table 6-1).
- ^b Calculated as $21.3 \text{ m}^3/\text{d} \times 365.25 \text{ d/yr}$, where $21.3 \text{ m}^3/\text{d}$ is the mean upper percentile daily inhalation rate of an adult from 21 to less than 61 yr old (EPA 2011, 208374, Table 6-1).
- ^c Calculated as $(1 / 6.6 \times 10^9 \text{ m}^3/\text{kg}) \times 1000 \text{ g/kg}$, where $6.6 \times 10^9 \text{ m}^3/\text{kg}$ is the particulate emission factor (NMED 2015, 600915).
- ^d Calculated as $(2.32 \text{ h/d} \times 350 \text{ d/yr}) / 8766 \text{ h/yr}$, where 2.32 h/d (139 min) is the largest amount of time spent outdoors for child age groups between 1 to less than 3 mo and 3 to less than 6 yr (EPA 2011, 208374, Table 16-1) and is comparable with the adult time spent outdoors at a residence.
- ^e Calculated as $(2.34 \text{ h/d} \times 350 \text{ d/yr}) / 8766 \text{ h/yr}$, where 4.68 h/d is the average total time spent outdoors for adults age 18 to less than 65 yr in all environments (EPA 2011, 208374, Table 16-1); 50% of this value (2.34 h/d) was applied to time spent outdoors at a residence and is similar to mean time outdoors at a residence for this age group (EPA 2011, 208374, Table 16-22).
- ^f Calculated as $[(24 \text{ h/d} - 2.32 \text{ h/d}) \times 350 \text{ d/yr}] / 8766 \text{ h/yr}$.
- ^g Calculated as $[(24 \text{ h/d} - 2.34 \text{ h/d}) \times 350 \text{ d/yr}] / 8766 \text{ h/yr}$.
- ^h The soil ingestion rate compensates for the time-based occupancy factor applied by RESRAD in calculating exposure from the soil ingestion pathway. Calculated as $[0.2 \text{ g/d} \times 350 \text{ d/yr}] / [\text{indoor} + \text{outdoor time fractions}]$, where 0.2 g/d is the upper percentile site-related daily child soil ingestion rate (NMED 2015, 600915; EPA 2011, 208374, Table 5-1).
- ⁱ The soil ingestion rate compensates for the time-based occupancy factor applied by RESRAD in calculating exposure from the soil ingestion pathway. Calculated as $[0.1 \text{ g/d} \times 350 \text{ d/yr}] / [\text{indoor} + \text{outdoor time fractions}]$, where 0.1 g/d is the site-related daily adult soil ingestion rate (NMED 2015, 600915).

Table H-4.1-3
Parameter Values Used to Calculate Radionuclide SALs for the Industrial Scenario

Parameters	Industrial, Adult
Inhalation rate (m ³ /yr)	7780 ^a
Mass loading (g/m ³)	1.5×10^{-7b}
Outdoor time fraction	0.2053 ^c
Indoor time fraction	0 ^d
Soil ingestion (g/yr)	109.6 ^e

- ^a Calculated as $[21.3 \text{ m}^3/\text{d} \times 365.25 \text{ d/yr}]$, where $21.3 \text{ m}^3/\text{d}$ is the upper percentile daily inhalation rate of an adult from 21 to less than 61 yr old (EPA 2011, 208374, Table 6-1).
- ^b Calculated as $(1/6.6 \times 10^9 \text{ m}^3/\text{kg}) \times 1000 \text{ g/kg}$, where $6.6 \times 10^9 \text{ m}^3/\text{kg}$ is the particulate emission factor (NMED 2015, 600915).
- ^c Calculated as $(8 \text{ h/d} \times 225 \text{ d/yr}) / 8766 \text{ h/yr}$, where 8 h/d is an estimate of the average length of the work day and 225 d/yr is the exposure frequency (NMED 2015, 600915).
- ^d The commercial/industrial worker is defined as someone who "spends most of the work day conducting maintenance or manual labor activities outdoors" (NMED 2015, 600915).
- ^e The soil-ingestion rate compensates for the time-based occupancy factor applied by RESRAD in calculating exposure from the soil-ingestion pathway. Calculated as $[0.1 \text{ g/d} \times 225 \text{ d/yr}] / [\text{indoor} + \text{outdoor time fractions}]$, where 0.1 g/d is the site-related daily adult soil-ingestion rate (NMED 2015, 600915).

Table H-4.1-4
Parameters Used to Calculate Radionuclide SALs for the Recreational Scenario

Parameters	Recreational, Child	Recreational, Adult
Inhalation rate (m ³ /yr)	15,250 ^a	19,460 ^b
Mass loading (g/m ³)	1.5×10^{-7c}	1.5×10^{-7c}
Outdoor time fraction	0.0228 ^d	0.0228 ^d
Indoor time fraction	0	0
Soil ingestion (g/yr)	797 ^e	244 ^f

^a Calculated as $(0.029 \text{ m}^3/\text{min} \times 60 \text{ min/h} \times 24 \text{ h/d} \times 365.25 \text{ d/yr})$, where 0.029 m³/min is the upper percentile child inhalation rate for moderate activity for 6 to <11 yr old (EPA 2011, 208374, Table 6-2).

^b Calculated as $(0.037 \text{ m}^3/\text{min} \times 60 \text{ min/h} \times 24 \text{ h/d} \times 365.25 \text{ d/yr})$, where 0.037 m³/min is the age-weighted upper percentile adult inhalation rate for moderate activity (12 to 35 yr) (EPA 2011, 208374, Table 6-2).

^c Calculated as $(1/6.6 \times 10^{-9} \text{ m}^3/\text{kg}) \times 1000 \text{ g/kg}$, where $6.6 \times 10^{-9} \text{ m}^3/\text{kg}$ is the particulate emission factor used for residential and industrial scenarios (NMED 2015, 600915).

^d Calculated as $(1 \text{ h/d} \times 200 \text{ d/yr}) / 8766 \text{ hr/yr}$, where 1 h/d is the exposure time for a recreational adult or child and 200 d/yr is the exposure frequency (LANL 2015, 600929).

^e The soil ingestion rate is defined to compensate for the time-based occupancy factor applied by RESRAD in calculating exposure from the soil ingestion pathway. 100% of daily soil ingestion is protectively assumed to occur during outdoor activity. Calculated as $[(0.2 \text{ g/d} / 2.2 \text{ h/d}) \times 1 \text{ h/d} \times 200 \text{ d/yr}] / [\text{indoor} + \text{outdoor time fractions}]$, where 2.2 h/d is the mean time spent outdoors per d for a 6 to <11 yr old child (EPA 2011, 208374, Table 16-1), and where 0.2 g/d is the upper bound child soil ingestion rate (EPA 2011, 208374, Table 5-1; NMED 2015, 600915).

^f Calculated as $[(0.1 \text{ g/d} / 3.6 \text{ h/d}) \times 1 \text{ h/d} \times 200 \text{ d/yr}] / [\text{indoor} + \text{outdoor time fractions}]$, where 3.6 h/d is the mean time spent outdoors per d for an adult (12 to 35 yr) (EPA 2011, 208374, Table 16-1) and where 0.1 g/d is the adult soil ingestion rate (NMED 2015, 600915).

Table H-4.2-1
Industrial Carcinogenic Screening Evaluation for SWMUs 12-001(a) and 12-001(b)

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	Cancer Risk
Chromium (Total)	25.3	505	5.01E-07
PETN	5.82	570 ^b	1.02E-07
RDX	7.16	311	2.30E-07
Total Excess Cancer Risk			8E-07

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-2
Industrial Noncarcinogenic Screening Evaluation for SWMUs 12-001(a) and 12-001(b)

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	1.45 (U)	519	2.79E-03
Barium	226	255,000	8.86E-04
Cobalt	7.02	350 ^b	2.01E-02
Copper	9.61	51,900	1.85E-04
Manganese	422	160,000	2.64E-03
Perchlorate	0.00125	908	1.38E-06
Selenium	1.34 (U)	6490	2.06E-04
Uranium	5.59	3880	1.44E-03
Amino-2,6-dinitrotoluene[4-]	0.127	2300 ^b	5.52E-05
HMX	11.4	63,300	1.80E-04
Tetryl	0.333	2590	1.29E-04
HI			0.03

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-3
Industrial Radionuclide Screening Evaluation for SWMUs 12-001(a) and 12-001(b)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Plutonium-239/240	0.0082	1200	1.71E-04
Uranium-234	1.86	3100	1.50E-02
Uranium-238	2.15	710	7.57E-02
Total Dose			0.09

* SALs from LANL (2015, 600929).

Table H-4.2-4
Recreational Carcinogenic Screening
Evaluation for SWMsU 12-001(a) and 12-001(b)

COPC	EPC (mg/kg)	Recreational SSL* (mg/kg)	Cancer Risk
Chromium (Total)	25.3	281	9.00E-07
RDX	7.16	399	1.79E-07
Total Excess Cancer Risk			1E-06

* SSLs from LANL (2015, 600336).

Table H-4.2-5
Recreational Noncarcinogenic Screening
Evaluation for SWMUs 12-001(a) and 12-001(b)

COPC	EPC (mg/kg)	Recreational SSL* (mg/kg)	HQ
Antimony	1.45 (U)	248	5.85E-03
Barium	226	124,000	1.82E-03
Cobalt	7.02	186	3.77E-02
Copper	9.61	24,800	3.88E-04
Manganese	422	86,200	4.90E-03
Perchlorate	0.00125	434	2.88E-06
Selenium	1.34 (U)	3100	4.32E-04
Uranium	5.59	1860	3.01E-03
Amino-2,6-dinitrotoluene[4-]	0.127	1150	1.10E-04
HMX	11.4	29,400	3.88E-04
PETN	5.82	657	8.86E-03
Tetryl	0.333	1230	2.71E-04
HI			0.07

* SSLs from LANL (2015, 600336).

Table H-4.2-6
Recreational Radionuclide Screening Evaluation for SWMUs 12-001(a) and 12-001(b)

COPC	EPC (pCi/g)	Recreational SAL* (pCi/g)	Dose (mrem/yr)
Plutonium-239/240	0.0082	1300	1.58E-04
Uranium-234	1.86	3900	1.19E-02
Uranium-238	2.15	2800	1.92E-02
Total Dose			0.03

* SALs from LANL (2015, 600929).

Table H-4.2-7
Residential Carcinogenic Screening Evaluation for SWMUs 12-001(a) and 12-001(b)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	24.6	96.6	2.55E-06
RDX	3.73	60.4	6.18E-07
Total Excess Cancer Risk			3E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-8
Residential Noncarcinogenic Screening Evaluation for SWMUs 12-001(a) and 12-001(b)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Aluminum	11900	78,000	1.53E-01
Antimony	1.15	31.3	3.67E-02
Barium	213	15,600	1.37E-02
Cobalt	7.1	23 ^b	3.09E-01
Copper	8.09	3130	2.58E-03
Iron	13900	54,800	2.54E-01
Manganese	456	10,500	4.34E-02
Nickel	7.67	1560	4.92E-03
Perchlorate	0.001	54.8	1.82E-05
Selenium	1.34 (U)	391	3.43E-03
Uranium	3.52	234	1.50E-02
Vanadium	27.6	394	7.01E-02
Amino-2,6-dinitrotoluene[4-]	0.127	150 ^b	8.47E-04
HMX	0.749	3850	1.95E-04
PETN	5.82	130 ^b	4.48E-02
Tetryl	0.333	156	2.13E-03
HI			1

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-9
Residential Radionuclide Screening Evaluation for SWMUs 12-001(a) and 12-001(b)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Cesium-137	0.234	12	4.88E-01
Plutonium-239/240	0.00149	79	4.72E-04
Uranium-234	1.45	290	1.25E-01
Uranium-238	1.65	150	2.75E-01
Total Dose			0.9

* SALs from LANL (2015, 600929).

Table H-4.2-10
Construction Worker Noncarcinogenic
Screening Evaluation for SWMUs 12-001(a) and 12-001(b)

<u>COPC</u>	<u>EPC</u> <u>(mg/kg)</u>	<u>Construction Worker</u> <u>SSL^a (mg/kg)</u>	<u>HQ</u>
<u>Aluminum</u>	<u>11,900</u>	<u>41,400</u>	<u>2.87E-01</u>
<u>Antimony</u>	<u>1.15</u>	<u>142</u>	<u>8.10E-03</u>
<u>Barium</u>	<u>213</u>	<u>4390</u>	<u>4.85E-02</u>
<u>Chromium (Total)</u>	<u>24.6</u>	<u>134</u>	<u>1.84E-01</u>
<u>Cobalt</u>	<u>7.1</u>	<u>36.6</u>	<u>1.94E-01</u>
<u>Copper</u>	<u>8.09</u>	<u>14,200</u>	<u>5.70E-04</u>
<u>Iron</u>	<u>13,900</u>	<u>248,000</u>	<u>5.60E-02</u>
<u>Manganese</u>	<u>456</u>	<u>464</u>	<u>9.83E-01</u>
<u>Nickel</u>	<u>7.67</u>	<u>753</u>	<u>1.02E-02</u>
<u>Perchlorate</u>	<u>0.001</u>	<u>248</u>	<u>4.03E-06</u>
<u>Selenium</u>	<u>1.34 (U)</u>	<u>1750</u>	<u>7.66E-04</u>
<u>Uranium</u>	<u>3.52</u>	<u>277</u>	<u>1.27E-02</u>
<u>Vanadium</u>	<u>27.6</u>	<u>614</u>	<u>4.50E-02</u>
<u>Amino-2,6-dinitrotoluene[4-]</u>	<u>0.127</u>	<u>688^b</u>	<u>1.85E-04</u>
<u>HMX</u>	<u>0.749</u>	<u>17,400</u>	<u>4.30E-05</u>
<u>PETN</u>	<u>5.82</u>	<u>514^b</u>	<u>1.13E-02</u>
<u>Tetryl</u>	<u>0.333</u>	<u>760</u>	<u>4.38E-04</u>
HI			2

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b Construction worker SSL calculated using toxicity value from EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>) and equation and parameters from NMED (2015, 600915).

Table H-4.2-1~~10~~
Industrial Noncarcinogenic Screening Evaluation for SWMU 12-002

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	1.03 (U)	519	1.98E-03
Barium	74.3	255,000	2.91E-04
Cobalt	13.4	350 ^b	3.83E-02
Copper	7.83	51,900	1.51E-04
Selenium	1.06 (U)	6490	1.63E-04
HI			0.04

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-1~~21~~
Recreational Noncarcinogenic Screening Evaluation for SWMU 12-002

COPC	EPC (mg/kg)	Recreational SSL* (mg/kg)	HQ
Antimony	1.03 (U)	248	4.15E-03
Barium	74.3	124,000	5.99E-04
Cobalt	13.4	186	7.20E-02
Copper	7.83	24,800	3.16E-04
Selenium	1.06 (U)	3100	3.42E-04
HI			0.08

* SSLs from LANL (2015, 600336).

Table H-4.2-1~~32~~
Residential Carcinogenic Screening Evaluation for SWMU 12-002

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	13.5	96.6	1.40E-06
Total Excess Cancer Risk			1E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-143
Residential Noncarcinogenic Screening Evaluation for SWMU 12-002

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Aluminum	14200	78,000	1.82E-01
Antimony	1.03 (U)	31.3	3.29E-02
Barium	191	15,600	1.22E-02
Cobalt	14.2	23 ^b	6.17E-01
Copper	11.1	3130	3.55E-03
Iron	18900	54,800	3.45E-01
Nickel	9.28	1560	5.95E-03
Selenium	1.1 (U)	391	2.81E-03
Vanadium	27.1	394	6.88E-02
HI			1

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-154
Industrial Carcinogenic Screening Evaluation for AOC 12-004(a)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Chromium (Total)	24.9	505	4.93E-07
Total Excess Cancer Risk			5E-07

* SSLs from NMED (2015, 600915).

Table H-4.2-165
Industrial Noncarcinogenic Screening Evaluation for AOC 12-004(a)

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	1.36	519	2.62E-03
Barium	100	255,000	3.92E-04
Cobalt	4.43	350 ^b	1.27E-02
Copper	6.34	51,900	1.22E-04
Perchlorate	0.00078	908	8.59E-07
Selenium	1.26 (U)	6490	1.94E-04
Uranium	3.74	3880	9.64E-04
Vanadium	17.2	6530	2.63E-03
Benzoic acid	0.608	3,300,000 ^b	1.84E-07
HI			0.02

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-176
Industrial Radionuclide Screening Evaluation for AOC-12-004(a)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Cesium-137	0.468	41	2.85E-01
Uranium-234	1.82	3100	1.47E-02
Uranium-235/236	0.124	160	1.94E-02
Uranium-238	2.92	710	1.03E-01
Total Dose			0.4

* SALs from LANL (2015, 600929).

Table H-4.2-187
Residential Carcinogenic Screening Evaluation for AOC 12-004(a)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Arsenic	1.83	4.25	4.31E-06
Chromium (Total)	22.1	96.6	2.29E-06
Total Excess Cancer Risk			7E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-198
Residential Noncarcinogenic Screening Evaluation for AOC 12-004(a)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Aluminum	6410	78,000	8.22E-02
Antimony	0.677	31.3	2.16E-02
Barium	88.5	15,600	5.67E-03
Cobalt	3.98	23 ^b	1.73E-01
Copper	5.31	3130	1.70E-03
Nickel	5.98	1560	3.83E-03
Perchlorate	0.00078	54.8	1.42E-05
Selenium	1.26 (U)	391	3.22E-03
Uranium	2.64	234	1.13E-02
Vanadium	13.8	394	3.50E-02
Benzoic acid	0.608	250,000 ^b	2.43E-06
Di-n-butylphthalate	0.121	6160	1.96E-05
HI			0.3

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-2049
Residential Radionuclide Screening Evaluation for AOC 12-004(a)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Cesium-137	0.263	12	5.48E-01
Uranium-234	1.44	290	1.24E-01
Uranium-235/236	0.0956	42	5.69E-02
Uranium-238	2.79	150	4.65E-01
Total Dose			1

* SALs from LANL (2015, 600929).

Table H-4.2-210
Industrial Carcinogenic Screening Evaluation for AOC 12-004(b)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Aroclor-1254	0.015	11.5	1.30E-08
Total Excess Cancer Risk			1E-08

* SSLs from NMED (2015, 600915).

Table H-4.2-224
Industrial Noncarcinogenic Screening Evaluation for AOC 12-004(b)

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	1.05 (U)	519	2.02E-03
Cobalt	9.62	350 ^b	2.75E-02
Lead	23.4	800	2.93E-02
Uranium	5.8	3880	1.49E-03
Vanadium	47.5	6530	7.27E-03
HI			0.07

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-232
Residential Carcinogenic Screening Evaluation for AOC 12-004(b)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Arsenic	2.74	4.25	6.45E-06
Chromium (Total)	13.7	96.6	1.42E-06
Aroclor-1260	0.011	2.43	4.53E-08
Total Excess Cancer Risk			8E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-243
Residential Noncarcinogenic Screening Evaluation for AOC 12-004(b)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Aluminum	10700	78,000	1.37E-01
Antimony	0.373	31.3	1.19E-02
Barium	188	15,600	1.21E-02
Cobalt	6.79	23 ^b	2.95E-01
Copper	10.4	3130	3.32E-03
Lead	15.2	400	3.80E-02
Nickel	8.44	1560	5.41E-03
Perchlorate	0.000832	54.8	1.52E-05
Selenium	1.03	391	2.63E-03
Uranium	2.57	234	1.10E-02
Vanadium	29.2	394	7.41E-02
Aroclor-1254	0.015	1.14	1.32E-02
HI			0.6

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-254
Industrial Carcinogenic Screening Evaluation for AOC C-12-001

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Aroclor-1242	0.114	11.5	9.91E-08
Aroclor-1254	0.109	11.5	9.48E-08
Aroclor-1260	0.0477	11.5	4.15E-08
Total Excess Cancer Risk			2E-07

* SSLs from NMED (2015, 600915).

Table H-4.2-265
Industrial Noncarcinogenic Screening Evaluation for AOC C-12-001

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	HQ
Antimony	1.25 (U)	519	2.41E-03
Uranium	4.07	3880	1.05E-03
HI			0.003

* SSLs from NMED (2015, 600915).

Table H-4.2-276
Residential Carcinogenic Screening Evaluation for AOC C-12-001

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	16.3	96.6	1.69E-06
Aroclor-1242	0.114	2.43	4.69E-07
Aroclor-1260	0.0477	2.43	1.96E-07
Total Excess Cancer Risk			2E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-287
Residential Noncarcinogenic Screening Evaluation for AOC C-12-001

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Aluminum	9750	78,000	1.25E-01
Antimony	0.426	31.3	1.36E-02
Barium	132	15,600	8.46E-03
Cobalt	4.97	23 ^b	2.16E-01
Nickel	7.75	1560	4.97E-03
Perchlorate	0.00241	54.8	4.40E-05
Selenium	1.26 (U)	391	3.22E-03
Uranium	1.96	234	8.38E-03
Aroclor-1254	0.109	1.14	9.56E-02
HI			0.5

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-298
Industrial Noncarcinogenic Screening Evaluation for AOC C-12-002

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	1.11 (U)	519	2.14E-03
Cobalt	12.1	350 ^b	3.46E-02
HI			0.04

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-3029
Residential Carcinogenic Screening Evaluation for AOC C-12-002

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	15	96.6	1.55E-06
Total Excess Cancer Risk			2E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-310
Residential Noncarcinogenic Screening Evaluation for AOC C-12-002

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Aluminum	11100	78,000	1.42E-01
Antimony	1.11 (U)	31.3	3.55E-02
Barium	223	15,600	1.43E-02
Cobalt	7.49	23b	3.26E-01
Copper	7.65	3130	2.44E-03
Nickel	7.8	1560	5.00E-03
Perchlorate	0.00164	54.8	2.99E-05
Selenium	1.15 (U)	391	2.94E-03
Vanadium	28.2	394	7.16E-02
HI			0.6

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-324
Industrial Carcinogenic Screening Evaluation for AOC C-12-003

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Chromium (Total)	104	505	2.06E-06
Total Excess Cancer Risk			2E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-332
Industrial Noncarcinogenic Screening Evaluation for AOC C-12-003

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	HQ
Antimony	2.61 (U)	519	5.03E-03
HI			0.005

* SSLs from NMED (2015, 600915).

Table H-4.2-343
Residential Carcinogenic Screening Evaluation for AOC C-12-003

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	45	96.6	4.66E-06
Total Excess Cancer Risk			5E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-354
Residential Noncarcinogenic Screening Evaluation for AOC C-12-003

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Antimony	2.74	31.3	8.75E-02
Barium	117	15,600	7.50E-03
Cobalt	4.99	23 ^b	2.17E-01
Perchlorate	0.0019	54.8	3.47E-05
Selenium	1.12 (UJ)	391	2.86E-03
HI			0.3

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-365
Industrial Carcinogenic Screening Evaluation for AOC C-12-004

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Chromium (Total)	33.5	505	6.63E-07
Total Excess Cancer Risk			7E-07

* SSLs from NMED (2015, 600915).

Table H-4.2-376
Industrial Noncarcinogenic Screening Evaluation for AOC C-12-004

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	HQ
Antimony	1.21 (UJ)	519	2.33E-03
Copper	28.1	51,900	5.41E-04
Lead	58.6	800	7.33E-02
Silver	2.56	6490	3.94E-04
Uranium	3.86	3880	9.95E-04
HI			0.1

* SSLs from NMED (2015, 600915).

Table H-4.2-387
Residential Carcinogenic Screening Evaluation for AOC C-12-004

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	18.4	96.6	1.90E-06
Total Excess Cancer Risk			2E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-398
Residential Noncarcinogenic Screening Evaluation for AOC C-12-004

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Aluminum	15100	78,000	1.94E-01
Antimony	1.21 (UJ)	31.3	3.87E-02
Barium	214	15,600	1.37E-02
Cobalt	5.85	23 ^b	2.54E-01
Copper	13.7	3130	4.38E-03
Lead	39.2	400	9.80E-02
Nickel	8.38	1560	5.37E-03
Perchlorate	0.0012	54.8	2.19E-05
Selenium	1.14 (U)	391	2.92E-03
Silver	1.63	391	4.17E-03
Uranium	3.86	234	1.65E-02
Vanadium	28.1	394	7.13E-02
HI			0.6

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-4039
Industrial Carcinogenic Screening Evaluation for AOC C-12-005

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Chromium (Total)	196	505	3.88E-06
Total Excess Cancer Risk			4E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-419
Industrial Noncarcinogenic Screening Evaluation for AOC C-12-005

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	HQ
Antimony	3.89	519	7.50E-03
Perchlorate	0.00197	908	2.17E-06
Uranium	2.77	3880	7.14E-04
HI			0.008

* SSLs from NMED (2015, 600915).

Table H-4.2-424
Recreational Carcinogenic Screening Evaluation for AOC C-12-005

COPC	EPC (mg/kg)	Recreational SSL* (mg/kg)	Cancer Risk
Chromium (Total)	196	281	6.98E-06
Total Excess Cancer Risk			7E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-432
Recreational Noncarcinogenic Screening Evaluation for AOC C-12-005

COPC	EPC (mg/kg)	Recreational SSL ^a (mg/kg)	HQ
Antimony	3.89	248	1.57E-02
Perchlorate	0.00197	434	4.54E-06
Uranium	2.77	1860	1.49E-03
HI			0.02

* SSLs from NMED (2015, 600915)..

Table H-4.2-443
Residential Carcinogenic Screening Evaluation for AOC C-12-005

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	114	96.6	1.18E-05
Total Excess Cancer Risk			1E-05

* SSLs from NMED (2015, 600915).

Table H-4.2-454
Residential Noncarcinogenic Screening Evaluation for AOC C-12-005

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Antimony	3.89	31.3	1.24E-01
Perchlorate	0.00197	54.8	3.59E-05
Uranium	1.81	234	7.74E-03
HI			0.1

* SSLs from NMED (2015, 600915).

Table H-4.2-465
Industrial Carcinogenic Screening Evaluation for AOC C-14-006

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Chromium (Total)	20.7	505	4.10E-07
Total Excess Cancer Risk			4E-07

* SSLs from NMED (2015, 600915).

Table H-4.2-476
Industrial Noncarcinogenic Screening Evaluation for AOC C-14-006

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	1.1	519	2.12E-03
<u>Nitrate</u>	<u>1.82</u>	<u>2,080,000</u>	<u>8.75E-07</u>
Perchlorate	0.00135	908	1.49E-06
Acetone	0.00973	960,000	1.01E-08
Isopropyltoluene[4-]	0.00229	14,200	1.61E-07
TATB	11.3	32,000 ^{b, c}	3.53E-04
Toluene	0.000887	61,300	1.45E-08
HI			0.002

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Trinitrobenzene[1,3,5-] used as a surrogate based on structural similarity.

Table H-4.2-487
Residential Carcinogenic Screening Evaluation for AOC C-14-006

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	13.9	96.6	1.44E-06
Total Excess Cancer Risk			1E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-498
Residential Noncarcinogenic Screening Evaluation for AOC C-14-006

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Antimony	0.933	31.3	2.98E-02
<u>Nitrate</u>	<u>1.54</u>	<u>125,000</u>	<u>1.23E-05</u>
Perchlorate	0.00188	54.8	3.43E-05
Acetone	0.00973	66,300	1.47E-07
Isopropyltoluene[4-]	0.00229	2360	9.70E-07
TATB	4.63	2200 ^{b,c}	2.10E-03
Toluene	0.000887	5230	1.70E-07
HI			0.03

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Trinitrobenzene[1,3,5-] used as a surrogate based on structural similarity.

Table H-4.2-5049
Industrial Carcinogenic Screening Evaluation for AOC 15-005(c)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Chromium (Total)	11.9	505	2.36E-07
Bis(2-ethylhexyl)phthalate	0.0995	1830	5.44E-10
Ethylbenzene	0.000395	368	1.07E-11
Total Excess Cancer Risk			2E-07

* SSLs from NMED (2015, 600915).

Table H-4.2-51⁹
Industrial Noncarcinogenic Screening Evaluation for AOC 15-005(c)

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	0.836	519	1.61E-03
Barium	198	255,000	7.76E-04
Cobalt	6.81	350 ^b	1.95E-02
Copper	16.3	51,900	3.14E-04
Iron	13900	908,000	1.53E-02
Lead	55.6	800	6.95E-02
Perchlorate	0.00149	908	1.64E-06
Selenium	1.48 (U)	6490	2.28E-04
Uranium	9.48	3880	2.44E-03
Vanadium	27.9	6530	4.27E-03
Acetone	0.0188	960,000	1.96E-08
Isopropyltoluene[4-]	0.00151	14,200	1.06E-07
Toluene	0.000754	61,300	1.23E-08
Xylene[1,3-]+1,4-Xylene	0.000984	4280 ^c	2.30E-07
HI			0.1

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Xylenes used as a surrogate based on structural similarity.

Table H-4.2-52⁴
Industrial Radionuclide Screening Evaluation for AOC-15-005(c)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Uranium-234	4.55	3100	3.67E-02
Uranium-235/236	0.252	160	3.94E-02
Uranium-238	5.6	710	1.97E-01
Total Dose			0.3

* SALs from LANL (2015, 600929).

Table H-4.2-532
Residential Carcinogenic Screening Evaluation for AOC 15-005(c)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	11.3	96.6	1.17E-06
Bis(2-ethylhexyl)phthalate	0.0995	380	2.62E-09
Ethylbenzene	0.00063	75.1	8.39E-11
Total Excess Cancer Risk			1E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-543
Residential Noncarcinogenic Screening Evaluation for AOC 15-005(c)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Antimony	0.855	31.3	2.73E-02
Barium	199	15,600	1.28E-02
Cobalt	6.13	23 ^b	2.67E-01
Copper	12	3130	3.83E-03
Iron	13800	54,800	2.52E-01
Lead	35.3	400	8.83E-02
Perchlorate	0.00149	54.8	2.72E-05
Selenium	1.48 (U)	391	3.79E-03
Uranium	6.35	234	2.71E-02
Vanadium	27.4	394	6.95E-02
Acetone	0.0188	66,300	2.84E-07
Isopropyltoluene[4-]	0.00151	2360	6.40E-07
Toluene	0.000754	5230	1.44E-07
Xylene[1,3-]+1,4-Xylene	0.000787	871 ^c	9.04E-07
HI			0.8

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Xylenes used as a surrogate based on structural similarity.

Table H-4.2-554
Residential Radionuclide Screening Evaluation for AOC 15-005(c)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Uranium-234	3.15	290	2.72E-01
Uranium-235/236	0.169	42	1.01E-01
Uranium-238	4.96	150	8.27E-01
Total Dose			1

* SALs from LANL (2015, 600929).

Table H-4.2-565
Industrial Carcinogenic Screening Evaluation for SWMU 15-007(c)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Chromium (Total)	18.9	505	3.74E-07
Aroclor-1254	0.0055	11.5	4.78E-09
Total Excess Cancer Risk			4E-07

* SSLs from NMED (2015, 600915).

Table H-4.2-576
Industrial Noncarcinogenic Screening Evaluation for SWMU 15-007(c)

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	243	519	4.68E-01
Lead	15500	800	1.94E+01
Perchlorate	0.000831	908	9.15E-07
Selenium	1.48 (U)	6490	2.28E-04
Silver	3.9	6490	6.01E-04
Zinc	58.1	389,000	1.49E-04
TATB	0.496	32,000 ^{b,c}	1.55E-05
HI			20

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Trinitrobenzene[1,3,5-] used as a surrogate based on structural similarity.

Table H-4.2-587
Residential Carcinogenic Screening Evaluation for SWMU 15-007(c)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	31.8	96.6	3.29E-06
Aroclor-1242	0.0034	2.43	1.40E-08
Total Excess Cancer Risk			3E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-598
Residential Noncarcinogenic Screening Evaluation for SWMU 15-007(c)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Antimony	243	31.3	7.76E+00
Copper	8.17	3130	2.61E-03
Lead	7290	400	1.82E+01
Nickel	8.79	1560	5.63E-03
Perchlorate	0.00122	54.8	2.23E-05
Selenium	2.11 (U)	391	5.40E-03
Silver	1.15	391	2.94E-03
Zinc	46.7	23,500	1.99E-03
Aroclor-1254	0.0055	1.14	4.82E-03
TATB	0.496	2200b,c	2.25E-04
HI			26

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Trinitrobenzene[1,3,5-] used as a surrogate based on structural similarity.

Table H-4.2-6059
Residential Radionuclide Screening Evaluation for SWMU 15-007(c)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Tritium	7.45	1700	1.10E-01
Total Dose			0.1

* SALs from LANL (2015, 600929).

Table H-4.2-619
Residential Noncarcinogenic Screening Evaluation for SWMU 15-007(d)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Antimony	0.998 (U)	31.3	3.19E-02
Selenium	1 (U)	391	2.56E-03
HI			0.03

* SSLs from NMED (2015, 600915).

Table H-4.2-624
Residential Radionuclide Screening Evaluation for SWMU 15-007(d)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Tritium	6.11	1700	8.99E-02
Total Dose			0.09

* SALs from LANL (2015, 600929).

Table H-4.2-632
Industrial Carcinogenic Screening Evaluation for SWMU 15-008(b)

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	Cancer Risk
Chromium (Total)	14.3	505	2.83E-07
Aroclor-1242	0.282	11.5	2.45E-07
Aroclor-1254	0.0478	11.5	4.16E-08
Aroclor-1260	0.0182	11.5	1.58E-08
Aroclor-1268	0.0205	11.5b	1.78E-08
RDX	7.72	311	2.48E-07
Total Excess Cancer Risk			9E-07

^a SSLs from NMED (2015, 600915).

^b Aroclor-1260 used as a surrogate based on structural similarity.

Table H-4.2-643
Industrial Noncarcinogenic Screening Evaluation for SWMU 15-008(b)

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	10.3	519	1.98E-02
Barium	85.3	255,000	3.35E-04
Beryllium	6.95	2580	2.69E-03
Cadmium	0.569	1110	5.13E-04
Copper	2710	51,900	5.22E-02
Iron	10,700	908,000	1.18E-02
Lead	8610	800	1.08E+01
Manganese	292	160,000	1.83E-03
Nickel	7.17	25,700	2.79E-04
Perchlorate	0.000629	908	6.93E-07
Selenium	0.696	6490	1.07E-04
Silver	0.69	6490	1.06E-04
Uranium	107	3880	2.76E-02
Vanadium	16.4	6530	2.51E-03
Zinc	862	389,000	2.22E-03
HMX	2.22	63,300	3.51E-05
TATB	2.15	32,000 ^{b,c}	6.72E-05
Trinitrotoluene[2,4,6-]	0.205	573	3.58E-04
HI			11

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Trinitrobenzene[1,3,5-] used as a surrogate based on structural similarity.

Table H-4.2-654
Industrial Radionuclide Screening Evaluation for SWMU 15-008(b)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.000676	1000	1.69E-05
Cesium-137	0.338	41	2.06E-01
Plutonium-239/240	0.049	1200	1.02E-03
Tritium	11.4	2,400,000	1.19E-04
Uranium-234	10.5	3100	8.47E-02
Uranium-235/236	1.31	160	2.05E-01
Uranium-238	50	710	1.76E+00
Total Dose			2

* SALs from LANL (2015, 600929).

Table H-4.2-6~~5~~5
Residential Carcinogenic Screening Evaluation for SWMU 15-008(b)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	Cancer Risk
Arsenic	4.25	2.01	4.73E-06
Chromium (Total)	13.6	96.6	1.41E-06
Aroclor-1242	0.282	2.43	1.16E-06
Aroclor-1260	0.0105	2.43	4.32E-08
Aroclor-1268	0.0205	2.43 ^b	8.44E-08
RDX	0.475	60.4	7.86E-08
Total Excess Cancer Risk			8E-06

^a SSLs from NMED (2015, 600915).

^b Aroclor-1260 used as a surrogate based on structural similarity.

Table H-4.2-6~~7~~6
Residential Noncarcinogenic Screening Evaluation for SWMU 15-008(b)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Antimony	5.63	31.3	1.80E-01
Barium	73.2	15,600	4.69E-03
Beryllium	4.46	156	2.86E-02
Cadmium	0.394	70.5	5.59E-03
Copper	1410	3130	4.50E-01
Iron	10,500	54,800	1.92E-01
Lead	4400	400	1.10E+01
Manganese	266	10,500	2.53E-02
Nickel	6.58	1560	4.22E-03
Perchlorate	0.0011	54.8	2.01E-05
Selenium	0.696	391	1.78E-03
Silver	0.51	391	1.30E-03
Uranium	90.4	234	3.86E-01
Vanadium	13.3	394	3.38E-02
Zinc	457	23,500	1.94E-02
Aroclor-1254	0.0168	1.14	1.47E-02
HMX	1.98	3850	5.14E-04
TATB	1.43	2200 ^{b, c}	6.50E-04
Trinitrotoluene[2,4,6-]	0.205	36	5.69E-03
HI			12

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Trinitrobenzene[1,3,5-] used as a surrogate based on structural similarity.

Table H-4.2-687
Residential Radionuclide Screening Evaluation for SWMU 15-008(b)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.00575	83	1.73E-03
Cesium-137	0.161	12	3.35E-01
Plutonium-239/240	0.0254	79	8.04E-03
Tritium	10.6	1700	1.56E-01
Uranium-234	6.53	290	5.63E-01
Uranium-235/236	0.795	42	4.73E-01
Uranium-238	38.4	150	6.40E+00
Total Dose			8

* SALs from LANL (2015, 600929).

Table H-4.2-698
Industrial Noncarcinogenic Screening Evaluation for AOC 15-008(g)

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	3.77	519	7.26E-03
Cobalt	14	350	4.00E-02
Copper	41.3	51,900	7.96E-04
Lead	370	800	4.63E-01
Uranium	3.8	3880	9.79E-04
TATB	20.8	32,000 ^{b,c}	6.50E-04
HI			0.5

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Trinitrobenzene[1,3,5-] used as a surrogate based on structural similarity.

Table H-4.2-7069
Industrial Radionuclide Screening Evaluation for AOC 15-008(g)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Tritium	0.0162	2,400,000	1.69E-07
Uranium-238	4.14	710	1.46E-01
Total Dose			0.1

* SALs from LANL (2015, 600929).

Table H-4.2-710
Residential Noncarcinogenic Screening Evaluation for AOC 15-008(g)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Antimony	3.77	31.3	1.20E-01
Cobalt	9.43	23	4.10E-01
Copper	25.7	3130	8.21E-03
Lead	309	400	7.73E-01
Selenium	1.28 (U)	391	3.27E-03
Uranium	4.95	234	2.12E-02
TATB	16.5	2200 ^{b,c}	7.50E-03
HI			1

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Trinitrobenzene[1,3,5-] used as a surrogate based on structural similarity.

Table H-4.2-721
Residential Radionuclide Screening Evaluation for AOC 15-008(g)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Tritium	0.0374	1700	5.50E-04
Uranium-238	2.8	150	4.67E-01
Total Dose			0.5

* SALs from LANL (2015, 600929).

Table H-4.2-732
Industrial Carcinogenic Screening Evaluation for SWMU 15-009(b)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Chromium (Total)	14	505	2.77E-07
Total Excess Cancer Risk			3E-07

* SSLs from NMED (2015, 600915).

Table H-4.2-743
Industrial Noncarcinogenic Screening Evaluation for SWMU 15-009(b)

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	1.44 (UJ)	519	2.77E-03
Barium	134	255,000	5.25E-04
Cadmium	0.757 (U)	1110	6.82E-04
Copper	17.8	51,900	3.43E-04
Cyanide (Total)	1.22	63.3	1.93E-02
Lead	28.2	800	3.53E-02
<u>Nitrate</u>	<u>2.76</u>	<u>2,080,000</u>	<u>1.33E-06</u>
Selenium	1.59 (U)	6490	2.45E-04
Uranium	615	3880	1.59E-01
Acetone	0.0141	960,000	1.47E-08
Isopropyltoluene[4-]	0.0167	14,200 ^b	1.18E-06
Toluene	0.00112	61,300	1.83E-08
HI			0.2

^a SSLs from NMED (2015, 600915).

^b Isopropylbenzene used as a surrogate based on structural similarity.

Table H-4.2-754
Industrial Radionuclide Screening Evaluation for SWMU 15-009(b)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Cesium-137	2.54	41	1.55E+00
Plutonium-239/240	0.134	1200	2.79E-03
Tritium	0.101	2,400,000	1.05E-06
Uranium-234	303	3100	2.44E+00
Uranium-235/236	20.3	160	3.17E+00
Uranium-238	311	710	1.10E+01
Total Dose			18

* SALs from LANL (2015, 600929).

Table H-4.2-765
Residential Carcinogenic Screening Evaluation for SWMU 15-009(b)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	10.5	96.6	1.09E-06
Aroclor-1242	0.0272	2.43	1.12E-07
Aroclor-1260	0.0131	2.43	5.39E-08
Total Excess Cancer Risk			1E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-776
Residential Noncarcinogenic Screening Evaluation for SWMU 15-009(b)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Antimony	1.44 (UJ)	31.3	4.60E-02
Barium	80.8	15,600	5.18E-03
Cadmium	0.257	70.5	3.65E-03
Copper	8.97	3130	2.87E-03
Cyanide (Total)	1.22	11.2	1.09E-01
Lead	15.8	400	3.95E-02
<u>Nitrate</u>	<u>2.76</u>	<u>125,000</u>	<u>2.21E-05</u>
Perchlorate	0.00247	54.8	4.51E-05
Selenium	1.59 (U)	391	4.07E-03
Uranium	305	234	1.30E+00
Zinc	60.7	23,500	2.58E-03
Acetone	0.131	66,300	1.98E-06
Aroclor-1254	0.0312	1.14	2.74E-02
Butanone[2-]	0.0024	37,400	6.42E-08
Isopropyltoluene[4-]	0.0065	2360 ^b	2.75E-06
Methylene chloride	0.0024	409	5.87E-06
Toluene	0.0102	5230	1.95E-06
Trimethylbenzene[1,2,4-]	0.000651	58 ^c	1.12E-05
Xylene[1,2-]	0.000574	805	7.13E-07
Xylene[1,3-]+1,4-Xylene	0.000702	871 ^d	8.06E-07
HI			2

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b Isopropylbenzene used as a surrogate based on structural similarity.

^c EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^d Xylenes used as a surrogate based on structural similarity.

Table H-4.2-787
Residential Radionuclide Screening Evaluation for SWMU 15-009(b)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Cesium-137	0.831	12	1.73E+00
Plutonium-239/240	0.134	79	4.24E-02
Tritium	0.151	1700	2.22E-03
Uranium-234	158	290	1.36E+01
Uranium-235/236	6.06	42	3.61E+00
Uranium-238	163	150	2.72E+01
Total Dose			46

* SALs from LANL (2015, 600929).

Table H-4.2-798
Industrial Carcinogenic Screening Evaluation for SWMU 15-009(c)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Chromium (Total)	10.9	505	2.16E-07
Bis(2-ethylhexyl)phthalate	0.105	1830	5.74E-10
Total Excess Cancer Risk			2E-07

* SSLs from NMED (2015, 600915).

Table H-4.2-8079
Industrial Noncarcinogenic Screening Evaluation for SWMU 15-009(c)

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	11 (U)	519	2.12E-02
Perchlorate	0.000642	908	7.07E-07
Selenium	1.3 (U)	6490	2.00E-04
Silver	0.272	6490	4.19E-05
Uranium	4.18	3880	1.08E-03
Acetone	0.0527	960,000	5.49E-08
Isopropyltoluene[4-]	0.00428	14200 ^b	3.01E-07
Toluene	0.0122	61,300	1.99E-07
Trimethylbenzene[1,2,4-]	0.00049	240 ^c	2.04E-06
Xylene[1,3-]+1,4-Xylene	0.000572	4280 ^d	1.34E-07
HI			0.02

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b Isopropylbenzene used as a surrogate based on structural similarity.

^c EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^d Xylenes used as a surrogate based on structural similarity.

Table H-4.2-810
Industrial Radionuclide Screening Evaluation for SWMU 15-009(c)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Tritium	0.0504	2,400,000	5.25E-07
Uranium-234	1.53	3100	1.23E-02
Uranium-238	2.39	710	8.42E-02
Total Dose			0.1

* SALs from LANL (2015, 600929).

Table H-4.2-8~~21~~²⁴
Residential Carcinogenic Screening Evaluation for SWMU 15-009(c)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	9.73	96.6	1.01E-06
Benzo(a)anthracene	0.0626	1.53	4.09E-07
Benzo(a)pyrene	0.0384	0.153	2.51E-06
Benzo(b)fluoranthene	0.072	1.53	4.71E-07
Bis(2-ethylhexyl)phthalate	0.105	380	2.76E-09
Chrysene	0.0527	153	3.44E-09
Indeno(1,2,3-cd)pyrene	0.0208	1.53	1.36E-07
Total Excess Cancer Risk			5E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-8~~32~~³²
Residential Noncarcinogenic Screening Evaluation for SWMU 15-009(c)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Antimony	0.602	31.3	1.92E-02
Cyanide (Total)	1.69	11.2	1.51E-01
<u>Nitrate</u>	<u>1.26</u>	<u>125,000</u>	<u>1.01E-05</u>
Perchlorate	0.00105	54.8	1.92E-05
Selenium	1.3 (U)	391	3.32E-03
Silver	0.202	391	5.17E-04
Uranium	3.43	234	1.47E-02
Acetone	0.00765	66,300	1.15E-07
Anthracene	0.0128	17,400	7.36E-07
Benzo(g,h,i)perylene	0.0226	1740 ^b	1.30E-05
Fluoranthene	0.127	2320	5.47E-05
Isopropyltoluene[4-]	0.00101	2360 ^c	4.28E-07
Phenanthrene	0.0812	1740	4.67E-05
Pyrene	0.0783	1740	4.50E-05
Toluene	0.00143	5230	2.73E-07
Trimethylbenzene[1,2,4-]	0.00049	58 ^d	8.45E-06
Xylene[1,3-]+1,4-Xylene	0.000572	871 ^e	6.57E-07
HI			0.2

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b Pyrene used as a surrogate based on structural similarity.

^c Isopropylbenzene used as a surrogate based on structural similarity.

^d EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^e Xylenes used as a surrogate based on structural similarity.

Table H-4.2-843
Residential Radionuclide Screening Evaluation for SWMU 15-009(c)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Tritium	0.0399	1700	5.87E-04
Uranium-234	2.93	290	2.53E-01
Uranium-235/236	0.121	42	7.20E-02
Uranium-238	3.93	150	6.55E-01
Total Dose			1

* SALs from LANL (2015, 600929).

Table H-4.2-854
Residential Carcinogenic Screening Evaluation for SWMU 15-009(h)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Ethylbenzene	0.00117	75.1	1.56E-10
Total Excess Cancer Risk			2E-10

* SSLs from NMED (2015, 600915).

Table H-4.2-865
Residential Noncarcinogenic Screening Evaluation for SWMU 15-009(h)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Antimony	1.11 (UJ)	31.3	3.55E-02
Barium	124	15,600	7.95E-03
Nickel	7.91	1560	5.07E-03
<u>Nitrate</u>	<u>5.22</u>	<u>125,000</u>	<u>4.18E-05</u>
Perchlorate	0.0012	54.8	2.19E-05
Selenium	1.23 (UJ)	391	3.15E-03
Uranium	4.03	234	1.72E-02
Acetone	0.00919	66,300	1.39E-07
Hexanone[2-]	0.00201	200 ^b	1.01E-05
HI			0.07

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-876
Residential Radionuclide Screening Evaluation for SWMU 15-009(h)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Plutonium-239/240	0.0286	79	9.05E-03
Tritium	9.09	1700	1.34E-01
Uranium-234	1.58	290	1.36E-01
Uranium-235/236	0.13	42	7.74E-02
Uranium-238	2.14	150	3.57E-01
Total Dose			0.7

* SALs from LANL (2015, 600929).

Table H-4.2-887
Industrial Carcinogenic Screening Evaluation for SWMU 15-010(b)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Chromium (Total)	9.19	505	1.82E-07
Aroclor-1254	0.0046	11.5	4.00E-09
Aroclor-1260	0.0025	11.5	2.17E-09
Bis(2-ethylhexyl)phthalate	0.17	1830	9.29E-10
Total Excess Cancer Risk			2E-07

* SSLs from NMED (2015, 600915).

Table H-4.2-898
Industrial Noncarcinogenic Screening Evaluation for SWMU 15-010(b)

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	1.35 (U)	519	2.60E-03
Cadmium	0.673 (U)	1110	6.06E-04
Iron	11,900	908,000	1.31E-02
Mercury	0.422	389	1.08E-03
<u>Nitrate</u>	<u>1.65</u>	<u>2,080,000</u>	<u>7.93E-07</u>
Perchlorate	0.000598	908	6.59E-07
Selenium	0.72	6490	1.11E-04
Uranium	5.94	3880	1.53E-03
Acetone	0.0133	960,000	1.39E-08
Di-n-butylphthalate	3.64	91,600	3.97E-05
Dichloroethene[1,1-]	0.00037	2260	1.64E-07
Methylene chloride	0.00371	5130	7.23E-07
Tetrachloroethene	0.000584	629	9.28E-07
Toluene	0.00723	61,300	1.18E-07
Xylene[1,3-]+1,4-Xylene	0.0004	4280 ^b	9.35E-08
HI			0.02

^a SSLs from NMED (2015, 600915).

^b Xylenes used as a surrogate based on structural similarity.

Table H-4.2-9089
Industrial Radionuclide Screening Evaluation for SWMU 15-010(b)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Cesium-137	1.03	41	6.28E-01
Plutonium-239/240	0.121	1200	2.52E-03
Uranium-238	3.78	710	1.33E-01
Total Dose			0.8

* SALs from LANL (2015, 600929).

Table H-4.2-910
Residential Carcinogenic Screening Evaluation for SWMU 15-010(b)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	10	96.6	1.04E-06
Aroclor-1260	0.0025	2.43	1.03E-08
Bis(2-ethylhexyl)phthalate	0.17	380	4.47E-09
Total Excess Cancer Risk			1E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-924
Residential Noncarcinogenic Screening Evaluation for SWMU 15-010(b)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Antimony	1.35 (U)	31.3	4.31E-02
Cadmium	0.673 (U)	70.5	9.55E-03
Iron	13,100	54,800	2.39E-01
Mercury	0.292	23.5	1.24E-02
<u>Nitrate</u>	<u>1.65</u>	<u>125,000</u>	<u>1.32E-05</u>
Perchlorate	0.000762	54.8	1.39E-05
Selenium	0.72	391	1.84E-03
Uranium	4.21	234	1.80E-02
Vanadium	15.7	394	3.98E-02
Acetone	0.121	66,300	1.83E-06
Aroclor-1254	0.0065	1.14	5.70E-03
Di-n-butylphthalate	0.86	6160	1.40E-04
Dichloroethene[1,1-]	0.00037	440	8.41E-07
Methylene chloride	0.00414	409	1.01E-05
Styrene	0.000555	7260	7.64E-08
Tetrachloroethene	0.000584	111	5.26E-06
Toluene	0.00421	5230	8.05E-07
Xylene[1,3-]+1,4-Xylene	0.000732	871 ^b	8.40E-07
HI			0.4

^a SSLs from NMED (2015, 600915).

^b Xylenes used as a surrogate based on structural similarity.

Table H-4.2-9~~32~~³²
Residential Radionuclide Screening Evaluation for SWMU 15-010(b)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Cesium-137	0.626	12	1.30E+00
Plutonium-239/240	0.0281	79	8.89E-03
Uranium-238	2.68	150	4.47E-01
Total Dose			2

* SALs from LANL (2015, 600929).

Table H-4.2-9~~43~~⁴³
Industrial Carcinogenic Screening Evaluation for AOC 15-014(h)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Chromium (Total)	15.1	505	2.99E-07
Aroclor-1254	0.704	11.5	6.12E-07
Aroclor-1260	0.258	11.5	2.24E-07
Bis(2-ethylhexyl)phthalate	0.343	1830	1.87E-09
Ethylbenzene	0.00076	368	2.07E-11
Total Excess Cancer Risk			1E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-9~~54~~⁵⁴
Industrial Noncarcinogenic Screening Evaluation for AOC 15-014(h)

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	1.57 (U)	519	3.03E-03
Barium	152	255,000	5.96E-04
Cadmium	0.39	1110	3.51E-04
Cobalt	4.93	350 ^b	1.41E-02
Copper	17.6	51,900	3.39E-04
Iron	12,200	908,000	1.34E-02
Lead	22.9	800	2.86E-02
Mercury	0.521	389	1.34E-03
Nickel	8.43	25,700	3.28E-04
Perchlorate	0.00118	908	1.30E-06
Selenium	1.5 (U)	6490	2.31E-04
Silver	6.07	6490	9.35E-04
Uranium	5.72	3880	1.47E-03

Table H-4.2-954 (continued)

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Vanadium	23.8	6530	3.64E-03
Acetone	0.0295	960,000	3.07E-08
Benzoic acid	1.01	3,300,000 ^b	3.06E-07
Di-n-butylphthalate	0.129	91,600	1.41E-06
Di-n-octylphthalate	1.43	8200 ^b	1.74E-04
Dichloroethene[1,1-]	0.000772	2260	3.42E-07
Isopropyltoluene[4-]	0.00604	14,200 ^c	4.25E-07
Methylene chloride	0.00508	5130	9.90E-07
Tetrachloroethene	0.000948	629	1.51E-06
Toluene	0.000802	61,300	1.31E-08
Xylene[1,3-]+1,4-Xylene	0.00108	4280 ^d	2.52E-07
HI			0.07

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Isopropylbenzene used as a surrogate based on structural similarity.

^d Xylenes used as a surrogate based on structural similarity.

Table H-4.2-965
Industrial Radionuclide Screening Evaluation for AOC 15-014(h)

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Cesium-137	0.549	41	3.35E-01
Plutonium-238	0.0599	1300	1.15E-03
Plutonium-239/240	0.0243	1200	5.06E-04
Tritium	0.0901	2,400,000	9.39E-07
Uranium-234	2.24	3100	1.81E-02
Uranium-238	2.86	710	1.01E-01
Total Dose			0.5

* SALs from LANL (2015, 600929).

Table H-4.2-976
Residential Carcinogenic Screening Evaluation for AOC 15-014(h)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	18.2	96.6	1.88E-06
Aroclor-1260	0.258	2.43	1.06E-06
Bis(2-ethylhexyl)phthalate	0.343	380	9.03E-09
Chloroform	0.000687	5.9	1.16E-09
Ethylbenzene	0.00076	75.1	1.01E-10
Total Excess Cancer Risk			3E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-987
Residential Noncarcinogenic Screening Evaluation for AOC 15-014(h)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Aluminum	9740	78,000	1.25E-01
Antimony	1.57 (U)	31.3	5.02E-02
Barium	140	15,600	8.97E-03
Cadmium	0.344	70.5	4.88E-03
Cobalt	4.99	23 ^b	2.17E-01
Copper	14.7	3130	4.70E-03
Iron	13100	54,800	2.39E-01
Lead	19.3	400	4.83E-02
Mercury	0.322	23.5	1.37E-02
Nickel	8.25	1560	5.29E-03
Perchlorate	0.00113	54.8	2.06E-05
Selenium	1.5 (U)	391	3.84E-03
Silver	3.57	391	9.13E-03
Uranium	4.41	234	1.88E-02
Vanadium	23.9	394	6.07E-02
Acetone	0.0059	66,300	8.90E-08
Aroclor-1254	0.704	1.14	6.18E-01
Benzoic acid	1.01	250,000 ^b	4.04E-06
Di-n-butylphthalate	0.129	6160	2.09E-05
Di-n-octylphthalate	1.43	630 ^b	2.27E-03
Dichloroethene[1,1-]	0.000772	440	1.75E-06
Isopropyltoluene[4-]	0.00538	2360 ^c	2.28E-06
Methylene chloride	0.00477	409	1.17E-05

Table H-4.2-98 (continued)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Tetrachloroethene	0.000721	111	6.50E-06
Toluene	0.000771	5230	1.47E-07
Trimethylbenzene[1,2,4-]	0.000383	58 ^b	6.60E-06
Xylene[1,2-]	0.000371	805	4.61E-07
Xylene[1,3-]+1,4-Xylene	0.000748	871 ^d	8.59E-07
HI			1

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Isopropylbenzene used as a surrogate based on structural similarity.

^d Xylenes used as a surrogate based on structural similarity.

Table H-4.2-998
Residential Radionuclide Screening Evaluation for AOC 15-014(h)

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Cesium-137	0.291	12	6.06E-01
Plutonium-238	0.0599	84	1.78E-02
Plutonium-239/240	0.00605	79	1.91E-03
Tritium	0.0882	1700	1.30E-03
Uranium-234	1.68	290	1.45E-01
Uranium-238	2.1	150	3.50E-01
Total Dose			1

* SALs from LANL (2015, 600929).

Table H-4.2-10099
Residential Carcinogenic Screening Evaluation for SWMU 36-002

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Ethylbenzene	0.000482	75.1	6.42E-11
Total Excess Cancer Risk			6E-11

* SSLs from NMED (2015, 600915).

Table H-4.2-10~~19~~
Residential Noncarcinogenic Screening Evaluation for SWMU 36-002

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Aluminum	13800	78,000	1.77E-01
Antimony	1.07 (UJ)	31.3	3.42E-02
Barium	84.6	15,600	5.42E-03
Beryllium	2.69	156	1.72E-02
Cobalt	4.2	23 ^b	1.83E-01
Copper	9.92	3130	3.17E-03
Nickel	10.6	1560	6.79E-03
Perchlorate	0.00377	54.8	6.88E-05
Selenium	1.02 (UJ)	391	2.61E-03
HI			0.4

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

Table H-4.2-10~~24~~
Residential Radionuclide Screening Evaluation for SWMU 36-002

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Plutonium-238	0.033	84	9.82E-03
Tritium	0.0101	1700	1.49E-04
Total Dose			0.01

* SALs from LANL (2015, 600929).

Table H-4.2-10~~32~~
Industrial Noncarcinogenic Screening Evaluation for SWMU 36-003(a)

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	HQ
Antimony	1.11 (U)	519	2.14E-03
<u>Nitrate</u>	<u>1.92</u>	<u>2,080,000</u>	<u>9.23E-07</u>
HI			0.002

* SSLs from NMED (2015, 600915).

Table H-4.2-10~~43~~⁴³
Residential Carcinogenic Screening Evaluation for SWMU 36-003(a)

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
RDX	0.184	60.4	3.05E-08
Total Excess Cancer Risk			3E-08

* SSLs from NMED (2015, 600915).

Table H-4.2-10~~54~~⁵⁴
Residential Noncarcinogenic Screening Evaluation for SWMU 36-003(a)

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Antimony	1.29 (UJ)	31.3	4.12E-02
Beryllium	2.23	156	1.43E-02
Cobalt	2.89	23 ^b	1.26E-01
Nickel	15.9	1560	1.02E-02
<u>Nitrate</u>	<u>1.71</u>	<u>125,000</u>	<u>1.37E-05</u>
Perchlorate	0.00101	54.8	1.84E-05
Selenium	1.28 (U)	391	3.27E-03
Isopropyltoluene[4-]	0.00811	2360 ^c	3.44E-06
Trimethylbenzene[1,2,4-]	0.000343	58 ^b	5.91E-06
HI			0.2

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Isopropylbenzene used as a surrogate based on structural similarity.

Table H-4.2-10~~65~~⁶⁵
Industrial Carcinogenic Screening Evaluation for SWMU~~s~~ 36-008 and C-36-003

COPC	EPC (mg/kg)	Industrial SSL* (mg/kg)	Cancer Risk
Chromium (Total)	38.6	505	7.64E-07
Aroclor-1254	0.378	11.5	3.29E-07
Aroclor-1260	0.138	11.5	1.20E-07
Bis(2-ethylhexyl)phthalate	0.436	1830	2.38E-09
Bromodichloromethane	0.00117	30.2	3.87E-10
Chlorodibromomethane	0.000635	67.4	9.42E-11
Chloroform	0.00982	28.7	3.42E-09
Chloromethane	0.000633	201	3.15E-11
RDX	0.106	311	3.41E-09
Total Excess Cancer Risk			1E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-1076
Industrial Noncarcinogenic Screening Evaluation for SWMUs 36-008 and C-36-003

COPC	EPC (mg/kg)	Industrial SSL ^a (mg/kg)	HQ
Antimony	5.62 (U)	519	1.08E-02
Cadmium	0.41	1110	3.69E-04
Copper	567	51,900	1.09E-02
Cyanide (Total)	0.678	63.3	1.07E-02
Lead	41	800	5.13E-02
Mercury	3.09	389	7.94E-03
Nickel	10.1	25,700	3.93E-04
<u>Nitrate</u>	<u>55.7</u>	<u>2,080,000</u>	<u>2.68E-05</u>
Perchlorate	0.0715	908	7.87E-05
Selenium	2.03 (U)	6490	3.13E-04
Silver	44.7	6490	6.89E-03
Uranium	2.44	3880	6.29E-04
Zinc	208	389,000	5.35E-04
Acetone	0.00596	960,000	6.21E-09
Benzoic acid	0.671	3,300,000 ^b	2.03E-07
Di-n-butylphthalate	0.705	91,600	7.70E-06
Dibenzofuran	0.493	1000 ^b	4.93E-04
Dichloroethene[1,1-]	0.00246	2260	1.09E-06
Isopropyltoluene[4-]	0.016	14,200 ^c	1.13E-06
Methylene chloride	0.00419	5130	8.17E-07
Styrene	0.00197	51,300	3.84E-08
TATB	0.331	32,000 ^{b,d}	1.03E-05
Toluene	0.00133	61,300	2.17E-08
Trichloroethene	0.00079	36.5	2.16E-05
Trimethylbenzene[1,2,4-]	0.00499	240 ^b	2.08E-05
Trimethylbenzene[1,3,5-]	0.00279	12,000 ^b	2.33E-07
Xylene[1,2-]	0.000616	3940	1.56E-07
Xylene[1,3-]+1,4-Xylene	0.000764	4280 ^e	1.79E-07
HI			0.1

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Isopropylbenzene used as a surrogate based on structural similarity.

^d Trinitrobenzene[1,3,5-] used as a surrogate based on structural similarity.

^e Xylenes used as a surrogate based on structural similarity.

Table H-4.2-10~~87~~⁸
Industrial Radionuclide Screening Evaluation for SWMU~~s~~ 36-008 and C-36-003

COPC	EPC (pCi/g)	Industrial SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.00385	1000	9.63E-05
Cesium-137	0.833	41	5.08E-01
Plutonium-239/240	0.0355	1200	7.40E-04
Tritium	0.0639	2,400,000	6.66E-07
Uranium-234	1.73	3100	1.40E-02
Uranium-235/236	0.08	160	1.25E-02
Uranium-238	1.93	710	6.80E-02
Total Dose			0.6

* SALs from LANL (2015, 600929).

Table H-4.2-10~~98~~⁸
Residential Carcinogenic Screening Evaluation for SWMU~~s~~ 36-008 and C-36-003

COPC	EPC (mg/kg)	Residential SSL* (mg/kg)	Cancer Risk
Chromium (Total)	30.3	96.6	3.14E-06
Aroclor-1260	0.0725	2.43	2.98E-07
Bis(2-ethylhexyl)phthalate	0.236	380	6.21E-09
Bromodichloromethane	0.00117	6.19	1.89E-09
Butylbenzylphthalate	0.214	2900	7.38E-10
Chlorodibromomethane	0.000635	13.9	4.57E-10
Chloroform	0.00982	5.9	1.66E-08
Chloromethane	0.000633	41.1	1.54E-10
RDX	0.106	60.4	1.75E-08
Total Excess Cancer Risk			3E-06

* SSLs from NMED (2015, 600915).

Table H-4.2-1₁₀₉
Residential Noncarcinogenic Screening Evaluation for SWMUs 36-008 and C-36-003

COPC	EPC (mg/kg)	Residential SSL ^a (mg/kg)	HQ
Aluminum	6080	78,000	7.79E-02
Antimony	5.62 (U)	31.3	1.80E-01
Barium	77.6	15,600	4.97E-03
Beryllium	0.654	156	4.19E-03
Cadmium	0.397	70.5	5.63E-03
Copper	315	3130	1.01E-01
Cyanide (Total)	0.538	11.2	4.80E-02
Lead	29.7	400	7.43E-02
Mercury	2.34	23.5	9.96E-02
Nickel	6.79	1560	4.35E-03
<u>Nitrate</u>	<u>32.7</u>	<u>125,000</u>	<u>2.62E-04</u>
Perchlorate	0.0438	54.8	7.99E-04
Selenium	0.635	391	1.62E-03
Silver	41.7	391	1.07E-01
Uranium	1.89	234	8.08E-03
Vanadium	13.9	394	3.53E-02
Zinc	135	23,500	5.74E-03
Acetone	0.00444	66,300	6.70E-08
Aroclor-1254	0.124	1.14	1.09E-01
Benzoic acid	0.63	250,000 ^b	2.52E-06
Chloronaphthalene[2-]	0.0215	6260	3.43E-06
Chlorotoluene[4-]	0.000496	1600 ^b	3.10E-07
Di-n-butylphthalate	0.448	6160	7.27E-05
Dibenzofuran	0.421	73 ^b	5.77E-03
Dichloroethene[1,1-]	0.00246	440	5.59E-06
Isopropyltoluene[4-]	0.00711	2360 ^c	3.01E-06
Methylene chloride	0.00384	409	9.39E-06
Styrene	0.00197	7260	2.71E-07
TATB	0.331	2200 ^{b,d}	1.50E-04
Toluene	0.00127	5230	2.43E-07
Trichloroethene	0.000729	6.77	1.08E-04
Trimethylbenzene[1,2,4-]	0.000826	58 ^b	1.42E-05
Trimethylbenzene[1,3,5-]	0.00569	780 ^b	7.29E-06
Xylene[1,2-]	0.000616	805	7.65E-07
Xylene[1,3-]+1,4-Xylene	0.000658	871 ^e	7.55E-07
HI			0.9

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>).

^c Isopropylbenzene used as a surrogate based on structural similarity.

^d Trinitrobenzene[1,3,5-] used as a surrogate based on structural similarity.

^e Xylenes used as a surrogate based on structural similarity.

Table H-4.2-11¹⁰
Residential Radionuclide Screening Evaluation for SWMUs 36-008 and C-36-003

COPC	EPC (pCi/g)	Residential SAL* (pCi/g)	Dose (mrem/yr)
Americium-241	0.000591	83	1.78E-04
Cesium-137	0.559	12	1.16E+00
Plutonium-239/240	0.0186	79	5.89E-03
Tritium	0.0125	1700	1.84E-04
Uranium-234	1.55	290	1.34E-01
Uranium-235/236	0.0699	42	4.16E-02
Uranium-238	1.69	150	2.82E-01
Total Dose			2

* SALs from LANL (2015, 600929).

Table H-4.2-112
Industrial Carcinogenic Screening Evaluation for SWMU C-36-003

<u>COPC</u>	<u>EPC (mg/kg)</u>	<u>Industrial SSL* (mg/kg)</u>	<u>Cancer Risk</u>
<u>Chromium (Total)</u>	<u>176</u>	<u>505</u>	<u>3.49E-06</u>
<u>Aroclor-1254</u>	<u>0.392</u>	<u>11.5</u>	<u>3.41E-07</u>
<u>Aroclor-1260</u>	<u>0.617</u>	<u>11.5</u>	<u>5.37E-07</u>
<u>Bromodichloromethane</u>	<u>0.00117</u>	<u>30.2</u>	<u>3.87E-10</u>
<u>Chlorodibromomethane</u>	<u>0.000635</u>	<u>67.4</u>	<u>9.42E-11</u>
<u>Chloroform</u>	<u>0.00982</u>	<u>28.7</u>	<u>3.42E-09</u>
<u>RDX</u>	<u>0.106</u>	<u>311</u>	<u>3.41E-09</u>
Total Excess Cancer Risk			4E-06

*SSLs from NMED (2015, 600915) unless otherwise noted.

Table H-4.2-113
Industrial Noncarcinogenic Screening Evaluation for SWMU C-36-003

<u>COPC</u>	<u>EPC</u> (mg/kg)	<u>Industrial SSL^a</u> (mg/kg)	<u>HQ</u>
<u>Antimony</u>	<u>1.49 (U)</u>	<u>519</u>	<u>2.87E-03</u>
<u>Cadmium</u>	<u>1.36</u>	<u>1110</u>	<u>1.23E-03</u>
<u>Copper</u>	<u>1830</u>	<u>51,900</u>	<u>3.53E-02</u>
<u>Cyanide (Total)</u>	<u>1.47</u>	<u>63.3</u>	<u>2.32E-02</u>
<u>Lead</u>	<u>101</u>	<u>800</u>	<u>1.26E-01</u>
<u>Manganese</u>	<u>597</u>	<u>160,000</u>	<u>3.74E-03</u>
<u>Mercury</u>	<u>0.403</u>	<u>389</u>	<u>1.04E-03</u>
<u>Nickel</u>	<u>37.2</u>	<u>25,700</u>	<u>1.45E-03</u>
<u>Nitrate</u>	<u>370</u>	<u>2,080,000</u>	<u>1.78E-04</u>
<u>Perchlorate</u>	<u>0.474</u>	<u>908</u>	<u>5.22E-04</u>
<u>Selenium</u>	<u>1.56 (U)</u>	<u>6490</u>	<u>2.40E-04</u>
<u>Silver</u>	<u>177</u>	<u>6490</u>	<u>2.73E-02</u>
<u>Uranium</u>	<u>6.06</u>	<u>3880</u>	<u>1.56E-03</u>
<u>Zinc</u>	<u>904</u>	<u>389,000</u>	<u>2.32E-03</u>
<u>Benzoic Acid</u>	<u>0.355</u>	<u>3,300,000^b</u>	<u>1.08E-07</u>
<u>Di-n-butylphthalate</u>	<u>8.07</u>	<u>91,600</u>	<u>8.81E-05</u>
<u>Isopropyltoluene[4-]</u>	<u>0.00777</u>	<u>14,200^c</u>	<u>5.47E-07</u>
<u>Methylene Chloride</u>	<u>0.00378</u>	<u>5130</u>	<u>7.37E-07</u>
<u>Toluene</u>	<u>0.0012</u>	<u>61,300</u>	<u>1.96E-08</u>
<u>Trimethylbenzene[1,2,4-]</u>	<u>0.001</u>	<u>240^b</u>	<u>4.17E-06</u>
<u>Xylene[1,3-]+Xylene[1,4-]</u>	<u>0.000822</u>	<u>4280^d</u>	<u>1.92E-07</u>
<u>HI</u>			<u>0.2</u>

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

^c Isopropylbenzene used as a surrogate based on structural similarity.

^d Xylenes used as a surrogate based on structural similarity.

Table H-4.2-114
Industrial Radionuclide Screening Evaluation for SWMU C-36-003

<u>COPC</u>	<u>EPC</u> (pCi/g)	<u>Industrial SAL*</u> (pCi/g)	<u>Dose</u> (mrem/yr)
<u>Cesium-137</u>	<u>1.21</u>	<u>41</u>	<u>7.38E-01</u>
<u>Tritium</u>	<u>0.0914</u>	<u>2,400,000</u>	<u>9.52E-07</u>
<u>Uranium-234</u>	<u>5.05</u>	<u>3100</u>	<u>4.07E-02</u>
<u>Uranium-235/236</u>	<u>0.178</u>	<u>160</u>	<u>2.78E-02</u>
<u>Uranium-238</u>	<u>3.29</u>	<u>710</u>	<u>1.16E-01</u>
<u>Total Dose</u>			<u>0.9</u>

*SALs from LANL (2015, 600929) unless otherwise noted.

Table H-4.2-115
Residential Carcinogenic Screening Evaluation for SWMU C-36-003

<u>COPC</u>	<u>EPC (mg/kg)</u>	<u>Residential SSL* (mg/kg)</u>	<u>Cancer Risk</u>
<u>Chromium (Total)</u>	<u>90.4</u>	<u>96.6</u>	<u>9.36E-06</u>
<u>Aroclor-1260</u>	<u>0.132</u>	<u>2.43</u>	<u>5.43E-07</u>
<u>Bromodichloromethane</u>	<u>0.00117</u>	<u>6.19</u>	<u>1.89E-09</u>
<u>Chlorodibromomethane</u>	<u>0.000635</u>	<u>13.9</u>	<u>4.57E-10</u>
<u>Chloroform</u>	<u>0.00982</u>	<u>5.9</u>	<u>1.66E-08</u>
<u>RDX</u>	<u>0.106</u>	<u>60.4</u>	<u>1.75E-08</u>
<u>Total Excess Cancer Risk</u>			<u>1E-05</u>

*SSLs from NMED (2015, 600915) unless otherwise noted.

Table H-4.2-116
Residential Noncarcinogenic Screening Evaluation for SWMU C-36-003

<u>COPC</u>	<u>EPC (mg/kg)</u>	<u>Residential SSL^a (mg/kg)</u>	<u>HQ</u>
<u>Antimony</u>	<u>1.49 (U)</u>	<u>31.3</u>	<u>4.76E-02</u>
<u>Cadmium</u>	<u>1.09</u>	<u>70.5</u>	<u>1.55E-02</u>
<u>Copper</u>	<u>936</u>	<u>3130</u>	<u>2.99E-01</u>
<u>Cyanide (Total)</u>	<u>1.06</u>	<u>11.2</u>	<u>9.46E-02</u>
<u>Lead</u>	<u>58.5</u>	<u>400</u>	<u>1.46E-01</u>
<u>Manganese</u>	<u>452</u>	<u>10,500</u>	<u>4.30E-02</u>
<u>Mercury</u>	<u>0.342</u>	<u>23.5</u>	<u>1.46E-02</u>
<u>Nickel</u>	<u>20.7</u>	<u>1560</u>	<u>1.33E-02</u>
<u>Nitrate</u>	<u>197</u>	<u>125,000</u>	<u>1.58E-03</u>
<u>Perchlorate</u>	<u>0.256</u>	<u>54.8</u>	<u>4.67E-03</u>
<u>Selenium</u>	<u>0.635</u>	<u>391</u>	<u>1.62E-03</u>
<u>Silver</u>	<u>161</u>	<u>391</u>	<u>4.12E-01</u>
<u>Uranium</u>	<u>4.43</u>	<u>234</u>	<u>1.89E-02</u>
<u>Zinc</u>	<u>490</u>	<u>23,500</u>	<u>2.09E-02</u>
<u>Aroclor-1254</u>	<u>0.209</u>	<u>1.14</u>	<u>1.83E-01</u>
<u>Benzoic Acid</u>	<u>0.355</u>	<u>250,000^b</u>	<u>1.42E-06</u>
<u>Di-n-butylphthalate</u>	<u>1.84</u>	<u>6160</u>	<u>2.99E-04</u>
<u>Isopropyltoluene[4-]</u>	<u>0.00516</u>	<u>2360^c</u>	<u>2.19E-06</u>
<u>Methylene Chloride</u>	<u>0.00378</u>	<u>409</u>	<u>9.24E-06</u>
<u>Toluene</u>	<u>0.000815</u>	<u>5230</u>	<u>1.56E-07</u>
<u>Trimethylbenzene[1,2,4-]</u>	<u>0.001</u>	<u>58^b</u>	<u>1.72E-05</u>
<u>Xylene[1,3-]+Xylene[1,4-]</u>	<u>0.000822</u>	<u>871^d</u>	<u>9.44E-07</u>
<u>HI</u>			<u>1</u>

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

^c Isopropylbenzene used as a surrogate based on structural similarity.

^d Xylenes used as a surrogate based on structural similarity.

Table H-4.2-117
Residential Radionuclide Screening Evaluation for SWMU C-36-003

<u>COPC</u>	<u>EPC</u> (pCi/g)	<u>Residential SAL*</u> (pCi/g)	<u>Dose</u> (mrem/yr)
<u>Cesium-137</u>	<u>0.711</u>	<u>12</u>	<u>1.48E+00</u>
<u>Tritium</u>	<u>0.0219</u>	<u>1700</u>	<u>3.22E-04</u>
<u>Uranium-234</u>	<u>3.23</u>	<u>290</u>	<u>2.78E-01</u>
<u>Uranium-235/236</u>	<u>0.144</u>	<u>42</u>	<u>8.57E-02</u>
<u>Uranium-238</u>	<u>2.63</u>	<u>150</u>	<u>4.38E-01</u>
Total Dose			<u>2</u>

*SALs from LANL (2015, 600929) unless otherwise noted.

Table H-4.2-118
Construction Worker Noncarcinogenic Screening Evaluation for SWMU C-36-003

<u>COPC</u>	<u>EPC</u> (mg/kg)	<u>Construction Worker</u> <u>SSL^a (mg/kg)</u>	<u>HQ</u>
<u>Antimony</u>	<u>1.49 (U)</u>	<u>142</u>	<u>1.05E-02</u>
<u>Cadmium</u>	<u>1.09</u>	<u>72.1</u>	<u>1.51E-02</u>
<u>Chromium (Total)</u>	<u>90.4</u>	<u>134</u>	<u>6.75E-01</u>
<u>Copper</u>	<u>936</u>	<u>14,200</u>	<u>6.59E-02</u>
<u>Cyanide (Total)</u>	<u>1.06</u>	<u>12.1</u>	<u>8.76E-02</u>
<u>Lead</u>	<u>58.5</u>	<u>800</u>	<u>7.31E-02</u>
<u>Manganese</u>	<u>452</u>	<u>464</u>	<u>9.74E-01</u>
<u>Mercury</u>	<u>0.342</u>	<u>77.1</u>	<u>4.44E-03</u>
<u>Nickel</u>	<u>20.7</u>	<u>753</u>	<u>2.75E-02</u>
<u>Nitrate</u>	<u>197</u>	<u>566,000</u>	<u>3.48E-04</u>
<u>Perchlorate</u>	<u>0.256</u>	<u>248</u>	<u>1.03E-03</u>
<u>Selenium</u>	<u>0.635</u>	<u>1750</u>	<u>3.63E-04</u>
<u>Silver</u>	<u>161</u>	<u>1770</u>	<u>9.10E-02</u>
<u>Uranium</u>	<u>4.43</u>	<u>277</u>	<u>1.60E-02</u>
<u>Zinc</u>	<u>490</u>	<u>106,000</u>	<u>4.62E-03</u>
<u>Aroclor-1254</u>	<u>0.209</u>	<u>4.91</u>	<u>4.26E-02</u>
<u>Benzoic Acid</u>	<u>0.355</u>	<u>1,080,000^b</u>	<u>3.29E-07</u>
<u>Di-n-butylphthalate</u>	<u>1.84</u>	<u>26,900</u>	<u>6.84E-05</u>
<u>Isopropyltoluene[4-]</u>	<u>0.00516</u>	<u>2740^c</u>	<u>1.88E-06</u>
<u>Methylene Chloride</u>	<u>0.00378</u>	<u>1210</u>	<u>3.12E-06</u>
<u>RDX</u>	<u>0.106</u>	<u>1010</u>	<u>1.04E-04</u>
<u>Toluene</u>	<u>0.000815</u>	<u>14,000</u>	<u>5.82E-08</u>
<u>Trimethylbenzene[1,2,4-]</u>	<u>0.001</u>	<u>245^b</u>	<u>4.08E-06</u>
<u>Xylenes[1,3-]+Xylenes[1,4-]</u>	<u>0.000822</u>	<u>798^d</u>	<u>1.03E-06</u>
<u>HI</u>			<u>21</u>

^a SSLs from NMED (2015, 600915) unless otherwise noted.

^b Construction worker SSL calculated using toxicity value from EPA regional screening level (<http://www.epa.gov/risk/risk-based-screening-table-generic-tables>) and equation and parameters from NMED (2015, 600915).

^c Isopropylbenzene used as a surrogate based on structural similarity.

^d Xylenes used as a surrogate based on structural similarity.

Table H-4.3-1
Residential Noncarcinogenic Screening of Vapor Intrusion for AOC 15-005(c)

COPC	EPC ^a (mg/kg)	Vapor Intrusion Risk-Based Concentration ^b (mg/kg)	HQ
Acetone	0.0188	2240	8.39E-06
Isopropyltoluene[4-]	0.00151	34.1 ^c	3.27E-03
HI			0.003

^a Maximum detected concentration.

^b Vapor intrusion risk values generated by the Johnson and Ettinger advanced soil model.

^c Isopropylbenzene used as a surrogate based on structural similarity.

Table H-4.3-2
Residential Noncarcinogenic Screening of Vapor Intrusion for SWMU 15-009(b)

COPC	EPC ^a (mg/kg)	Vapor Intrusion Risk-Based Concentration ^b (mg/kg)	HQ
Acetone	0.131	1060	1.24E-04
Isopropyltoluene[4-]	0.0167	8.46 ^c	1.97E-03
Toluene	0.0102	94	1.09E-04
HI			0.002

^a Maximum detected concentration.

^b Vapor intrusion risk values generated by the Johnson and Ettinger advanced soil model.

^c Isopropylbenzene used as a surrogate based on structural similarity.

Table H-4.3-3
Residential Noncarcinogenic Screening of Vapor Intrusion for SWMU 15-009(c)

COPC	EPC ^a (mg/kg)	Vapor Intrusion Risk-Based Concentration ^b (mg/kg)	HQ
Acetone	0.0527	4240	1.24E-05
Isopropyltoluene[4-]	0.00128	15.1 ^c	8.48E-05
Toluene	0.0122	685	1.78E-05
HI			0.0001

^a Maximum detected concentration.

^b Vapor intrusion risk values generated by the Johnson and Ettinger advanced soil model.

^c Isopropylbenzene used as a surrogate based on structural similarity.

Table H-4.3-4
Residential Noncarcinogenic Screening of Vapor Intrusion for SWMU 15-010(b)

COPC	EPC ^a (mg/kg)	Vapor Intrusion Risk-Based Concentration ^b (mg/kg)	HQ
Acetone	0.689	5320	1.30E-04
Toluene	0.0185	859	2.15E-05
HI			0.0002

^a Maximum detected concentration.

^b Vapor intrusion risk values generated by the Johnson and Ettinger advanced soil model.

Table H-4.3-5
Residential Noncarcinogenic Screening of Vapor Intrusion for SWMU 36-003(a)

COPC	EPC ^a (mg/kg)	Vapor Intrusion Risk-Based Concentration ^b (mg/kg)	HQ
Isopropyltoluene[4-]	0.00811	25 ^c	3.24E-04
Trimethylbenzene[1,2,4-]	0.000343	4.46	7.69E-05
HI			0.0004

^a Maximum detected concentration.

^b Vapor intrusion risk values generated by the Johnson and Ettinger advanced soil model.

^c Isopropylbenzene used as a surrogate based on structural similarity.

Table H-4.4-1
Essential Nutrient Screening Assessment

SWMU	Scenario	COPC	Maximum (mg/kg)	SSL (mg/kg)*	Ratio
12-001(a) and 12-001(b)	Residential	Calcium	4640	13,000,000	3.6E-04
12-001(a) and 12-001(b)	Residential	Magnesium	2800	339,000	8.3E-03
12-002	Residential	Calcium	2440	13,000,000	1.9E-04
12-004(a)	Industrial	Calcium	5100	3,2400,000	1.6E-04
12-004(a)	Residential	Calcium	5100	13,000,000	3.9E-04
12-004(a)	Residential	Magnesium	2570	339,000	7.6E-03
12-004(b)	Residential	Calcium	5490	13,000,000	4.2E-04
12-004(b)	Residential	Magnesium	3230	339,000	9.5E-03
15-008(b)	Industrial	Calcium	27,600	32,400,000	8.5E-04
15-008(b)	Residential	Calcium	27,600	13,000,000	2.1E-03
15-008(g)	Residential	Calcium	6080	13,000,000	4.7E-04
36-002	Residential	Calcium	4700	13,000,000	3.6E-04
36-002	Residential	Magnesium	3080	339,000	9.1E-03
36-008 and C-36-008	Industrial	Calcium	11,700	32,400,000	3.6E-04
36-008 and C-36-008	Residential	Calcium	11,700	13,000,000	9.0E-04
C-12-001	Residential	Calcium	4530	13,000,000	3.5E-04
C-12-002	Residential	Calcium	3360	13,000,000	2.6E-04
C-12-004	Residential	Calcium	3810	13,000,000	2.9E-04
<u>C-36-003</u>	<u>Industrial</u>	<u>Calcium</u>	<u>11,700</u>	<u>32,400,000</u>	<u>3.6E-04</u>
<u>C-36-003</u>	<u>Residential</u>	<u>Calcium</u>	<u>11,700</u>	<u>13,000,000</u>	<u>9.0E-04</u>

* SSLs from NMED (2015, 600915).

Table H-5.3-1
Ecological Screening Levels for Terrestrial Receptors

COPEC	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Generic Plant (terrestrial autotroph-producer)
Inorganic Chemicals (mg/kg)											
Antimony	46	na*	na	na	na	na	2.6	2.6	2.4	78	11
Arsenic	820	850	120	42	26	18	140	15	32	6.8	18
Barium	41000	28000	8600	820	930	1000	2900	1300	1800	330	110
Cadmium	530	470	1.5	4.4	0.54	0.29	8.8	0.27	0.51	140	32
Chromium (Total)	1800	1000	200	68	40	28	750	45	110	na	na
Cobalt	5500	2700	720	170	120	96	1600	160	400	na	13
Copper	4000	1300	92	38	22	15	240	38	64	80	70
Cyanide (Total)	2800	0.59	0.4	0.1	0.1	0.1	660	310	340	na	na
Lead	3700	630	95	21	16	14	330	72	120	1700	120
Manganese	41000	69000	27000	1400	1900	3100	1800	1500	1400	450	220
Mercury	61	0.29	0.066	0.07	0.022	0.013	20	1.7	3	0.05	34
Nickel	1200	2300	120	160	38	21	440	9.7	20	280	38
Selenium	90	81	4.3	1	0.87	0.75	1.9	0.66	0.83	4.1	0.52
Silver	4300	670	14	11	4.3	2.6	140	14	24	na	560
Thallium	5.3	120	56	9.2	7.5	6.3	2.5	0.22	0.73	na	0.05
Uranium	4800	30000	16000	1900	1700	1600	1800	220	750	na	25
Vanadium	3300	130	64	8.9	7.6	6.7	1300	140	480	na	60
Zinc	7800	2400	250	350	85	48	1600	98	170	120	160

Table H-5.3-1 (continued)

COPEC	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Generic Plant (terrestrial autotroph-producer)
Organic Chemicals (mg/kg)											
Acetone	7800	76000	970	7.5	14	170	1.3	15	1.2	na	na
Amino-2,6-dinitrotoluene[4-]	6400	na	na	na	na	na	290	12	23	18	33
Anthracene	34000	na	na	na	na	na	1000	210	310	na	6.8
Aroclor-1242	83	5.7	0.22	1	0.079	0.041	27	0.38	0.76	na	na
Aroclor-1254	5.9	7.1	0.22	1.3	0.08	0.041	46	0.44	0.88	na	160
Aroclor-1260	14	400	4.8	46	1.7	0.88	2600	10	20	na	na
Benzo(a)anthracene	110	34	7.4	0.8	0.91	1	5.5	3	3.4	na	18
Benzo(a)pyrene	3400	na	na	na	na	na	240	53	85	na	na
Benzo(b)fluoranthene	2400	na	na	na	na	na	110	38	52	na	18
Benzo(g,h,i)perylene	3300	na	na	na	na	na	480	24	47	na	na
Benzoic acid	1800	na	na	na	na	na	3.7	1	1.3	na	na
Bis(2-ethylhexyl)phthalate	380	8.1	0.1	20	0.04	0.02	2400	0.59	1.1	na	na
Butylbenzylphthalate	18000	na	na	na	na	na	2000	90	160	na	na
Chloroform	8200	na	na	na	na	na	15	8.2	8	na	na
Chrysene	110	na	na	na	na	na	5.8	2.4	3.1	na	na
Di-n-butylphthalate	48000	1.7	0.059	0.39	0.021	0.011	14000	180	370	na	160
Di-n-octylphthalate	1000	na	na	na	na	na	11000	0.91	1.8	na	na
Dibenzofuran	na	na	na	na	na	na	na	na	na	na	6.1
Dichloroethene[1,1-]	13000	na	na	na	na	na	35	11	14	na	na
Fluoranthene	3300	na	na	na	na	na	230	22	38	10	na
Hexanone[2-]	5700	320	2	0.47	0.41	0.36	13	5.4	6.1	na	na

Table H-5.3-1 (continued)

COPEC	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Generic Plant (terrestrial autotroph-producer)
HMX	59,000	na	na	na	na	na	340	900	300	16	2700
Indeno(1,2,3-cd)pyrene	4600	na	na	na	na	na	530	62	110	na	na
Methylene chloride	4200	na	na	na	na	na	3	9	2.6	na	1600
PETN	45,000	na	na	na	na	na	100	870	100	na	na
Phenanthrene	1700	na	na	na	na	na	52	10	15	5.5	na
Pyrene	2800	3100	190	71	46	34	99	22	32	10	na
RDX	7000	890	13	2.3	2.4	2.4	31	16	16	8.4	na
Styrene	na	na	na	na	na	na	na	na	na	1.2	3.2
Tetrachloroethene	97	na	na	na	na	na	7.8	0.18	0.36	na	10
Tetryl	940	na	na	na	na	na	1.5	35	1.5	na	na
Toluene	11,000	na	na	na	na	na	54	23	25	na	200
Trichloroethene	37,000	na	na	na	na	na	150	42	55	na	na
Trinitrotoluene[2,4,6-]	26,000	3500	1500	7.6	14	170	96	1000	96	32	62
Radionuclides (pCi/g)											
Americium-241	26,000	59,000	47,000	5000	6900	11,000	20,000	33,000	33,000	190	500
Cesium-137	1500	3900	4300	1400	2600	4600	1200	2400	2300	2300	1500
Plutonium-238	45,000	130,000	120,000	5200	7700	14,000	53,000	160,000	170,000	820	1800
Plutonium-239/240	51,000	160,000	140,000	5400	7900	14,000	620,000	270,000	280,000	870	1900
Tritium	220,000	550,000	610,000	300,000	440,000	600,000	210,000	340,000	330,000	48,000	36,000
Uranium-234	110,000	260,000	260,000	15,000	31,000	92,000	18,000	140,000	120,000	2200	440
Uranium-235/236	5200	10,000	10,000	6500	8200	9800	4200	5200	5200	1600	440
Uranium-238	2100	4200	4200	3400	3800	4100	1900	2100	2100	1100	400

*na = Not available.

Table H-5.3-2
Minimum ESL Comparison for SWMUs 12-001(a) and 12-001(b)

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	1.15	2.4	Deer mouse	0.48
Barium	213	110	Plant	1.94
Chromium (Total)	24.6	28	Robin (insectivore)	0.88
Cobalt	7.1	13	Plant	0.55
Copper	8.09	15	Robin (insectivore)	0.54
Manganese	456	220	Plant	2.07
Nickel	7.67	9.7	Shrew	0.79
Selenium	1.34 (U)	0.52	Plant	2.58
Uranium	3.52	25	Plant	0.14
Vanadium	27.6	6.7	Robin (insectivore)	4.12
Organic Chemicals (mg/kg)				
Amino-2,6-dinitrotoluene[4-]	0.127	12	Shrew	0.011
HMX	0.749	16	Earthworm	0.047
PETN	5.82	100	Deer mouse	0.058
RDX	3.73	2.3	Robin (herbivore)	1.62
Tetryl	0.333	1.5	Deer mouse	0.22
Radionuclides (pCi/g)				
Cesium-137	0.234	1200	Cottontail	0.0002
Plutonium-239/240	0.00149	870	Earthworm	0.0000017
Uranium-234	1.45	440	Plant	0.0033
Uranium-238	1.65	400	Plant	0.0041

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-3
HI Analysis for SWMUs 12-001(a) and 12-001(b)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	1.15	0.025	na*	na	na	na	na	0.44	0.44	0.48	0.015	0.1
Barium	213	5.2E-03	7.6E-03	0.025	0.26	0.23	0.21	0.073	0.16	0.12	0.65	1.94
Chromium (Total)	24.6	0.014	0.025	0.12	0.36	0.62	0.88	0.033	0.55	0.22	na	na
Cobalt	7.1	1.3E-03	2.6E-03	9.9E-03	0.042	0.059	0.074	4.4E-03	0.044	0.018	na	0.55
Copper	8.09	2.0E-03	6.2E-03	0.088	0.21	0.37	0.54	0.034	0.21	0.13	0.1	0.12
Manganese	456	0.011	6.6E-03	0.017	0.33	0.24	0.15	0.25	0.3	0.33	1.01	2.07
Nickel	7.67	6.4E-03	3.3E-03	0.064	0.048	0.2	0.37	0.017	0.79	0.38	0.027	0.2
Selenium	1.34 (U)	0.015	0.017	0.31	1.34	1.54	1.79	0.71	2.03	1.61	0.33	2.58
Vanadium	27.6	8.4E-03	0.21	0.43	3.1	3.63	4.12	0.021	0.2	0.058	na	0.46
RDX	3.73	5.3E-04	4.2E-03	0.29	1.62	1.55	1.55	0.12	0.23	0.23	0.44	na
HI		0.09	0.3	1	7	8	10	2	5	4	3	8

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-4
Minimum ESL Comparison for SWMU 12-002

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	1.03 (U)	2.4	Deer mouse	0.43
Barium	191	110	Plant	1.74
Chromium (Total)	13.5	28	Robin (insectivore)	0.48
Cobalt	14.2	13	Plant	1.09
Copper	11.1	15	Robin (insectivore)	0.74
Nickel	9.28	9.7	Shrew	0.96
Selenium	1.1 (U)	0.52	Plant	2.12
Vanadium	27.1	6.7	Robin (insectivore)	4.04

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-5
HI Analysis for SWMU 12-002

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	1.03 (U)	0.022	na*	na	na	na	na	0.4	0.4	0.43	0.013	0.094
Barium	191	4.7E-03	6.8E-03	0.022	0.23	0.21	0.19	0.066	0.15	0.11	0.58	1.74
Chromium (Total)	13.5	7.5E-03	0.014	0.068	0.2	0.34	0.48	0.018	0.3	0.12	na	na
Cobalt	14.2	2.6E-03	5.3E-03	0.02	0.084	0.12	0.15	8.9E-03	0.089	0.036	na	1.09
Copper	11.1	2.8E-03	8.5E-03	0.12	0.29	0.5	0.74	0.046	0.29	0.17	0.14	0.16
Nickel	9.28	7.7E-03	4.0E-03	0.077	0.058	0.24	0.44	0.021	0.96	0.46	0.033	0.24
Selenium	1.1 (U)	0.012	0.014	0.26	1.1	1.26	1.47	0.58	1.67	1.33	0.27	2.12
Vanadium	27.1	8.2E-03	0.21	0.42	3.04	3.57	4.04	0.021	0.19	0.056	na	0.45
HI		0.07	0.3	1	5	6	8	1	4	3	1	6

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-6
Minimum ESL Comparison for AOC 12-004(a)

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.677	2.4	Deer mouse	0.28
Arsenic	1.83	6.8	Earthworm	0.27
Barium	88.5	110	Plant	0.8
Chromium (Total)	22.1	28	Robin (insectivore)	0.79
Cobalt	3.98	13	Plant	0.31
Copper	5.31	15	Robin (insectivore)	0.35
Nickel	5.98	9.7	Shrew	0.62
Selenium	1.26 (U)	0.52	Plant	2.42
Uranium	2.64	25	Plant	0.11
Vanadium	13.8	6.7	Robin (insectivore)	2.06
Organic Chemicals (mg/kg)				
Benzoic acid	0.608	1	Shrew	0.61
Di-n-butylphthalate	0.121	0.011	Robin (insectivore)	11
Radionuclides (pCi/g)				
Cesium-137	0.263	1200	Cottontail	0.00022
Uranium-234	1.44	440	Plant	0.0033
Uranium-235/236	0.0956	440	Plant	0.00022
Uranium-238	2.79	400	Plant	0.007

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-7
HI Analysis for AOC 12-004(a)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Barium	88.5	2.2E-03	3.2E-03	0.01	0.11	0.095	0.089	0.031	0.068	0.049	0.27	0.8
Chromium (Total)	22.1	0.012	0.022	0.11	0.33	0.55	0.79	0.029	0.49	0.2	na*	na
Cobalt	3.98	7.2E-04	1.5E-03	5.5E-03	0.023	0.033	0.041	2.5E-03	0.025	0.01	na	0.31
Copper	5.31	1.3E-03	4.1E-03	0.058	0.14	0.24	0.35	0.022	0.14	0.083	0.066	0.076
Nickel	5.98	5.0E-03	2.6E-03	0.05	0.037	0.16	0.28	0.014	0.62	0.3	0.021	0.16
Selenium	1.26 (U)	0.014	0.016	0.29	1.26	1.45	1.68	0.66	1.91	1.52	0.31	2.42
Vanadium	13.8	4.2E-03	0.11	0.22	1.55	1.82	2.06	0.011	0.099	0.029	na	0.23
Benzoic acid	0.608	3.4E-04	na	na	na	na	na	0.16	0.61	0.47	na	na
Di-n-butylphthalate	0.121	2.5E-06	0.071	2.05	0.31	5.76	11	8.6E-06	6.7E-04	3.3E-04	na	7.6E-04
HI		0.04	0.2	3	4	10	16	0.9	4	3	0.7	4

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

* na = Not available.

Table H-5.3-8
Minimum ESL Comparison for AOC 12-004(b)

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.373	2.4	Deer mouse	0.16
Arsenic	2.92	6.8	Earthworm	0.43
Barium	246	110	Plant	2.24
Chromium (Total)	13.3	28	Robin (insectivore)	0.48
Cobalt	7.49	13	Plant	0.58
Copper	9.38	15	Robin (insectivore)	0.63
Lead	18.5	14	Robin (insectivore)	1.32
Nickel	7.82	9.7	Shrew	0.81
Selenium	1.1	0.52	Plant	2.12
Uranium	2.97	25	Plant	0.12
Vanadium	30.3	6.7	Robin (insectivore)	4.52
Organic Chemicals (mg/kg)				
Aroclor-1254	0.015	0.041	Robin (insectivore)	0.37

Note: Bolded values indicate HQs greater than 0.3. Data qualifiers are defined in Appendix A.

Table H-5.3-9
HI Analysis for AOC 12-004(b)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph-producer)
Arsenic	2.92	3.6E-03	3.4E-03	0.024	0.07	0.11	0.16	0.021	0.19	0.091	0.43	0.16
Barium	246	6.0E-03	8.8E-03	0.029	0.3	0.26	0.25	0.085	0.19	0.14	0.75	2.24
Chromium (Total)	13.3	7.4E-03	0.013	0.067	0.2	0.33	0.48	0.018	0.3	0.12	na	na
Cobalt	7.49	1.4E-03	2.8E-03	0.01	0.044	0.062	0.078	4.7E-03	0.047	0.019	na	0.58
Copper	9.38	2.3E-03	7.2E-03	0.1	0.25	0.43	0.63	0.039	0.25	0.15	0.12	0.13
Lead	18.5	5.0E-03	0.029	0.19	0.88	1.16	1.32	0.056	0.26	0.15	0.011	0.15
Nickel	7.82	6.5E-03	3.4E-03	0.065	0.049	0.21	0.37	0.018	0.81	0.39	0.028	0.21
Selenium	1.1	0.012	0.014	0.26	1.1	1.26	1.47	0.58	1.67	1.33	0.27	2.12
Vanadium	30.3	9.2E-03	0.23	0.47	3.4	3.99	4.52	0.023	0.22	0.063	na	0.51
Aroclor-1254	0.015	2.5E-03	2.1E-03	0.068	0.012	0.19	0.37	3.3E-04	0.034	0.017	na	9.4E-05
HI	0.06	0.3	1	6	8	10	0.8	4	2	2	6	

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

* na = Not available.

Table H-5.3-10
Minimum ESL Comparison for AOC C-12-001

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.426	2.4	Deer mouse	0.18
Barium	132	110	Plant	1.2
Chromium (Total)	16.3	28	Robin (insectivore)	0.58
Cobalt	4.97	13	Plant	0.38
Nickel	7.75	9.7	Shrew	0.8
Selenium	1.26 (U)	0.52	Plant	2.42
Uranium	1.96	25	Plant	0.078
Organic Chemicals (mg/kg)				
Aroclor-1242	0.114	0.041	Robin (insectivore)	2.78
Aroclor-1254	0.109	0.041	Robin (insectivore)	2.66
Aroclor-1260	0.0477	0.88	Robin (insectivore)	0.054

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-11
HI Analysis for AOC C-12-001

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Barium	132	3.2E-03	4.7E-03	0.015	0.16	0.14	0.13	0.046	0.1	0.073	0.4	1.2
Chromium (Total)	16.3	9.1E-03	0.016	0.082	0.24	0.41	0.58	0.022	0.36	0.15	na*	na
Cobalt	4.97	9.0E-04	1.8E-03	6.9E-03	0.029	0.041	0.052	3.1E-03	0.031	0.012	na	0.38
Nickel	7.75	6.5E-03	3.4E-03	0.065	0.048	0.2	0.37	0.018	0.8	0.39	0.028	0.2
Selenium	1.26 (U)	0.014	0.016	0.29	1.26	1.45	1.68	0.66	1.91	1.52	0.31	2.42
Aroclor-1242	0.114	1.4E-03	0.02	0.52	0.11	1.44	2.78	4.2E-03	0.3	0.15	na	na
Aroclor-1254	0.109	0.018	0.015	0.5	0.084	1.36	2.66	2.4E-03	0.25	0.12	na	6.8E-04
HI		0.05	0.08	1	2	5	8	0.8	4	2	0.7	4

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-12
Minimum ESL Comparison for AOC C-12-002

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	1.11 (U)	2.4	Deer mouse	0.46
Barium	223	110	Plant	2.03
Chromium (Total)	15	28	Robin (insectivore)	0.54
Cobalt	7.49	13	Plant	0.58
Copper	7.65	15	Robin (insectivore)	0.51
Nickel	7.8	9.7	Shrew	0.8
Selenium	1.15 (U)	0.52	Plant	2.21
Vanadium	28.2	6.7	Robin (insectivore)	4.21

Note: Bolded values indicate HQs greater than 0.3. Data qualifiers are defined in Appendix A.

Table H-5.3-13
HI Analysis for AOC C-12-002

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate i)	Plant (terrestrial autotroph- producer)
Antimony	1.11 (U)	0.024	na*	na	na	na	na	0.43	0.43	0.46	0.014	0.1
Barium	223	5.4E-03	8.0E-03	0.026	0.27	0.24	0.22	0.077	0.17	0.12	0.68	2.03
Chromium (Total)	15	8.3E-03	0.015	0.075	0.22	0.38	0.54	0.02	0.33	0.14	na	na
Cobalt	7.49	1.4E-03	2.8E-03	0.01	0.044	0.062	0.078	4.7E-03	0.047	0.019	na	0.58
Copper	7.65	1.9E-03	5.9E-03	0.083	0.2	0.35	0.51	0.032	0.2	0.12	0.096	0.11
Nickel	7.8	6.5E-03	3.4E-03	0.065	0.049	0.21	0.37	0.018	0.8	0.39	0.028	0.21
Selenium	1.15 (U)	0.013	0.014	0.27	1.15	1.32	1.53	0.61	1.74	1.39	0.28	2.21
Vanadium	28.2	8.5E-03	0.22	0.44	3.17	3.71	4.21	0.022	0.2	0.059	na	0.47
HI		0.07	0.3	1	5	6	7	1	4	3	1	6

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-14
Minimum ESL Comparison for AOC C-12-003

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	2.74	2.4	Deer mouse	1.14
Barium	117	110	Plant	1.06
Chromium (Total)	45	28	Robin (insectivore)	1.61
Cobalt	4.99	13	Plant	0.38
Selenium	1.12 (UJ)	0.52	Plant	2.15

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-15
HI Analysis for AOC C-12-003

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	2.74	0.06	na*	na	na	na	na	1.05	1.05	1.14	0.035	0.25
Barium	117	2.9E-03	4.2E-03	0.014	0.14	0.13	0.12	0.04	0.09	0.065	0.35	1.06
Chromium (Total)	45	0.025	0.045	0.23	0.66	1.13	1.61	0.06	1	0.41	na	na
Cobalt	4.99	9.1E-04	1.8E-03	6.9E-03	0.029	0.042	0.052	3.1E-03	0.031	0.012	na	0.38
Selenium	1.12 (UJ)	0.012	0.014	0.26	1.12	1.29	1.49	0.59	1.7	1.35	0.27	2.15
HI		0.1	0.07	0.5	2	3	3	2	4	3	0.7	4

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-16
Minimum ESL Comparison for AOC C-12-004

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	1.21 (UJ)	2.4	Deer mouse	0.5
Barium	214	110	Plant	1.95
Chromium (Total)	18.4	28	Robin (insectivore)	0.66
Cobalt	5.85	13	Plant	0.45
Copper	13.7	15	Robin (insectivore)	0.91
Lead	39.2	14	Robin (insectivore)	2.8
Nickel	8.38	9.7	Shrew	0.86
Selenium	1.14 (U)	0.52	Plant	2.19
Silver	1.63	2.6	Robin (insectivore)	0.63
Uranium	3.86	25	Plant	0.15
Vanadium	28.1	6.7	Robin (insectivore)	4.19

Note: Bolded values indicate HQs greater than 0.3. Data qualifiers are defined in Appendix A.

Table H-5.3-17
HI Analysis for AOC C-12-004

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	1.21 (UJ)	0.026	na*	na	na	na	na	0.47	0.47	0.5	0.016	0.11
Barium	214	5.2E-03	7.6E-03	0.025	0.26	0.23	0.21	0.074	0.16	0.12	0.65	1.95
Chromium (Total)	18.4	0.01	0.018	0.092	0.27	0.46	0.66	0.025	0.41	0.17	na	na
Cobalt	5.85	1.1E-03	2.2E-03	8.1E-03	0.034	0.049	0.061	3.7E-03	0.037	0.015	na	0.45
Copper	13.7	3.4E-03	0.011	0.15	0.36	0.62	0.91	0.057	0.36	0.21	0.17	0.2
Lead	39.2	0.011	0.062	0.41	1.87	2.45	2.8	0.12	0.54	0.33	0.023	0.33
Nickel	8.38	7.0E-03	3.6E-03	0.07	0.052	0.22	0.4	0.019	0.86	0.42	0.03	0.22
Selenium	1.14 (U)	0.013	0.014	0.27	1.14	1.31	1.52	0.6	1.73	1.37	0.28	2.19
Silver	1.63	3.8E-04	2.4E-03	0.12	0.15	0.38	0.63	0.012	0.12	0.068	na	2.9E-03
Vanadium	28.1	8.5E-03	0.22	0.44	3.16	3.7	4.19	0.022	0.2	0.059	na	0.47
HI	0.09	0.3	2	7	9	11	1	5	3	1	6	

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

* na = Not available.

Table H-5.3-18
Minimum ESL Comparison for AOC C-12-005

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	3.89	2.4	Deer mouse	1.62
Chromium (Total)	114	28	Robin (insectivore)	4.07
Uranium	1.81	25	Plant	0.072

Note: Bolded values indicate HQs greater than 0.3. Data qualifiers are defined in Appendix A.

Table H-5.3-19
HI Analysis for AOC C-12-005

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	3.89	0.085	na*	na	na	na	na	1.5	1.5	1.62	0.05	0.35
Chromium (Total)	114	0.063	0.11	0.57	1.68	2.85	4.07	0.15	2.53	1.04	na	na
HI		0.1	0.1	0.6	2	3	4	2	4	3	0.05	0.4

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-20
Minimum ESL Comparison for AOC C-14-006

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.933	2.4	Deer mouse	0.39
Chromium (Total)	13.9	28	Robin (insectivore)	0.5
Organic Chemicals (mg/kg)				
Acetone	0.00973	1.2	Deer mouse	0.0081
Toluene	0.000887	23	Shrew	0.000039

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-21
HI Analysis for AOC C-14-006

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph-producer)
Antimony	0.933	0.02	na*	na	na	na	na	0.36	0.36	0.39	0.012	0.085
Chromium (Total)	13.9	7.7E-03	0.014	0.07	0.2	0.35	0.5	0.019	0.31	0.13	na	na
HI		0.03	0.01	0.07	0.2	0.4	0.5	0.4	0.7	0.5	0.01	0.09

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-22
Minimum ESL Comparison for AOC 15-005(c)

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.855	2.4	Deer mouse	0.36
Barium	199	110	Plant	1.81
Chromium (Total)	11.3	28	Robin (insectivore)	0.4
Cobalt	6.13	13	Plant	0.47
Copper	12	15	Robin (insectivore)	0.8
Lead	35.3	14	Robin (insectivore)	2.52
Selenium	1.48 (U)	0.52	Plant	2.85
Uranium	6.35	25	Plant	0.25
Vanadium	27.4	6.7	Robin (insectivore)	4.09
Organic Chemicals (mg/kg)				
Acetone	0.0188	1.2	Deer mouse	0.016
Bis(2-ethylhexyl)phthalate	0.0995	0.02	Robin (insectivore)	4.98
Toluene	0.000754	23	Shrew	0.000033
Radionuclides (pCi/g)				
Uranium-234	3.15	440	Plant	0.0072
Uranium-235/236	0.169	440	Plant	0.00038
Uranium-238	4.96	400	Plant	0.012

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-23
HI Analysis for AOC 15-005(c)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate i)	Plant (terrestrial autotroph- producer)
Antimony	0.855	0.019	na*	na	na	na	na	0.33	0.33	0.36	0.011	0.078
Barium	199	4.9E-03	7.1E-03	0.023	0.24	0.21	0.2	0.069	0.15	0.11	0.6	1.81
Chromium (Total)	11.3	6.3E-03	0.011	0.057	0.17	0.28	0.4	0.015	0.25	0.1	na	na
Cobalt	6.13	1.1E-03	2.3E-03	8.5E-03	0.036	0.051	0.064	3.8E-03	0.038	0.015	na	0.47
Copper	12	3.0E-03	9.2E-03	0.13	0.32	0.55	0.8	0.05	0.32	0.19	0.15	0.17
Lead	35.3	9.5E-03	0.056	0.37	1.68	2.21	2.52	0.11	0.49	0.29	0.021	0.29
Selenium	1.48 (U)	0.016	0.018	0.34	1.48	1.7	1.97	0.78	2.24	1.78	0.36	2.85
Vanadium	27.4	8.3E-03	0.21	0.43	3.08	3.61	4.09	0.021	0.2	0.057	na	0.46
Bis(2-ethylhexyl)phthalate	0.0995	2.6E-04	0.012	1	5.0E-03	2.49	4.98	4.1E-05	0.17	0.09	na	na
HI		0.07	0.3	2	7	11	15	1	4	3	1	6

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-24
Minimum ESL Comparison for SWMU 15-007(c)

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	243	2.4	Deer mouse	101
Chromium (Total)	31.8	28	Robin (insectivore)	1.14
Copper	8.17	15	Robin (insectivore)	0.54
Lead	7290	14	Robin (insectivore)	521
Nickel	8.79	9.7	Shrew	0.91
Selenium	2.11 (U)	0.52	Plant	4.06
Silver	1.15	2.6	Robin (insectivore)	0.44
Zinc	46.7	48	Robin (insectivore)	0.97
Organic Chemicals (mg/kg)				
Aroclor-1242	0.0034	0.041	Robin (insectivore)	0.083
Aroclor-1254	0.0055	0.041	Robin (insectivore)	0.13
Radionuclides (pCi/g)				
Tritium	7.45	36000	Plant	0.00021

Note: Bolded values indicate HQs greater than 0.3. Data qualifiers are defined in Appendix A.

Table H-5.3-25
HI Analysis for SWMU 15-007(c)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	243	5.28	na*	na	na	na	na	93.5	93.5	101	3.12	22.1
Chromium (Total)	31.8	0.018	0.032	0.16	0.47	0.8	1.14	0.042	0.71	0.29	na	na
Copper	8.17	2.0E-03	6.3E-03	0.089	0.22	0.37	0.54	0.034	0.22	0.13	0.1	0.12
Lead	7290	1.97	11.6	76.7	347	456	521	22.1	101	60.8	4.29	60.8
Nickel	8.79	7.3E-03	3.8E-03	0.073	0.055	0.23	0.42	0.02	0.91	0.44	0.031	0.23
Selenium	2.11 (U)	2.3E-02	2.6E-02	0.49	2.11	2.43	2.81	1.11	3.20	2.54	0.52	4.06
Silver	1.15	2.7E-04	1.7E-03	0.082	0.1	0.27	0.44	8.2E-03	0.082	0.048	na	2.1E-03
Zinc	46.7	6.0E-03	0.019	0.19	0.13	0.55	0.97	0.029	0.48	0.27	0.39	0.29
HI		7	12	77	350	460	528	117	200	166	8	88

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-26
Minimum ESL Comparison for SWMU 15-007(d)

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.998 (U)	2.4	Deer mouse	0.42
Selenium	1 (U)	0.52	Plant	1.92
Radionuclides (pCi/g)				
Tritium	6.11	36000	Plant	0.00017

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-27
HI Analysis for SWMU 15-007(d)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	0.998 (U)	0.022	na*	na	na	na	na	0.38	0.38	0.42	0.013	0.091
Selenium	1 (U)	0.011	0.012	0.23	1	1.15	1.33	0.53	1.52	1.2	0.24	1.92
HI		0.03	0.01	0.2	1	1	1	0.9	2	2	0.3	2

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

* na = Not available.

Table H-5.3-28
Minimum ESL Comparison for SWMU 15-008(b)

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	5.63	2.4	Deer mouse	2.35
Arsenic	2.01	6.8	Earthworm	0.3
Barium	73.2	110	Plant	0.67
Beryllium	4.46	2.5	Plant	1.78
Cadmium	0.394	0.27	Shrew	1.46
Chromium (Total)	13.6	28	Robin (insectivore)	0.49
Copper	1410	15	Robin (insectivore)	94
Lead	4400	14	Robin (insectivore)	314
Manganese	266	220	Plant	1.21
Nickel	6.58	9.7	Shrew	0.68
Selenium	0.696	0.52	Plant	1.34
Silver	0.51	2.6	Robin (insectivore)	0.2
Uranium	90.4	25	Plant	3.62
Vanadium	13.3	6.7	Robin (insectivore)	1.99
Zinc	457	48	Robin (insectivore)	9.52
Organic Chemicals (mg/kg)				
Aroclor-1242	0.282	0.041	Robin (insectivore)	6.88
Aroclor-1254	0.0168	0.041	Robin (insectivore)	0.41
Aroclor-1260	0.0105	0.88	Robin (insectivore)	0.012
HMX	1.98	16	Earthworm	0.12
RDX	0.475	2.3	Robin (herbivore)	0.21
Trinitrotoluene[2,4,6-]	0.205	7.6	Robin (herbivore)	0.027
Radionuclides (pCi/g)				
Americium-241	0.00575	190	Earthworm	0.00003
Cesium-137	0.161	1200	Cottontail	0.00013
Plutonium-239/240	0.0254	870	Earthworm	0.000029
Tritium	10.6	36,000	Plant	0.00029
Uranium-234	6.53	440	Plant	0.015
Uranium-235/236	0.795	440	Plant	0.0018
Uranium-238	38.4	400	Plant	0.096

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-29
HI Analysis for SWMU 15-008(b)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	5.63	0.12	na*	na	na	na	na	2.17	2.17	2.35	0.072	0.51
Barium	73.2	1.8E-03	2.6E-03	8.5E-03	0.089	0.079	0.073	0.025	0.056	0.041	0.22	0.67
Beryllium	4.46	0.011	na	na	na	na	na	0.03	0.25	0.08	0.11	1.78
Cadmium	0.394	7.4E-04	8.4E-04	0.26	0.09	0.73	1.36	0.045	1.46	0.77	2.8E-03	0.012
Chromium (Total)	13.6	7.6E-03	0.014	0.068	0.2	0.34	0.49	0.018	0.3	0.12	na	na
Copper	1410	0.35	1.08	15.3	37.1	64.1	94	5.88	37.1	22	17.6	20.1
Lead	4400	1.19	6.98	46.3	210	275	314	13.3	61.1	36.7	2.59	36.7
Manganese	266	6.5E-03	3.9E-03	9.9E-03	0.19	0.14	0.086	0.15	0.18	0.19	0.59	1.21
Nickel	6.58	5.5E-03	2.9E-03	0.055	0.041	0.17	0.31	0.015	0.68	0.33	0.024	0.17
Selenium	0.696	7.7E-03	8.6E-03	0.16	0.7	0.8	0.93	0.37	1.05	0.84	0.17	1.34
Uranium	90.4	0.019	3.0E-03	5.7E-03	0.048	0.053	0.057	0.05	0.41	0.12	na	3.62
Vanadium	13.3	4.0E-03	0.1	0.21	1.49	1.75	1.99	0.01	0.095	0.028	na	0.22
Zinc	457	0.059	0.19	1.83	1.31	5.38	9.52	0.29	4.66	2.69	3.81	2.86
Aroclor-1242	0.282	3.4E-03	0.049	1.28	0.28	3.57	6.88	0.01	0.74	0.37	na	na
Aroclor-1254	0.0168	2.8E-03	2.4E-03	0.076	0.013	0.21	0.41	3.7E-04	0.038	0.019	na	1.1E-04
HI		2	8	66	252	352	430	22	110	67	25	69

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-30
Minimum ESL Comparison for AOC 15-008(g)

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	3.77	2.4	Deer mouse	1.57
Cobalt	9.43	13	Plant	0.73
Copper	25.7	15	Robin (insectivore)	1.71
Lead	309	14	Robin (insectivore)	22.1
Selenium	1.28 (U)	0.52	Plant	2.46
Uranium	4.95	25	Plant	0.2
Radionuclides (pCi/g)				
Tritium	0.0374	36,000	Plant	0.000001
Uranium-238	2.8	400	Plant	0.007

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-31
HI Analysis for AOC 15-008(g)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	3.77	0.082	na*	na	na	na	na	1.45	1.45	1.57	0.048	0.34
Cobalt	9.43	1.7E-03	3.5E-03	0.013	0.055	0.079	0.098	5.9E-03	0.059	0.024	na	0.73
Copper	25.7	6.4E-03	0.02	0.28	0.68	1.17	1.71	0.11	0.68	0.4	0.32	0.37
Lead	309	0.084	0.49	3.25	14.7	19.3	22.1	0.94	4.29	2.58	0.18	2.58
Selenium	1.28 (U)	0.014	0.016	0.3	1.28	1.47	1.71	0.67	1.94	1.54	0.31	2.46
HI		0.2	0.5	4	17	22	26	3	8	6	0.9	6

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-32
Minimum ESL Comparison for SWMU 15-009(b)

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	1.44 (UJ)	2.4	Deer mouse	0.6
Barium	94	110	Plant	0.85
Cadmium	0.757 (U)	0.27	Shrew	2.8
Chromium (Total)	14.4	28	Robin (insectivore)	0.51
Copper	10	15	Robin (insectivore)	0.67
Cyanide (Total)	1.22	0.1	Robin (all diets)	12.2
Lead	16.2	14	Robin (insectivore)	1.16
Selenium	1.59 (U)	0.52	Plant	3.06
Uranium	417	25	Plant	16.7
Organic Chemicals (mg/kg)				
Acetone	0.0141	1.2	Deer mouse	0.012
Toluene	0.00112	23	Shrew	0.000049
Radionuclides (pCi/g)				
Cesium-137	1.04	1200	Cottontail	0.00087
Plutonium-239/240	0.134	870	Earthworm	0.00015
Tritium	0.123	36,000	Plant	0.0000034
Uranium-234	215	440	Plant	0.49
Uranium-235/236	14.4	440	Plant	0.033
Uranium-238	221	400	Plant	0.55

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-33
HI Analysis for SWMU 15-009(b)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	1.44 (UJ)	0.031	na*	na	na	na	na	0.55	0.55	0.6	0.018	0.13
Barium	94	2.3E-03	3.4E-03	0.011	0.11	0.1	0.094	0.032	0.072	0.052	0.28	0.85
Cadmium	0.757 (U)	1.4E-03	1.6E-03	0.5	0.17	1.4	2.61	0.086	2.8	1.48	5.4E-03	0.024
Chromium (Total)	14.4	8.0E-03	0.014	0.072	0.21	0.36	0.51	0.019	0.32	0.13	na	na
Copper	10	2.5E-03	7.7E-03	0.11	0.26	0.45	0.67	0.042	0.26	0.16	0.13	0.14
Cyanide (Total)	1.22	4.4E-04	2.07	3.05	12.2	12.2	12.2	1.8E-03	3.9E-03	3.6E-03	na	na
Lead	16.2	4.4E-03	0.026	0.17	0.77	1.01	1.16	0.049	0.23	0.14	9.5E-03	0.14
Selenium	1.59 (U)	0.018	0.02	0.37	1.59	1.83	2.12	0.84	2.41	1.92	0.39	3.06
Uranium	417	0.087	0.014	0.026	0.22	0.25	0.26	0.23	1.9	0.56	na	16.7
Uranium-234	215	2.0E-03	8.3E-04	8.3E-04	0.014	6.9E-03	2.3E-03	0.012	1.5E-03	1.8E-03	0.098	0.49
Uranium-238	221	0.11	0.053	0.053	0.065	0.058	0.054	0.12	0.11	0.11	0.2	0.55
HI		0.3	2	4	16	18	20	2	9	5	1	22

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-34
Minimum ESL Comparison for SWMU 15-009(c)

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.386	2.4	Deer mouse	0.16
Chromium (Total)	10.3	28	Robin (insectivore)	0.37
Cyanide (Total)	1.69	0.1	Robin (all diets)	16.9
Selenium	1.3 (U)	0.52	Plant	2.5
Silver	0.209	2.6	Robin (insectivore)	0.08
Uranium	3.73	25	Plant	0.15
Organic Chemicals (mg/kg)				
Acetone	0.00811	1.2	Deer mouse	0.0068
Anthracene	0.0128	6.8	Plant	0.0019
Benzo(a)anthracene	0.0626	0.8	Robin (herbivore)	0.078
Benzo(a)pyrene	0.0384	53	Shrew	0.00072
Benzo(b)fluoranthene	0.072	18	Plant	0.004
Benzo(g,h,i)perylene	0.0226	24	Shrew	0.00094
Bis(2-ethylhexyl)phthalate	0.105	0.02	Robin (insectivore)	5.25
Chrysene	0.0527	2.4	Shrew	0.022
Fluoranthene	0.127	10	Earthworm	0.013
Indeno(1,2,3-cd)pyrene	0.0208	62	Shrew	0.00034
Phenanthrene	0.0812	5.5	Earthworm	0.015
Pyrene	0.0783	10	Earthworm	0.0078
Toluene	0.00152	23	Shrew	0.000066
Radionuclides (pCi/g)				
Tritium	0.0413	36,000	Plant	0.0000011
Uranium-234	3.09	440	Plant	0.007
Uranium-235/236	0.13	440	Plant	0.0003
Uranium-238	4.14	400	Plant	0.01

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-35
HI Analysis for SWMU 15-009(c)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Chromium (Total)	10.3	5.7E-03	0.01	0.052	0.15	0.26	0.37	0.014	0.23	0.094	na*	na
Cyanide (Total)	1.69	6.0E-04	2.86	4.23	16.9	16.9	16.9	2.6E-03	5.5E-03	5.0E-03	na	na
Selenium	1.3 (U)	0.014	0.016	0.3	1.3	1.49	1.73	0.68	1.97	1.57	0.32	2.5
Bis(2-ethylhexyl)phthalate	0.105	2.8E-04	0.013	1.05	5.3E-03	2.63	5.25	4.4E-05	0.18	0.095	na	na
HI	0.02	3	6	18	21	24	24	0.7	2	2	0.3	3

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-36
Minimum ESL Comparison for SWMU 15-009(h)

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	1.09 (UJ)	2.4	Deer mouse	0.45
Uranium	4.06	25	Plant	0.16
Organic Chemicals (mg/kg)				
Hexanone[2-]	0.00201	0.36	Robin (insectivore)	0.0056
Radionuclides (pCi/g)				
Tritium	0.0424	36000	Plant	0.0000012

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-37
HI Analysis for SWMU 15-009(h)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph-producer)
Antimony	1.09 (UJ)	0.024	na*	na	na	na	na	0.42	0.42	0.45	0.014	0.099
HI		0.02	na	na	na	na	na	0.4	0.4	0.5	0.01	0.1

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-38
Minimum ESL Comparison for SWMU 15-010(b)

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	1.35 (U)	2.4	Deer mouse	0.56
Cadmium	0.673 (U)	0.27	Shrew	2.49
Chromium (Total)	10	28	Robin (insectivore)	0.36
Mercury	0.292	0.013	Robin (insectivore)	22.5
Selenium	0.72	0.52	Plant	1.38
Uranium	4.21	25	Plant	0.17
Vanadium	15.7	6.7	Robin (insectivore)	2.34
Organic Chemicals (mg/kg)				
Acetone	0.121	1.2	Deer mouse	0.1
Aroclor-1254	0.0065	0.041	Robin (insectivore)	0.16
Aroclor-1260	0.0025	0.88	Robin (insectivore)	0.0028
Bis(2-ethylhexyl)phthalate	0.17	0.02	Robin (insectivore)	8.5
Di-n-butylphthalate	0.86	0.011	Robin (insectivore)	78.2
Dichloroethene[1,1-]	0.00037	11	Shrew	0.000034
Methylene chloride	0.00414	2.6	Deer mouse	0.0016
Styrene	0.000555	1.2	Earthworm	0.00046
Tetrachloroethene	0.000584	0.18	Shrew	0.0032
Toluene	0.00421	23	Shrew	0.00018
Radionuclides (pCi/g)				
Uranium-238	2.68	400	Plant	0.0067

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-39
HI Analysis for SWMU 15-010(b)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	1.35 (U)	0.029	na*	na	na	na	na	0.52	0.52	0.56	0.017	0.12
Cadmium	0.673 (U)	1.3E-03	1.4E-03	0.45	0.15	1.25	2.32	0.076	2.49	1.32	4.8E-03	0.021
Chromium (Total)	10	5.6E-03	0.01	0.05	0.15	0.25	0.36	0.013	0.22	0.091	na	na
Mercury	0.292	4.8E-03	1.01	4.42	4.17	13.3	22.5	0.015	0.17	0.097	5.84	8.6E-03
Selenium	0.72	8.0E-03	8.9E-03	0.17	0.72	0.83	0.96	0.38	1.09	0.87	0.18	1.38
Vanadium	15.7	4.8E-03	0.12	0.25	1.76	2.07	2.34	0.012	0.11	0.033	na	0.26
Bis(2-ethylhexyl)phthalate	0.17	4.5E-04	0.021	1.7	8.5E-03	4.25	8.5	7.1E-05	0.29	0.15	na	na
Di-n-butylphthalate	0.86	1.8E-05	0.51	14.6	2.21	41	78.2	6.1E-05	4.8E-03	2.3E-03	na	5.4E-03
HI		0.05	2	22	9	63	115	1	5	3	6	2

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-40
Minimum ESL Comparison for AOC 15-014(h)

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	1.57 (U)	2.4	Deer mouse	0.65
Barium	142	110	Plant	1.29
Cadmium	0.348	0.27	Shrew	1.29
Chromium (Total)	18.4	28	Robin (insectivore)	0.66
Cobalt	5.08	13	Plant	0.39
Copper	15.2	15	Robin (insectivore)	1.01
Lead	19.8	14	Robin (insectivore)	1.41
Mercury	0.34	0.013	Robin (insectivore)	26.2
Nickel	8.35	9.7	Shrew	0.86
Selenium	1.5 (U)	0.52	Plant	2.88
Silver	3.72	2.6	Robin (insectivore)	1.43
Uranium	4.62	25	Plant	0.18
Vanadium	24.2	6.7	Robin (insectivore)	3.61
Organic Chemicals (mg/kg)				
Acetone	0.00598	1.2	Deer mouse	0.005
Aroclor-1254	0.704	0.041	Robin (insectivore)	17.2
Aroclor-1260	0.258	0.88	Robin (insectivore)	0.29
Benzoic acid	1.01	1	Shrew	1.01
Bis(2-ethylhexyl)phthalate	0.343	0.02	Robin (insectivore)	17.2
Chloroform	0.000687	8	Deer mouse	0.000086
Di-n-butylphthalate	0.129	0.011	Robin (insectivore)	11.7
Di-n-octylphthalate	1.43	0.91	Shrew	1.57
Dichloroethene[1,1-]	0.000772	11	Shrew	0.00007
Methylene chloride	0.00478	2.6	Deer mouse	0.0018
Tetrachloroethene	0.000723	0.18	Shrew	0.004
Toluene	0.000778	23	Shrew	0.000034
Radionuclides (pCi/g)				
Cesium-137	0.31	1200	Cottontail	0.00026
Plutonium-238	0.0599	820	Earthworm	0.000073
Plutonium-239/240	0.00693	870	Earthworm	0.000008
Tritium	0.00467	36,000	Plant	0.00000013
Uranium-234	1.74	440	Plant	0.004
Uranium-238	2.54	400	Plant	0.0064

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-41
HI Analysis for AOC 15-014(h)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian Insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	1.57 (U)	0.034	na*	na	na	na	na	0.6	0.6	0.65	0.02	0.14
Barium	142	3.5E-03	5.1E-03	0.017	0.17	0.15	0.14	0.049	0.11	0.079	0.43	1.29
Cadmium	0.348	6.6E-04	7.4E-04	0.23	0.079	0.64	1.2	0.04	1.29	0.68	2.5E-03	0.011
Chromium (Total)	18.4	0.01	0.018	0.092	0.27	0.46	0.66	0.025	0.41	0.17	na	na
Cobalt	5.08	9.2E-04	1.9E-03	7.1E-03	0.03	0.042	0.053	3.2E-03	0.032	0.013	na	0.39
Copper	15.2	3.8E-03	0.012	0.17	0.4	0.69	1.01	0.063	0.4	0.24	0.19	0.22
Lead	19.8	5.4E-03	0.031	0.21	0.94	1.24	1.41	0.06	0.28	0.17	0.012	0.17
Mercury	0.34	5.6E-03	1.17	5.15	4.86	15.5	26.2	0.017	0.2	0.11	6.8	0.01
Nickel	8.35	7.0E-03	3.6E-03	0.07	0.052	0.22	0.4	0.019	0.86	0.42	0.03	0.22
Selenium	1.5 (U)	0.017	0.019	0.35	1.5	1.72	2	0.79	2.27	1.81	0.37	2.88
Silver	3.72	8.7E-04	5.6E-03	0.27	0.34	0.87	1.43	0.027	0.27	0.16	na	6.6E-03
Vanadium	24.2	7.3E-03	0.19	0.38	2.72	3.18	3.61	0.019	0.17	0.05	na	0.4
Aroclor-1254	0.704	0.12	0.099	3.2	0.54	8.8	17.2	0.015	1.6	0.8	na	4.4E-03
Benzoic acid	1.01	5.6E-04	na	na	na	na	na	0.27	1.01	0.78	na	na
Bis(2-ethylhexyl)phthalate	0.343	9.0E-04	0.042	3.43	0.017	8.58	17.2	1.4E-04	0.58	0.31	na	na
Di-n-butylphthalate	0.129	2.7E-06	0.076	2.19	0.33	6.14	11.7	9.2E-06	7.2E-04	3.5E-04	na	8.1E-04
Di-n-octylphthalate	1.43	1.4E-03	na	na	na	na	na	1.3E-04	1.57	0.79	na	na
HI		0.2	2	16	12	48	84	2	12	7	8	6

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-42
Minimum ESL Comparison for SWMU 36-002

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	0.913 (UJ)	2.4	Deer mouse	0.38
Barium	84.6	110	Plant	0.77
Cobalt	4.2	13	Plant	0.32
Copper	5.98	15	Robin (insectivore)	0.4
Nickel	6.82	9.7	Shrew	0.7
Selenium	0.922 (UJ)	0.52	Plant	1.77
Radionuclides (pCi/g)				
Plutonium-238	0.033	820	Earthworm	0.00004

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-43
HI Analysis for SWMU 36-002

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	0.913 (UJ)	0.02	na*	na	na	na	na	0.35	0.35	0.38	0.012	0.083
Barium	84.6	2.1E-03	3.0E-03	9.8E-03	0.1	0.091	0.085	0.029	0.065	0.047	0.26	0.77
Cobalt	4.2	7.6E-04	1.6E-03	5.8E-03	0.025	0.035	0.044	2.6E-03	0.026	0.011	na	0.32
Copper	5.98	1.5E-03	4.6E-03	0.065	0.16	0.27	0.4	0.025	0.16	0.093	0.075	0.085
Nickel	6.82	5.7E-03	3.0E-03	0.057	0.043	0.18	0.32	0.016	0.7	0.34	0.024	0.18
Selenium	0.922 (UJ)	0.01	0.011	0.21	0.92	1.06	1.23	0.49	1.4	1.11	0.22	1.77
HI		0.04	0.02	0.3	1	2	2	0.9	3	2	0.6	3

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-44
Minimum ESL Comparison for SWMU 36-003(a)

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	1.29 (UJ)	2.4	Deer mouse	0.54
Beryllium	2.63	2.5	Plant	1.05
Cobalt	2.81	13	Plant	0.22
Nickel	18.6	9.7	Shrew	1.92
Selenium	1.28 (U)	0.52	Plant	2.46
Organic Chemicals (mg/kg)				
RDX	0.184	2.3	Robin (herbivore)	0.08

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-45
HI Analysis for SWMU 36-003(a)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	1.29 (UJ)	0.028	na*	na	na	na	na	0.5	0.5	0.54	0.017	0.12
Beryllium	2.63	6.3E-03	na	na	na	na	na	0.018	0.15	0.047	0.066	1.05
Nickel	18.6	0.016	8.1E-03	0.16	0.12	0.49	0.89	0.042	1.92	0.93	0.066	0.49
Selenium	1.28 (U)	0.014	0.016	0.3	1.28	1.47	1.71	0.67	1.94	1.54	0.31	2.46
HI		0.06	0.02	0.5	1	2	3	1	5	3	0.5	4

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-46
Minimum ESL Comparison for SWMUs 36-008 and C-36-003

COPC	EPC (mg/kg)	ESL (mg/kg)	Receptor	HQ
Inorganic Chemicals (mg/kg)				
Antimony	5.62 (U)	2.4	Deer mouse	2.34
Barium	77.6	110	Plant	0.71
Beryllium	0.654	2.5	Plant	0.26
Cadmium	0.397	0.27	Shrew	1.47
Chromium (Total)	30.3	28	Robin (insectivore)	1.08
Copper	315	15	Robin (insectivore)	21
Cyanide (Total)	0.538	0.1	Robin (all diets)	5.38
Lead	29.7	14	Robin (insectivore)	2.12
Mercury	2.34	0.013	Robin (insectivore)	180
Nickel	6.79	9.7	Shrew	0.7
Selenium	0.635	0.52	Plant	1.22
Silver	41.7	2.6	Robin (insectivore)	16
Uranium	1.89	25	Plant	0.076
Vanadium	13.9	6.7	Robin (insectivore)	2.07
Zinc	135	48	Robin (insectivore)	2.81
Organic Chemicals (mg/kg)				
Acetone	0.00444	1.2	Deer mouse	0.0037
Aroclor-1254	0.124	0.041	Robin (insectivore)	3.02
Aroclor-1260	0.0725	0.88	Robin (insectivore)	0.082
Benzoic acid	0.63	1	Shrew	0.63
Bis(2-ethylhexyl)phthalate	0.236	0.02	Robin (insectivore)	11.8
Butylbenzylphthalate	0.214	90	Shrew	0.0024
Chloroform	0.00982	8	Deer mouse	0.0012
Di-n-butylphthalate	0.448	0.011	Robin (insectivore)	40.7
Dibenzofuran	0.421	6.1	Plant	0.069
Dichloroethene[1,1-]	0.00246	11	Shrew	0.00022
Methylene chloride	0.00384	2.6	Deer mouse	0.0015
RDX	0.106	2.3	Robin (herbivore)	0.046
Styrene	0.00197	1.2	Earthworm	0.0016
Toluene	0.00127	23	Shrew	0.000055
Trichloroethene	0.000729	42	Shrew	0.000017
Radionuclides (pCi/g)				
Cesium-137	0.559	1200	Cottontail	0.00047
Plutonium-239/240	0.0186	870	Earthworm	0.000021
Tritium	0.0125	36,000	Plant	0.00000035
Uranium-234	1.55	440	Plant	0.0035
Uranium-235/236	0.0699	440	Plant	0.00016
Uranium-238	1.69	400	Plant	0.0042

Note: Bolded values indicate HQs greater than 0.3.

Table H-5.3-47
HI Analysis for SWMUs 36-008 and C-36-003

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	5.62 (U)	0.12	na*	na	na	na	na	2.16	2.16	2.34	0.072	0.51
Barium	77.6	1.9E-03	2.8E-03	9.0E-03	0.095	0.083	0.078	0.027	0.06	0.043	0.24	0.71
Cadmium	0.397	7.5E-04	8.4E-04	0.26	0.09	0.74	1.37	0.045	1.47	0.78	2.8E-03	0.012
Chromium (Total)	30.3	0.017	0.03	0.15	0.45	0.76	1.08	0.04	0.67	0.28	na	na
Copper	315	0.079	0.24	3.42	8.29	14.3	21	1.31	8.29	4.92	3.94	4.5
Cyanide (Total)	0.538	1.9E-04	0.91	1.35	5.38	5.38	5.38	8.2E-04	1.7E-03	1.6E-03	na	na
Lead	29.7	8.0E-03	0.047	0.31	1.41	1.86	2.12	0.09	0.41	0.25	0.017	0.25
Mercury	2.34	0.038	8.07	35.5	33.4	106	180	0.12	1.38	0.78	46.8	0.069
Nickel	6.79	5.7E-03	3.0E-03	0.057	0.042	0.18	0.32	0.015	0.7	0.34	0.024	0.18
Selenium	0.635	7.1E-03	7.8E-03	0.15	0.64	0.73	0.85	0.33	0.96	0.77	0.15	1.22
Silver	41.7	9.7E-03	0.062	2.98	3.79	9.7	16	0.3	2.98	1.74	na	0.074
Vanadium	13.9	4.2E-03	0.11	0.22	1.56	1.83	2.07	0.011	0.099	0.029	na	0.23
Zinc	135	0.017	0.056	0.54	0.39	1.59	2.81	0.084	1.38	0.79	1.13	0.84
Aroclor-1254	0.124	0.021	0.017	0.56	0.095	1.55	3.02	2.7E-03	0.28	0.14	na	7.8E-04
Benzoic acid	0.63	3.5E-04	na	na	na	na	na	0.17	0.63	0.48	na	na
Bis(2-ethylhexyl)phthalate	0.236	6.2E-04	0.029	2.36	0.012	5.9	11.8	9.8E-05	0.4	0.21	na	na
Di-n-butylphthalate	0.448	9.3E-06	0.26	7.59	1.15	21.3	40.7	3.2E-05	2.5E-03	1.2E-03	na	2.8E-03
HI		0.3	10	55	57	172	289	5	22	14	52	9

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.3-48
Minimum ESL Comparison for SWMU C-36-003

<u>COPC</u>	<u>EPC (mg/kg)</u>	<u>ESL (mg/kg)</u>	<u>Receptor</u>	<u>HQ</u>
<u>Inorganic Chemicals (mg/kg)</u>				
<u>Antimony</u>	<u>1.49 (U)</u>	<u>2.4</u>	<u>Deer mouse</u>	<u>0.62</u>
<u>Cadmium</u>	<u>1.09</u>	<u>0.27</u>	<u>Shrew</u>	<u>4.04</u>
<u>Chromium (Total)</u>	<u>90.4</u>	<u>28</u>	<u>Robin (insectivore)</u>	<u>3.23</u>
<u>Copper</u>	<u>936</u>	<u>15</u>	<u>Robin (insectivore)</u>	<u>62.4</u>
<u>Cyanide (Total)</u>	<u>1.06</u>	<u>0.1</u>	<u>Robin (all diets)</u>	<u>10.6</u>
<u>Lead</u>	<u>58.5</u>	<u>14</u>	<u>Robin (insectivore)</u>	<u>4.18</u>
<u>Manganese</u>	<u>452</u>	<u>220</u>	<u>Plant</u>	<u>2.05</u>
<u>Mercury</u>	<u>0.342</u>	<u>0.013</u>	<u>Robin (insectivore)</u>	<u>26.3</u>
<u>Nickel</u>	<u>20.7</u>	<u>9.7</u>	<u>Shrew</u>	<u>2.13</u>
<u>Selenium</u>	<u>0.635</u>	<u>0.52</u>	<u>Plant</u>	<u>1.22</u>
<u>Silver</u>	<u>161</u>	<u>2.6</u>	<u>Robin (insectivore)</u>	<u>61.9</u>
<u>Uranium</u>	<u>4.43</u>	<u>25</u>	<u>Plant</u>	<u>0.18</u>
<u>Zinc</u>	<u>490</u>	<u>48</u>	<u>Robin (insectivore)</u>	<u>10.2</u>
<u>Organic Chemicals (mg/kg)</u>				
<u>Aroclor-1254</u>	<u>0.209</u>	<u>0.041</u>	<u>Robin (insectivore)</u>	<u>5.1</u>
<u>Aroclor-1260</u>	<u>0.132</u>	<u>0.88</u>	<u>Robin (insectivore)</u>	<u>0.15</u>
<u>Benzoic Acid</u>	<u>0.355</u>	<u>1</u>	<u>Shrew</u>	<u>0.36</u>
<u>Chloroform</u>	<u>0.00982</u>	<u>8</u>	<u>Deer mouse</u>	<u>0.0012</u>
<u>Di-n-butylphthalate</u>	<u>1.84</u>	<u>0.011</u>	<u>Robin (insectivore)</u>	<u>167</u>
<u>Methylene Chloride</u>	<u>0.00378</u>	<u>2.6</u>	<u>Deer mouse</u>	<u>0.0015</u>
<u>RDX</u>	<u>0.106</u>	<u>2.3</u>	<u>Robin (herbivore)</u>	<u>0.046</u>
<u>Toluene</u>	<u>0.000815</u>	<u>23</u>	<u>Shrew</u>	<u>0.000035</u>
<u>Radionuclides (pCi/g)</u>				
<u>Cesium-137</u>	<u>0.711</u>	<u>1200</u>	<u>Cottontail</u>	<u>0.00059</u>
<u>Tritium</u>	<u>0.0219</u>	<u>36,000</u>	<u>Plant</u>	<u>0.00000061</u>
<u>Uranium-234</u>	<u>3.23</u>	<u>440</u>	<u>Plant</u>	<u>0.0073</u>
<u>Uranium-235/236</u>	<u>0.144</u>	<u>440</u>	<u>Plant</u>	<u>0.00033</u>
<u>Uranium-238</u>	<u>2.63</u>	<u>400</u>	<u>Plant</u>	<u>0.0066</u>

Table H-5.3-49
HI Analysis for SWMU C-36-003

<u>COPEC</u>	<u>EPC (mg/kg)</u>	<u>Red Fox (mammalian top carnivore)</u>	<u>American Kestrel (avian Top carnivore)</u>	<u>American Kestrel (avian intermediate carnivore)</u>	<u>American Robin (avian herbivore)</u>	<u>American Robin (avian omnivore)</u>	<u>American Robin (avian insectivore)</u>	<u>Desert Cottontail (mammalian herbivore)</u>	<u>Montane Shrew (mammalian insectivore)</u>	<u>Deer Mouse (mammalian omnivore)</u>	<u>Earthworm (soil dwelling invertebrate)</u>	<u>Plant (terrestrial autotroph- producer)</u>
<u>Antimony</u>	<u>1.49 (U)</u>	<u>0.032</u>	<u>na*</u>	<u>na</u>	<u>na</u>	<u>na</u>	<u>na</u>	<u>0.57</u>	<u>0.57</u>	<u>0.62</u>	<u>0.019</u>	<u>0.14</u>
<u>Cadmium</u>	<u>1.09</u>	<u>2.1E-03</u>	<u>2.3E-03</u>	<u>0.73</u>	<u>0.25</u>	<u>2.02</u>	<u>3.76</u>	<u>0.12</u>	<u>4.04</u>	<u>2.14</u>	<u>7.8E-03</u>	<u>0.034</u>
<u>Chromium</u>	<u>90.4</u>	<u>0.05</u>	<u>0.09</u>	<u>0.45</u>	<u>1.33</u>	<u>2.26</u>	<u>3.23</u>	<u>0.12</u>	<u>2.01</u>	<u>0.82</u>	<u>na</u>	<u>na</u>
<u>Copper</u>	<u>936</u>	<u>0.23</u>	<u>0.72</u>	<u>10.2</u>	<u>24.6</u>	<u>42.5</u>	<u>62.4</u>	<u>3.9</u>	<u>24.6</u>	<u>14.6</u>	<u>11.7</u>	<u>13.4</u>
<u>Cyanide (Total)</u>	<u>1.06</u>	<u>3.8E-04</u>	<u>1.8</u>	<u>2.65</u>	<u>10.6</u>	<u>10.6</u>	<u>10.6</u>	<u>1.6E-03</u>	<u>3.4E-03</u>	<u>3.1E-03</u>	<u>na</u>	<u>na</u>
<u>Lead</u>	<u>58.5</u>	<u>0.016</u>	<u>0.093</u>	<u>0.62</u>	<u>2.79</u>	<u>3.66</u>	<u>4.18</u>	<u>0.18</u>	<u>0.81</u>	<u>0.49</u>	<u>0.034</u>	<u>0.49</u>
<u>Manganese</u>	<u>452</u>	<u>0.011</u>	<u>6.6E-03</u>	<u>0.017</u>	<u>0.32</u>	<u>0.24</u>	<u>0.15</u>	<u>0.25</u>	<u>0.3</u>	<u>0.32</u>	<u>1</u>	<u>2.05</u>
<u>Mercury</u>	<u>0.342</u>	<u>5.6E-03</u>	<u>1.18</u>	<u>5.18</u>	<u>4.89</u>	<u>15.5</u>	<u>26.3</u>	<u>0.017</u>	<u>0.2</u>	<u>0.11</u>	<u>6.84</u>	<u>0.01</u>
<u>Nickel</u>	<u>20.7</u>	<u>0.017</u>	<u>9.0E-03</u>	<u>0.17</u>	<u>0.13</u>	<u>0.54</u>	<u>0.99</u>	<u>0.047</u>	<u>2.13</u>	<u>1.04</u>	<u>0.074</u>	<u>0.54</u>
<u>Selenium</u>	<u>0.635</u>	<u>7.1E-03</u>	<u>7.8E-03</u>	<u>0.15</u>	<u>0.64</u>	<u>0.73</u>	<u>0.85</u>	<u>0.33</u>	<u>0.96</u>	<u>0.77</u>	<u>0.15</u>	<u>1.22</u>
<u>Silver</u>	<u>161</u>	<u>0.037</u>	<u>0.24</u>	<u>11.5</u>	<u>14.6</u>	<u>37.4</u>	<u>61.9</u>	<u>1.15</u>	<u>11.5</u>	<u>6.71</u>	<u>na</u>	<u>0.29</u>
<u>Zinc</u>	<u>490</u>	<u>0.063</u>	<u>0.2</u>	<u>1.96</u>	<u>1.4</u>	<u>5.76</u>	<u>10.2</u>	<u>0.31</u>	<u>5</u>	<u>2.88</u>	<u>4.08</u>	<u>3.06</u>
<u>Aroclor-1254</u>	<u>0.209</u>	<u>0.035</u>	<u>0.029</u>	<u>0.95</u>	<u>0.16</u>	<u>2.61</u>	<u>5.1</u>	<u>4.5E-03</u>	<u>0.48</u>	<u>0.24</u>	<u>na</u>	<u>1.3E-03</u>
<u>Benzoic Acid</u>	<u>0.355</u>	<u>2.0E-04</u>	<u>na</u>	<u>na</u>	<u>na</u>	<u>na</u>	<u>na</u>	<u>0.096</u>	<u>0.36</u>	<u>0.27</u>	<u>na</u>	<u>na</u>
<u>Di-n-butylphthalate</u>	<u>1.84</u>	<u>3.8E-05</u>	<u>1.08</u>	<u>31.2</u>	<u>4.72</u>	<u>87.6</u>	<u>167</u>	<u>1.3E-04</u>	<u>0.01</u>	<u>5.0E-03</u>	<u>na</u>	<u>0.012</u>
<u>HI</u>	<u>0.5</u>	<u>5</u>	<u>66</u>	<u>66</u>	<u>66</u>	<u>211</u>	<u>357</u>	<u>7</u>	<u>53</u>	<u>31</u>	<u>24</u>	<u>21</u>

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.4-1
Mexican Spotted Owl AUFs for Sites
within the Threemile Canyon Aggregate Area

Site	Site Area (ha)	AUF*
12-001(a) and 12-001(b)	1.82	0.00497
12-002	0.000232	0.000000635
12-004(a)	0.271	0.000741
12-004(b)	0.000513	0.0000014
C-12-001	0.00353	0.00000964
C-12-002	0.00422	0.0000115
C-12-003	0.0101	0.0000277
C-12-004	0.00391	0.0000107
C-12-005	0.00261	0.00000712
C-14-006	0.00295	0.00000806
15-005(c)	0.111	0.000305
15-007(c)	0.0508	0.000139
15-007(d)	0.0267	0.0000729
15-008(b)	3.12	0.00853
15-008(g)	0.00254	0.00000694
15-009(b)	0.0165	0.000045
15-009(c)	0.273	0.000746
15-009(h)	0.00485	0.0000132
15-010(b)	0.267	0.00073
15-014(h)	1.36	0.00371
36-002	0.00356	0.00000972
36-003(a)	0.0591	0.000161
36-008 and C-36-003	0.452	0.00124
<u>C-36-003</u>	<u>0.0165</u>	<u>0.000045</u>

* AUF is calculated as the area of the site divided by the owl home range of 366 ha.

Table H-5.4-2
PAUFs for Ecological Receptors for SWMUs 12-001(a) and 12-001(b)

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	4.29E-04
American Robin	0.42	16.8	1.08E-01
Deer Mouse	0.077	3	6.06E-01
Desert Cottontail	3.1	124	1.47E-02
Montane Shrew	0.39	15.6	1.17E-01
Red Fox	1038	41520	4.38E-05

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (1.82 ha) divided by the population area.

Table H-5.4-3
Adjusted HIs for SWMUs 12-001(a) and 12-001(b)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph-producer)
Antimony	1.15	1.1E-06	na*	na	na	na	na	0.0065	0.052	0.29	0.015	0.1
Barium	213	2.3E-07	3.3E-06	1.1E-05	0.028	0.025	0.023	0.0011	0.019	0.072	0.65	1.94
Chromium (Total)	24.6	6.0E-07	1.1E-05	5.3E-05	0.039	0.067	0.095	4.8E-04	0.064	0.14	na	na
Cobalt	7.1	5.7E-08	1.1E-06	4.2E-06	4.5E-03	6.4E-03	0.008	6.5E-05	0.0052	0.011	na	0.55
Copper	8.09	8.9E-08	2.7E-06	3.8E-05	0.023	0.04	0.058	4.9E-04	0.025	0.077	0.1	0.12
Manganese	456	4.9E-07	2.8E-06	7.2E-06	0.035	0.026	0.016	0.0037	0.035	0.2	1.01	2.07
Nickel	7.67	2.8E-07	1.4E-06	2.7E-05	5.2E-03	0.022	0.04	2.6E-04	0.092	0.23	0.027	0.2
Selenium	1.34 (U)	6.5E-07	7.1E-06	1.3E-04	0.15	0.17	0.19	0.01	0.24	0.98	0.33	2.58
Vanadium	27.6	3.7E-07	9.1E-05	1.8E-04	0.34	0.39	0.45	3.1E-04	0.023	0.035	na	0.46
RDX	3.73	2.3E-08	1.8E-06	1.2E-04	0.18	0.17	0.17	0.0018	0.027	0.14	0.44	na
Adjusted HI		4E-06	1E-04	6E-04	0.8	0.9	1	0.02	0.6	2	3	8

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-4
PAUFs for Ecological Receptors for SWMU 12-002

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	5.48E-08
American Robin	0.42	16.8	1.38E-05
Deer Mouse	0.077	3	7.74E-05
Desert Cottontail	3.1	124	1.87E-06
Montane Shrew	0.39	15.6	1.49E-05
Red Fox	1038	41520	5.59E-09

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.000232 ha) divided by the population area.

**Table H-5.4-5
Adjusted HIs for SWMU 12-002**

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph-producer)
Antimony	1.03 (U)	1.3E-10	na*	na	na	na	na	7.4E-07	5.9E-06	3.3E-05	0.013	0.094
Barium	191	2.6E-11	3.7E-08	1.2E-09	3.2E-06	2.8E-06	2.6E-06	1.2E-07	2.2E-06	8.2E-06	0.58	1.74
Chromium (Total)	13.5	4.2E-11	7.4E-08	3.7E-09	2.7E-06	4.7E-06	6.7E-06	3.4E-08	4.5E-06	9.5E-06	na	na
Cobalt	14.2	1.4E-11	2.9E-10	1.1E-09	1.2E-06	1.6E-06	2.0E-06	1.7E-08	1.3E-06	2.7E-06	na	1.09
Copper	11.1	1.6E-11	4.7E-08	6.6E-09	4.0E-06	7.0E-06	1.0E-05	8.7E-08	4.3E-06	1.3E-05	0.14	0.16
Nickel	9.28	4.3E-11	2.2E-10	4.2E-09	8.0E-07	3.4E-06	6.1E-06	4.0E-08	1.4E-05	3.6E-05	0.033	0.24
Selenium	1.1 (U)	6.8E-11	7.4E-08	1.4E-08	1.5E-05	1.7E-05	2.0E-05	1.1E-06	2.5E-05	1.0E-04	0.27	2.12
Vanadium	27.1	4.6E-11	1.1E-08	2.3E-08	4.2E-05	4.9E-05	5.6E-05	3.9E-08	2.9E-06	4.4E-06	na	0.45
Adjusted HI		4E-10	2E-07	5E-08	7E-05	9E-05	1E-04	2E-06	6E-05	2E-04	1	6

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

**Table H-5.4-6
PAUFs for Ecological Receptors for AOC 12-004(a)**

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	6.39E-05
American Robin	0.42	16.8	1.61E-02
Deer Mouse	0.077	3	9.04E-02
Desert Cottontail	3.1	124	2.19E-03
Montane Shrew	0.39	15.6	1.74E-02
Red Fox	1038	41520	6.53E-06

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.271 ha) divided by the population area.

**Table H-5.4-7
Adjusted HIs for AOC 12-004(a)**

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph-producer)
Barium	88.5	1.4E-08	2.0E-07	6.6E-07	1.7E-03	1.5E-03	0.0014	6.7E-05	0.0012	0.0044	0.27	0.8
Chromium (Total)	22.1	8.0E-08	1.4E-06	7.1E-06	5.2E-03	8.9E-03	0.013	6.4E-05	0.0085	0.018	na*	na
Cobalt	3.98	4.7E-09	9.4E-08	3.5E-07	3.8E-04	5.4E-04	6.7E-04	5.4E-06	4.3E-04	9.0E-04	na	0.31
Copper	5.31	8.7E-09	2.6E-07	3.7E-06	2.3E-03	3.9E-03	0.0057	4.8E-05	0.0024	0.0075	0.066	0.076
Nickel	5.98	3.3E-08	1.7E-07	3.2E-06	6.0E-04	2.5E-03	0.0046	3.0E-05	0.011	0.027	0.021	0.16
Selenium	1.26 (U)	9.1E-08	9.9E-07	1.9E-05	0.02	0.023	0.027	0.0015	0.033	0.14	0.31	2.42
Vanadium	13.8	2.7E-08	6.8E-06	1.4E-05	0.025	0.029	0.033	2.3E-05	0.0017	0.0026	na	0.23
Benzoic acid	0.608	2.2E-09	na	na	na	na	na	3.6E-04	0.011	0.042	na	na
Di-n-butylphthalate	0.121	1.6E-11	4.6E-06	1.3E-04	5.0E-03	0.093	0.18	1.9E-08	1.2E-05	3.0E-05	na	7.6E-04
Adjusted HI		3E-07	1E-05	2E-04	0.06	0.2	0.3	0.002	0.07	0.2	0.7	4

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-8
PAUFs for Ecological Receptors for AOC 12-004(b)

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	1.21E-07
American Robin	0.42	16.8	3.05E-05
Deer Mouse	0.077	3	1.71E-04
Desert Cottontail	3.1	124	4.13E-06
Montane Shrew	0.39	15.6	3.29E-05
Red Fox	1038	41520	1.23E-08

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.000513 ha) divided by the population area.

Table H-5.4-9
Adjusted HIs for AOC 12-004(b)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Arsenic	2.92	4.4E-11	4.2E-08	2.9E-09	2.1E-06	3.4E-06	5.0E-06	8.6E-08	6.4E-06	1.6E-05	0.43	0.16
Barium	246	7.4E-11	1.1E-09	3.5E-09	9.2E-06	8.1E-06	7.5E-06	3.5E-07	6.2E-06	2.3E-05	0.75	2.24
Chromium (Total)	13.3	9.1E-11	1.6E-09	8.0E-09	6.0E-06	1.0E-05	1.4E-05	7.3E-08	9.7E-06	2.1E-05	na*	na
Cobalt	7.49	1.7E-11	3.4E-08	1.3E-09	1.3E-06	1.9E-06	2.4E-06	1.9E-08	1.5E-06	3.2E-06	na	0.58
Copper	9.38	2.9E-11	8.7E-08	1.2E-08	7.5E-06	1.3E-05	1.9E-05	1.6E-07	8.1E-06	2.5E-05	0.12	0.13
Lead	18.5	6.2E-11	3.6E-09	2.4E-08	2.7E-05	3.5E-05	4.0E-05	2.3E-07	8.4E-06	2.6E-05	0.011	0.15

Table H-5.4-9 (continued)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Nickel	7.82	8.0E-11	4.1E-08	7.9E-09	1.5E-06	6.3E-06	1.1E-05	7.3E-08	2.6E-05	6.7E-05	0.028	0.21
Selenium	1.1	1.5E-10	1.6E-09	3.1E-08	3.4E-05	3.9E-05	4.5E-05	2.4E-06	5.5E-05	2.3E-04	0.27	2.12
Vanadium	30.3	1.1E-10	2.8E-08	5.7E-08	1.0E-04	1.2E-04	1.4E-04	9.6E-08	7.1E-06	1.1E-05	na	0.51
Aroclor-1254	0.015	3.1E-11	2.6E-10	8.2E-09	3.5E-07	5.7E-06	1.1E-05	1.3E-09	1.1E-06	2.9E-06	na	9.4E-05
Adjusted HI		7E-10	2E-07	2E-07	2E-04	2E-04	3E-04	3E-06	1E-04	4E-04	2	6

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-10
PAUFs for Ecological Receptors for AOC C-12-001

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	8.32E-07
American Robin	0.42	16.8	2.10E-04
Deer Mouse	0.077	3	1.18E-03
Desert Cottontail	3.1	124	2.85E-05
Montane Shrew	0.39	15.6	2.26E-04
Red Fox	1038	41520	8.50E-08

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.00353 ha) divided by the population area.

Table H-5.4-11
Adjusted HIs for AOC C-12-001

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Barium	132	2.7E-10	3.9E-09	1.3E-08	3.4E-05	3.0E-05	2.8E-05	1.3E-06	2.3E-05	8.6E-05	0.4	1.2
Chromium (Total)	16.3	7.7E-08	1.4E-08	6.8E-08	5.0E-05	8.6E-05	1.2E-04	6.2E-07	8.2E-05	1.7E-04	na*	na
Cobalt	4.97	7.7E-11	1.5E-09	5.7E-09	6.1E-06	8.7E-06	1.1E-05	8.8E-08	7.0E-06	1.5E-05	na	0.38
Nickel	7.75	5.5E-08	2.8E-09	5.4E-08	1.0E-05	4.3E-05	7.8E-05	5.0E-07	1.8E-04	4.6E-04	0.028	0.2
Selenium	1.26 (U)	1.2E-09	1.3E-08	2.4E-07	2.6E-04	3.0E-04	3.5E-04	1.9E-05	4.3E-04	0.0018	0.31	2.42
Aroclor-1242	0.114	1.2E-10	1.7E-08	4.3E-07	2.4E-05	3.0E-04	5.8E-04	1.2E-07	6.8E-05	1.8E-04	na	na
Aroclor-1254	0.109	1.6E-09	1.3E-08	4.1E-07	1.8E-05	2.9E-04	5.6E-04	6.7E-08	5.6E-05	1.5E-04	na	6.8E-04
Adjusted HI		1E-07	7E-08	1E-06	4E-04	0.001	0.002	2E-05	8E-04	0.003	0.7	4

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-12
PAUFs for Ecological Receptors for AOC C-12-002

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	9.95E-07
American Robin	0.42	16.8	2.51E-04
Deer Mouse	0.077	3	1.41E-03
Desert Cottontail	3.1	124	3.40E-05
Montane Shrew	0.39	15.6	2.70E-04
Red Fox	1038	41520	1.02E-07

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.00422 ha) divided by the population area.

Table H-5.4-13
Adjusted HIs for AOC C-12-002

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	1.11 (U)	2.5E-09	na*	na	na	na	na	1.5E-05	1.2E-04	6.5E-04	0.014	0.1
Barium	223	5.5E-08	7.9E-09	2.6E-08	6.8E-05	6.0E-05	5.6E-05	2.6E-06	4.6E-05	1.7E-04	0.68	2.03
Chromium (Total)	15	8.5E-08	1.5E-08	7.5E-08	5.5E-05	9.4E-05	1.3E-04	6.8E-07	9.0E-05	1.9E-04	na	na
Cobalt	7.49	1.4E-10	2.8E-09	1.0E-08	1.1E-05	1.6E-05	2.0E-05	1.6E-07	1.3E-05	2.6E-05	na	0.58
Copper	7.65	1.9E-10	5.9E-09	8.3E-08	5.1E-05	8.7E-05	1.3E-04	1.1E-06	5.4E-05	1.7E-04	0.096	0.11
Nickel	7.8	6.6E-08	3.4E-09	6.5E-08	1.2E-05	5.2E-05	9.3E-05	6.0E-07	2.2E-04	5.5E-04	0.028	0.21
Selenium	1.15 (U)	1.3E-09	1.4E-08	2.7E-07	2.9E-04	3.3E-04	3.8E-04	2.1E-05	4.7E-04	0.0019	0.28	2.21
Vanadium	28.2	8.7E-08	2.2E-07	4.4E-07	8.0E-04	9.3E-04	0.0011	7.4E-07	5.4E-05	8.3E-05	na	0.47
Adjusted HI		3E-07	3E-07	1E-06	0.001	0.002	0.002	4E-05	0.001	0.004	1	6

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-14
PAUFs for Ecological Receptors for AOC C-12-003

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	2.39E-06
American Robin	0.42	16.8	6.03E-04
Deer Mouse	0.077	3	3.38E-03
Desert Cottontail	3.1	124	8.18E-05
Montane Shrew	0.39	15.6	6.50E-04
Red Fox	1038	41520	2.44E-07

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.0101 ha) divided by the population area.

Table H-5.4-15
Adjusted HIs for AOC C-12-003

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph-producer)
Antimony	2.74	1.5E-08	na*	na	na	na	na	8.6E-05	6.8E-04	0.0039	0.035	0.25
Barium	117	7.0E-08	1.0E-08	3.3E-08	8.6E-05	7.6E-05	7.1E-05	3.3E-06	5.8E-05	2.2E-04	0.35	1.06
Chromium (Total)	45	6.1E-09	1.1E-07	5.4E-07	4.0E-04	6.8E-04	9.7E-04	4.9E-06	6.5E-04	0.0014	na	na
Cobalt	4.99	2.2E-10	4.4E-09	1.7E-08	1.8E-05	2.5E-05	3.1E-05	2.5E-07	2.0E-05	4.2E-05	na	0.38
Selenium	1.12 (UJ)	3.0E-09	3.3E-08	6.2E-07	6.8E-04	7.8E-04	9.0E-04	4.8E-05	0.0011	0.0046	0.27	2.15
Adjusted HI		9E-08	2E-07	1E-06	1E-03	2E-03	2E-03	1E-04	3E-03	0.01	0.7	4

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-16
PAUFs for Ecological Receptors for AOC C-12-004

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	9.22E-07
American Robin	0.42	16.8	2.33E-04
Deer Mouse	0.077	3	1.30E-03
Desert Cottontail	3.1	124	3.15E-05
Montane Shrew	0.39	15.6	2.51E-04
Red Fox	1038	41520	9.41E-08

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.00391 ha) divided by the population area.

Table H-5.4-17
Adjusted HIs for AOC C-12-004

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	1.21 (UJ)	2.5E-09	na*	na	na	na	na	1.5E-05	1.2E-04	6.6E-04	0.016	0.11
Barium	214	4.9E-08	7.0E-09	2.3E-08	6.1E-05	5.4E-05	5.0E-05	2.3E-06	4.1E-05	1.5E-04	0.65	1.95
Chromium (Total)	18.4	9.6E-08	1.7E-08	8.5E-08	6.3E-05	1.1E-04	1.5E-04	7.7E-07	1.0E-04	2.2E-04	na	na
Cobalt	5.85	1.0E-10	2.0E-09	7.5E-09	8.0E-06	1.1E-05	1.4E-05	1.2E-07	9.2E-06	1.9E-05	na	0.45
Copper	13.7	3.2E-08	9.7E-09	1.4E-07	8.4E-05	1.4E-04	2.1E-04	1.8E-06	9.0E-05	2.8E-04	0.17	0.2
Lead	39.2	1.0E-07	5.7E-08	3.8E-07	4.3E-04	5.7E-04	6.5E-04	3.7E-06	1.4E-04	4.3E-04	0.023	0.33

Table H-5.4-17 (continued)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Nickel	8.38	6.6E-08	3.4E-09	6.4E-08	1.2E-05	5.1E-05	9.3E-05	6.0E-07	2.2E-04	5.5E-04	0.03	0.22
Selenium	1.14 (U)	1.2E-09	1.3E-08	2.4E-07	2.7E-04	3.0E-04	3.5E-04	1.9E-05	4.3E-04	0.0018	0.28	2.19
Silver	1.63	3.6E-11	2.2E-09	1.1E-07	3.4E-05	8.8E-05	1.5E-04	3.7E-07	2.9E-05	8.8E-05	na	2.9E-03
Vanadium	28.1	8.0E-08	2.0E-07	4.0E-07	7.3E-04	8.6E-04	9.8E-04	6.8E-07	5.0E-05	7.6E-05	na	0.47
Adjusted HI		4E-07	3E-07	1E-06	0.002	0.002	0.003	4E-05	0.001	0.004	1	6

Table H-5.4-18
PAUFs for Ecological Receptors for AOC C-12-005

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	6.15E-07
American Robin	0.42	16.8	1.55E-04
Deer Mouse	0.077	3	8.69E-04
Desert Cottontail	3.1	124	2.10E-05
Montane Shrew	0.39	15.6	1.67E-04
Red Fox	1038	41520	6.28E-08

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.00261 ha) divided by the population area.

Table H-5.4-19
Adjusted HIs for AOC C-12-005

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	3.89	5.3E-09	na*	na	na	na	na	3.1E-05	2.5E-04	0.0014	0.05	0.35
Chromium (Total)	114	4.0E-09	7.0E-08	3.5E-07	2.6E-04	4.4E-04	6.3E-04	3.2E-06	4.2E-04	9.0E-04	na	na
Adjusted HI		9E-09	7E-08	4E-07	3E-04	4E-04	6E-04	3E-05	7E-04	0.002	0.05	0.4

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-20
PAUFs for Ecological Receptors for AOC 15-005(c)

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	2.63E-05
American Robin	0.42	16.8	6.64E-03
Deer Mouse	0.077	3	3.72E-02
Desert Cottontail	3.1	124	8.99E-04
Montane Shrew	0.39	15.6	7.15E-03
Red Fox	1038	41520	2.69E-06

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.111 ha) divided by the population area.

Table H-5.4-21
Adjusted HIs for AOC 15-005(c)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	0.855	5.0E-08	na*	na	na	na	na	3.0E-04	0.0024	0.013	0.011	0.078
Barium	199	1.3E-08	1.9E-07	6.1E-07	1.6E-03	1.4E-03	0.0013	6.2E-05	0.0011	0.0041	0.6	1.81
Chromium (Total)	11.3	1.7E-08	3.0E-07	1.5E-06	1.1E-03	1.9E-03	0.0027	1.4E-05	0.0018	0.0038	na	na
Cobalt	6.13	3.0E-09	6.0E-08	2.2E-07	2.4E-04	3.4E-04	4.2E-04	3.4E-06	2.7E-04	5.7E-04	na	0.47
Copper	12	8.1E-09	2.4E-07	3.4E-06	2.1E-03	3.6E-03	0.0053	4.5E-05	0.0023	0.007	0.15	0.17
Lead	35.3	2.6E-08	1.5E-06	9.8E-06	0.011	0.015	0.017	9.6E-05	0.0035	0.011	0.021	0.29
Selenium	1.48 (U)	4.4E-08	4.8E-07	9.0E-06	9.8E-03	0.011	0.013	7.0E-04	0.016	0.066	0.36	2.85
Vanadium	27.4	2.2E-08	5.5E-06	1.1E-05	0.02	0.024	0.027	1.9E-05	0.0014	0.0021	na	0.46
Bis(2-ethylhexyl)phthalate	0.0995	7.0E-08	3.2E-07	2.6E-05	3.3E-05	0.017	0.033	3.7E-08	0.0012	0.0034	na	na
Adjusted HI		3E-07	9E-06	6E-05	0.05	0.07	0.1	0.001	0.03	0.1	1	6

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-22
PAUFs for Ecological Receptors for SWMU 15-007(c)

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	1.20E-05
American Robin	0.42	16.8	3.03E-03
Deer Mouse	0.077	3	1.69E-02
Desert Cottontail	3.1	124	4.10E-04
Montane Shrew	0.39	15.6	3.26E-03
Red Fox	1038	41520	1.22E-06

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.0508 ha) divided by the population area.

Table H-5.4-23
Adjusted HIs for SWMU 15-007(c)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph-producer)
Antimony	243	6.5E-06	na*	na	na	na	na	0.038	0.3	1.72	3.12	22.1
Chromium (Total)	31.8	2.2E-08	3.8E-07	1.9E-06	1.4E-03	2.4E-03	0.0034	1.7E-05	0.0023	0.0049	na	na
Copper	8.17	2.5E-09	7.5E-08	1.1E-06	6.5E-04	1.1E-03	0.0016	1.4E-05	7.0E-04	0.0022	0.1	0.12
Lead	7290	2.4E-06	1.4E-04	9.2E-04	1.05	1.38	1.58	0.0091	0.33	1.03	4.29	60.8
Nickel	8.79	9.0E-09	4.6E-08	8.8E-07	1.7E-04	7.0E-04	0.0013	8.2E-06	0.003	0.0074	0.031	0.23
Selenium	2.11 (U)	2.9E-09	3.1E-07	5.9E-06	6.4E-03	7.4E-03	3.03E-03	4.6E-04	1.0E-02	4.3E-02	0.52	4.06
Silver	1.15	3.3E-08	2.1E-08	9.9E-07	3.2E-04	8.1E-04	0.0013	3.4E-06	2.7E-04	8.1E-04	na	2.1E-03
Zinc	46.7	7.3E-09	2.3E-07	2.2E-06	4.0E-04	1.7E-03	0.0029	1.2E-05	0.0016	0.0047	0.39	0.29
Adjusted HI		9E-06	1E-04	9E-04	1	1	2	0.05	0.6	3	8	84

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

*na = Not available.

Table H-5.4-24
PAUFs for Ecological Receptors for SWMU 15-007(d)

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	6.29E-06
American Robin	0.42	16.8	1.59E-03
Deer Mouse	0.077	3	8.89E-03
Desert Cottontail	3.1	124	2.15E-04
Montane Shrew	0.39	15.6	1.71E-03
Red Fox	1038	41520	6.42E-07

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.0267 ha) divided by the population area.

Table H-5.4-25
Adjusted HIs for SWMU 15-007(d)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	0.998 (U)	1.4E-08	na*	na	na	na	na	8.3E-05	6.6E-04	0.0037	0.013	0.091
Selenium	1 (U)	7.1E-09	7.8E-08	1.5E-06	1.6E-03	1.8E-03	0.0021	1.1E-04	0.0026	0.011	0.24	1.92
Adjusted HI		2E-08	8E-08	2E-06	0.002	0.002	0.002	2E-04	0.003	0.01	0.3	2

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-26
PAUFs for Ecological Receptors for SWMU 15-008(b)

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	7.36E-04
American Robin	0.42	16.8	1.86E-01
Deer Mouse	0.077	3	1.00E+00
Desert Cottontail	3.1	124	2.52E-02
Montane Shrew	0.39	15.6	2.00E-01
Red Fox	1038	41520	7.52E-05

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (3.12 ha) divided by the population area.

Table H-5.4-27
Adjusted HIs for SWMU 15-008(b)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph-producer)
Antimony	5.63	9.2E-06	na*	na	na	na	na	0.054	0.43	2.35	0.072	0.51
Barium	73.2	1.3E-07	1.9E-06	6.3E-06	0.017	0.015	0.014	6.4E-04	0.011	0.041	0.22	0.67
Beryllium	4.46	8.0E-07	na	na	na	na	na	7.5E-04	0.05	0.08	0.11	1.78
Cadmium	0.394	5.6E-08	6.2E-07	1.9E-04	0.017	0.14	0.25	0.0011	0.29	0.77	2.8E-03	0.012
Chromium (Total)	13.6	5.7E-07	1.0E-05	5.0E-05	0.037	0.063	0.09	4.6E-04	0.06	0.12	na	na
Copper	1410	2.6E-05	8.0E-04	0.011	6.89	11.9	17.5	0.15	7.42	22	17.6	20.1

Table H-5.4 (continued)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Lead	4400	8.9E-05	5.1E-03	0.034	38.9	51.1	58.4	0.34	12.2	36.7	2.59	36.7
Manganese	266	4.9E-07	2.8E-06	7.3E-06	0.035	0.026	0.016	0.0037	0.035	0.19	0.59	1.21
Nickel	6.58	4.1E-07	2.1E-06	4.0E-05	7.6E-03	0.032	0.058	3.8E-04	0.14	0.33	0.024	0.17
Selenium	0.696	5.8E-07	6.3E-06	1.2E-04	0.13	0.15	0.17	0.0092	0.21	0.84	0.17	1.34
Uranium	90.4	1.4E-06	2.2E-06	4.2E-06	8.8E-03	9.9E-03	0.01	0.0013	0.082	0.12	na	3.62
Vanadium	13.3	3.0E-07	7.5E-05	1.5E-04	0.28	0.33	0.37	2.6E-04	0.019	0.028	na	0.22
Zinc	457	4.4E-06	1.4E-04	1.3E-03	0.24	1	1.77	0.0072	0.93	2.69	3.81	2.86
Aroclor-1242	0.282	2.6E-07	3.6E-05	9.4E-04	0.052	0.66	1.28	2.6E-04	0.15	0.37	na	na
Aroclor-1254	0.0168	2.1E-07	1.7E-06	5.6E-05	2.4E-03	0.039	0.076	9.2E-06	0.0076	0.019	na	1.1E-04
Adjusted HI		1E-04	0.006	0.05	47	65	80	0.6	22	67	25	69

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-28
PAUFs for Ecological Receptors for AOC 15-008(g)

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	5.99E-07
American Robin	0.42	16.8	1.51E-04
Deer Mouse	0.077	3	8.46E-04
Desert Cottontail	3.1	124	2.05E-05
Montane Shrew	0.39	15.6	1.63E-04
Red Fox	1038	41520	6.11E-08

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.00254 ha) divided by the population area.

Table H-5.4-29
Adjusted HIs for AOC 15-008(g)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph-producer)
Antimony	3.77	5.0E-09	na*	na	na	na	na	3.0E-05	2.4E-04	0.0013	0.048	0.34
Cobalt	9.43	1.0E-10	2.1E-09	7.8E-09	8.4E-06	1.2E-05	1.5E-05	1.2E-07	9.6E-06	2.0E-05	na	0.73
Copper	25.7	3.9E-08	1.2E-08	1.7E-07	1.0E-04	1.8E-04	2.6E-04	2.2E-06	1.1E-04	3.4E-04	0.32	0.37
Lead	309	5.1E-09	2.9E-07	1.9E-06	2.2E-03	2.9E-03	0.0033	1.9E-05	7.0E-04	0.0022	0.18	2.58
Selenium	1.28 (U)	8.7E-08	9.5E-09	1.8E-07	1.9E-04	2.2E-04	2.6E-04	1.4E-05	3.2E-04	0.0013	0.31	2.46
Adjusted HI		1E-07	3E-07	2E-06	0.002	0.003	0.004	7E-05	0.001	0.005	0.9	6

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-30
PAUFs for Ecological Receptors for SWMU 15-009(b)

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	3.88E-06
American Robin	0.42	16.8	9.79E-04
Deer Mouse	0.077	3	5.48E-03
Desert Cottontail	3.1	124	1.33E-04
Montane Shrew	0.39	15.6	1.05E-03
Red Fox	1038	41520	3.96E-07

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.0165 ha) divided by the population area.

Table H-5.4-31
Adjusted HIs for SWMU 15-009(b)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	1.44 (UJ)	1.2E-08	na*	na	na	na	na	7.3E-05	5.8E-04	0.0033	0.018	0.13
Barium	94	9.1E-08	1.3E-08	4.2E-08	1.1E-04	9.9E-05	9.2E-05	4.3E-06	7.6E-05	2.9E-04	0.28	0.85
Cadmium	0.757 (U)	5.7E-08	6.3E-09	2.0E-06	1.7E-04	1.4E-03	0.0026	1.1E-05	0.003	0.0081	5.4E-03	0.024
Chromium (Total)	14.4	3.2E-09	5.6E-08	2.8E-07	2.1E-04	3.5E-04	5.0E-04	2.5E-06	3.4E-04	7.2E-04	na	na
Copper	10	9.9E-08	3.0E-08	4.2E-07	2.6E-04	4.5E-04	6.5E-04	5.5E-06	2.8E-04	8.6E-04	0.13	0.14
Cyanide (Total)	1.22	1.7E-10	8.0E-06	1.2E-05	0.012	0.012	0.012	2.5E-07	4.2E-06	2.0E-05	na	na

Table H-5.4-31 (continued)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Lead	16.2	1.7E-09	1.0E-07	6.6E-07	7.6E-04	9.9E-04	0.0011	6.5E-06	2.4E-04	7.4E-04	9.5E-03	0.14
Selenium	1.59 (U)	7.0E-09	7.6E-08	1.4E-06	1.6E-03	1.8E-03	0.0021	1.1E-04	0.0025	0.011	0.39	3.06
Uranium	417	3.4E-08	5.4E-08	1.0E-07	2.1E-04	2.4E-04	2.6E-04	3.1E-05	0.002	0.003	na	16.7
Uranium-234	215	7.7E-08	3.2E-09	3.2E-09	1.4E-05	6.8E-06	2.3E-06	1.6E-06	1.6E-06	9.8E-06	0.098	0.49
Uranium-238	221	4.2E-08	2.0E-07	2.0E-07	6.4E-05	5.7E-05	5.3E-05	1.5E-05	1.1E-04	5.8E-04	0.2	0.55
Adjusted HI		4E-07	9E-06	2E-05	0.02	0.02	0.02	3E-04	0.009	0.03	1	22

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-32
PAUFs for Ecological Receptors for SWMU 15-009(c)

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	6.44E-05
American Robin	0.42	16.8	1.62E-02
Deer Mouse	0.077	3	9.10E-02
Desert Cottontail	3.1	124	2.20E-03
Montane Shrew	0.39	15.6	1.75E-02
Red Fox	1038	41520	6.57E-06

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.273 ha) divided by the population area.

Table H-5.4-33
Adjusted HIs for SWMU 15-009(c)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Chromium (Total)	10.3	3.8E-08	6.6E-07	3.3E-06	2.5E-03	4.2E-03	0.006	3.0E-05	0.004	0.0085	na*	na
Cyanide (Total)	1.69	4.0E-09	1.8E-04	2.7E-04	0.27	0.27	0.27	5.6E-06	9.5E-05	4.5E-04	na	na
Selenium	1.3 (U)	9.5E-08	1.0E-06	1.9E-05	0.021	0.024	0.028	0.0015	0.034	0.14	0.32	2.5
Bis(2-ethylhexyl)phthalate	0.105	1.8E-09	8.3E-07	6.8E-05	8.5E-05	0.043	0.085	9.6E-08	0.0031	0.0087	na	na
Adjusted HI		1E-07	2E-04	4E-04	0.3	0.3	0.4	0.002	0.04	0.2	0.3	3

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-34
PAUFs for Ecological Receptors for SWMU 15-010(b)

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	6.30E-05
American Robin	0.42	16.8	1.59E-02
Deer Mouse	0.077	3	8.90E-02
Desert Cottontail	3.1	124	2.15E-03
Montane Shrew	0.39	15.6	1.71E-02
Red Fox	1038	41520	6.43E-06

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.267 ha) divided by the population area.

Table H-5.4-35
Adjusted HIs for SWMU 15-010(b)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	1.35 (U)	1.9E-07	na*	na	na	na	na	0.0011	0.0089	0.05	0.017	0.12
Cadmium	0.673 (U)	8.2E-09	9.0E-08	2.8E-05	2.4E-03	0.02	0.037	1.6E-04	0.043	0.12	4.8E-03	0.021
Chromium (Total)	10	3.6E-08	6.3E-07	3.2E-06	2.3E-03	4.0E-03	0.0057	2.9E-05	0.0038	0.0081	na	na
Mercury	0.292	3.1E-08	6.3E-05	2.8E-04	0.066	0.21	0.36	3.1E-05	0.0029	0.0087	5.84	8.6E-03
Selenium	0.72	5.1E-08	5.6E-07	1.1E-05	0.011	0.013	0.015	8.2E-04	0.019	0.077	0.18	1.38
Vanadium	15.7	3.1E-08	7.6E-06	1.5E-05	0.028	0.033	0.037	2.6E-05	0.0019	0.0029	na	0.26
Bis(2-ethylhexyl)phthalate	0.17	2.9E-09	1.3E-06	1.1E-04	1.4E-04	0.068	0.14	1.5E-07	0.0049	0.014	na	na
Di-n-butylphthalate	0.86	1.2E-10	3.2E-05	9.2E-04	0.035	0.65	1.24	1.3E-07	8.2E-05	2.1E-04	na	5.4E-03
Adjusted HI		4E-07	1E-04	0.001	0.1	1	2	0.002	0.08	0.3	6	2

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-36
PAUFs for Ecological Receptors for AOC 15-014(h)

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	3.20E-04
American Robin	0.42	16.8	8.08E-02
Deer Mouse	0.077	3	4.52E-01
Desert Cottontail	3.1	124	1.09E-02
Montane Shrew	0.39	15.6	8.70E-02
Red Fox	1038	41520	3.27E-05

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (1.36 ha) divided by the population area.

Table H-5.4-37
Adjusted HIs for AOC 15-014(h)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Antimony	1.57 (U)	1.1E-06	na*	na	na	na	na	0.0066	0.053	0.3	0.02	0.14
Barium	142	1.1E-07	1.6E-06	5.3E-06	0.014	0.012	0.011	5.4E-04	0.0095	0.036	0.43	1.29
Cadmium	0.348	2.1E-08	2.4E-07	7.4E-05	6.4E-03	0.052	0.097	4.3E-04	0.11	0.31	2.5E-03	0.011
Chromium (Total)	18.4	3.3E-07	5.9E-06	2.9E-05	0.022	0.037	0.053	2.7E-04	0.036	0.076	na	na
Cobalt	5.08	3.0E-08	6.0E-07	2.3E-06	2.4E-03	3.4E-03	0.0043	3.5E-05	0.0028	0.0057	na	0.39
Copper	15.2	1.2E-07	3.7E-06	5.3E-05	0.032	0.056	0.082	6.9E-04	0.035	0.11	0.19	0.22

Table H-5.4-37 (continued)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Lead	19.8	1.7E-07	1.0E-05	6.7E-05	0.076	0.1	0.11	6.6E-04	0.024	0.075	0.012	0.17
Mercury	0.34	1.8E-07	3.8E-04	1.6E-03	0.39	1.25	2.11	1.9E-04	0.017	0.051	6.8	0.01
Nickel	8.35	2.3E-07	1.2E-06	2.2E-05	4.2E-03	0.018	0.032	2.1E-04	0.075	0.19	0.03	0.22
Selenium	1.5 (U)	5.4E-07	5.9E-06	1.1E-04	0.12	0.14	0.16	0.0086	0.2	0.82	0.37	2.88
Silver	3.72	2.8E-08	1.8E-06	8.5E-05	0.027	0.07	0.12	2.9E-04	0.023	0.07	na*	6.6E-03
Vanadium	24.2	2.4E-07	6.0E-05	1.2E-04	0.22	0.26	0.29	2.0E-04	0.015	0.023	na	0.4
Aroclor-1254	0.704	3.9E-06	3.2E-05	1.0E-03	0.044	0.71	1.39	1.7E-04	0.14	0.36	na	4.4E-03
Benzoic acid	1.01	1.8E-08	na	na	na	na	na	0.003	0.088	0.35	na	na
Bis(2-ethylhexyl)phthalate	0.343	2.9E-08	1.4E-05	1.1E-03	1.4E-03	0.69	1.39	1.6E-06	0.051	0.14	na	na
Di-n-butylphthalate	0.129	8.8E-11	2.4E-05	7.0E-04	0.027	0.5	0.95	1.0E-07	6.2E-05	1.6E-04	na	8.1E-04
Di-n-octylphthalate	1.43	4.7E-08	na	na	na	na	na	1.4E-06	0.14	0.36	na	na
Adjusted HI		7E-06	5E-04	0.005	1	4	7	0.02	1	3	8	6

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-38
PAUFs for Ecological Receptors for SWMU 36-002

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	8.39E-07
American Robin	0.42	16.8	2.12E-04
Deer Mouse	0.077	3	1.19E-03
Desert Cottontail	3.1	124	2.87E-05
Montane Shrew	0.39	15.6	2.28E-04
Red Fox	1038	41520	8.57E-08

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.00356 ha) divided by the population area.

Table H-5.4-39
Adjusted HIs for SWMU 36-002

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph-producer)
Antimony	0.913 (UJ)	1.7E-09	na	na	na	na	na	1.0E-05	8.0E-05	4.5E-04	0.012	0.083
Barium	84.6	1.8E-10	2.5E-09	8.3E-09	2.2E-05	1.9E-05	1.8E-05	8.4E-07	1.5E-05	5.6E-05	0.26	0.77
Cobalt	4.2	6.5E-11	1.3E-09	4.9E-09	5.2E-06	7.4E-06	na	1.0E-05	8.0E-05	4.5E-04	0.012	0.083
Copper	5.98	1.3E-10	3.9E-09	5.5E-08	3.3E-05	5.8E-05	8.4E-05	7.1E-07	3.6E-05	1.1E-04	0.075	0.085
Nickel	6.82	4.9E-08	2.5E-09	4.8E-08	9.0E-06	3.8E-05	6.9E-05	4.4E-07	1.6E-04	4.0E-04	0.024	0.18
Selenium	0.922 (UJ)	8.8E-08	9.6E-09	1.8E-07	2.0E-04	2.2E-04	2.6E-04	1.4E-05	3.2E-04	0.0013	0.22	1.77
Adjusted HI		1E-07	2E-08	3E-07	3E-04	3E-04	4E-04	3E-05	6E-04	0.002	0.6	3

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-40
PAUFs for Ecological Receptors for SWMU 36-003(a)

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	1.39E-05
American Robin	0.42	16.8	3.52E-03
Deer Mouse	0.077	3	1.97E-02
Desert Cottontail	3.1	124	4.76E-04
Montane Shrew	0.39	15.6	3.79E-03
Red Fox	1038	41520	1.42E-06

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.0591 ha) divided by the population area.

Table H-5.4-41
Adjusted HIs for SWMU 36-003(a)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph-producer)
Antimony	1.29 (UJ)	4.0E-08	na*	na	na	na	na	2.4E-04	0.0019	0.011	0.017	0.12
Beryllium	2.63	8.9E-09	na	na	na	na	na	8.4E-06	5.5E-04	9.2E-04	0.066	1.05
Nickel	18.6	2.2E-08	1.1E-07	2.2E-06	4.1E-04	1.7E-03	0.0031	2.0E-05	0.0073	0.018	0.066	0.49
Selenium	1.28 (U)	2.0E-08	2.2E-07	4.1E-06	4.5E-03	5.2E-03	0.006	3.2E-04	0.0073	0.03	0.31	2.46
Adjusted HI		9E-08	3E-07	6E-06	0.005	0.007	0.009	6E-04	0.02	0.06	0.5	4

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-42
PAUFs for Ecological Receptors for SWMUs 36-008 and C-36-003

Receptor	HR (ha) ^a	Population Area (ha)	PAUF ^b
American Kestrel	106	4240	1.07E-04
American Robin	0.42	16.8	2.69E-02
Deer Mouse	0.077	3	1.51E-01
Desert Cottontail	3.1	124	3.65E-03
Montane Shrew	0.39	15.6	2.90E-02
Red Fox	1038	41520	1.09E-05

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.452 ha) divided by the population area.

Table H-5.4-43
Adjusted HIs for SWMUs 36-008 and C-36-003

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph-producer)
Antimony	5.62 (U)	1.3E-06	na*	na	na	na	na	0.0079	0.063	0.35	0.072	0.51
Barium	77.6	2.1E-08	3.0E-07	9.6E-07	2.5E-03	2.2E-03	0.0021	9.8E-05	0.0017	0.0065	0.24	0.71
Cadmium	0.397	8.2E-09	9.0E-08	2.8E-05	2.4E-03	0.02	0.037	1.6E-04	0.043	0.12	2.8E-03	0.012
Chromium (Total)	30.3	1.8E-07	3.2E-06	1.6E-05	0.012	0.02	0.029	1.5E-04	0.02	0.042	na	na
Copper	315	8.6E-07	2.6E-05	3.7E-04	0.22	0.39	0.57	0.0048	0.24	0.74	3.94	4.5
Cyanide (Total)	0.538	2.1E-09	9.7E-05	1.4E-04	0.14	0.14	0.14	3.0E-06	5.0E-05	2.4E-04	na	na

Table H-5.4-43 (continued)

COPEC	EPC (mg/kg)	Red Fox (mammalian top carnivore)	American Kestrel (avian Top carnivore)	American Kestrel (avian intermediate carnivore)	American Robin (avian herbivore)	American Robin (avian omnivore)	American Robin (avian insectivore)	Desert Cottontail (mammalian herbivore)	Montane Shrew (mammalian insectivore)	Deer Mouse (mammalian omnivore)	Earthworm (soil dwelling invertebrate)	Plant (terrestrial autotroph- producer)
Lead	29.7	8.7E-08	5.0E-06	3.3E-05	0.038	0.05	0.057	3.3E-04	0.012	0.037	0.017	0.25
Mercury	2.34	4.2E-07	8.6E-04	3.8E-03	0.9	2.86	4.84	4.3E-04	0.04	0.12	46.8	0.069
Nickel	6.79	6.2E-08	3.1E-07	6.0E-06	1.1E-03	4.8E-03	0.0087	5.6E-05	0.02	0.051	0.024	0.18
Selenium	0.635	7.7E-08	8.4E-07	1.6E-05	0.017	0.02	0.023	0.0012	0.028	0.12	0.15	1.22
Silver	41.7	1.1E-07	6.6E-06	3.2E-04	0.1	0.26	0.43	0.0011	0.086	0.26	na	0.074
Vanadium	13.9	4.6E-08	1.1E-05	2.3E-05	0.042	0.049	0.056	3.9E-05	0.0029	0.0044	na	0.23
Zinc	135	1.9E-07	6.0E-06	5.8E-05	0.01	0.043	0.076	3.1E-04	0.04	0.12	1.13	0.84
Aroclor-1254	0.124	2.3E-07	1.9E-06	6.0E-05	2.6E-03	0.042	0.081	9.8E-06	0.0082	0.021	na	7.8E-04
Benzoic acid	0.63	3.8E-09	na	na	na	na	na	6.2E-04	0.018	0.073	na	na
Bis(2-ethylhexyl)phthalate	0.236	6.8E-09	3.1E-06	2.5E-04	3.2E-04	0.16	0.32	3.6E-07	0.012	0.032	na	na
Di-n-butylphthalate	0.448	1.0E-10	2.8E-05	8.1E-04	0.031	0.57	1.1	1.2E-07	7.2E-05	1.8E-04	na	2.8E-03
Adjusted HI		4E-06	0.001	0.006	2	5	8	0.02	0.6	2	52	9

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-44
PAUFs for Ecological Receptors for SWMU C-36-003

<u>Receptor</u>	<u>Home Range (ha)^a</u>	<u>Population Area (ha)</u>	<u>PAUF^b</u>
<u>American Kestrel</u>	<u>106</u>	<u>4240</u>	<u>3.88E-06</u>
<u>American Robin</u>	<u>0.42</u>	<u>16.8</u>	<u>9.80E-04</u>
<u>Deer Mouse</u>	<u>0.077</u>	<u>3</u>	<u>5.49E-03</u>
<u>Desert Cottontail</u>	<u>3.1</u>	<u>124</u>	<u>1.33E-04</u>
<u>Montane Shrew</u>	<u>0.39</u>	<u>15.6</u>	<u>1.06E-03</u>
<u>Red Fox</u>	<u>1038</u>	<u>41520</u>	<u>3.97E-07</u>

^a Values from EPA (1993, 059384).

^b PAUF is calculated as the area of the site (0.0165 ha) divided by the population area.

Table H-5.4-45
Adjusted HIs for SWMU C-36-003

<u>COPEC</u>	<u>EPC (mg/kg)</u>	<u>Red Fox (mammalian top carnivore)</u>	<u>American Kestrel (avian Top carnivore)</u>	<u>American Kestrel (avian intermediate carnivore)</u>	<u>American Robin (avian herbivore)</u>	<u>American Robin (avian omnivore)</u>	<u>American Robin (avian insectivore)</u>	<u>Desert Cottontail (mammalian herbivore)</u>	<u>Montane Shrew (mammalian insectivore)</u>	<u>Deer Mouse (mammalian omnivore)</u>	<u>Earthworm (soil dwelling invertebrate)</u>	<u>Plant (terrestrial autotroph-producer)</u>
<u>Antimony</u>	<u>1.49 (U)</u>	<u>1.3E-08</u>	<u>na*</u>	<u>na</u>	<u>na</u>	<u>na</u>	<u>na</u>	<u>7.6E-05</u>	<u>6.0E-04</u>	<u>0.0034</u>	<u>0.019</u>	<u>0.14</u>
<u>Cadmium</u>	<u>1.09</u>	<u>8.2E-08</u>	<u>9.0E-09</u>	<u>2.8E-06</u>	<u>2.4E-04</u>	<u>2.0E-03</u>	<u>0.0037</u>	<u>1.6E-05</u>	<u>0.0043</u>	<u>0.012</u>	<u>7.8E-03</u>	<u>0.034</u>
<u>Chromium</u>	<u>90.4</u>	<u>2.0E-08</u>	<u>3.5E-07</u>	<u>1.8E-06</u>	<u>1.3E-03</u>	<u>2.2E-03</u>	<u>0.0032</u>	<u>1.6E-05</u>	<u>0.0021</u>	<u>0.0045</u>	<u>na</u>	<u>na</u>
<u>Copper</u>	<u>936</u>	<u>9.3E-08</u>	<u>2.8E-06</u>	<u>4.0E-05</u>	<u>0.024</u>	<u>0.042</u>	<u>0.061</u>	<u>5.2E-04</u>	<u>0.026</u>	<u>0.08</u>	<u>11.7</u>	<u>13.4</u>
<u>Cyanide (Total)</u>	<u>1.06</u>	<u>1.5E-10</u>	<u>7.0E-06</u>	<u>1.0E-05</u>	<u>0.01</u>	<u>0.01</u>	<u>0.01</u>	<u>2.1E-07</u>	<u>3.6E-06</u>	<u>1.7E-05</u>	<u>na</u>	<u>na</u>

Table H-5.4-45 (continued)

<u>COPEC</u>	<u>EPC (mg/kg)</u>	<u>Red Fox (mammalian top carnivore)</u>	<u>American Kestrel (avian Top carnivore)</u>	<u>American Kestrel (avian intermediate carnivore)</u>	<u>American Robin (avian herbivore)</u>	<u>American Robin (avian omnivore)</u>	<u>American Robin (avian insectivore)</u>	<u>Desert Cottontail (mammalian herbivore)</u>	<u>Montane Shrew (mammalian insectivore)</u>	<u>Deer Mouse (mammalian omnivore)</u>	<u>Earthworm (soil dwelling invertebrate)</u>	<u>Plant (terrestrial autotroph- producer)</u>
<u>Lead</u>	<u>58.5</u>	<u>6.3E-09</u>	<u>3.6E-07</u>	<u>2.4E-06</u>	<u>2.7E-03</u>	<u>3.6E-03</u>	<u>0.0041</u>	<u>2.4E-05</u>	<u>8.6E-04</u>	<u>0.0027</u>	<u>0.034</u>	<u>0.49</u>
<u>Manganese</u>	<u>452</u>	<u>4.4E-09</u>	<u>2.5E-08</u>	<u>6.5E-08</u>	<u>3.2E-04</u>	<u>2.3E-04</u>	<u>1.4E-04</u>	<u>3.3E-05</u>	<u>3.2E-04</u>	<u>0.0018</u>	<u>1</u>	<u>2.05</u>
<u>Mercury</u>	<u>0.342</u>	<u>2.2E-09</u>	<u>4.6E-06</u>	<u>2.0E-05</u>	<u>4.8E-03</u>	<u>0.015</u>	<u>0.026</u>	<u>2.3E-06</u>	<u>2.1E-04</u>	<u>6.3E-04</u>	<u>6.84</u>	<u>0.01</u>
<u>Nickel</u>	<u>20.7</u>	<u>6.8E-09</u>	<u>3.5E-08</u>	<u>6.7E-07</u>	<u>1.3E-04</u>	<u>5.3E-04</u>	<u>9.7E-04</u>	<u>6.2E-06</u>	<u>0.0023</u>	<u>0.0057</u>	<u>0.074</u>	<u>0.54</u>
<u>Selenium</u>	<u>0.635</u>	<u>2.8E-09</u>	<u>3.0E-08</u>	<u>5.7E-07</u>	<u>6.2E-04</u>	<u>7.2E-04</u>	<u>8.3E-04</u>	<u>4.4E-05</u>	<u>0.001</u>	<u>0.0042</u>	<u>0.15</u>	<u>1.22</u>
<u>Silver</u>	<u>161</u>	<u>1.5E-08</u>	<u>9.3E-07</u>	<u>4.5E-05</u>	<u>0.014</u>	<u>0.037</u>	<u>0.061</u>	<u>1.5E-04</u>	<u>0.012</u>	<u>0.037</u>	<u>na</u>	<u>0.29</u>
<u>Zinc</u>	<u>490</u>	<u>2.5E-08</u>	<u>7.9E-07</u>	<u>7.6E-06</u>	<u>1.4E-03</u>	<u>5.6E-03</u>	<u>0.01</u>	<u>4.1E-05</u>	<u>0.0053</u>	<u>0.016</u>	<u>4.08</u>	<u>3.06</u>
<u>Aroclor-1254</u>	<u>0.209</u>	<u>1.4E-08</u>	<u>1.1E-07</u>	<u>3.7E-06</u>	<u>1.6E-04</u>	<u>2.6E-03</u>	<u>0.005</u>	<u>6.0E-07</u>	<u>5.0E-04</u>	<u>0.0013</u>	<u>na</u>	<u>1.3E-03</u>
<u>Benzoic Acid</u>	<u>0.355</u>	<u>7.8E-11</u>	<u>na</u>	<u>na</u>	<u>na</u>	<u>na</u>	<u>na</u>	<u>1.3E-05</u>	<u>3.7E-04</u>	<u>0.0015</u>	<u>na</u>	<u>na</u>
<u>Di-n-butylphthalate</u>	<u>1.84</u>	<u>1.5E-11</u>	<u>4.2E-06</u>	<u>1.2E-04</u>	<u>4.6E-03</u>	<u>0.086</u>	<u>0.16</u>	<u>1.7E-08</u>	<u>1.1E-05</u>	<u>2.7E-05</u>	<u>na</u>	<u>0.012</u>
<u>Adjusted HI</u>		<u>3.E-07</u>	<u>2.E-05</u>	<u>3.E-04</u>	<u>0.06</u>	<u>0.2</u>	<u>0.3</u>	<u>9.E-04</u>	<u>0.06</u>	<u>0.2</u>	<u>24</u>	<u>21</u>

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.

*na = Not available.

Table H-5.4-464
Summary of LOAEL-Based ESLs for Terrestrial Receptors

COPEC	Receptor	LOAEL-Based ESL* (mg/kg)
Antimony	Deer Mouse	24
	Earthworm	780
	Plant	58
	Montane shrew	26
Arsenic	Earthworm	68
Barium	Earthworm	3200
	Plant	260
Beryllium	Plant	25
Cadmium	Deer Mouse	5.1
Cobalt	Plant	130
Copper	Robin—herbivore	110
	Robin—insectivore	46
	Robin—omnivore	66
	Deer Mouse	100
	Earthworm	530
	Plant	490
	Montane shrew	63
Lead	Robin—herbivore	42
	Robin—insectivore	28
	Robin—omnivore	33
	Deer Mouse	230
	Earthworm	8400
	Plant	570
	Montane shrew	130
Manganese	Earthworm	4500
	Plant	1100
Mercury	Robin—herbivore	0.7
	Robin—insectivore	0.13
	Robin—omnivore	0.22
	Earthworm	0.5
Nickel	Deer Mouse	41
	Plant	270
Selenium	Deer Mouse	1.2
	Earthworm	41
	Plant	3
Silver	Robin - insectivore	26
Uranium	Plant	250

Table H-5.4-464 (continued)

COPEC	Receptor	LOAEL-Based ESL* (mg/kg)
Vanadium	Robin - insectivore	13
	Robin - omnivore	15
	Plant	80
Zinc	Robin - insectivore	480
	Robin - omnivore	850
	Deer Mouse	1700
	Earthworm	930
	Plant	810
	Montane shrew	980
Aroclor-1242	Robin - insectivore	0.41
	Robin - omnivore	0.79
	Deer Mouse	3
Aroclor-1254	Robin - insectivore	0.41
	Robin - omnivore	0.8
	Deer Mouse	4.9
Benzoic acid	Deer Mouse	13
Bis(2-ethylhexyl)phthalate	Robin - insectivore	0.2
	Robin - omnivore	0.4
Di-n-butylphthalate	Robin - insectivore	0.11
	Robin - omnivore	0.21
Di-n-octylphthalate	Deer Mouse	18
RDX	Earthworm	15
Uranium-234	Plant	4400
Uranium-238	Plant	4000

*LOAEL-based ESLs from ECORISK Database, Version 3.3 (LANL 2015, 600929)

Table H-5.4-475
HI Analysis Using LOAEL-Based ESLs for SWMUs 12-001(a) and 12-001(b)

COPEC	EPC (mg/kg)	Robin (insectivore)	Deer Mouse	Earthworm	Plant
Barium	213	n/a ^a	n/a	0.067	0.82
Cobalt	7.1	n/a	n/a	n/a	0.055
Manganese	456	n/a	n/a	0.1	0.41
Selenium	1.34 (U)	n/a	1.12	0.033	0.45
Vanadium	27.6	2.12	n/a	na ^b	0.35
RDX	3.73	n/a	n/a	0.25	na
HI		2	1	0.5	2

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

^a n/a = Not applicable.

^b na = Not available.

Table H-5.4-486
Adjusted HI Analysis Using LOAEL-Based ESLs for SWMUs 12-001(a) and 12-001(b)

COPEC	EPC (mg/kg)	Robin (insectivore)	Deer Mouse	Earthworm	Plant
Barium	213	n/a ^a	n/a	0.067	0.82
Cobalt	7.1	n/a	n/a	n/a	0.055
Manganese	456	n/a	n/a	0.1	0.41
Selenium	1.34 (U)	n/a	0.68	0.033	0.45
Vanadium	27.6	0.23	n/a	na ^b	0.35
RDX	3.73	n/a	n/a	0.25	na
Adjusted HI		0.2	0.7	0.5	2

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

^a n/a = Not applicable.

^b na = Not available.

Table H-5.4-497
HI Analysis Using LOAEL-Based ESLs for SWMU 12-002

COPEC	EPC (mg/kg)	Earthworm	Plant
Barium	191	0.06	0.73
Cobalt	14.2	n/a*	0.11
Selenium	1.1 (U)	n/a	0.37
Vanadium	27.1	na ^b	0.34
HI		0.06	2

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.

Data qualifiers are defined in Appendix A.

^a n/a = Not applicable.

^b na = Not available.

Table H-5.4-5048
HI Analysis Using LOAEL-Based ESLs for AOC 12-004(a)

COPEC	EPC (mg/kg)	Plant
Barium	88.5	0.34
Cobalt	3.98	0.031
Selenium	1.26 (U)	0.42
HI		0.8

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.

Data qualifiers are defined in Appendix A.

Table H-5.4-5149
HI Analysis Using LOAEL-Based ESLs for AOC 12-004(b)

COPEC	EPC (mg/kg)	Earthworm	Plant
Arsenic	2.92	0.043	n/a ^a
Barium	246	0.077	0.95
Cobalt	7.49	n/a	0.058
Selenium	1.1	n/a	0.37
Vanadium	30.3	na ^b	0.38
HI		0.1	2

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.

Data qualifiers are defined in Appendix A.

^a n/a = Not applicable.

^b na = Not available.

Table H-5.4-520
HI Analysis Using LOAEL-Based ESLs for AOC C-12-001

COPEC	EPC (mg/kg)	Plant
Barium	132	0.51
Cobalt	4.97	0.038
Selenium	1.26 (U)	0.42
HI		1

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.
 Data qualifiers are defined in Appendix A.

Table H-5.4-531
HI Analysis Using LOAEL-Based ESLs for AOC C-12-002

COPEC	EPC (mg/kg)	Earthworm	Plant
Barium	223	0.07	0.86
Cobalt	7.49	n/a ^a	0.058
Selenium	1.15 (U)	n/a	0.38
Vanadium	28.2	na ^b	0.35
HI		0.07	2

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.
 Data qualifiers are defined in Appendix A.

^a n/a = Not applicable.

^b na = Not available.

Table H-5.4-542
HI Analysis Using LOAEL-Based ESLs for AOC C-12-003

COPEC	EPC (mg/kg)	Plant
Barium	117	0.45
Cobalt	4.99	0.038
Selenium	1.12 (UJ)	0.37
HI		0.9

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.
 Data qualifiers are defined in Appendix A.

Table H-5.4-53
HI Analysis Using LOAEL-Based ESLs for AOC C-12-004

COPEC	EPC (mg/kg)	Earthworm	Plant
Barium	214	0.067	0.82
Cobalt	5.85	na ^a	0.045
Lead	39.2	n/a ^b	0.069
Selenium	1.14 (U)	n/a	0.38
Vanadium	28.1	na	0.35
HI		0.07	2

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.

Data qualifiers are defined in Appendix A.

^a n/a = Not applicable.

^b na = Not available.

Table H-5.4-54
HI Analysis Using LOAEL-Based ESLs for AOC 15-005(c)

COPEC	EPC (mg/kg)	Earthworm	Plant
Barium	199	0.062	0.77
Cobalt	6.13	na*	0.047
Selenium	1.48 (U)	0.036	0.49
Vanadium	27.4	na	0.34
HI		0.1	2

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.

Data qualifiers are defined in Appendix A.

* na = Not available.

Table H-5.4-55
HI Analysis Using LOAEL-Based ESLs for SWMU 15-007(c)

COPEC	EPC (mg/kg)	Robin (herbivore)	Robin (omnivore)	Robin (insectivore)	Deer Mouse	Earthworm	Plant
Antimony	243	na ^a	na	na	10.1	0.31	4.19
Lead	7290	174	221	260	31.7	0.87	12.8
Selenium	2.11 (U)	n/a ^b	n/a	n/a	n/a	0.05	0.7
Zinc	46.7	n/a	n/a	n/a	n/a	0.05	n/a
HI		174	221	260	42	1	18

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

^a na = Not available.

^b n/a = Not applicable.

Table H-5.4-586
Adjusted HI Analysis Using LOAEL-Based ESLs for SWMU 15-007(c)

COPEC	EPC (mg/kg)	Robin (herbivore)	Robin (omnivore)	Robin (insectivore)	Deer Mouse	Earthworm	Plant
Antimony	243	na ^a	na	na	0.17	0.31	4.19
Lead	7290	0.53	0.67	0.79	0.54	0.87	12.8
Selenium	2.11 (U)	n/a ^b	n/a	n/a	n/a	0.05	0.7
Zinc	46.7	n/a	n/a	n/a	n/a	0.05	n/a
Adjusted HI		0.5	0.7	0.8	0.7	1	18

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

^a n/a = Not applicable.

^b na = Not available.

Table H-5.4-597
HI Analysis Using LOAEL-Based ESLs for SWMU 15-007(d)

COPEC	EPC (mg/kg)	Plant
Selenium	1 (U)	0.33
HI		0.3

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.

Data qualifiers are defined in Appendix A.

Table H-5.4-6058
HI Analysis Using LOAEL-Based ESLs for SWMU 15-008(b)

COPEC	EPC (mg/kg)	Robin (herbivore)	Robin (omnivore)	Robin (insectivore)	Montane Shrew	Deer Mouse	Earthworm	Plant
Antimony	5.63	na ^a	na	na	0.22	0.23	n/a ^b	0.097
Barium	73.2	n/a	n/a	n/a	n/a	n/a	n/a	0.28
Beryllium	4.46	na	na	na	n/a	n/a	n/a	0.18
Cadmium	0.394	n/a	n/a	n/a	n/a	0.077	n/a	n/a
Copper	1410	12.8	21.4	30.7	22.4	14.1	2.66	2.88
Lead	4400	105	133	157	33.8	19.1	0.52	7.72
Manganese	266	n/a	n/a	n/a	n/a	n/a	0.059	0.24
Nickel	6.58	n/a	n/a	n/a	n/a	0.16	n/a	n/a
Selenium	0.696	n/a	n/a	n/a	n/a	0.58	n/a	0.23
Uranium	90.4	n/a	n/a	n/a	n/a	n/a	na	0.36
Vanadium	13.3	n/a	0.89	1.02	n/a	n/a	na	n/a
Zinc	457	n/a	0.54	0.95	0.47	0.27	0.49	0.56
Aroclor-1242	0.282	n/a	0.36	0.69	n/a	0.094	na	na
HI	118	156	190	57	35	4	13	

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.

^a n/a = Not applicable.

^b na = Not available.

Table H-5.4-6159
Adjusted HI Analysis Using LOAEL-Based ESLs for SWMU 15-008(b)

COPEC	EPC (mg/kg)	Robin (herbivore)	Robin (omnivore)	Robin (insectivore)	Montane Shrew	Deer Mouse	Earthworm	Plant
Antimony	5.63	na ^a	na	na	0.043	0.23	n/a ^b	0.097
Barium	73.2	n/a	n/a	n/a	n/a	n/a	n/a	0.28
Beryllium	4.46	na	na	na	n/a	n/a	n/a	0.18
Cadmium	0.394	n/a	n/a	n/a	n/a	0.077	n/a	n/a
Copper	1410	2.38	3.97	5.69	4.48	14.1	2.66	2.88
Lead	4400	19.5	24.8	29.2	6.77	19.1	0.52	7.72
Manganese	266	n/a	n/a	n/a	n/a	n/a	0.059	0.24
Nickel	6.58	n/a	n/a	n/a	n/a	0.16	n/a	n/a
Selenium	0.696	n/a	n/a	n/a	n/a	0.58	n/a	0.23
Uranium	90.4	n/a	n/a	n/a	n/a	n/a	na	0.36
Vanadium	13.3	n/a	0.16	0.19	n/a	n/a	na	n/a
Zinc	457	n/a	0.1	0.18	0.093	0.27	0.49	0.56
Aroclor-1242	0.282	n/a	0.066	0.13	n/a	0.094	na	na
Adjusted HI		22	29	35	11	35	4	13

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

^a n/a = Not applicable.

^b na = Not available.

Table H-5.4-620
HI Analysis Using LOAEL-Based ESLs for AOC 15-008(g)

COPEC	EPC (mg/kg)	Plant
Antimony	3.77	0.065
Cobalt	9.43	0.073
Copper	25.7	0.052
Lead	309	0.54
Selenium	1.28 (U)	0.43
HI		1

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.
 Data qualifiers are defined in Appendix A.

Table H-5.4-631
HI Analysis Using LOAEL-Based ESLs for SWMU 15-009(b)

COPEC	EPC (mg/kg)	Earthworm	Plant
Barium	94	n/a ^a	0.36
Selenium	1.59 (U)	0.039	0.53
Uranium	417	na ^b	1.67
Uranium-234	215	n/a	0.049
Uranium-238	221	n/a	0.055
HI		0.04	3

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.

Data qualifiers are defined in Appendix A.

^a n/a = Not applicable.

^b na = Not available.

Table H-5.4-642
HI Analysis Using LOAEL-Based ESLs for SWMU 15-009(c)

COPEC	EPC (mg/kg)	Plant
Selenium	1.3 (U)	0.43
HI		0.4

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.

Data qualifiers are defined in Appendix A.

Table H-5.4-653
HI Analysis Using LOAEL-Based ESLs for SWMU 15-010(b)

COPEC	EPC (mg/kg)	Robin (omnivore)	Robin (insectivore)	Earthworm	Plant
Mercury	0.292	n/a ^a	2.25	0.58	n/a
Selenium	0.72	n/a	n/a	n/a	0.24
Di-n-butylphthalate	0.86	4.1	7.82	na ^b	n/a
HI		4	10	0.6	0.2

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.

Data qualifiers are defined in Appendix A.

^a n/a = Not applicable.

^b na = Not available.

Table H-5.4-6~~4~~4
Adjusted HI Analysis Using LOAEL-Based ESLs for SWMU 15-010(b)

COPEC	EPC (mg/kg)	Robin (omnivore)	Robin (insectivore)	Earthworm	Plant
Mercury	0.292	n/a ^a	0.036	0.58	n/a
Selenium	0.72	n/a	n/a	n/a	0.24
Di-n-butylphthalate	0.86	0.065	0.12	na ^b	n/a
Adjusted HI		0.07	0.2	0.6	0.2

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.

Data qualifiers are defined in Appendix A.

^a n/a = Not applicable.

^b na = Not available.

Table H-5.4-6~~7~~5
HI Analysis Using LOAEL-Based ESLs for AOC 15-014(h)

COPEC	EPC (mg/kg)	Robin (herbivore)	Robin (omnivore)	Robin (insectivore)	Deer Mouse	Earthworm	Plant
Barium	142	n/a ^a	n/a	n/a	n/a	0.044	0.55
Cadmium	0.348	n/a	n/a	n/a	0.068	n/a	n/a
Cobalt	5.08	n/a	n/a	n/a	n/a	n/a	0.039
Mercury	0.34	0.49	1.55	2.62	n/a	0.68	n/a
Selenium	1.5 (U)	n/a	n/a	n/a	1.25	0.037	0.5
Vanadium	24.2	n/a	n/a	n/a	n/a	na ^b	0.3
Aroclor-1254	0.704	n/a	0.88	1.72	0.14	na	n/a
Benzoic acid	1.01	na	na	na	0.078	na	na
Bis(2-ethylhexyl)phthalate	0.343	n/a	0.86	1.72	n/a	na	na
Di-n-butylphthalate	0.129	n/a	0.61	1.17	n/a	na	n/a
Di-n-octylphthalate	1.43	na	na	na	0.079	na	na
HI		0.5	4	7	2	0.8	1

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

^a n/a = Not applicable.

^b na = Not available.

Table H-5.4-686
Adjusted HI Analysis Using LOAEL-Based ESLs for AOC 15-014(h)

COPEC	EPC (mg/kg)	Robin (herbivore)	Robin (omnivore)	Robin (insectivore)	Deer Mouse	Earthworm	Plant
Barium	142	n/a ^a	n/a	n/a	n/a	0.044	0.55
Cadmium	0.348	n/a	n/a	n/a	0.031	n/a	n/a
Cobalt	5.08	n/a	n/a	n/a	n/a	n/a	0.039
Mercury	0.34	0.039	0.12	0.21	n/a	0.68	n/a
Selenium	1.5 (U)	n/a	n/a	n/a	0.57	0.037	0.5
Vanadium	24.2	n/a	n/a	n/a	n/a	n/a	0.3
Aroclor-1254	0.704	n/a	0.071	0.14	0.065	na ^b	n/a
Benzoic acid	1.01	na	na	na	0.035	na	na
Bis(2-ethylhexyl)phthalate	0.343	n/a	0.069	0.14	n/a	na	na
Di-n-butylphthalate	0.129	n/a	0.05	0.095	n/a	na	n/a
Di-n-octylphthalate	1.43	na	na	na	0.036	na	na
Adjusted HI		0.04	0.3	0.6	0.7	0.8	1

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

^a na = Not available.

^b n/a = Not applicable.

Table H-5.4-697
HI Analysis Using LOAEL-Based ESLs for SWMU 36-002

COPEC	EPC (mg/kg)	Plant
Barium	84.6	0.33
Selenium	0.922 (UJ)	0.31
HI		0.7

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.
Data qualifiers are defined in Appendix A.

Table H-5.4-7068
HI Analysis Using LOAEL-Based ESLs for SWMU 36-003(a)

COPEC	EPC (mg/kg)	Plant
Beryllium	2.63	0.11
Nickel	18.6	0.069
Selenium	1.28 (U)	0.43
HI		0.6

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.
 Data qualifiers are defined in Appendix A.

Table H-5.4-7169
HI Analysis Using LOAEL-Based ESLs for SWMUs 36-008 and C-36-003

COPEC	EPC (mg/kg)	Robin (herbivore)	Robin (omnivore)	Robin (insectivore)	Deer Mouse	Earthworm	Plant
Antimony	5.62 (U)	na ^a	na	na	0.23	n/a ^b	0.097
Barium	77.6	n/a	n/a	n/a	n/a	n/a	0.3
Copper	315	n/a	4.77	6.85	3.15	0.59	0.64
Mercury	2.34	3.34	10.6	18	n/a	4.68	n/a
Selenium	0.635	n/a	n/a	n/a	n/a	n/a	0.21
Silver	41.7	n/a	n/a	1.6	n/a	n/a	n/a
Zinc	135	n/a	n/a	n/a	n/a	0.15	0.17
Bis(2-ethylhexyl)phthalate	0.236	n/a	n/a	1.18	n/a	na	na
Di-n-butylphthalate	0.448	n/a	2.13	4.07	n/a	na	n/a
HI		3	18	32	3	5	1

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

^a na = Not available.

^b n/a = Not applicable.

Table H-5.4-72⁰
Adjusted HI Analysis Using LOAEL-Based ESLs for SWMU~~s~~ 36-008 and C-36-003

COPEC	EPC (mg/kg)	Robin (herbivore)	Robin (omnivore)	Robin (insectivore)	Deer Mouse	Earthworm	Plant
Antimony	5.62 (U)	na ^a	na	na	0.035	n/a ^b	0.097
Barium	77.6	n/a	n/a	n/a	n/a	n/a	0.3
Copper	315	n/a	0.13	0.18	0.47	0.59	0.64
Mercury	2.34	0.09	0.29	0.48	n/a	4.68	n/a
Selenium	0.635	n/a	n/a	n/a	n/a	n/a	0.21
Silver	41.7	n/a	n/a	0.043	n/a	n/a	n/a
Zinc	135	n/a	n/a	n/a	n/a	0.15	0.17
Bis(2-ethylhexyl)phthalate	0.236	n/a	n/a	0.032	n/a	na	na
Di-n-butylphthalate	0.448	n/a	0.057	0.11	n/a	na	n/a
Adjusted HI		0.09	0.5	0.8	0.5	5	1

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.

^a na = Not available.

^b n/a = Not applicable.

Table H-5.4-73
HI Analysis Using LOAEL-Based ESLs for SWMU C-36-003

<u>COPEC</u>	<u>EPC (mg/kg)</u>	<u>Earthworm</u>	<u>Plant</u>
<u>Copper</u>	<u>936</u>	<u>1.77</u>	<u>1.91</u>
<u>Lead</u>	<u>58.5</u>	<u>n/a*</u>	<u>0.1</u>
<u>Manganese</u>	<u>452</u>	<u>0.1</u>	<u>0.41</u>
<u>Mercury</u>	<u>0.342</u>	<u>0.68</u>	<u>n/a</u>
<u>Nickel</u>	<u>20.7</u>	<u>n/a</u>	<u>0.077</u>
<u>Selenium</u>	<u>0.635</u>	<u>n/a</u>	<u>0.21</u>
<u>Zinc</u>	<u>490</u>	<u>0.53</u>	<u>0.6</u>
<u>HI</u>		<u>3</u>	<u>3</u>

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.0.

Data qualifiers are defined in Appendix A.

* n/a = Not applicable.

