Table 1a

Comparisons of Untreated EAF Dust Metals TCLP Results

METAL	TOXICITY CHARACTERISTIC BY TCLP (mg/L)	UTS CRITERIA (mg/L)	RISK BASED[4] (mg/L)		TCLP RESULTS[1][2] (mg/L)									
					Mill 1	Mill 2	Mill 3	Mill 4	Mill 5	Mill 6	Mill 7	Mill 8	Mill 9	Mill 10
Antimony	---	1.15	0.206	Max	0.036	<0.02	0.033	<0.02	0.059	<0.02	0.028	0.028	<0.02	<0.02
				Mean	0.023	0.01	0.024	0.01	0.018	0.01	0.015	0.018	0.01	0.01
				Min	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	5	5	0.0936	Max	0.088	0.078	0.036	0.057	0.068	0.039	0.084	0.026	<0.02	0.065
				Mean	0.087	0.063	0.022	0.051	0.039	0.031	0.065	0.02	0.01	0.065
				Min	0.085	0.048	<0.02	0.045	0.021	0.023	0.034	<0.02	<0.02	0.065
Barium	100	21	55.7	Max	1.4	2	1.8	1.6	1.6	<1	2	2.2	<1	<1
				Mean	1.0	1.7	1.1	1.4	0.8	0.5	1.0	1.1	0.5	0.5
				Min	<1	1.3	<1	1.2	<1	<1	<1	<1	<1	<1
Beryllium	--	1.22	0.416	Max	<0.001	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	0.005	<0.001
				Mean	0.0005	0.0005	0.0005	0.0005	0.0012	0.0005	0.0005	0.0005	0.005	0.0005
				Min	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.005	<0.001
Cadmium	1	0.11	0.15	Max	**3.2**	**21**	**2.8**	**17**	**6.8**	**7.7**	**8.8**	**2.3**	**1.3**	**7.6**
				Mean	**2.5**	**18**	**1.9**	**15**	**5.2**	**3.9**	**7.4**	**1.0**	**1.3**	**7.6**
				Min	**1.8**	**14**	0.006	**13**	**3.2**	0.019	**5.5**	0.003	**1.3**	**7.6**
Chromium	5	0.6	385	Max	0.093	0.024	0.057	0.025	0.36	0.075	0.42	0.18	<0.004	0.017
				Mean	0.052	0.022	0.023	0.024	0.075	0.056	0.11	0.156	0.002	0.017
				Min	0.011	0.019	0.008	0.023	0.009	0.036	0.01	0.006	<0.004	0.017
Lead	5	0.75	75	Max	**42**	**230**	**3.1**	**46**	**150**	**31**	**170**	**12**	0.28	**27**
				Mean	**21.4**	**151**	**1.45**	**37**	**30.9**	**15.5**	**98**	**6.68**	0.28	**27**
				Min	**0.87**	**71**	<0.01	**28**	0.72	0.014	**12**	<0.01	0.28	**27**
Mercury	0.2	0.025	0.0814	Max	<0.001	0.002	<0.001	0.001	<0.001	**0.03**	<0.001	<0.001	<0.001	<0.001
				Mean	0.0005	0.002	0.001	0.001	0.001	0.019	0.0005	0.0005	0.0005	0.0005
				Min	<0.001	0.001	<0.001	0.001	<0.001	0.007	<0.001	<0.001	<0.001	<0.001

Table 1a

Comparisons of Untreated EAF Dust Metals TCLP Results

METAL	TOXICITY CHARACTERISTIC BY TCLP (mg/L)	UTS CRITERIA (mg/L)	RISK BASED[4] (mg/L)	TCLP RESULTS[1][2] (mg/L)										
					Mill 1	Mill 2	Mill 3	Mill 4	Mill 5	Mill 6	Mill 7	Mill 8	Mill 9	Mill 10
Nickel	---	11	28.3	Max	3.5	0.15	0.21	0.28	0.73	0.19	0.32	0.39	0.095	0.11
				Mean	2.04	0.112	0.129	0.23	0.310	0.134	0.225	0.198	0.095	0.11
				Min	0.57	0.073	0.028	0.17	0.085	0.078	0.082	0.047	0.095	0.11
Selenium	1	5.7	0.58	Max	0.067	0.05	0.025	0.032	0.043	0.1	0.069	0.086	0.014	0.016
				Mean	0.05	0.049	0.022	0.032	0.031	0.090	0.053	0.042	0.014	0.016
				Min	0.03	0.047	0.017	0.031	0.019	0.079	0.024	0.021	0.014	0.016
Silver	5	0.14	3.84	Max	<0.05	<0.05	<0.05	<0.05	0.058	<0.05	<0.05	<0.05	<0.005	<0.05
				Mean	0.02	0.020	0.011	0.014	0.022	0.025	0.020	0.018	0.0025	0.025
				Min	<0.03	<0.03	<0.005	<0.005	<0.005	<0.05	<0.03	<0.005	<0.005	<0.05
Thallium	---	0.2	0.088	Max	0.016	0.054	0.012	0.029	0.026	**0.52**	0.042	0.007	0.011	0.046
				Mean	0.01	0.052	0.009	0.027	0.021	**0.51**	0.036	0.005	0.011	0.046
				Min	0.009	0.05	0.004	0.024	0.016	**0.5**	0.026	0.003	0.011	0.046
Zinc	---	4.3	280	Max	**4200**	**2700 J**	**1000 J**	**2500 J**	**1400 J**	**450 J**	**2400 J**	**800 J**	**96**	**2400 J**
				Mean	**3450**	**1715**	**585**	**1715**	**583**	**225**	**1983**	**354**	**96**	**2400**
				Min	**2700**	**730**	1.4	**930**	**100**	<1	**1000**	1.3	**96**	**2400 J**
Final pH	---	---	---	Max	6.67	6.91	10.49	6.93	7.47	9.29	6.68	12.26	7.29	5.74
				Mean	6.09	6.58	7.52	6.46	6.66	8.17	6.10	8.73	7.29	5.74
				Min	5.51	6.24	5.86	5.98	4.78	7.04	5.15	6.44	7.29	5.74

Notes:

[1] Shaded cells indicate exceedence of toxicity characteristic criteria.
Bold entries indicate exceedence of Universal Treatment Standards (UTS) criteria. The criteria is found in 40 CFR 268.48.
Underlined entries indicate exceedences of risk based criteria.
J - Indicates estimated concentrations based on data validation.
< - Constituent not detected at the indicated Method Detection Limit
mg/L - Milligrams per liter

[2] A value of one-half the MDL was substituted for undetectable concentrations.

[3] Vanadium was not sampled for the untreated EAF dust.

[4] Risk based updated DRAS v.2 model used for comparison. Risk based numbers generated according to EPA's RCRA Delisting Technical Support Document, April 2002.

Table 1b

Comparisons of Untreated EAF Dust Metals Total Results

DELISTING CONSTITUENTS OF CONCERN	UPDATED DRAS v.2 (mg/kg)	TOTAL RESULTS[1][2][3] (mg/kg)										
			Mill 1	Mill 2	Mill 3	Mill 4	Mill 5	Mill 6	Mill 7	Mill 8	Mill 9	Mill 10
Antimony	20100	Max	40	88	54	76	45	140	54	39	16	27
		Mean	40	83	46.5	63.5	38.5	140	41.7	32.5	16	27
		Min	40	78	42	51	32	140	32	17	16	27
Arsenic	168	Max	38	48	42	42	42	58	43	39	16	26
		Mean	34	41.5	72.5	36.5	35.7	55	41.3	31.5	16	26
		Min	30	35	32	31	27	52	38	19	16	26
Barium	2620000	Max	180	500	100	330	220	540	1300	180	170	210
		Mean	165	405	94.5	300	175	345	513.3	246	170	210
		Min	150	310	87	270	130	150	140	62	170	210
Beryllium	1420	Max	<1	8.5	<1	<1	<1	<1	10	1.2	<1	<1
		Mean	<1	4.5	<1	<1	<1	<1	2.3	0.68	<1	<1
		Min	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium	1900	Max	96	560	110	490	270	290	330	190	62	290
		Mean	74	545	98.8	455	213.3	290	288	115	62	290
		Min	52	530	90	420	180	290	210	86	62	290
Chromium	477000	Max	8700	2400	1400	2400	2900	2200	2000	1400	1600	1900
		Mean	6550	2300	1300	1950	1833	2050	1467	1060	1600	1900
		Min	4400	2200	1000	1500	1900	1900	1200	750	1600	1900
Lead	43900	Max	12000	20000	4000	14000	110000	38000	12000	9300	2300	6100
		Mean	9150	19500	3300	14000	25817	36000	8017	6175	2300	6100
		Min	6300	19000	2600	14000	8600	34000	5100	4400	2300	6100

Table 1b

Comparisons of Untreated EAF Dust Metals Total Results

DELISTING CONSTITUENTS OF CONCERN	UPDATED DRAS v.2 (mg/kg)		TOTAL RESULTS[1][2][3] (mg/kg)									
			Mill 1	Mill 2	Mill 3	Mill 4	Mill 5	Mill 6	Mill 7	Mill 8	Mill 9	Mill 10
Mercury[4]	9.35	Max	1.1	2.1	1.4	8.6	2	33	1.1	2.9	<0.2	2.1
		Mean	0.74	1.8	1.0	8.05	1.38	32	0.94	1.47	<0.2	2.1
		Min	0.37	1.5	0.6	7.5	0.87	31	0.59	0.88	<0.2	2.1
Nickel	130000	Max	1700	130	220	350	320	230	180	170	270	200
		Mean	1060	120	182.5	275	247	225	142	142.5	270	200
		Min	420	110	140	200	190	220	120	100	270	200
Selenium	77900	Max	24	13	1.9	5.4	7.7	21	17	5.8	2.6	1.6
		Mean	14.10	9.5	1.4	5.05	4.7	19	6.6	4.7	2.6	1.6
		Min	4.2	5.9	<1	4.7	<1	17	2.1	3.0	2.6	1.6
Silver	49300	Max	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
		Mean	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
		Min	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Thallium	94.7	Max	1.8	12	1.2	1.1	<1	22	14	2.6	<1	1.4
		Mean	1.6	6.6	0.7	0.8	<1	19.5	4.1	1.03	<1	1.4
		Min	1.3	1.2	<1	<1	<1	17	1.5	<1	<1	1.4
Zinc	922000	Max	160000	210000	98000	170000	110000	140000	130000	73000	40000	170000
		Mean	140000	200000	84500	150000	81500	140000	116667	61750	40000	170000
		Min	120000	190000	71000	130000	65000	140000	100000	40000	40000	170000

Notes:

[1] Shaded cells indicate exceedence of risk based DRAS v.2 model.
< - Constituent not detected at the indicated Method Detection Limit
mg/kg - Milligrams per kilogram

[2] A value of one-half the MDL was substituted for undetectable concentrations.

[3] Vanadium was not sampled for the untreated EAF dust.

[4] Risk based DRAS v.3 model value for mercury provided by Todd Ramaly, USEPA Region 5.

Table 2

Historical Receipts of K061 EAF Dust at PDC - Peoria, Illinois

CALENDAR YEAR	MONTHLY AVERAGE K061 EAF DUST RECEIVED (TONS)	MONTHLY MAXIMUM K061 EAF DUST RECEIVED (TONS)	ANNUAL EAF DUST RECEIVED (TONS)
2001	3,731	4,575	22,386
2002	4,203	5,805	48,211
2003	4,760	5,908	57,114
2004	5,488	5,894	65,855
2005	5,649	6,085	67,790
2006	6,211	7,157	74,534
2007	6,162	6,899	73,946
7-Year Maximum	**6,211**	**7,157**	**74,534**
7-Year Average	**5,172**	**6,046**	**58,548**

Table 3a

Summary of Constituents Detected in EAF Dust Treatment Residue Composite Samples

ANALYTE	UNITS	TACO	RISK BASED[4]	SAMPLE IDENTIFICATION AND RESULTS[1]												
				R1-03	R2-03	R3-01	R4-01	R5-01	R6-01	R7-01	R8-03	R9-01	R9-02	R9-03	R9-04	R9-05
General Indicators																
Oil and grease	mg/kg	---	---	<400	210 J											
Cyanide, total	mg/kg	---	63,500	<0.82 R	<0.77 R							<50		<50		
Sulfide, total	mg/kg	---	---	<10 R	<10 R							700		<94		
pH of soil slurry	SU	---	---	10	9.9											
Inorganics - SW-846 Method 6020A (mercury Method 7471A)																
Antimony	mg/kg	---[2]	20,100	29	28	18	29	33	33	28	27	33	33	39	38	37
Arsenic	mg/kg	---[2]	168	21	22	19	21	20	19	20	18	19	19	21	20	20
Barium	mg/kg	---[2]	1,000,000[6]	200	120	110	110	96	78	92	92	120	120	160	140	140
Beryllium	mg/kg	---[2]	1,420	0.23	0.18	0.17	0.17	0.15	0.17	0.2	0.2	0.16	0.18	0.17	0.16	0.18
Cadmium	mg/kg	---[2]	1,900	150	120	140	150	140	100	130	110	150	140	210	190	190
Chromium	mg/kg	---[2]	477,000	1,800	1,200	1,200 B	1,300	1,400	1,100 B	1,200 B	1,200 B	1,300	1,400	1,400	1,400	1,400
Cobalt	mg/kg	---[2]	1,220	11	9.2											
Copper	mg/kg	---[2]	1,000,000[6]	1,600	1,200											
Lead	mg/kg	---[2]	43,900	5,600	3,900	5,000	4,800	5,500	4,500	4,800	3,800	6,300	6,100	9,600	8,300	8,400
Nickel	mg/kg	---[2]	130,000	170	130	130	130	150	120	150	140	120	120	92	110	100
Selenium	mg/kg	---[2]	77,900	4.4	3.4	3.5	4.4	2.2	90	4.1	3.3	5.4	5.6	7.3	6.4	6.5
Silver	mg/kg	---[2]	49,300	7.8 R	7.2 R	6.1 R	6.8 R	6.9 R	6.3 R	6 R	7 R	24	23	25	25	24
Thallium	mg/kg	---[2]	94.7	<20	0.42 J	0.32 J	0.46 J	0.5 J	0.76 J	0.52 J	0.58 J	<20	1.4 J	1.0 J	<20	<20
Tin	mg/kg	---	1,000,000[6]	150	130											
Vanadium	mg/kg	---[2]	128,000	170	140	150	160	170	130	180	160	120	130	95	110	100
Zinc	mg/kg	---[2]	922,000	64,000	82,000	80,000	91,000	79,000	68,000	78,000	68,000	90,000	88,000	120,000	99,000	100,000
Mercury[3]	mg/kg	---[2]	9.35	0.92								1.5	1.5	1.1	1.1	1.1
Semivolatile Organic Compounds SW-846 Method 8270C																
2,4,5-Trichlorophenol	mg/kg	270	391,000	0.0077 J	<1.6											
2-Methylna phthalene	mg/kg	---	---	0.0053 J	0.00067 J											
2-Nitroaniline	mg/kg	---	395	0.019 J	<1.6											
4-Bromophenyl-phenylether	mg/kg	---	7,210	0.0017 J	<0.33											
4-Chloro-3-methylphenol	mg/kg	---	---	0.0077 J	<0.33											
Acenaphthene	mg/kg	570	198,000	0.0023 J	<0.33											
Acenaphthylene	mg/kg	---	---	0.011 J	0.0017 J											
Anthracene	mg/kg	12,000	227,000	0.01 J	0.002 J											
Benzo(a) anthracene	mg/kg	2	1,560	0.021 J	0.002 J											
Benzo(a)pyrene	mg/kg	8	156	0.017 J	0.002 J						0.0033 J					
Benzo(b) fluoranthene	mg/kg	5	1,560	0.032 J	0.004 J						0.0057 J					
Benzo(g,h,i) perylene	mg/kg	---	---	0.027 J	<0.33											
Benzo(k) fluoranthene	mg/kg	49	15,600	0.016 J	0.0013 J											
Benzyl alcohol	mg/kg	---	408,000	0.01 J	<0.33											
bis(2-Ethylhexyl) phthalate	mg/kg	3,600	2,720	0.34	0.085 J											
Butylbenzyl phthalate	mg/kg	930	169,000	0.027 J	0.0047 J											
Carbazole	mg/kg	1	---	0.0083 J	<0.33											
Chrysene	mg/kg	160	156,000	0.033 J	0.003 J											
Dibenzo(a,h) anthracene	mg/kg	2	156	0.013 J	<0.33						0.0047 J					
Dibenzofuran	mg/kg	---	257,000	0.008 J	<0.33											
Diethylphthalate	mg/kg	470	657,000	0.0057 J	0.002 J											
Dimethyl phthalate	mg/kg	---	1,000,000[6]	0.0023 J	<0.33											

Table 3a

Summary of Constituents Detected in EAF Dust Treatment Residue Composite Samples

ANALYTE	UNITS	TACO	RISK BASED[4]	SAMPLE IDENTIFICATION AND RESULTS[1]												
				R1-03	R2-03	R3-01	R4-01	R5-01	R6-01	R7-01	R8-03	R9-01	R9-02	R9-03	R9-04	R9-05
Di-n-butyl phthalate	mg/kg	2,300	36,000	0.12 J	0.0013 J											
Di-n-octylphthalate	mg/kg	10,000	25.7	0.059 J	<0.33											
Fluoranthene	mg/kg	4,300	803,000	0.059 J	0.007 J											
Fluorene	mg/kg	560	898,000	0.0093 J	0.001 J											
Indeno(1,2,3-cd) pyrene	mg/kg	14	1,560	0.017 J	0.0013 J						0.0057 J					
Isophorone	mg/kg	8	2,510	0.0027 J	<0.33											
Naphthalene	mg/kg	12	29.9	0.019 J	0.003 J											
N-Nitrosodi phenylamine	mg/kg	1	2,320	0.0033 J	<0.33											
Pentachloro phenol	mg/kg	0.03	9,470	0.0063 J	<1.6											
Phenanthrene	mg/kg	---	---	0.055 J	0.0063 J											
Phenol	mg/kg	100	1,000,000[6]	0.042 J	<0.33											
Pyrene	mg/kg	4,200	4,780	0.066 J	0.0057 J											
Pyridine	mg/kg	---	128,000	0.021 J	0.0067 J											
Dioxins and Furans SW-846 Method 8290. TEQs computed per EPA/625/3-89/016 (March 1989)																
1,2,3,4,6,7,8-Heptachlorodibenzofuran	ng/kg	---	---	220	44	220	170	270	73	100	120					
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	ng/kg	---	---	160	31	380	130	210	59	78	390					
1,2,3,4,7,8,9-Heptachlorodibenzofuran	ng/kg	---	---	48	11	47	39	60	17	26	26					
1,2,3,4,7,8-Hexachlorodibenzofuran	ng/kg	---	---	87	21	74	69	100	33	47	46					
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	ng/kg	---	---	14	3.4 J	30	13	22	5.5	7	35					
1,2,3,6,7,8-Hexachlorodibenzofuran	ng/kg	---	---	66	17	65	65	99	33	48	47					
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	ng/kg	---	---	39	9.5	86	31	52	16	20	90					
1,2,3,7,8,9-Hexachlorodibenzofuran	ng/kg	---	---	38	8.7	33	27	44	14	19	21					
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	ng/kg	---	---	31	7.3	64	25	41	12	16	73					
2,3,4,6,7,8-Hexachlorodibenzofuran	ng/kg	---	---	100	24	93	78	130	39	48	61					
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	ng/kg	---	---	180	33	150	120	180	51	96	79					
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	ng/kg	---	---	160	25	350	120	200	56	91	300					
1,2,3,7,8-Pentachlorodibenzofuran	ng/kg	---	---	74	23	72	57	100	33	53	43					
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	ng/kg	---	---	16	4.5	26	16	24	6.8	10	29					
2,3,4,7,8-Pentachlorodibenzofuran	ng/kg	---	---	120	32	99	91	150	52	73	69					
2,3,7,8-Tetrachlorodibenzofuran	ng/kg	---	---	51	23	50	46 A	73 A	48	73	56					
2,3,7,8-Tetrachlorodibenzo-p-dioxin	ng/kg	---	---	3.8	1.5	4.2	4.2	5.9	1.9	3.4	3.3					
Total 2,3,4,7-TCDD Toxicity Equivalent	ng/kg	---	7,580	120	33	130	100	160	55	78	100					

Notes:

(1) Blank entries indicate that the analyte was not included in the analysis of the sample.
All analyses were performed by TriMatrix and Pace Analytical Laboratories.
Data qualifiers include:
A - Reporting Limit based on signal to noise
B - Analyte observed in a laboratory blank
J - Estimated concentration between Estimated Quantitation Limit and Method Detection Limit
R - Rejected because of poor spike recoveries
< - Constituent not detected at the indicated Method Detection Limit

(2) No metal TACO total concentration values are provided for pH greater than 9.0.

(3) Risk based DRAS v.3 model value for mercury provided by Todd Ramaly, USEPA Region 5.

(4) Risk based updated DRAS v.2 model used for comparison. Risk based numbers generated according to EPA's RCRA Delisting Technical Support Document, April 2002.

(5) TACO: Tier 1 soil component of the groundwater ingestion exposure route for Class I groundwater, 35 IAC 742, Appendix B, Table A.

(6) Risk-based value exceeds maximum theoretical concentration.

Definitions:
mg/kg - milligram per kilogram
ng/kg - nanograms per kilogram
SU - Standard Unit

Table 3b
Summary of VOC Constituents Detected in EAF Dust Treatment Residue Samples

ANALYTE	UNITS	TACO[2]	RISK BASED[4]	SAMPLE IDENTIFICATION AND RESULTS[1][3]		
				R1-01	R2-01	R8-01
Volatile Organic Compounds SW-846 Method 8260B						
Acetone	mg/kg	25	116,000,000	<0.06	0.025	0.25 J
Benzene	mg/kg	0.03	0.3	<0.05	0.00038 J	<0.05
Toluene	mg/kg	12	6,110	<0.05	<0.005	0.0075 J

Notes:

(1) All analyses were performed by TriMatrix Laboratories.

(2) TACO: Tier 1 soil component of the groundwater ingestion exposure route for Class I groundwater, 35 IAC 742, Appendix B, Table A.

(3) Acetone, benzene, and toluene are common laboratory contaminants.

(4) Risk based updated DRAS v.2 model used for comparison. Risk based numbers generated according to EPA's RCRA Delisting Technical Support Document, April 2002.

Definitions:
J - Estimated concentration between Estimated Quantitation Limit and Method Detection Limit
< - Constituent not detected at the indicated Method Detection Limit
mg/kg - milligram per kilogram

Table 3c
Summary of SVOC TCLP Results in EAF Dust Treatment Residue Composite Samples

ANALYTE	UNITS	TACO[2]	RISK BASED[3]	SAMPLE IDENTIFICATION AND RESULTS[1]		
				R1-03	R2-03	R8-03
Semivolatile Organic Compounds EPA Method 1311/8270C						
Benzo(a)pyrene	ug/L	---	0.00806	<0.47	<0.47	<0.023
Benzo(b)fluoranthene	ug/L	---	0.07290	<0.79	<0.79	<0.040
Dibenz(a,h)anthracene	ug/L	---	0.00380	<0.052	<0.052	<0.0026
Indeno(1,2,3-cd)pyrene	ug/L	---	0.04110	<0.28	<0.28	<0.014

Notes:

(1) All analyses were performed by TriMatrix Laboratories. Method detection limit was reported in the table if the analyte was not detected in the sample.

(2) TACO: Tier 1 soil component of the groundwater ingestion exposure route for Class I groundwater, 35 IAC 742, Appendix B, Table A.

(3) Risk based updated DRAS v.2 model used for comparison. Risk based numbers generated according to EPA's RCRA Delisting Technical Support Document, April 2002.

Definitions:

< - Constituent not detected at the indicated Method Detection Limit

ug/L - micrograms per liter

Table 4
Analytical Program

SAMPLE DAY	SAMPLE ID	SAMPLE TYPE	FIELD DUPLICATE	COLLECTION TIME	TRIMATRIX LABORATORIES, INC.							PACE ANALYTICAL SERVICES, INC.	
					pH, OIL & GREASE, CYANIDE, SULFIDE TOTALS	COC METALS			40 CFR 264 APP. IX VOCs TOTALS	40 CFR 264 APP. IX SVOCs & PCBs TOTALS	SVOC TCLP (select constituents)	DIOXIN/FURAN	
						TOTAL	TCLP (3 extraction fluids)	MEP (3 extraction fluids)				TOTAL	TCLP
Day 1 12/7/2007	R1-01 & R1-02[3]	Grab		8:24					X[1][3]				
	R1-03	Composite		14:39	X[1]	X[1][2]	X[1]	X		X[1]	X[1]	X[1]	X[1]
	R1-04 & R1-05	Equipment Blank		15:26		X[4]						X[5]	
Day 2 12/10/2007	R2-01 & R2-02[3]	Grab		10:31					X[3]				
	R2-03	Composite	X[6]	15:10	X	X	X	X		X	X	X	X
Day 3 12/11/2007	R3-01	Composite		14:10		X[1]	X[1]					X[1]	X[7]
Day 4 12/12/2007	R4-01	Composite		14:36		X	X					X	X[7]
Day 5 12/13/2007	R5-01	Composite		14:50		X[1]	X[1]					X[1]	X[7]
Day 6 12/17/2007	R6-01	Composite		14:19		X	X					X	X[8]
Day 7 12/18/2007	R7-01	Composite		14:17		X[1]	X[1]					X[1]	X[8]
Day 8 12/19/2007	R8-01 & R8-02	Grab		7:28					X[1][3]				
	R8-03	Composite		14:05		X	X				X[9]	X	X[8]

Table 4
Analytical Program

SAMPLE DAY	SAMPLE ID	SAMPLE TYPE	FIELD DUPLICATE	COLLECTION TIME	TRIMATRIX LABORATORIES, INC.							PACE ANALYTICAL SERVICES, INC.	
					pH, OIL & GREASE, CYANIDE, SULFIDE TOTALS	COC METALS TOTAL	COC METALS TCLP (3 extraction fluids)	COC METALS MEP (3 extraction fluids)	40 CFR 264 APP. IX VOCs TOTALS	40 CFR 264 APP. IX SVOCs & PCBs TOTALS	SVOC TCLP (select constituents)	DIOXIN/FURAN TOTAL	DIOXIN/FURAN TCLP
Day 9 2/11/2008	R9-01	Composite		13:14	X(11)	X	X(10)						
	R9-02	Composite		13:41		X	X(10)						
	R9-03	Composite		14:14	X(11)	X	X(10)						
	R9-04	Composite		14:42		X	X(10)						
	R9-05	Composite	X (R9-03)	14:14		X	X(10)						
	R9-06	Equipment Blank		15:31		X(4)							
Day 10 2/14/2008	R10-01	Composite		13:11			X(12)						
	R10-03	Composite		13:43			X(13)						
Day 11 2/21/2008	R11-03	Composite		12:28			X(13)						

Notes:

Grab samples for VOC samples were collected from the first mixer load of the day.

One trip blank (40 mil vial of VOC-free water from the laboratory) was sent with the containers for VOC analysis, if VOCs were detected in sample.

Grab samples for the composite sample were collected from each mixer load processed that day.

For the composite samples, two 1 gallon jars of sample material were collected; one as back-up in the event of jar breakage during transport.

Composite field duplicate – one total; taken during Day 2. EPA guidance recommends 1 field duplicate per 20 samples.

Footnotes:

(1) MS/MSD was performed in conjunction with this analytical method, except pH, which only had a laboratory control sample (LCS).
(2) Sample was analyzed for 40 CFR 264 Appendix IX metals which include all of the COC metals plus three additional metals.
(3) Additional 4 oz. grab sample collected and held in case TC analysis results for VOCs warranted TCLP analysis.
(4) Metals – Rinsed equipment with metals free water provided by the laboratory; collected rinse water in a 500 mil plastic bottle with HNO3 preservative.
(5) Dioxins/Furans – Rinsed equipment with Millipore water provided by the laboratory; collected rinse water in two 1000 mil amber glass bottles.
(6) The field duplicate was sent to the lab with composite 4 to maintain anonymity. The field duplicate was analyzed for total concentrations of COC metals and Dioxins/Furans.
(7) For rounds 3 through 5, TCLP was performed on the sample with the highest total concentration of Dioxins/Furans as determined by Pace Analytical.
(8) For rounds 6 through 8, TCLP was performed on the sample with the highest total concentration of Dioxin/Furans as determined by Pace Analytical.
(9) Laboratory ran totals and TCLP for select PAHs as additional data to show SVOCs are not COCs.
(10) TCLP was run with only the acidic extraction solution
(11) Only total Cyanide and total Sulfide for 2/11/2008 sample round
(12) TCLP with the acidic extraction solution for Mercury only; resample of R9-01
(13) TCLP with the acidic extraction solution for Cadmium only; resample of R9-03; retreatment of R10-03

Table 5
PDC K061 Waste Processing Summary

Sample Round	Date	Waste Received (lbs): Mill 1	Mill 2	Mill 3	Mill 4	Mill 5	Mill 6	Mill 7	Mill 8	Mill 9	Mill 10	Totals (lbs)	Totals (Tons)	Totals (%)
1	12/07/07	-	-	45,800	44,620	38,980	-	-	35,420	-	-	164,820	82	13.6%
2	12/10/07	-	-	45,440	-	32,800	-	-	34,040	-	-	112,280	56	9.3%
3	12/11/07	-	-	-	-	71,920	-	-	-	40,780	40,900	153,600	77	12.7%
4	12/12/07	-	43,880	-	-	-	-	28,060	33,460	-	-	105,400	53	8.7%
5	12/13/07	44,120	-	-	20,080	37,760	18,640	25,240	30,540	-	-	176,380	88	14.6%
6	12/17/07	-	-	44,940	-	-	22,080	24,820	-	-	42,000	133,840	67	11.1%
7	12/18/07	18,600	-	46,600	-	36,840	-	49,380	-	-	-	151,420	76	12.5%
8	12/19/07	-	42,580	-	-	72,500	-	24,660	-	-	-	139,740	70	11.6%
9	02/11/08		19,838		19,838			12,966			17,756	70,398	35	5.8%
Totals (lbs)		62,720	106,298	182,780	84,538	290,800	40,720	165,126	133,460	40,780	100,656	1,207,878	-	-
Totals (tons)		31	53	91	42	145	20	83	67	20	50	-	604	-
Percent of Total Trials		5.2%	8.8%	15.1%	7.0%	24.1%	3.4%	13.7%	11.0%	3.4%	8.3%	-	-	100.0%
% of 2007 Total Loads		0.95%	5.37%	15.91%	4.95%	32.35%	1.67%	18.65%	8.24%	1.18%	10.72%	-	-	100.0%

Table 6

Results of MEP Analyses of EAF Dust Treatment Residue COCs

ANALYTE	SAMPLE RESULTS (mg/L)									
	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
R1-03: MEP Solution Extraction - Neutral										
Antimony	0.014 B	0.0092	0.013	0.012	0.011	0.013	0.014	0.012	0.01	0.0083
Arsenic	0.0011 J	0.00084 J	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Barium	0.25	0.23	0.41	0.4	0.39	0.39	0.3	0.2	0.15	0.016
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	0.00014 J	<0.002	<0.002	0.0001 J	0.000084 J	<0.002	<0.002	<0.002	<0.002	0.00019 J
Chromium	0.017	0.021	0.014	0.017	0.02	0.0095	0.008	0.0068	0.0064	0.0071
Lead	0.00037 J	0.0015 J	0.0038	0.013	0.00054 J	0.002 J	0.0027	0.0021	0.002	0.01
Mercury	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.0088	0.0016 J	0.0018 J	0.0011 J	0.0012 J	0.0015 J	0.00058 J	0.00058 J	0.00039 J	0.00085 J
Selenium	0.027	0.02	0.0064	0.014	0.013	0.002 J	0.0026 J	0.0021 J	<0.003	<0.003
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	0.0021	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Vanadium	<0.003	0.0014 J	0.0015 J	0.0049	0.0053	0.004	0.0045	0.0046	0.0043	0.0043
Zinc	0.018	0.026 B	0.015 B	0.02 B	0.015 B	0.022 B	0.017 B	0.02 B	0.025 B	0.2 B
R1-03: MEP Solution Extraction - Acidic										
Antimony	0.0074	0.0057	0.003	0.0034	0.0037	0.0039	0.0038	0.0037	0.0034	0.0033
Arsenic	0.0019 J	<0.003	<0.003	<0.003	<0.003	<0.003	0.00088 J	0.0015 J	<0.003	<0.003
Barium	0.58	0.38	0.14	0.26	0.34	0.32	0.3	0.28	0.24	0.04
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	0.052 B	0.00024 J	0.00037 J	<0.002	0.000088 J	0.000097 J	0.00012 J	0.00019 J	0.00013 J	<0.002
Chromium	0.0012 J	0.0069	0.029	0.0096	0.009	0.0089	0.009	0.0081	0.0071	0.0055
Lead	0.023 B	0.005 JB	0.0058 B	0.0013 JB	0.0019 JB	0.0015 JB	<0.005	0.0014 JB	0.00079 JB	0.00086 JB
Mercury	0.014	0.00053	0.00011 J	<0.0002	<0.0002	<0.0002	<0.0002	0.000053 J	<0.0002	<0.0002
Nickel	0.024	0.0009 J	0.0019 J	0.0016 J	0.00071 J	0.00063 J	0.00073 J	0.00081 J	0.0011 J	0.00057 J
Selenium	0.021	0.0067	0.014	0.0045	0.0047	0.0044	0.0041	0.0042	0.004	0.0032
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	0.0048	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Vanadium	<0.003	<0.003	0.001 J	0.002 J	0.002 J	0.002 J	0.0017 J	0.0018 J	0.0016 J	0.0013 J
Zinc	0.31 B	0.044 B	0.1 B	0.029 B	0.023 B	0.015 B	0.014 B	0.017 B	0.013 B	0.016 B
R1-03: MEP Solution Extraction - Alkaline										
Antimony	0.013	0.01	0.0094	0.0088	0.0075	0.0077	0.0068	0.0069	0.0066	0.0055
Arsenic	0.0021 J	0.0011 J	<0.003	0.00082 J	0.00076 J	0.00089 J	<0.003	0.00084 J	<0.003	0.00076 J
Barium	0.54	0.45	0.47	0.39	0.33	0.24	0.18	0.2	0.22	0.18
Beryllium	0.00034 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.002	0.00012 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	0.095	0.027 B	0.014 B	<0.005	<0.005	<0.005	<0.005	0.0014 JB	<0.005	0.0014 JB

Table 6

Results of MEP Analyses of EAF Dust Treatment Residue COCs

ANALYTE	SAMPLE RESULTS (mg/L)									
	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
Lead	0.36	4.3 B	2.8 B	2.9 B	2.8 B	2.9 B	1.9 B	2.7 B	0.39 B	0.0046 B
Mercury	0.00011 J	<0.0002	0.000053 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.006 B	0.0031	0.0024	0.0015 J	0.0017 J	0.0016 J	0.0018 J	0.002	0.0019 J	0.00091 J
Selenium	0.038	0.015	0.0088	0.0048	0.0023 J	0.0041	0.0022 J	0.005	0.0025 J	0.001 J
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	0.00071 J	<0.002	<0.002	<0.002	0.00021 J	0.0002 J	<0.002	0.00032 J	<0.002	<0.002
Vanadium	0.0038	0.0044	0.0065	0.0088	0.0094	0.011	0.011	0.014	0.0084	0.0091
Zinc	0.026 B	0.4 B	0.22 B	0.32 B	0.34 B	0.31 B	0.23 B	0.38 B	0.063 B	0.011 B
R2-03: MEP Solution Extraction - Neutral										
Antimony	0.021 B	0.013	0.013	0.011	0.012	0.0099	0.0092	0.0096	0.0079	0.0065
Arsenic	0.00084 J	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Barium	0.34	0.31	0.26	0.19	0.18	0.085	0.064	0.14	0.11	0.0032 J
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.002	<0.002	<0.002	0.00022 J	<0.002	<0.002	<0.002	0.000065 J	<0.002	0.00011 J
Chromium	0.0042 J	0.015	0.0061	0.0038 J	0.0059	0.004 J	0.005 J	0.0054	0.0056	0.0054
Lead	0.00074 J	0.00044 J	0.00082 J	0.022	0.00073 J	0.0028	0.0024	0.0017 J	0.0034	0.0032
Mercury	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.018	0.0014 J	<0.002	0.0013 J	0.00046 J	<0.002	<0.002	<0.002	<0.002	0.00045 J
Selenium	0.025	0.021	0.0047	0.0024 J	0.0033	0.0015 J	0.00095 J	0.0014 J	0.0013 J	0.0013 J
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	0.00063 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Vanadium	0.0011 J	0.0028 J	0.0024 J	0.0022 J	0.0028 J	0.0022 J	0.0024 J	0.0023 J	0.0018 J	0.0019 J
Zinc	0.016	0.014 B	0.013 B	0.06 B	0.014 B	0.018 B	0.0087 JB	0.013 B	0.0094 JB	0.044 B
R2-03: MEP Solution Extraction - Acidic										
Antimony	0.0058	0.0055	0.0046	0.0036	0.0027	0.0034	0.0035	0.0039	0.0037	0.0028
Arsenic	0.0011 J	<0.003	<0.003	<0.003	<0.003	<0.003	0.00075 J	0.00092 J	<0.003	<0.003
Barium	0.6	0.3	0.44	0.34	0.28	0.068	0.027	0.079	0.067	0.019
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	0.25 B	0.000071 J	0.0015 J	0.000065 J	0.00033 J	0.00017 J	0.00031 J	0.000098 J	0.000065 J	0.00015 J
Chromium	0.00081 J	0.0053	0.0074	0.0044 J	0.0029 J	0.0032 J	0.0029 J	0.0023 J	0.0029 J	0.0027 J
Lead	0.063 B	<0.005	0.021 B	<0.002	0.00094 JB	0.01 B	0.0041 JB	0.0008 JB	0.0028 JB	0.0089 B
Mercury	0.0026	0.00027	0.000047 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.058	0.0014 J	0.0026	0.00045 J	0.00073 J	0.0016 J	0.0013 J	0.00065 J	0.0075	0.0012 J
Selenium	0.016	0.005	0.0065	0.0079	0.0057	0.0022 J	0.0017 J	0.0033	0.0015 J	<0.003
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	0.0046	<0.002	0.00021 J	0.00048 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Vanadium	0.002 J	0.0015 J	0.0026 J	0.0016 J	0.002 J	0.0018 J	0.0019 J	0.0018 J	0.0017 J	0.0015 J
Zinc	4.3 B	0.0041 JB	0.32 B	0.0095 JB	0.025 B	0.031 B	0.052 B	0.0094 JB	0.025 B	0.059 B

Table 6

Results of MEP Analyses of EAF Dust Treatment Residue COCs

ANALYTE	SAMPLE RESULTS (mg/L)									
	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
R2-03: MEP Solution Extraction - Alkaline										
Antimony	0.02	0.011	0.011	0.0097	0.0089	0.0075	0.0067	0.0072	0.0079	0.012
Arsenic	0.0013 J	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.0011 J	<0.003	<0.003
Barium	0.6	0.34	0.29	0.22	0.17	0.12	0.11	0.12	0.16	0.075
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	0.038	0.0064 B	0.00092 JB	<0.005	0.0055 B	0.0047 JB	0.005 B	0.0068 B	0.0079 B	0.0057 B
Lead	0.00037 J	2.7 B	1.7 B	2.6 B	1.7 B	1.1 B	1.1 B	0.81 B	0.0097 B	0.0026 B
Mercury	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.0076 B	0.0028	0.0023	0.0018 J	0.002 J	0.0014 J	0.0014 J	0.002 J	0.0028	0.0014 J
Selenium	0.037	0.021	0.0088	0.0043	0.0051	0.0033	0.0027 J	0.0051	0.0022 J	0.0022 J
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Thallium	0.001 J	<0.002	<0.002	0.00028 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Vanadium	0.01	0.013	0.015	0.017	0.017	0.018	0.019	0.022	0.016	0.018
Zinc	0.013 B	0.2 B	0.094 B	0.35 B	0.17 B	0.057 B	0.068 B	0.097 B	0.14 B	0.031 B

Notes:

J - Estimated concentration between Estimated Quantitation Limit and Method Detection Limit

B - Analyte observed in a laboratory blank

< - Constituent not detected at the indicated Method Detection Limit

mg/L - Milligrams per liter

Table 7
Results of TCLP Analyses of EAF Dust Treatment Residue COCs

ANALYTE	LDR TS TCLP (mg/L)	RISK BASED[5] MAX ALLOWABLE TCLP (mg/L)	SAMPLE RESULTS (mg/L)																	
DI Water Extraction			**R1-03**	**R2-03**	**R3-01**	**R4-01**	**R5-01**	**R6-01**	**R7-01**	**R8-03**	**R9-01**	**R9-02**	**R9-03[3]**	**R9-04[3]**	**R9-05[2]**	**R10-01[3]**	**R10-03[3]**	**R11-03[3]**	**Max**	**Mean[1]**	**Min**
Antimony	1.15	0.206	0.014 B	0.021 B	0.013	0.013	0.013	0.019	0.015	0.015	NS	NS	NS	NS	NS	NS	NS	NS	0.021 B	0.0154	0.013
Arsenic[4]	5.0	0.0936	0.0011 J	0.00084 J	0.001 J	0.00094 J	<0.003	0.0011 J	0.0015 J	0.0013 J	NS	NS	NS	NS	NS	NS	NS	NS	0.0015 J	0.0012	0.00084 J
Barium	21	55.7	0.25	0.34	0.42	0.36	0.26	0.37	0.39	0.32	NS	NS	NS	NS	NS	NS	NS	NS	0.42	0.3388	0.25
Beryllium	1.22	0.416	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NS	NS	NS	NS	NS	NS	NS	NS	---	---	---
Cadmium	0.11	0.15	0.00014 J	<0.002	0.00064 J	0.00046 J	0.00058 J	0.00014 J	0.00024 J	0.00013 J	NS	NS	NS	NS	NS	NS	NS	NS	0.00064	0.0004	0.00013 J
Chromium	0.6	385	0.017	0.0042 J	0.0047 JB	<0.005	0.013 B	0.0025 JB	0.002 JB	0.0029 JB	NS	NS	NS	NS	NS	NS	NS	NS	0.017	0.0061	0.002 JB
Lead	0.75	75	0.00037 J	0.00074 J	0.013 B	0.0083 B	0.0028 B	0.0028	0.0017 J	0.00043 J	NS	NS	NS	NS	NS	NS	NS	NS	0.013 B	0.0038	0.00037 J
Mercury	0.025	0.0814	<0.0002	<0.0002	<0.0002	<0.0002	0.000097 J	<0.0002	<0.0002	<0.0002	NS	NS	NS	NS	NS	NS	NS	NS	0.000097 J	0.0001	0.000097 J
Nickel	11	28.3	0.0088	0.018	0.0043	0.0079	0.0079	0.0059	0.0058	0.006	NS	NS	NS	NS	NS	NS	NS	NS	0.018	0.0081	0.0043
Selenium	5.7	0.58	0.027	0.025	0.017	0.021	0.023	0.032 B	0.03 B	0.018 B	NS	NS	NS	NS	NS	NS	NS	NS	0.032 B	0.0241	0.017
Silver	0.14	3.84	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NS	NS	NS	NS	NS	NS	NS	NS	---	---	---
Thallium	0.2	0.088	0.0021	0.00063 J	0.0015 J	0.0012 J	0.0015 J	0.0056	0.0035	0.00097 J	NS	NS	NS	NS	NS	NS	NS	NS	0.0056	0.0021	0.00063 J
Vanadium	---	3.02	<0.003	0.0011 J	<0.003	<0.003	<0.003	0.0038 B	0.0035 B	0.0031 B	NS	NS	NS	NS	NS	NS	NS	NS	0.0038 B	0.0022	0.0011 J
Zinc	4.3	280	0.018	0.016	0.17 B	0.034 B	0.061 B	0.014	0.02	0.017	NS	NS	NS	NS	NS	NS	NS	NS	0.17 B	0.0438	0.014
TCLP Solution Extraction - Acidic			**R1-03**	**R2-03**	**R3-01**	**R4-01**	**R5-01**	**R6-01**	**R7-01**	**R8-03**	**R9-01**	**R9-02**	**R9-03[3]**	**R9-04[3]**	**R9-05[2]**	**R10-01[3]**	**R10-03[3]**	**R11-03[3]**	**Max**	**Mean[1]**	**Min**
Antimony	1.15	0.206	0.0074	0.0058	0.0075	0.0054	0.01	0.016	0.012	0.013	0.0058 B	0.0092 B	0.0076 B	0.0062 B	0.0053 B	NS	NS	NS	0.016	0.0086	0.0054
Arsenic[4]	5.0	0.0936	0.0019 J	0.0011 J	0.0016 J	0.0018 J	0.0027 J	<0.003	0.0022 J	0.0037	0.0014 J	<0.003	<0.003	0.0025 J	0.0022 J	NS	NS	NS	0.0037	0.0020	0.0011 J
Barium	21	55.7	0.58	0.6	0.38 B	0.28 B	0.34 B	0.42 B	0.45 B	0.37 B	0.48	0.44	0.53	0.63	0.52	NS	NS	NS	0.63	0.4631	0.28 B
Beryllium	1.22	0.416	<0.002	<0.002	<0.002	0.00032 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NS	NS	NS	0.00032 J	0.0009	0.00032 J
Cadmium	0.11	0.15	0.052 B	~~0.25 B~~	~~0.26 B~~	~~0.92 B~~	~~0.34 B~~	0.0059	0.0067	0.03	0.051	0.038	~~0.14~~	0.092	~~0.16~~	NS	~~0.12~~	0.019	0.092	0.0368	0.0059
Chromium	0.6	385	0.0012 J	0.00081 J	0.0011 J	0.00087 J	0.0025 J	0.0097	0.0015 J	<0.005	0.0046 JB	0.0083 B	0.016 B	0.016 B	0.014 B	NS	NS	NS	0.016 B	0.0061	0.00081 J
Lead	0.75	75	0.023 B	0.063 B	0.05 B	0.11 B	0.16 B	0.019 B	0.011 B	0.12 B	0.0023 B	0.0098 B	0.010 B	0.0053 B	0.014 B	NS	NS	NS	0.16 B	0.0460	0.0023 B
Mercury	0.025	0.0814	0.014	0.0026	0.0067	0.0022	0.012	0.0058	0.0058	0.0016	~~0.026~~	0.023	0.021	0.021	0.022	0.024	NS	NS	0.024	0.0124	0.0016
Nickel	11	28.3	0.024	0.058	0.052	0.069	0.032	0.0033	0.0041	0.005	0.011 B	0.0066 B	0.0062 B	0.038 B	0.0095 B	NS	NS	NS	0.069	0.0245	0.0033
Selenium	5.7	0.58	0.021	0.016	0.015	0.022	0.017	0.025	0.027	0.03	0.021	0.023	0.024	0.026	0.024	NS	NS	NS	0.03	0.0224	0.015
Silver	0.14	3.84	<0.002	<0.002	<0.002	0.00075 J	0.00032 J	<0.002	<0.002	0.00052 J	0.00026 J	0.00018 J	0.00070 J	0.00015 J	0.00025 J	NS	NS	NS	0.00075 J	0.0006	0.00018 J
Thallium	0.2	0.088	0.0048	0.0046	0.0056	0.0061	0.0062	0.0066	0.005	0.0035	0.0086	0.0093	0.0075	0.0074	0.0075	NS	NS	NS	0.0093	0.0064	0.0035
Vanadium	---	3.02	<0.003	0.002 J	0.0017 J	0.0034	0.0058	0.003	0.0035	0.0084	<0.003	<0.015	<0.015	<0.003	<0.003	NS	NS	NS	0.0084	0.0038	0.0017 J
Zinc	4.3	280	0.31 B	~~4.3 B~~	4.1 B	~~110 B~~	~~13 B~~	0.021 B	0.037 B	~~6.2 B~~	0.12 B	0.034 B	2.3 B	0.16 B	0.31 B	NS	NS	NS	4.1 B	0.82	0.021 B

Table 7
Results of TCLP Analyses of EAF Dust Treatment Residue COCs

ANALYTE	LDR TS TCLP (mg/L)	RISK BASED[5] MAX ALLOWABLE TCLP (mg/L)	SAMPLE RESULTS (mg/L)																	
TCLP Solution Extractions - Alkaline			**R1-03**	**R2-03**	**R3-01**	**R4-01**	**R5-01**	**R6-01**	**R7-01**	**R8-03**	**R9-01**	**R9-02**	**R9-03[3]**	**R9-04[3]**	**R9-05[2]**	**R10-01[3]**	**R10-03[3]**	**R11-03[3]**	**Max**	**Mean[1]**	**Min**
Antimony	1.15	0.206	0.013	0.02	0.015	0.015	0.015	0.021	0.017	0.016	NS	NS	NS	NS	NS	NS	NS	NS	0.021	0.0165	0.013
Arsenic[4]	5.0	0.0936	-0.0021 J	0.0013 J	0.0011 J	0.0011 J	<0.003	<0.003	0.0011 J	0.0015 J	NS	NS	NS	NS	NS	NS	NS	NS	0.0021 J	0.0014	0.0011 J
Barium	21	55.7	0.54	0.6	0.3	0.33	0.25	0.53	0.38	0.33	NS	NS	NS	NS	NS	NS	NS	NS	0.6	0.4075	0.25
Beryllium	1.22	0.416	0.00034 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NS	NS	NS	NS	NS	NS	NS	NS	0.00034 J	0.0009	0.00034 J
Cadmium	0.11	0.15	<0.002	<0.002	0.00097 J	0.00011 J	0.00014 J	0.00032 J	0.00023 J	0.00018 J	NS	NS	NS	NS	NS	NS	NS	NS	0.00097 J	0.0005	0.00011 J
Chromium	0.6	385	0.095	0.038	0.0095	0.00068 J	0.011	0.034 B	0.0082 B	<0.005	NS	NS	NS	NS	NS	NS	NS	NS	0.095	0.0249	0.00068 J
Lead	0.75	75	0.36	0.00037 J	0.035	0.00057 J	0.0017 J	0.3 B	0.0037 B	0.0015 JB	NS	NS	NS	NS	NS	NS	NS	NS	0.36	0.0879	0.00037 J
Mercury	0.025	0.0814	0.00011 J	<0.0002	0.000061 J	<0.0002	0.00013 J	<0.0002	<0.0002	<0.0002	NS	NS	NS	NS	NS	NS	NS	NS	0.00013 J	0.0001	0.000061 J
Nickel	11	28.3	0.006 B	0.0076 B	0.011	0.007	0.0083	0.0086	0.014	0.012	NS	NS	NS	NS	NS	NS	NS	NS	0.014	0.0093	0.006 B
Selenium	5.7	0.58	0.038	0.037	0.021	0.019	0.022	0.034	0.03	0.022	NS	NS	NS	NS	NS	NS	NS	NS	0.038	0.0279	0.019
Silver	0.14	3.84	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	NS	NS	NS	NS	NS	NS	NS	NS	---	---	---
Thallium	0.2	0.088	0.00071 J	0.001 J	0.00037 J	0.00033 J	0.0017 J	0.0042	0.004	0.00044 J	NS	NS	NS	NS	NS	NS	NS	NS	0.0042	0.0016	0.00033 J
Vanadium	---	3.02	0.0038	0.01	0.0021 J	0.0011 J	<0.003	0.0068	0.0028 J	0.0034	NS	NS	NS	NS	NS	NS	NS	NS	0.01	0.0039	0.0011 J
Zinc	4.3	280	0.026 B	0.013 B	0.46 B	0.012 B	0.015 B	0.031	0.013	0.039	NS	NS	NS	NS	NS	NS	NS	NS	0.46 B	0.0761	0.012 B

Notes:

(1) Results reported as below detection limits were included as one half of the reported detection limit in the computation of the means. The mean is flagged with a "J" (estimated) if any value, with which the mean was calculated, was flagged "J" or was a nondetect. Strike-Out values were not used in the mean calculations.

(2) Sample R9-05 is a field duplicate for R9-03.

(3) Sample R10-1 is a resample of R9-04, R10-03 is a resample of R9-03, and R11-03 is a resample of R10-03.

(4) Hazard quotient of 1.0 and risk of $1x10^{-4}$ used for the arsenic value.

(5) Risk based updated DRAS v.2 model used for comparison. Risk based numbers generated according to EPA's RCRA Delisting Technical Support Document, April 2002.

Definitions:

J - estimated concentration between Estimated Quantitation Limit and Method Detection Limit
B - analyte observed in a laboratory blank
Shaded Values - indicate concentration exceeds toxicity characteristics
Strike-Out - indicates replaced data
< - Constituent not detected at the indicated Method Detection Limit
NS - Not Sampled
mg/L - milligrams per liter
TCLP - Toxicity Characteristic Leaching Procedure
LDR TS - Land Disposal Restriction Treatment Standard

Table 8
Summary of Proposed Delisting Levels for Constituents of Concern

CHEMICALS OF CONCERN	TOXICITY CHARACTERISTIC LEVEL (mg/L by TCLP)	LAND DISPOSAL RESTRICTION TREATMENT STANDARDS (mg/L by TCLP)	Risk Based MAX ALLOWABLE TCLP[1] (mg/L)	PROPOSED DELISTING LEVEL (mg/L by TCLP)	OBSERVED CONCENTRATIONS (mg/L by TCLP)	
					MAXIMUM	MEAN
Antimony	---	1.15	0.206	0.206	0.016	0.0086
Arsenic	5	5.0	0.0936	0.0936	0.0037	0.0020
Barium	100	21	55.7	21	0.63	0.4631
Beryllium	---	1.22	0.416	0.416	0.00032 J	0.0009
Cadmium	1	0.11	0.15	0.11	0.092	0.0368
Chromium	5	0.6	385	0.6	0.016 B	0.0061
Lead	5	0.75	75	0.75	0.16 B	0.0460
Mercury	0.2	0.025	0.0814	0.025	0.024	0.0124
Nickel	---	11	28.3	11	0.069	0.0245
Selenium	1	5.7	0.58	0.58	0.03	0.0224
Silver	5	0.14	3.84	0.14	0.00075 J	0.0006
Thallium	---	0.2	0.088	0.088	0.0093	0.0064
Vanadium	---	---	3.02	3.02	0.0084	0.0038
Zinc	---	4.3	280	4.3	4.1 B	0.82

Notes:

(1) Risk based updated DRAS v.2 model used for comparison. Risk based numbers generated according to EPA's RCRA Delisting Technical Support Document, April 2002.

Definitions:

J - estimated concentration between Estimated Quantitation Limit and Method Detection Limit

B - analyte concentration in the associated method blank was greater than or equal to the reporting limit. The positive sample result, which was less than 5 times the method blank value, is considered estimated.

mg/L - milligrams per liter

--- no standard for this constituent