

TABLE 1
Typical Metals Guidance/Reference Concentrations

<i>Analyte</i>	1992 Recommended	1994 Recommended	Eastern USA	Conterminous	
	Soil Clean Up Objectives (mg/kg) ¹	Soil Clean Up Objectives (mg/kg) ²	Background Concentration (mg/kg) ²	Average (ppm)	Range (ppm)
Aluminum	30 or SB ⁴	SB	33,000	72,000	700-<10,000
Antimony	30 or SB	SB	NA ⁵	0.66	<1-8.8
Arsenic	7.5 or SB	7.5 or SB	3-12	7.2	<0.1-97
Barium	300 or SB	300 or SB	15-600	580	10-5,000
Beryllium	0.14	0.16 or SB	0-1.75	0.92	<1-15
Cadmium	1 or SB	1 or SB	0.1-1	NA	NA
Calcium	SB	SB	130-35,000	24,000	100-320,000
Chromium	10 or SB	10 or SB	1.5-40	54	1-2,000
Cobalt	30 or SB	30 or SB	2.5-60	9.1	<3-70
Copper	25 or SB	25 or SB	1-50	25	<1-700
Iron	2,000 or SB	2,000 or SB	2,000-550,000	26,000	100->100,000
Lead	30 or SB	SB	200-500	19	<10-700
Magnesium	SB	SB	100-5,000	9,000	50->100,000
Manganese	SB	SB	50-5,000	550	<2-7,000
Mercury	0.1	0.1	0.001-0.2	0.09	<0.01-4.6
Nickel	13 or SB	13 or SB	0.5-25	19	<5-700
Potassium	4,000 or SB	SB	8,500-43,000	15,000	50-63,000
Selenium	2 or SB	2 or SB	0.1-3.9	0.39	<0.1-4.3
Silver	200	SB	NA	NA	NA
Sodium	3,000 or SB	SB	6,000-8,000	12,000	<500-100,000
Thallium	20 or SB	SB	NA	9.4	2.2-31
Vanadium	150 or SB	150 or SB	1-300	80.0	<7-500
Zinc	20 or SB	20 or SB	9-50	60.0	<5-2,900

NOTES:

¹ Values based on NYSDEC TAGM - Recommended Soil Cleanup Objectives, HWR-94-4046, Nov. 16, 1992.

² Values based on NYSDEC TAGM - Recommended Soil Cleanup Objectives, HWR-94-4046, Jan. 24, 1994.

³ Values from Shacklette and Boerngen, 1984.

⁴ SB - Site Background

⁵ NA - Not Available

TABLE 2
Long Island Site
Metals Concentration Statistics

Metal	Number of Samples	Mean (X) Concentration (mg/kg)	Range of Concentrations (mg/kg)	X+2SD (mg/kg)	X+3SD (mg/kg)	Background Sample Concentration (mg/kg)	Eastern USA Background ³ Concentration (mg/kg)
Aluminum	23	4,769	369-19,300	17,913	24,486	10,700	33,000
Antimony	23.0	5.6	5.2-6.1	6.2	6.5	5.8	NA ⁴
Arsenic	23.00	1.47	0.33-4.4	4.14	5.47	3.40	3-12
Barium	23.0	17.3	1.7-159	84.9	118.8	31.7 B ¹	15-600
Beryllium	23.00	0.17	0.02-0.55	0.49	0.65	0.42 B	0-1.75
Cadmium	23.00	0.69	0.55-1.40	1.07	1.26	0.81 U ²	0.1-1
Calcium	23.0	612.7	32.2-4830	2884.5	4020.3	18600.0	130-35,000
Chromium	23.0	11.3	1.7-79.5	44.1	60.4	11.6	1.5-40
Cobalt	23.0	2.6	0.6-6.9	6.4	8.3	4.5 B	2.5-60
Copper	23.0	6.0	1.4-30.2	20.0	27.0	8.0	1-50
Iron	23	6,221	1,030-18,100	18,370	24,444	12,100	2,000-550,000
Lead	23.0	6.3	0.5-34.6	24.1	33.0	14.1	200-500
Magnesium	23.0	675.6	74.6-2,390	2248.6	3035.1	1770.0	100-5,000
Manganese	23.0	56.6	5.5-130	139.2	180.5	111.0	50-5,000
Mercury	23.00	0.05	0.04-0.06	0.06	0.07	0.05 B	0.001-0.2
Nickel	23.0	4.3	1.0-11.2	11.2	14.7	8.1 B	0.5-25
Potassium	23.0	207.4	32.1-693	646.0	865.3	579.0 B	8,500-43,000
Selenium	23.00	0.39	0.14-0.59	0.71	0.88	0.21 BJ	0.1-3.9
Silver	23.00	0.43	0.30-0.52	0.59	0.68	0.31 U	NA
Sodium	23.0	64.9	3.1-248	233.9	318.4	199.0 B	6,000-8,000
Thallium	23.00	0.32	0.25-1.30	0.75	0.96	0.29 U	NA
Vanadium	23.0	9.9	1.6-30.3	31.1	41.8	20.2	1-300
Zinc	23.0	40.8	2.9-201	143.0	194.1	32.4	9-50

NOTES:

¹ B - Indicates that the concentration is less than the CRDL but greater than the IDL.

² U - Analyte was analyzed for but not detected.

³ Values from on NYSDEC TAGM - Recommended Soil Cleanup Objectives, HWR-94-4046, Jan. 24, 1994.

⁴ NA - Not Applicable.