Table D.3-1
IDENTIFICATION OF METAL CONTAMINANTS OF CONCERN
IN SEDIMENT COMPOSITE SAMPLES - UPPER EASTERN DRAINAGE

Analyte[1]	Number of Samples	Number of Detects	Maximum Detected Result (mg/kg)	Preliminary Background Limit (mg/kg)[2]	Maximum Exceeds Background?[3]	Sediment Guideline[4]	Retained as a COPC?	Rationale
Aluminum	6	6	15900	18000	No	14000	No	<BKG
Antimony	6	0	ND	0.46	No	2.0	No	ND
Arsenic	6	6	10.8	76	No	9.8	No	<BKG
Barium	6	6	191	240	No	500	No	<BKG
Beryllium	6	6	1.7	2.8	No	0.7	No	<BKG
Cadmium	6	6	9.7	0.72	Yes	0.99	Yes	>SQG
Chromium	6	6	22.6	18	Yes	43	No	<SQG
Cobalt	6	6	23.3	12	Yes	50	No	<SQG
Copper	6	6	21	28	No	32	No	<BKG
Iron	6	6	17500	23000	No	200000	No	<BKG
Lead	6	6	11.8	16	No	36	No	<BKG
Magnesium	6	6	4380	3900	Yes	6100	No	<SQG
Manganese	6	6	21200	930	Yes	1700	Yes	>SQG
Mercury	6	0	ND	0.12	No	0.18	No	ND
Nickel	6	6	289	16	Yes	23	Yes	>SQG
Selenium	6	6	3.9	1.3	No	2.5	No	<BKG
Silver	6	0	ND	0.14	No	1.0	No	ND
Sulfate	6	6	1780	68	Yes	NG	No	No SQG
Thallium	6	5	0.33	0.32	No	3.8	No	<BKG
Uranium	8	8	57.5	66	No	21	No	<BKG
Vanadium	6	6	22.7	34	No	NG	No	<BKG
Zinc	6	6	301	71	Yes	121	Yes	>SQG

1 - Analytes listed based on available results from E&E (1998), SMI (1999), and URS (2000).
2 - 95th UTLs for composite samples (except maximum for uranium).
3 - Two or more results greater than background (see Appendix B for sediment results).
4 - Compilation of consensus-based freshwater threshold effects concentrations (Table 3-3) and sediment quality guidelines (primarily mid SQGs) (Table 3-2).
COPC - Contaminant of Potential Concern
BKG - Background (see Appendix C)
ND - Not detected
NG - No applicable Guideline
SQG - Sediment Quality Guideline
Shaded rows - analyte concentration exceeds background and guideline.

Table D.3-2
IDENTIFICATION OF METAL CONTAMINANTS OF CONCERN
IN SEDIMENT COMPOSITE SAMPLES - LOWER EASTERN DRAINAGE

Analyte[1]	Number of Samples	Number of Detects	Detected Result (mg/kg)	Preliminary Background Limit (mg/kg)[2]	Result Exceeds Background?[3]	Sediment Guideline[4]	Retained as a COPC?	Rationale
Aluminum	1	1	18500	18000	Yes	14000	Yes	>SQG
Antimony	1	0	ND	0.46	No	2.0	No	ND
Arsenic	1	1	11.9	76	No	9.8	No	<BKG
Barium	1	1	257	240	Yes	500	No	<SQG
Beryllium	1	1	3.5	2.8	Yes	0.7	Yes	>SQG
Cadmium	1	1	14.4	0.72	Yes	0.99	Yes	>SQG
Chromium	1	1	23.1	18	Yes	43	No	<SQG
Cobalt	1	1	31.9	12	Yes	50	No	<SQG
Copper	1	1	22.1	28	No	32	No	<BKG
Iron	1	1	18500	23000	No	200000	No	<BKG
Lead	1	1	16.1	16	Yes	36	No	<SQG
Magnesium	1	1	4150	3900	Yes	6100	No	<SQG
Manganese	1	1	33600	930	Yes	1700	Yes	>SQG
Mercury	1	0	ND	0.12	No	0.18	No	ND
Nickel	1	1	516	16	Yes	23	Yes	>SQG
Selenium	1	1	7.2	1.3	Yes	2.5	Yes	>SQG
Silver	1	1	0.43	0.14	Yes	1.0	No	<SQG
Sulfate	1	1	1620	68	Yes	NG	No	No SQG
Thallium	1	1	0.3	0.32	No	3.8	No	<BKG
Uranium	1	1	138	66	Yes	21	Yes	>SQG
Vanadium	1	1	30.6	34	No	NG	No	<BKG
Zinc	1	1	553	71	Yes	121	Yes	>SQG

1 - Analytes listed based on available results from E&E (1998), SMI (1999), and URS (2000).
2 - 95th UTLs for composite samples (except maximum for uranium).
3 - Result is greater than background (see Appendix B for sediment results).
4 - Compilation of consensus-based freshwater threshold effects concentrations (Table 3-3) and sediment quality guidelines (primarily mid SQGs) (Table 3-2).
COPC - Contaminant of Potential Concern
BKG - Background (see Appendix C)
ND - Not detected
NG - No applicable Guideline
SQG - Sediment Quality Guideline
Shaded rows - analyte concentration exceeds background and guideline.

Table D.3-3
IDENTIFICATION OF METAL CONTAMINANTS OF CONCERN
IN SEDIMENT COMPOSITE SAMPLES - CENTRAL DRAINAGE

Analyte[1]	Number of Samples	Number of Detects	Maximum Detected Result (mg/kg)	Preliminary Background Limit (mg/kg)[2]	Maximum Exceeds Background?[3]	Sediment Guideline[4]	Retained as a COPC?	Rationale
Aluminum	2	2	17600	18000	No	14000	No	<BKG
Antimony	2	0	ND	0.46	No	2.0	No	ND
Arsenic	2	2	17.8	76	No	9.8	No	<BKG
Barium	2	2	178	240	No	500	No	<BKG
Beryllium	2	2	1.8	2.8	No	0.7	No	<BKG
Cadmium	2	2	1.6	0.72	Yes	0.99	Yes	>SQG
Chromium	2	2	13.6	18	No	43	No	<BKG
Cobalt	2	2	24.9	12	Yes	50	No	<SQG
Copper	2	2	91.2	28	No	32	No	<BKG
Iron	2	2	18400	23000	No	200000	No	<BKG
Lead	2	2	20.9	16	No	36	No	<BKG
Magnesium	2	2	3900	3900	No	6100	No	<BKG
Manganese	2	2	2470	930	Yes	1700	Yes	>SQG
Mercury	2	0	ND	0.12	No	0.18	No	ND
Nickel	2	2	39	16	Yes	23	Yes	>SQG
Selenium	2	2	0.88	1.3	No	2.5	No	<BKG
Silver	2	0	ND	0.14	No	1.0	No	ND
Sulfate	2	2	438	68	Yes	NG	No	No SQG
Thallium	2	2	0.2	0.32	No	3.8	No	<BKG
Uranium	2	2	1017	66	Yes	21	Yes	>SQG
Vanadium	2	2	22.9	34	No	NG	No	<BKG
Zinc	2	2	94.8	71	Yes	121	No	<SQG

1 - Analytes listed based on available results from E&E (1998), SMI (1999), and URS (2000).
2 - 95th UTLs for composite samples (except maximum for uranium).
3 - Two or more results greater than background (see Appendix B for sediment results).
4 - Compilation of consensus-based freshwater threshold effects concentrations (Table 3-3) and sediment quality guidelines (primarily mid SQGs) (Table 3-2).
COPC - Contaminant of Potential Concern
BKG - Background (see Appendix C)
ND - Not detected
NG - No applicable Guideline
SQG - Sediment Quality Guideline
Shaded rows - analyte concentration exceeds background and guideline.

Table D.3-4
IDENTIFICATION OF METAL CONTAMINANTS OF CONCERN IN SEDIMENT COMPOSITE SAMPLES - UPPER BLUE CREEK

Analyte[1]	Number of Samples	Number of Detects	Detected Result (mg/kg)	Preliminary Background Limit (mg/kg)[2]	Result Exceeds Background?[3]	Sediment Guideline[4]	Retained as a COPC?	Rationale
Aluminum	1	1	3010	18000	No	14000	No	<BKG
Antimony	1	0	ND	0.46	No	2.0	No	ND
Arsenic	1	0	ND	76	No	9.8	No	ND
Barium	1	1	27	240	No	500	No	<BKG
Beryllium	1	1	0.31	2.8	No	0.7	No	<BKG
Cadmium	1	0	ND	0.72	No	0.99	No	ND
Chromium	1	1	2.3	18	No	43	No	<BKG
Cobalt	1	1	1.2	12	No	50	No	<BKG
Copper	1	1	1.1	28	No	32	No	<BKG
Iron	1	1	5130	23000	No	200000	No	<BKG
Lead	1	1	3.9	16	No	36	No	<BKG
Magnesium	1	1	828	3900	No	6100	No	<BKG
Manganese	1	1	126	930	No	1700	No	<BKG
Mercury	1	0	ND	0.12	No	0.18	No	ND
Nickel	1	1	1.1	16	No	23	No	<BKG
Selenium	1	0	ND	1.3	No	2.5	No	ND
Silver	1	0	ND	0.14	No	1.0	No	ND
Sulfate	1	1	2.43	68	No	NG	No	<BKG
Thallium	1	0	ND	0.32	No	3.8	No	ND
Uranium	3	3	11.7	66	No	21	No	<BKG
Vanadium	1	1	7.9	34	No	NG	No	<BKG
Zinc	1	1	13.4	71	No	121	No	<BKG

1 - Analytes listed based on available results from E&E (1998), SMI (1999), and URS (2000).
2 - 95th UTLs for composite samples (except maximum for uranium).
3 - Result is greater than background (see Appendix B for sediment results).
4 - Compilation of consensus-based freshwater threshold effects concentrations (Table 3-3) and sediment quality guidelines (primarily mid SQGs) (Table 3-2).
COPC - Contaminant of Potential Concern
BKG - Background (see Appendix C)
ND - Not detected
NG - No applicable Guideline
SQG - Sediment Quality Guideline
Shaded rows - analyte concentration exceeds background and guideline.

Table D.3-5
IDENTIFICATION OF METAL CONTAMINANTS OF CONCERN
IN SEDIMENT COMPOSITE SAMPLES - MIDDLE BLUE CREEK

Analyte[1]	Number of Samples	Number of Detects	Maximum Detected Result (mg/kg)	Preliminary Background Limit (mg/kg)[2]	Maximum Exceeds Background?[3]	Sediment Guideline[4]	Retained as a COPC?	Rationale
Aluminum	2	2	3710	18000	No	14000	No	<BKG
Antimony	2	0	ND	0.46	No	2.0	No	ND
Arsenic	2	2	1.5	76	No	9.8	No	<BKG
Barium	2	2	41.1	240	No	500	No	<BKG
Beryllium	2	2	0.51	2.8	No	0.7	No	<BKG
Cadmium	2	2	1.1	0.72	No	0.99	No	<BKG
Chromium	2	0	ND	18	No	43	No	ND
Cobalt	2	2	5	12	No	50	No	<BKG
Copper	2	2	2.9	28	No	32	No	<BKG
Iron	2	2	5070	23000	No	200000	No	<BKG
Lead	2	2	4.6	16	No	36	No	<BKG
Magnesium	2	2	989	3900	No	6100	No	<BKG
Manganese	2	2	3690	930	No	1700	No	<BKG
Mercury	2	0	ND	0.12	No	0.18	No	ND
Nickel	2	2	41.7	16	No	23	No	<BKG
Selenium	2	0	ND	1.3	No	2.5	No	ND
Silver	2	0	ND	0.14	No	1.0	No	ND
Sulfate	2	2	710	68	Yes	NG	No	No SQG
Thallium	2	0	ND	0.32	No	3.8	No	ND
Uranium	7	7	89.9	66	Yes	21	Yes	>SQG
Vanadium	2	2	7.7	34	No	NG	No	<BKG
Zinc	2	2	55.9	71	No	121	No	<BKG

1 - Analytes listed based on available results from E&E (1998), SMI (1999), and URS (2000).
2 - 95th UTLs for composite samples (except maximum for uranium).
3 - Two or more results greater than background (see Appendix B for sediment results).
4 - Compilation of consensus-based freshwater threshold effects concentrations (Table 3-3) and sediment quality guidelines (primarily mid SQGs) (Table 3-2).
COPC - Contaminant of Potential Concern
BKG - Background (see Appendix C)
ND - Not detected
NG - No applicable Guideline
SQG - Sediment Quality Guideline
Shaded rows - analyte concentration exceeds background and guideline.

Table D.3-6
IDENTIFICATION OF METAL CONTAMINANTS OF CONCERN
IN SEDIMENT COMPOSITE SAMPLES - LOWER BLUE CREEK

Analyte[1]	Number of Samples	Number of Detects	Maximum Detected Result (mg/kg)	Preliminary Background Limit (mg/kg)[2]	Maximum Exceeds Background?[3]	Sediment Guideline[4]	Retained as a COPC?	Rationale
Aluminum	2	2	6790	18000	No	14000	No	<BKG
Antimony	2	0	ND	0.46	No	2.0	No	ND
Arsenic	2	2	5.8	76	No	9.8	No	<BKG
Barium	2	2	48.3	240	No	500	No	<BKG
Beryllium	2	2	0.45	2.8	No	0.7	No	<BKG
Cadmium	2	2	0.08	0.72	No	0.99	No	<BKG
Chromium	2	1	7.7	18	No	43	No	<BKG[5]
Cobalt	2	2	5.7	12	No	50	No	<BKG
Copper	2	2	7.1	28	No	32	No	<BKG
Iron	2	2	12500	23000	No	200000	No	<BKG
Lead	2	2	6.7	16	No	36	No	<BKG
Magnesium	2	2	3720	3900	No	6100	No	<BKG
Manganese	2	2	585	930	No	1700	No	<BKG
Mercury	2	0	ND	0.12	No	0.18	No	ND
Nickel	2	2	12.5	16	No	23	No	<BKG
Selenium	2	0	ND	1.3	No	2.5	No	ND
Silver	2	0	ND	0.14	No	1.0	No	ND
Sulfate	2	2	755	68	Yes	NG	No	No SQG
Thallium	2	2	0.31	0.32	No	3.8	No	<BKG
Uranium	2	2	7.93	66	No	21	No	<BKG
Vanadium	2	2	15.1	34	No	NG	No	<BKG
Zinc	2	2	43.4	71	No	121	No	<BKG

1 - Analytes listed based on available results from E&E (1998), SMI (1999), and URS (2000).
2 - 95th UTLs for composite samples (except maximum for uranium).
3 - Two or more results greater than background (see Appendix B for sediment results).
4 - Compilation of consensus-based freshwater threshold effects concentrations (Table 3-3) and sediment quality guidelines (primarily mid SQGs) (Table 3-2).
5 - Only 1 detected result.
COPC - Contaminant of Potential Concern
BKG - Background (see Appendix C)
ND - Not detected
NG - No applicable Guideline
SQG - Sediment Quality Guideline
Shaded rows - analyte concentration exceeds background and guideline.

Table D.3-7
IDENTIFICATION OF METAL CONTAMINANTS OF CONCERN
IN SEDIMENT COMPOSITE SAMPLES - FRANKLIN D. ROOSEVELT LAKE

Analyte[1]	Number of Samples	Number of Detects	Detected Result (mg/kg)	Preliminary Background Limit (mg/kg)[2]	Result Exceeds Background?[3]	Sediment Guideline[4]	Retained as a COPC?	Rationale
Aluminum	1	1	7410	18000	No	14000	No	<BKG
Antimony	1	0	ND	0.46	No	2.0	No	ND
Arsenic	1	1	9.3	76	No	9.8	No	<BKG
Barium	1	1	55.1	240	No	500	No	<BKG
Beryllium	1	1	0.31	2.8	No	0.7	No	<BKG
Cadmium	1	0	ND	0.72	No	0.99	No	ND
Chromium	1	1	11.1	18	No	43	No	<BKG
Cobalt	1	1	4.6	12	No	50	No	<BKG
Copper	1	1	8.7	28	No	32	No	<BKG
Iron	1	1	15700	23000	No	200000	No	<BKG
Lead	1	1	8.4	16	No	36	No	<BKG
Magnesium	1	1	6040	3900	Yes	6100	No	<SQG
Manganese	1	1	241	930	No	1700	No	<BKG
Mercury	1	0	ND	0.12	No	0.18	No	ND
Nickel	1	1	8.9	16	No	23	No	<BKG
Selenium	1	1	0.61	1.3	No	2.5	No	<BKG
Silver	1	0	ND	0.14	No	1.0	No	ND
Sulfate	1	1	29.9	68	No	NG	No	<BKG
Thallium	1	1	0.22	0.32	No	3.8	No	<BKG
Uranium	1	1	1.91	66	No	21	No	<BKG
Vanadium	1	1	16.1	34	No	NG	No	<BKG
Zinc	1	1	74.1	71	Yes	121	No	<SQG

1 - Analytes listed based on available results from E&E (1998), SMI (1999), and URS (2000).
2 - 95th UTLs for composite samples (except maximum for uranium).
3 - Result is greater than background (see Appendix B for sediment results).
4 - Compilation of consensus-based freshwater threshold effects concentrations (Table 3-3) and sediment quality guidelines (primarily mid SQGs) (Table 3-2).
COPC - Contaminant of Potential Concern
BKG - Background (see Appendix C)
ND - Not detected
NG - No applicable Guideline
SQG - Sediment Quality Guideline
Shaded rows - analyte concentration exceeds background and guideline.

Table D.3-8
IDENTIFICATION OF METAL CONTAMINANTS OF CONCERN
IN SEDIMENT COMPOSITE SAMPLES - WESTERN DRAINAGE

Analyte[1]	Number of Samples	Number of Detects	Maximum Detected Result (mg/kg)	Preliminary Background Limit (mg/kg)[2]	Maximum Exceeds Background?[3]	Sediment Guideline[4]	Retained as a COPC?	Rationale
Aluminum	3	3	12500	18000	No	14000	No	<BKG
Antimony	3	0	ND	0.46	No	2.0	No	ND
Arsenic	3	3	8.1	76	No	9.8	No	<BKG
Barium	3	3	88.9	240	No	500	No	<BKG
Beryllium	3	3	1.8	2.8	No	0.7	No	<BKG
Cadmium	3	3	1.2	0.72	No	0.99	No	<BKG
Chromium	3	3	10.8	18	No	43	No	<BKG
Cobalt	3	3	33.5	12	No	50	No	<BKG
Copper	3	3	16.5	28	No	32	No	<BKG
Iron	3	3	16700	23000	No	200000	No	<BKG
Lead	3	3	15.4	16	No	36	No	<BKG
Magnesium	3	3	2680	3900	No	6100	No	<BKG
Manganese	3	3	12900	930	No	1700	No	<BKG
Mercury	3	0	ND	0.12	No	0.18	No	ND
Nickel	3	3	39	16	No	23	No	<BKG
Selenium	3	3	1.9	1.3	No	2.5	No	<BKG
Silver	3	0	ND	0.14	No	1.0	No	ND
Sulfate	3	3	972	68	No	NG	No	<BKG
Thallium	3	3	0.37	0.32	Yes	3.8	No	<SQG
Uranium	4	4	330	66	Yes	21	Yes	>SQG
Vanadium	3	3	22.3	34	No	NG	No	<BKG
Zinc	3	3	74.5	71	No	121	No	<BKG

1 - Analytes listed based on available results from E&E (1998), SMI (1999), and URS (2000).
2 - 95th UTLs for composite samples (except maximum for uranium).
3 - Two or more results greater than background (see Appendix B for sediment results).
4 - Compilation of consensus-based freshwater threshold effects concentrations (Table 3-3) and sediment quality guidelines (primarily mid SQGs) (Table 3-2).
COPC - Contaminant of Potential Concern
BKG - Background (see Appendix C)
ND - Not detected
NG - No applicable Guideline
SQG - Sediment Quality Guideline
Shaded rows - analyte concentration exceeds background and guideline.

Table D.3-9
IDENTIFICATION OF METAL CONTAMINANTS OF CONCERN IN SEDIMENT COMPOSITE SAMPLES - OUTFALL POND

Analyte[1]	Number of Samples	Number of Detects	Detected Result (mg/kg)	Preliminary Background Limit (mg/kg)[2]	Result Exceeds Background?[3]	Sediment Guideline[4]	Retained as a COPC?	Rationale
Aluminum	1	1	17100	18000	No	14000	No	<BKG
Antimony	1	0	ND	0.46	No	2.0	No	ND
Arsenic	1	1	7.2	76	No	9.8	No	<BKG
Barium	1	1	165	240	No	500	No	<BKG
Beryllium	1	1	0.98	2.8	No	0.7	No	<BKG
Cadmium	1	1	0.14	0.72	No	0.99	No	<BKG
Chromium	1	1	18.1	18	Yes	43	No	<SQG
Cobalt	1	1	10.2	12	No	50	No	<BKG
Copper	1	1	18.3	28	No	32	No	<BKG
Iron	1	1	18000	23000	No	200000	No	<BKG
Lead	1	1	15.5	16	No	36	No	<BKG
Magnesium	1	1	3980	3900	Yes	6100	No	<SQG
Manganese	1	1	485	930	No	1700	No	<BKG
Mercury	1	0	ND	0.12	No	0.18	No	ND
Nickel	1	1	14.6	16	No	23	No	<BKG
Selenium	1	1	0.92	1.3	No	2.5	No	<BKG
Silver	1	0	ND	0.14	No	1.0	No	ND
Sulfate	1	1	1310	68	Yes	NG	No	No SQG
Thallium	1	1	0.35	0.32	Yes	3.8	No	<SQG
Uranium	1	1	31.9	66	No	21	No	<BKG
Vanadium	1	1	26.1	34	No	NG	No	<BKG
Zinc	1	1	73.3	71	Yes	121	No	<SQG

1 - Analytes listed based on available results from E&E (1998), SMI (1999), and URS (2000).
2 - 95th UTLs for composite samples (except maximum for uranium).
3 - Result is greater than background (see Appendix B for sediment results).
4 - Compilation of consensus-based freshwater threshold effects concentrations (Table 3-3) and sediment quality guidelines (primarily mid SQGs) (Table 3-2).
COPC - Contaminant of Potential Concern
BKG - Background (see Appendix C)
ND - Not detected
NG - No applicable Guideline
SQG - Sediment Quality Guideline
Shaded rows - analyte concentration exceeds background and guideline.