ATTACHMENT A

Table 3(a): Large Waste Pile - Total Metals Data Summary
Atlas Metals, Los Angeles, California

Metal	Range (mg/kg)	Mean (mg/kg)	Confidence Interval	RESULTS* (mg/kg)	Action Levels (mg/kg)		
					TTLC†	Industrial PRG‡	Residential PRG
Antimony	2,310 - 24.1	203.5	± 148	351.3	500	410	31
Arsenic	243 - 23.3	79.2	± 14.7	93.9	500	1.6	0.39
Barium	4,130 - 563	1,528.9	± 304.3	1,833.2	10,000	67,000	5,400
Beryllium	3.2 - ND	1.9	± 0.2	2.1	75	1,900	150
Cadmium	91.8 - 20.1	53.4	± 5.8	59.2	100	450	37
Chromium	3,720 - 224	1,110.6	± 262.9	1,373.5	2,500	450	210
Cobalt	67.6 - 18	36.2	± 3.7	39.9	8,000	1,900	900
Copper	11,200 - 1,590	3,348.0	± 701.8	**4,049.8**	2,500	-	-
Lead	56,200 - 3,890	12,838.5	± 3218.8	**16,057.3**	1,000	800	400
Mercury	20.7 - 5.9	14.3	± 1.2	15.5	20	310	23
Molybdenum	460 - 30.6	101.0	± 27.5	128.5	3,500	5,100	390
Nickel	2,450 - 141	812.9	± 184.1	997	2,000	20,000	1,600
Selenium	18.1 - ND	7.9	± 1.1	9	1,000	5,100	390
Silver	7.4 - 1.7	4.6	± 0.4	5.0	500	5,100	390
Thallium	7.4 - ND	5.6	± 0.4	6.0	700	67	5.2
Vanadium	46.2 - 19	31.0	± 2.9	33.0	2,400	1,000	78
Zinc	15,500 - 4,470	10,261.5	± 771.1	**11,032.6**	5,000	100,000	23,000

Notes:
- mg/kg - milligrams per kilogram
- ND - non-detect
- **BOLD** values over TTLC limits
- *Results = Mean + Upper Confidence Interval

Action Levels:
† California Total Threshold Limit Concentration Hazardous Waste Limits
‡ USEPA Region 9 Preliminary Remediation Goals for Soil, 2004
- DTSC Lead in Schools - 255 mg/kg

2006 Ecology & Environment

Table 3(b): Small Waste Pile - Total Metals Data Summary
Atlas Metals, Los Angeles, California

Metal	Range (mg/kg)	Mean (mg/kg)	Confidence Interval	RESULTS* (mg/kg)	Action Levels (mg/kg)		
					TTLC†	Industrial PRG‡	Residential PRG
Antimony	182 - ND	44.8	± 15.6	60.4	500	410	31
Arsenic	57.3 - 6.3	58.1	± 26.9	85.0	500	1.6	0.39
Barium	3,400 - 300	1,254.0	± 202.9	1,456.9	10,000	67,000	5,400
Beryllium	1.8 - ND	1.7	± 0	1.7	75	1,900	150
Cadmium	77.7 - 24.5	46.8	± 4.3	51.1	100	450	37
Chromium	1,180 - 174	434.3	± 78	512.3	2,500	450	210
Cobalt	44.8 - 11.9	27.1	± 2.5	29.6	8,000	1,900	900
Copper	7,200 - 1,190	3,398.5	± 509	**3,907.5**	2,500	-	-
Lead	31,800 - 4,730	11,408.5	± 1,909.7	**13,318.2**	1,000	800	400
Mercury	11.8 - 3.6	8.6	± 0.8	9.4	20	310	23
Molybdenum	78.6 - 18	51.3	± 5.1	56.4	3,500	5,100	390
Nickel	1,220 - 223	420.7	± 79.1	499.8	2,000	20,000	1,600
Selenium	8.4 - ND	4.0	± 0.6	4.6	1,000	5,100	390
Silver	8.3 - 2.2	4.8	± 0.5	5.3	500	5,100	390
Thallium	5.3 - ND	3.8	± 0.2	4.0	700	67	5.2
Vanadium	177 - 22.4	36.9	± 9.9	46.8	2,400	1,000	78
Zinc	16,800 - 2,920	10,735.5	± 1,080.4	**11,815.9**	5,000	100,000	23,000

Notes:
- mg/kg - milligrams per kilogram
- ND - non-detect
- **BOLD** values over TTLC limits
- *Results = Mean + Upper Confidence Interval

Action Levels:
† California Total Threshold Limit Concentration Hazardous Waste Limits
‡ USEPA Region 9 Preliminary Remediation Goals for Soil, 2004
- DTSC Lead in Schools - 255 mg/kg

2006 Ecology & Environment

Table 4: TCLP Metals Data Summary
Atlas Metals, Los Angeles, California

Metal	Pile	Range (mg/L)	Mean (mg/L)	Confidence Interval	RESULTS* (mg/kg)	RCRA TCLP† (mg/L)
Arsenic	Large	0.012 - ND	0	± 0	0	5
Barium		3.6 - 1.1	1.8	± 0.2	2.0	100
Cadmium		1.1 - 0.15	0.6	± 0.1	0.7	1
Chromium		0.0064 - ND	0	± 0	0	5
Lead		70.5 - 1.9	23.9	± 5.7	**29.6**	5
Mercury		0.00036 - ND	0	± 0	0	0.2
Selenium		0.0066 - ND	0	± 0	0	1
Silver		ND	ND	± 0	ND	5
Arsenic	Small	0.0077 - ND	0	± 0	0	5
Barium		2.4 - 0.78	1.4	± 0.1	1.5	100
Cadmium		1.1 - 0.19	0.6	± 0.1	0.7	1
Chromium		0.0013 - ND	0	± 0	0	5
Lead		68.7 - 0.65	21.0	± 4.5	**25.5**	5
Mercury		ND	ND	± 0	ND	0.2
Selenium		0.0096 - ND	0	± 0	0	1
Silver		ND	ND	± 0	ND	5

Notes:
- mg/L - milligrams per liter
- ND - non-detect
- **BOLD** values over TCLP limit
- *Results = Mean + Upper Confidence Interval

Action Levels:
† Resource Conservation & Recovery Act
Toxicity Characteristic Leaching Procedure

2006 Ecology & Environment

Table 5: Polychlorinated Biphenyls Data Summary
Atlas Metals, Los Angeles, California

Aroclor	Pile	Range (mg/kg)	Mean (mg/kg)	Confidence Interval	RESULTS* (mg/kg)	Action Levels (mg/kg)	
						TSCA PCB Rule†	TTLC‡
1016	Large	0.350 - ND	0	± 0	0	1	50
1221		ND	ND	± 0	ND	1	50
1232		ND	ND	± 0	ND	1	50
1242		ND	ND	± 0	ND	1	50
1248		ND	ND	± 0	ND	1	50
1254		28.0 - ND	1.3	± 12.9	**14.2**	1	50
1260		0.380 - ND	0	± 0	0	1	50
1016	Small	ND	ND	± 0	ND	1	50
1221		ND	ND	± 0	ND	1	50
1232		ND	ND	± 0	ND	1	50
1242		ND	ND	± 0	ND	1	50
1248		ND	ND	± 0	ND	1	50
1254		120 - 4.4	19.8	± 7.1	**26.9**	1	50
1260		ND	ND	± 0	ND	1	50

Notes:
- mg/kg - milligrams per kilogram
- ND - non-detect
- **BOLD** values over TSCA limit
- *Results = Mean + Upper Confidence Interval

Action Levels:
† Toxic Substance Control Act PCB Rule
‡ California Total Threshold Limit Concentration Hazardous Waste Limits

2006 Ecology & Environment

Table 6(a): Large Waste Pile - Polynuclear Aromatic Hydrocarbons Data Summary
Atlas Metals, Los Angeles, California

PAH	Range (mg/kg)	Mean (mg/kg)	Confidence Interval	RESULTS* (mg/kg)	Action Levels (mg/kg)	
					Residential PRG†	Industrial PRG
Acenaphthene	0.870 - ND	0.614	± 0.017	0.631	3,700	29,000
Acenaphthylene	ND	ND	± 0	ND	-	-
Anthracene	1.5 - ND	0.514	± 0.95	0.609	22,000	100,000
Benzo(g,h,i)perylene	2.0 - ND	1.2	± 0.1	1.3	-	-
Fluoranthene	8.5 - ND	1.8	± 0.6	2.4	2,300	22,000
Fluorene	0.940 - ND	0.560	± 0.027	0.587	2,700	26,000
Napthalene	0.660 - ND	0.546	± 0.008	0.554	56 *(1.7)*	190 *(4.2)*
Phenathrene	5.7 - ND	1.0	± 0.4	1.4	-	-
Pyrene	7.4 - ND	1.7	± 0.5	2.2	2,300	29,000
Benzo(a)anthracene	2.9 - ND	0.920	± 0.18	**1.1**	0.62	2.1
Benzo(a)pyrene	2.9 - ND	0.887	± 0.213	**1.1**	0.062	0.21
Benzo(b)fluoranthene	3.0 - ND	1.0	± 0.3	**1.3**	0.62	2.1
Benzo(k)fluoranthene	2.7 - ND	0.896	± 0.204	**1.1**	6.2 *(0.38)*	21 *(1.3)*
Chrysene	3.2 - ND	0.998	± 0.202	1.2	62 *(3.8)*	210 *(13)*
Dibenzo(a,h)anthracene	0.810 - ND	0.611	± .013	**0.624**	0.062	0.21
Indeno(1,2,3-cd)pyrene	1.8 - ND	0.764	± 0.1	**0.864**	0.62	2.1

Note:
- mg/kg - milligrams per kilogram
- ND - non-detect
- **BOLD** values over PRG
- *Results = Mean + Upper Confidence Interval

Action Levels:
† USEPA Region 9 Preliminary Remediation Goals for Soil, 2004
- *ITALICS:* California Modified PRGs

2006 Ecology & Environment

Table 6(b): Small Waste Pile - Polynuclear Aromatic Hydrocarbons Data Summary
Atlas Metals, Los Angeles, California

PAH	Range (mg/kg)	Mean (mg/kg)	Confidence Interval	RESULTS* (mg/kg)	Action Levels (mg/kg)	
					Residential PRG†	Industrial PRG
Acenaphthene	ND	ND	± 0	ND	3,700	29,000
Acenaphthylene	ND	ND	± 0	ND	-	-
Anthracene	1.3 - ND	0.529	± 0.055	0.584	22,000	100,000
Benzo(g,h,i)perylene	1.2 - ND	1.0	± 0.1	1.1	-	-
Fluoranthene	10.0 - ND	1.5	± 0.7	2.2	2,300	22,000
Fluorene	ND	ND	± 0	ND	2,700	26,000
Napthalene	ND	ND	± 0	ND	56 *(1.7)*	190 *(4.2)*
Phenathrene	6.4 - ND	0.885	± 0.415	1.3	-	-
Pyrene	7.8 - ND	1.6	± 0.4	2.0	2,300	29,000
Benzo(a)anthracene	3.1 - ND	0.782	± 0.172	**0.954**	0.62	2.1
Benzo(a)pyrene	2.5 - ND	0.827	± 0.138	**0.965**	0.062	0.21
Benzo(b)fluoranthene	3.2 - ND	1.0	± 0.2	**1.2**	0.62	2.1
Benzo(k)fluoranthene	2.3 - ND	0.799	± 0.122	0.921	6.2 *(0.38)*	21 *(1.3)*
Chrysene	3.3 - ND	0.849	± 0.151	1.0	62 *(3.8)*	210 *(13)*
Dibenzo(a,h)anthracene	ND	ND	± 0	ND	0.062	0.21
Indeno(1,2,3-cd)pyrene	1.3 - ND	0.661	± 0.5	**0.711**	0.62	2.1

Note:
- mg/kg - milligrams per kilogram
- ND - non-detect
- **BOLD** values over PRG
- *Results = Mean + Upper Confidence Interval

Action Levels:
† USEPA Region 9 Preliminary Remediation Goals for Soil, 2004
- *ITALICS:* California Modified PRGs

2006 Ecology & Environment

The laboratory data for particle-size distribution was reported in percent by weight and is provided in Table 7. No statistical analysis was performed for this data by the START.

Table 7: Particle-Size Data Summary
Atlas Metals Assessment
Watts, Los Angeles, California

Sample ID	USCS Description	Median Grain Size (mm)	Particle Size Distribution (wt. %)				
			Gravel	Sand			Silt/Clay
				Coarse	Medium	Fine	
Comp 1 (LWP 1-6)	medium sand	0.741	16.15	18.57	26.11	26.19	12.99
Comp 2 (LWP 7-12)	gravel	2.239	39.29	12.65	19.52	19.52	9.03
Comp 3 (LWP 13-18)	coarse sand	0.943	22.30	16.48	23.47	23.64	14.11
Comp 4 (SWP 1-6)	medium sand	0.744	16.66	16.31	27.82	25.82	13.39
Comp 5 (SWP 7-12)	coarse sand	1.340	22.15	20.48	24.72	21.18	11.47
Comp 6 (SWP 13-18)	coarse sand	0.972	24.38	13.94	25.84	23.98	11.86

NOTES
USCS: Unified Soil Classification System; mm: millimeter; wt. %: percent by weight

TDD: 09-05-06-0005 2006 ecology & environment, Inc.