	B	C
1	**Source Description**	
2		
3	Phase I ID No.	403
4	EPA ID No.	ARD981512270
5	Facility Name	Ash Grove Cement Company
6	Facility Location	
7	City	Foreman
8	State	AR
9	Unit ID Name/No.	Kiln No. 1
10	Other Sister Facilities	Kiln No. 2
11	Number of Sister Facilities	1
12	Combustor Class	Cement Kiln (CK)
13	Combustor Type	Wet, long
14	Combustor Characteristics	
15	Capacity (MMBtu/hr)	
16	APCS Detailed Acronym	ESP
17	APCS General Class	ESP
18	APCS Characteristics	SCA = 230, 4 fields, about 20 years old, rebuilt a few years ago
19	Hazardous Wastes	Liq and solid
20	Haz Waste Description	Solid haz waste and tires fired in mid-kiln hatch
21	Supplemental Fuel	Coal, natural gas
22		
23	Stack Characteristics	
24	Diameter (ft)	8.5
25	Height (ft)	150.0
26	Gas Velocity (ft/sec)	21.7
27	Gas Temperature (°F)	412.9
28		
29	Permitting Status	Tier I for Hg, Ag, Tl, Sb, and Ba; Tier III for Pb, As, Be, Cd, and Cr
30	HWC Burn Status (Date if Terminated)	Y

	B	C
1	**Condition Description**	
2		
3	**403C10**	
4		
5	Report Name/Date	RCRA Cement Kiln Test Burn Report Kiln 1 and 2, April 1998
6	Report Prepare	Ash Grove Cement
7	Testing Firm	AirSource Technologies
8	Testing Dates	December 9-10, 1997
9	Cond Dates	Dec-97
10	Condition Descr	Trial burn: Max comb temp, max metals, chlorine, raw material feedrate, 4 runs
11	Content	CO, HC, HCl/Cl2, metals, PM, D/F
12		
13	**403C11**	
14		
15	Report Name/Date	RCRA Cement Kiln Test Burn Report Kiln 1 and 2, April 1998
16	Report Prepare	Ash Grove Cement
17	Testing Firm	AirSource Technologies
18	Testing Dates	December 11-12, 1997
19	Cond Dates	Dec-97
20	Condition Descr	Trial burn: D/F test at max APCD temp and max CO, 3 runs
21	Content	D/F, CO, HC, PM, HCl/Cl2
22		
23	**403C12**	
24		
25	Report Name/Date	RCRA Cement Kiln Test Burn Report Kiln 1 and 2, April 1998
26	Report Prepare	Ash Grove Cement
27	Testing Firm	AirSource Technologies
28	Testing Dates	December 13, 1997
29	Cond Dates	Dec-97
30	Condition Descr	Trial burn: PM compliance
31	Content	PM, CO, HCl/Cl2
32		
33	**403C13**	
34		
35	Report Name/Date	RCRA Cement Kiln Test Burn Report Kiln 1 and 2, April 1998
36	Report Prepare	Ash Grove Cement
37	Testing Firm	AirSource Technologies
38	Testing Dates	January 3-4, 1998
39	Cond Dates	Jan-98
40	Condition Descr	Trial burn: PM compliance
41	Content	PM, CO
42		
43	**403C1**	
44		
45	Report Name/Date	Ash Grove Cement Company, Foreman Arkansas, Waste Derived Fuel Facility, RCRA Trial Burn Report and Certification of Compliance for Kiln No. 1 - July 1992, October 1992
46	Report Prepare	Ash Grove
47	Testing Firm	Air Source Technologies
48	Cond Descr	CoC, HIGH COMB TEMP, MIN ESP POWER
49	Testing Dates	July 23, 1992
50	Cond Dates	May-92
51		
52	**403C2**	
53		
54	Report Name/Date	Ash Grove Cement Company, Foreman Arkansas, Waste Derived Fuel Facility, RCRA Trial Burn Report and Certification of Compliance for Kiln No. 1 - July 1992, October 1992
55	Report Prepare	Ash Grove
56	Testing Firm	Air Source Technologies
57	Cond Descr	CoC, LOW COMB TEMP, HIGH CL FEED, HIGH HW FEED
58	Testing Dates	July 21-22, 1992
59	Cond Dates	Jul-92
60		
61	**403C3**	
62		
63	Report Name/Date	Ash Grove Cement, Foreman Arkansas, Report of RCRA Trial Burn for Kiln Nos. 1 and 2, November 1994, dated June 1995
64	Report Prepare	Ash Grove
65	Testing Firm	Air Source Technologies
66	Cond Descr	CoC, HIGH COMB TEMP, HIGH CL FEED, HIGH HW FEED

	B	C
67	Testing Dates	November 10-12, 1994
68	Cond Dates	Nov-94
69		
70	**403C4**	
71		
72	Report Name/Date	Ash Grove Cement, Foreman Arkansas, Report of RCRA Trial Burn for Kiln Nos. 1 and 2, November 1994, dated June 1995
73	Report Prepare	Ash Grove
74	Testing Firm	Air Source Technologies
75	Cond Descr	CoC, LOW COMB TEMP, HIGH HW FEED
76	Testing Dates	November 8-9, 1994
77	Cond Dates	Nov-94

	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	**Stack Gas Emissions 1**													
2														
3														
4	**403C10**	Max comb temp, max metals, chlo				R1		R2		R3		R4		Cond Avg
5														
6	PM	E1	gr/dscf	y		0.0539		0.0606		0.0565		0.0501		0.0553
7														
8	CO (RA)	E1	ppmv	y		139		128		146		112		131.3
9	CO (MHRA)	E1	ppmv	y		166		148		174		134		155.5
10	HC (RA)	E1	ppmv	y		16		12.4		12.4		11.2		13.0
11	HC (MHRA)	E1	ppmv	y		19.7		13.7		13.8		11.6		14.7
12														
13	HCl		g/hr			4747.0		5917.0		3516.0		3091.0		
14	Cl2		g/hr			0.58		0.78		0.78		0.80		
15														
16	HCl	E1	ppmv	y		26.23		30.80		18.29		17.31		23.2
17	Cl2	E1	ppmv	y		0.002		0.002		0.002		0.002		0.002
18	Total Chlorine	E1	ppmv	y		26.23		30.80		18.30		17.31		23.2
19														
20	Antimony		ug/dscm	n		3.0		2.6		2.2		2.4		
21	Arsenic		ug/dscm	n		10.9		9.8		6.4		6.1		
22	Barium		ug/dscm	n		47.9		46.4		25.5		25.9		
23	Beryllium		ug/dscm	n		1.2		1.5		0.5		0.5		
24	Cadmium		ug/dscm	n		95.2		121.0		98.6		80.7		
25	Chromium		ug/dscm	n		21.4		20.5		16.8		16.0		
26	Lead		ug/dscm	n		1517.0		2985.0		2474.0		2316.0		
27	Mercury		ug/dscm	n		39.7		28.6		34.7		28.6		
28	Nickel		ug/dscm	n		6.7		4.7		4.9		4.6		
29	Silver		ug/dscm	n		1.4		0.6		0.6		0.6		
30	Selenium		ug/dscm	n		5.9		5.9		5.4		4.8		
31	Thallium		ug/dscm	n	nd	0.5		0.5		0.7		0.5		
32	Zinc		ug/dscm	n		329.0		339.0		263.0		302.0		
33														
34	Sampling Train	PM, HCl/Cl2	E1											
35	Stack Gas Flowrate		dscfm			82019		85643		85674		83741		84269
36	O2		%			9		8.8		8.8		9.4		9.0
37	Moisture		%			32.3		31.85		32.21		32.52		32
38	Temperature		°F			421		419		416		422		420
39														
40	Sampling Train	Metals	E2											
41	Stack Gas Flowrate		dscfm			82013		83219		83423		80974		82407
42	O2		%			9.1		8.8		8.8		9.5		9.1
43	Moisture		%			33.28		32.85		32.66		34.37		33
44	Temperature		°F			423		419		415		424		420
45														
46	Sampling Train	PCDD/PCDF	E3											
47	Stack Gas Flowrate		dscfm			80675		83830		80949		82120		81894
48	O2		%			9.2		8.8		8.8		9.2		9.0
49	Moisture		%			32.52		32.51		33.65		32.45		33
50	Temperature		°F			426		422		423		425		424
51														
52	Antimony	E2	ug/dscm	y		3.5		2.9		2.5		2.9		3.0
53	Arsenic	E2	ug/dscm	y		12.8		11.3		7.4		7.4		9.7
54	Barium	E2	ug/dscm	y		56.4		53.2		29.3		31.5		42.6
55	Beryllium	E2	ug/dscm	y		1.4		1.7		0.6		0.6		1.1
56	Cadmium	E2	ug/dscm	y		112.0		138.9		113.1		98.2		115.6
57	Chromium	E2	ug/dscm	y		25.2		23.5		19.3		19.5		21.9
58	Lead	E2	ug/dscm	y		1784.7		3425.4		2839.0		2819.5		2717.2
59	Mercury	E2	ug/dscm	y		46.7		32.8		39.8		34.8		38.5
60	Nickel	E2	ug/dscm	y		7.9		5.4		5.7		5.6		6.1
61	Silver	E2	ug/dscm	y		1.6		0.7		0.7		0.7		0.9
62	Selenium	E2	ug/dscm	y		6.9		6.7		6.2		5.8		6.4
63	Thallium	E2	ug/dscm	y	nd	0.6		0.6		0.8		0.6		0.6
64	Zinc	E2	ug/dscm	y		387.1		389.0		301.8		367.7		361.4
65														
66	SVM	E2	ug/dscm	y		1896.7		3564.3		2952.2		2917.7		2832.7
67	LVM	E2	ug/dscm	y		39.4		36.5		27.2		27.4		32.6
68														
69														
70	**403C11**	D/F compliance				R1		R2		R3		R4		Cond Avg
71														

	B	C	D	E	F	G	H	I	J	K	L	M	N	O
72	CO (RA)	E1	ppmv	y		475		454		516				481.7
73	CO (MHRA)	E1	ppmv	y		520		689		585				598.0
74	HC (RA)	E1	ppmv	y		15.2		14.1		13.4				14.2
75	HC (MHRA)	E1	ppmv	y		17.3		17.3		14.6				16.4
76														
77	PM	E1	gr/dscf	y		0.0247		0.0245		0.0566				0.0353
78														
79	HCl		g/hr			2962.0		3219.0		2921.0				
80	Cl2		g/hr			0.78		0.77		0.78				
81														
82	HCl	E1	ppmv	y		17.84		20.65		17.88				18.8
83	Cl2	E1	ppmv	y		0.002		0.003		0.002				0.002
84	Total Chlorine	E1	ppmv	y		17.85		20.66		17.89				18.8
85														
86	Sampling Train	PM, HCl/Cl2	E1											
87	Stack Gas Flowrate		dscfm			73998		75687		74026				74570.3
88	O2		%			8.8		9.8		9				9.2
89	Moisture		%			32.26		32.46		32.57				32.4
90	Temperature		°F			377		366		367				370.0
91														
92	Sampling Train	PCDD/PCDF	E2											
93	Stack Gas Flowrate		dscfm			75530		75057		75484				75357.0
94	O2		%			8.8		9.8		9				9.2
95	Moisture		%			32.18		32.46		32.57				32.4
96	Temperature		°F			384		368		372				374.7
97														
98	**403C12**	PM retest				R1		R2		R3		R4		Cond Avg
99														
100	CO (RA)	E1	ppmv	y		475		454		516				481.7
101	CO (MHRA)	E1	ppmv	y		520		689		585				598.0
102	HC (RA)	E1	ppmv	y		15.2		14.1		13.4				14.2
103	HC (MHRA)	E1	ppmv	y		17.3		17.3		14.6				16.4
104														
105	PM	E1	gr/dscf	y		0.0105		0.0163		0.00946				0.0121
106														
107	HCl		g/hr			4671.0		2918.0		3012.0				
108	Cl2		g/hr			0.80		0.78		0.78				
109														
110	HCl	E1	ppmv	y		33.06		19.73		18.58				23.8
111	Cl2	E1	ppmv	y		0.003		0.003		0.002				0.0
112	Total Chlorine	E1	ppmv	y		33.07		19.74		18.59				23.8
113														
114	Sampling Train	PM, HCl/Cl2	E1											
115	Stack Gas Flowrate		dscfm			73887		74463		77327				75225.7
116	O2		%			10.6		10.2		9.6				10.1
117	Moisture		%			22.99		32.04		31.74				28.9
118	Temperature		°F			316		323		322				320.3
119														
120	**403C13**	PM retesting				R1		R2		R3		R4		Cond Avg
121														
122	PM	E1	gr/dscf	y		0.0168		0.0199		0.0149				0.0172
123														
124	CO (RA)	E1	ppmv	y		159		59		142				120.0
125	CO (MHRA)	E1	ppmv	y		193		62		242				165.7
126	HC (RA)	E1	ppmv	y		5.1		6.5		6.5				6.0
127	HC (MHRA)	E1	ppmv	y		5.6		6.8		8.2				6.9
128														
129	Sampling Train	PM	E1											
130	Stack Gas Flowrate		dscfm			75396		77982		77180				76852.7
131	O2		%			9.5		9.69		9.27				9.5
132	Moisture		%			33.3		32.14		32.25				32.6
133	Temperature		°F			364		419		407				396.7

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	**Stack Gas Emissions 2**																			
2																				
3																				
4	**403C1**					R1		R2		R3		R4		R5		R6		R7		Cond Avg
5																				
6	PM	E1	gr/dscf	y		0.0311		0.0243		0.0489		0.0346		0.0154		0.0177		0.0277		0.0285
7	CO (MHRA)	E1	ppmv	y		629.00		443.00		527.00		350.00								487.25
8	CO (RA)	E1	ppmv	y		312.00		259.00		226.00		195.00								248.00
9	HC (MHRA)	E1	ppmv	y		17.60		15.50		16.20		11.70								15.25
10	HC (RA)	E1	ppmv	y		11.20		10.90		10.40		7.20								9.93
11	HCl	E1	ppmv	y		22.28		97.11		27.93		14.30								40.41
12	Cl2	E1	ppmv	y	nd	0.17	nd	0.11	nd	0.08	nd	0.12								0.12
13	Total Chlorine	E1	ppmv	y	1.5	22.62	0.2	97.34	0.6	28.10	1.7	14.54							0.6	40.65
14	Antimony	E2	ug/dscm	y	nd	119.82	nd	126.09	nd	116.52		127.38								122.45
15	Arsenic	E2	ug/dscm	y	nd	19.86	nd	20.43	nd	19.30	nd	21.55								20.29
16	Barium	E2	ug/dscm	y		183.91	nd	215.71	nd	194.08	nd	254.76								212.11
17	Beryllium	E2	ug/dscm	y	nd	1.19	nd	1.23	nd	1.93	nd	2.11								1.61
18	Cadmium	E2	ug/dscm	y	nd	15.09	nd	18.38	nd	22.37	nd	25.33								20.29
19	Chromium	E2	ug/dscm	y	nd	5.17	nd	5.73	nd	6.17	nd	8.44								6.38
20	Chromium (Hex)	E3	ug/dscm	y		0.09		0.03		0.04		0.06								0.05
21	Lead	E2	ug/dscm	y	nd	657.52	nd	882.31	nd	803.20	nd	1587.57								982.65
22	Mercury	E2	ug/dscm	y		7.78	nd	14.31	nd	5.79	nd	5.49								5.14
23	Silver	E2	ug/dscm	y	nd	3.97	nd	4.10	nd	3.86	nd	4.22								4.04
24	Thallium	E2	ug/dscm	y	nd	24.63	nd	25.32	nd	23.92	nd	26.19								25.02
25	SVM	E2	ug/dscm	y	100	672.61	100	900.68	100	825.57	100	1612.90							100	1002.94
26	LVM	E2	ug/dscm	y	100	26.22	100	27.38	100	27.41	100	32.11							100	28.28
27																				
28	Sampling Train	Particulate	E1																	
29	Stack Gas Flowrate		dscfm			67423		67557		66296		71085		61555		64051		59003		
30	O2		%			5.5		5.5		4.9		6.4		7.1		7		6		
31	Moisture		%			37.8		36.4		37.8		35.8		35.8		36.8		37.9		
32	Temperature		°F			471		486		492		466		406		411		409		
33																				
34	Sampling Train	Metals	E2																	
35	Stack Gas Flowrate		dscfm			72246		69418		67344		68532								
36	O2		%			5.5		5.5		4.9		6.4								
37	Moisture		%			38		37.7		38.1		38.3								
38	Temperature		°F			476		486		497		466								
39																				
40	Sampling Train	Cr Hex	E3																	
41	Stack Gas Flowrate		dscfm			69488		70860		69491		69400								
42	O2		%			5.5		5.5		4.9		6.4								
43	Moisture		%			38		37.7		38.1		38.3								
44	Temperature		°F			476		488		497		468								
45																				
46	Sampling Train	Dioxin & Fu	E4																	
47	Stack Gas Flowrate		dscfm			55019		59014		60274		63350								
48	O2		%			5.5		5.5		4.9		6.4								
49	Moisture		%			45.8		37.9		38.3		37.8								
50	Temperature		°F			473		485		494		464								
51																				
52	**403C2**					R1		R2		R3		R4		R5		R6		R7		Cond Avg
53																				

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
54	PM	E1	gr/dscf	y		0.01630		0.03510		0.03560		0.03860								0.03140
55	CO (MHRA)	E1	ppmv	y		596.00		655.00		813.00		900.00								741.00
56	CO (RA)	E1	ppmv	y		356.00		384.00		440.00		471.00								412.75
57	HC (MHRA)	E1	ppmv	y		19.10		19.90		20.00		19.00								19.50
58	HC (RA)	E1	ppmv	y		13.30		16.44		14.12		13.40								14.32
59	HCl	E1	ppmv	y		43.97		46.39		58.79		43.88								48.26
60	Cl2	E1	ppmv	y		2.48		2.04		3.81		2.51								2.71
61	Total Chlorine	E1	ppmv	y		48.93		50.47		66.42		48.90								53.68
62																				
63	1,1,1-Trichloroethane	E2	%			99.9996		99.99988		99.99989										
64	1,2,4-Trichlorobenzene	E2	%			99.99987		99.99988		99.99987		99.99995								
65	Tetrachloroethene	E2	%			99.99997		99.99997		99.99997										
66																				
67	Sampling Train	Particulate	E1																	
68	Stack Gas Flowrate		dscfm			66914		64624		63569		64868								
69	O2		%			8		8		6.8		7.7								
70	Moisture		%			40.1		40.1		43.3		44.7								
71	Temperature		°F			387		370		380		370								
72																				
73	Sampling Train	SVOC	E2																	
74	Stack Gas Flowrate		dscfm			67235		65017		64953		67005								
75	O2		%			8		8		6.8		7.7								
76	Moisture		%			39.5		39.9		42.3		42								
77	Temperature		°F			386		368		381		367								
78																				
79	**403C3**					R1		R2		R3		R4		R5		R6		R7		Cond Avg
80																				
81	PM	E1	gr/dscf	y		0.02735		0.02480		0.03660		0.02890								0.02941
82	CO (MHRA)	E1	ppmv	y		556.00		913.00		569.00		784.00								705.50
83	HC (MHRA)	E1	ppmv	y		18.10		17.80		18.80		7.20								15.48
84	HCl	E1	ppmv	y		49.92		46.13		57.02		70.77								55.96
85	Cl2	E1	ppmv	y	nd	0.01	nd	0.00		0.02		0.02								0.01
86	Total Chlorine	E1	ppmv	y	0	49.93	0	46.13	0	57.06	0	70.82							0	55.99
87	Antimony	E1	ug/dscm	y	nd	0.94		1.75		2.67	nd	1.15								1.63
88	Arsenic	E1	ug/dscm	y	nd	0.09	nd	0.09	nd	0.09	nd	0.08								0.09
89	Barium	E1	ug/dscm	y	nd	48.22	nd	39.25	nd	39.16	nd	18.51								36.28
90	Beryllium	E1	ug/dscm	y	nd	0.28	nd	0.28	nd	0.27	nd	0.25								0.27
91	Cadmium	E1	ug/dscm	y		40.33		65.85		84.84		50.26								60.32
92	Chromium	E1	ug/dscm	y		13.25		16.36		13.93		10.71								13.56
93	Copper	E1	ug/dscm	y		37.11		43.15		59.71		31.27								42.81
94	Lead	E1	ug/dscm	y	nd	893.22		1237.07		1597.47	nd	968.22								1173.99
95	Mercury	E1	ug/dscm	y		47.73		8.07	nd	14.22		13.93							17	20.99
96	Nickel	E1	ug/dscm	y	nd	5.48	nd	3.23	nd	18.70	nd	4.60								8.00
97	Silver	E1	ug/dscm	y		0.50	nd	0.39	nd	0.51	nd	0.76								0.54
98	Thallium	E1	ug/dscm	y	nd	0.38	nd	0.28	nd	0.45	nd	0.33								0.36
99	Zinc	E1	ug/dscm	y		127.60		148.06		199.68		150.98								156.58
100	SVM	E1	ug/dscm	y	96	933.55		1302.91		1682.31	95	1018.48							38	1234.31
101	LVM	E1	ug/dscm	y	2.8	13.63	2.2	16.73	2.5	14.29	3	11.04							2.6	13.92
102		Lead levels is very very high nondetects?																		
103																				
104	Sampling Train	Metals	E1																	
105	Stack Gas Flowrate		dscfm			64175		69541		69329		80872								
106	O2		%			6.6		6.6		6.6		6.6								

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
107	Moisture		%																	
108	Temperature		°F																	
109																				
110	**403C4**					R1		R2		R3		R4		R5		R6		R7		Cond Avg
111																				
112	PM	E1	gr/dscf	y		0.01270		0.01220		0.01630		0.00990								0.01278
113	CO (MHRA)	E1	ppmv	y		489.00		552.00		361.00		457.00								
114	HC (MHRA)	E1	ppmv	y		16.30		19.00		15.40		14.60								
115																				
116	Sampling Train	Dioxin & Fu	E1																	
117	Stack Gas Flowrate		dscfm			61210		68270		62516		68764								
118	O2		%			6.6		6.6		6.6		6.6								
119	Moisture		%																	
120	Temperature		°F																	

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD
1	**Feedstreams 1**																												
2																													
3	**403C10**	Max comb temp, ma			R1		R2		R3		R4		Cond Avg		R1		R2		R3		R4		Cond Avg		R1		R2		R3
4																													
5	Feedstream Number				F1		F1		F1		F1		F1		F2		F2		F2		F2		F2		F3		F3		F3
6	Feed Class				Raw Material		Raw Material		Raw Material		Raw Material		Raw Material		Coal		Coal		Coal		Coal		Coal		Solid non-HW		Solid non-HW		Solid non-HV
7	Feed Class 2				RM		RM		RM		RM		RM		Coal		Coal		Coal		Coal		Coal		MF		MF		MF
8	Feedstream Description				Raw Matl		Raw Matl		Raw Matl		Raw Matl		Raw Matl		Coal		Coal		Coal		Coal		Coal		Tires		Tires		Tires
9	Feed Rate		g/hr		54700000		59700000		56800000		58700000		57475000		2720000								2720000		608000		816000		780000
10	Thermal Feedrate		MMBtu/hr												56								56		21		28		27
11	Heating Value		Btu/lb												9330								9330		15830		15801		15832
12	Estimated Firing Rate		MMBtu/hr																										
13	Chlorine		g/hr		7100		7160		7380		6460		7025		1290								1.29E+03		3650		4900		4680
14	Antimony		g/hr		68.4		71		69.3		67.5		69		2.12								2.12E+00		10.9		14.7		14
15	Arsenic		g/hr		146		108		140		121		129		115								1.15E+02		0.936		1.26		1.2
16	Barium		g/hr		2760		2200		2200		1980		2285		66.9								6.69E+01		4.98		6.69		6.4
17	Beryllium		g/hr		17.1		17.7		17.4		16.8		17		0.655								6.55E-01		0.061		0.0816		0.078
18	Cadmium		g/hr		32.6		30.3		28.9		27.7		30		0.58								5.80E-01		2.68		3.6		3.44
19	Chromium		g/hr		416		387		369		356		382		17.9								1.79E+01		3.4		4.57		4.37
20	Lead		g/hr		251		243		216		190		225		10.9								1.09E+01		17.8		23.9		22.9
21	Mercury		g/hr		7.82		9.25		8.69		8.39		9		0.25								2.50E-01		0.122		0.163		0.156
22	Nickel		g/hr		464		421		406		390		420		44.9								4.49E+01		3.7		4.97		4.75
23	Silver		g/hr		17.1		17.7		17.4		16.8		17		0.531								5.31E-01		0.608		0.816		0.78
24	Thallium		g/hr		85.3		88.9		86.9		83.9		86		2.67								2.67E+00		0.608		0.816		0.78
25	Zinc		g/hr		1570		1330		1310		1310		1380		50.1								5.01E+01		6100		8190		7830
26																													
27	Stack Gas Flowrate		dscfm		82013		83219		83423		80974		82407.3		82013		83219		83423		80974		82407.3		82013		83219		83423
28	Oxygen		%		9.1		8.8		8.8		9.5		9.1		9.1		8.8		8.8		9.5		9.1		9.1		8.8		8.8
29																													
30	*Feedrate MTEC Calculations*																												
31	Chlorine		ug/dscm		59981.7		58146.2		59786.2		57197.8		58817.1		10898.1								10800.6		30835.7		39792.8		37913.2
32	Antimony		ug/dscm		577.9		576.6		561.4		597.7		578.1		17.9								17.7		92.1		119.4		113.4
33	Arsenic		ug/dscm		1233.4		877.1		1134.2		1071.4		1078.0		971.5								962.8		7.9		10.2		9.7
34	Barium		ug/dscm		23316.8		17866.1		17822.4		17531.2		19131.2		565.2								560.1		42.1		54.3		51.8
35	Beryllium		ug/dscm		144.5		143.7		141.0		148.7		144.4		5.5								5.5		0.5		0.7		0.6
36	Cadmium		ug/dscm		275.4		246.1		234.1		245.3		250.1		4.9								4.9		22.6		29.2		27.9
37	Chromium		ug/dscm		3514.4		3142.8		2989.3		3152.1		3198.3		151.2								149.9		28.7		37.1		35.4
38	Lead		ug/dscm		2120.5		1973.4		1749.8		1682.3		1883.8		92.1								91.3		150.4		194.1		185.5
39	Mercury		ug/dscm		66.1		75.1		70.4		74.3		71.5		2.1								2.1		1.0		1.3		1.3
40	Nickel		ug/dscm		3919.9		3418.9		3289.1		3453.1		3518.6		379.3								375.9		31.3		40.4		38.5
41	Silver		ug/dscm		144.5		143.7		141.0		148.7		144.4		4.5								4.4		5.1		6.6		6.3
42	Thallium		ug/dscm		720.6		722.0		704.0		742.9		722.1		22.6								22.4		5.1		6.6		6.3
43	Zinc		ug/dscm		13263.6		10800.9		10612.5		11598.9		11554.1		423.3								419.5		51533.6		66510.8		63431.7
44																													
45	SVM		ug/dscm		2395.9		2219.5		1984.0		1927.5		2134.0		97.0								96.1		173.0		223.3		213.4
46	LVM		ug/dscm		4892.3		4163.6		4264.4		4372.2		4420.7		1128.3								1118.2		37.1		48.0		45.8
47																													
48	**403C11**				R1		R2		R3		R4		Cond Avg		R1		R2		R3		R4		Cond Avg		R1		R2		R3
49																													
50	Feedstream Number				F1		F1		F1		F1		F1		F2		F2		F2		F2		F2		F3		F3		F3
51	Feed Class				Raw Material		Raw Material		Raw Material		Raw Material		Raw Material		Coal		Coal		Coal		Coal		Coal		Solid non-HW		Solid non-HW		Solid non-HV
52	Feed Class 2				RM		RM		RM		RM		RM		Coal		Coal		Coal		Coal		Coal		MF		MF		MF
53	Feedstream Description				Raw Matl		Raw Matl		Raw Matl		Raw Matl		Raw Matl		Coal		Coal		Coal		Coal		Coal		Tires		Tires		Tires
54	Feed Rate		g/hr		54300000		51300000		50300000																807000		889000		689000
55	Heating Value		Btu/hr																										
56	Chlorine		g/hr		6520		6660		6530																484		533		412
57																													
58	Stack Gas Flowrate		dscfm		73998		75687		74026																73998		75687		74026
59	Oxygen		%		8.8		9.8		9.0																8.8		9.8		9.0
60																													

	B	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE
1	**Feedstreams 1**																											
2																												
3	**403C10**		R4		Cond Avg		R1		R2		R3		R4		Cond Avg		R1		R2		R3		R4		Cond Avg		R1	
4																												
5	Feedstream Number		F3		F3		F4		F4		F4		F4		F4													
6	Feed Class	✓	Solid non-HW		Solid non-HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW													
7	Feed Class 2		MF		MF		HW		HW		HW		HW		HW		Spike		Spike		Spike		Spike		Spike	Total		
8	Feedstream Description		Tires		Tires		LWDF		LWDF		LWDF		LWDF		LWDF		Spike		Spike		Spike		Spike		Spike		Total	
9	Feed Rate		807000		752750		7890000		7530000		7260000		7530000		7552500													
10	Thermal Feedrate		28		26		238		246		222		229		234												350	
11	Heating Value		15808		15817		13695		14832		13883		13807		14051													
12	Estimated Firing Rate																										310	
13	Chlorine		4840		4518		293000		142000		63000		63000		140250		0		153000		159000		169000		120250			
14	Antimony		14.5		14		14.8		40.6		13.3		42.6		28													
15	Arsenic		1.24		1		42.4		2520		20.1		63.4		661		11800		9380		10000		9530		10178			
16	Barium		6.62		6		336		638		357		881		553													
17	Beryllium		0.0807		0		1.53		1.45		1.38		1.41		1		294		221		202		208		231			
18	Cadmium		3.56		3		292		94.9		12.3		87.3		122		1180		1030		1050		1010		1068			
19	Chromium		4.52		4		102		84.3		52.7		126		91		19000		18200		18100		17400		18175			
20	Lead		23.7		22		169		172		110		203		164		19300		24000		23800		23700		22700			
21	Mercury		0.161		0		3.59		1.05		0.718		0.979		2													
22	Nickel		4.92		5		36.9		36.4		21.4		68.4		41													
23	Silver		0.807		1		1.53		1.45		1.38		2.04		2													
24	Thallium		0.807		1		7.65		7.23		6.91		7.05		7													
25	Zinc		8100		7555		2360		851		922		1300		1358													
26																												
27	Stack Gas Flowrate		80974		82407.3		82013		83219		83423		80974		82407.3		82013		83219		83423		80974		82407.3		82013	
28	Oxygen		9.5		9.1		9.1		8.8		8.8		9.5		9.1		9.1		8.8		8.8		9.5		9.1		9.1	
29																												
30	*Feedrate MTEC Calculations*																											
31	Chlorine		42854.1		37822.9		2475302.7		1153178.1		510370.1		557811.5		1174248.2		0.0		1242508.8		1288077.0		1496351.5		1006797.5		2577018.2	
32	Antimony		128.4		113.2		125.0		329.7		107.7		377.2		233.0		0.0		0.0		0.0		0.0		0.0		812.9	
33	Arsenic		11.0		9.7		358.2		20464.9		162.8		561.4		5538.2		99688.0		76174.7		81011.1		84380.1		85211.5		102259.0	
34	Barium		58.6		51.7		2838.6		5181.2		2892.1		7800.5		4630.0		0.0		0.0		0.0		0.0		0.0		26762.7	
35	Beryllium		0.7		0.6		12.9		11.8		11.2		12.5		12.1		2483.8		1794.7		1636.4		1841.7		1936.1		2647.2	
36	Cadmium		31.5		27.8		2466.9		770.7		99.6		773.0		1018.3		9968.8		8364.6		8506.2		8942.7		8937.7		12738.6	
37	Chromium		40.0		35.3		861.7		684.6		426.9		1115.6		764.0		160514.5		147801.7		146630.2		154062.2		152170.8		165070.6	
38	Lead		209.8		184.8		1427.7		1396.8		891.1		1797.4		1368.9		163048.9		194903.3		192806.5		209843.4		190056.6		166839.6	
39	Mercury		1.4		1.3		30.3		8.5		5.8		8.7		13.3		0.0		0.0		0.0		0.0		0.0		99.5	
40	Nickel		43.6		38.4		311.7		295.6		173.4		605.6		341.4		0.0		0.0		0.0		0.0		0.0		4642.2	
41	Silver		7.1		6.3		12.9		11.8		11.2		18.1		13.4		0.0		0.0		0.0		0.0		0.0		167.0	
42	Thallium		7.1		6.3		64.6		58.7		56.0		62.4		60.4		0.0		0.0		0.0		0.0		0.0		812.9	
43	Zinc		71718.6		63254.5		19937.6		6910.9		7469.2		11510.4		11372.0		0.0		0.0		0.0		0.0		0.0		85158.0	
44																												
45	SVM		241.4		212.6		3894.6		2167.5		990.8		2570.4		2387.2		173017.7		203267.9		201312.7		218786.1		198994.2		179578.2	
46	LVM		51.7		45.6		1232.8		21161.2		600.9		1689.5		6314.3		262686.2		225771.1		229277.7		240283.9		239318.5		269976.8	
47																												
48	**403C11**		R4		Cond Avg		R1		R2		R3		R4		Cond Avg		R1		R2		R3		R4		Cond Avg		R1	
49																												
50	Feedstream Number		F3		F3		F4		F4		F4		F4		F4		F5		F5		F5		F5		F5		F6	
51	Feed Class	✓	Solid non-HW		Solid non-HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Spike		Spike		Spike		Spike		Spike		Total	
52	Feed Class 2		MF		MF		HW		HW		HW		HW		HW		Spike		Spike		Spike		Spike		Spike		Total	
53	Feedstream Description		Tires		Tires		LWDF		LWDF		LWDF		LWDF		LWDF		Spike		Spike		Spike		Spike		Spike		Total	
54	Feed Rate						7350000		7080000		6890000																	
55	Heating Value																											
56	Chlorine						68000		95000		22000						104000		111000		113000							
57																												
58	Stack Gas Flowrate						73998		75687		74026						73998		75687		74026						73998	
59	Oxygen						8.8		9.8		9.0						8.8		9.8		9.0						8.8	
60																												

	B	BF	BG	BH	BI	BJ	BK	BL	BM
1	**Feedstreams 1**								
2									
3	**403C10**	R2		R3		R4		Cond Avg	
4									
5	Feedstream Number								
6	Feed Class								
7	Feed Class 2	Total		Total		Total		Total	
8	Feedstream Description	Total		Total		Total		Total	
9	Feed Rate								
10	Thermal Feedrate	267		250		256		318	
11	Heating Value								
12	Estimated Firing Rate	322		323		296		313	
13	Chlorine								
14	Antimony								
15	Arsenic								
16	Barium								
17	Beryllium								
18	Cadmium								
19	Chromium								
20	Lead								
21	Mercury								
22	Nickel								
23	Silver								
24	Thallium								
25	Zinc								
26									
27	Stack Gas Flowrate	83219		83423		80974		82407.3	
28	Oxygen	8.8		8.8		9.5		9.1	
29									
30	*Feedrate MTEC Calculations*								
31	Chlorine	2493625.7		1896146.6		2154214.9		2288486.2	2280251.4
32	Antimony	1025.7		782.6		1103.2		942.1	
33	Arsenic	97526.9		82317.8		86023.7		92800.2	
34	Barium	23101.6		20766.4		25390.3		24373.1	
35	Beryllium	1950.9		1789.2		2003.6		2098.8	
36	Cadmium	9410.6		8867.8		9992.4		10238.8	
37	Chromium	151666.2		150081.8		158369.9		156318.3	
38	Lead	198467.6		195633.0		213532.9		193585.4	
39	Mercury	85.0		77.5		84.4		88.1	
40	Nickel	3754.9		3500.9		4102.3		4274.3	
41	Silver	162.1		158.5		174.0		168.6	
42	Thallium	787.3		766.3		812.4		811.2	
43	Zinc	84222.6		81513.4		94828.0		86600.1	
44									
45	SVM	207878.2		204500.8		223525.3		203824.2	
46	LVM	251144.0		234188.8		246397.3		251217.3	
47									
48	**403C11**	R2		R3		R4		Cond Avg	
49									
50	Feedstream Number	F6		F6		F6		F6	
51	Feed Class	Total		Total		Total		Total	
52	Feed Class 2	Total		Total		Total		Total	
53	Feedstream Description	Total		Total		Total		Total	
54	Feed Rate								
55	Heating Value								
56	Chlorine								
57									
58	Stack Gas Flowrate	75687		74026				74570	
59	Oxygen	9.8		9.0				9.2	
60									

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD
61	*Feedrate MTEC Calculations*																												
62	Chlorine		ug/dscm		59547		64778		60609																4420		5184		3824
63																													
64																													
65																													
66	**403C13**				R1		R2		R3		R4		Cond Avg		R1		R2		R3		R4		Cond Avg		R1		R2		R3
67																													
68	Feedstream Number				F1		F1		F1		F1		F1		F2		F2		F2		F2		F2		F3		F3		F3
69	Feed Class				Raw Material		Raw Material		Raw Material		Raw Material		Raw Material		Coal		Coal		Coal		Coal		Coal		Solid non-HW		Solid non-HW		Solid non-HV
70	Feedstream Description				Raw Matl		Raw Matl		Raw Matl		Raw Matl		Raw Matl		Coal		Coal		Coal		Coal		Coal		Tires		Tires		Tires
71	Feed Rate		g/hr		49900000		51000000		50600000						2900000		2810000		3450000						562000		680000		635000
72	Heating Value		Btu/hr																										
73	Chlorine		g/hr		7480		7140		13700						2030		560		1810						337		408		381

	B	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE
61	*Feedrate MTEC Calculations*																											
62	Chlorine						621040		924006		204196						949826		1079628		1048826						1634833	
63																												
64																												
65																												
66	**403C13**		R4		Cond Avg		R1		R2		R3		R4		Cond Avg		R1		R2		R3		R4		Cond Avg		R1	
67																												
68	Feedstream Number		F3		F3		F4		F4		F4		F4		F4		F5		F5		F5		F5		F5		F6	
69	Feed Class	√	Solid non-HW		Solid non-HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Spike		Spike		Spike		Spike		Spike		Total	
70	Feedstream Description		Tires		Tires		LWDF		LWDF		LWDF		LWDF		LWDF		Spike		Spike		Spike		Spike		Spike		Total	
71	Feed Rate						5620000		5080000		5440000																	
72	Heating Value																											
73	Chlorine						108000		46000		58700						0		53600		58300							

	B	BF	BG	BH	BI	BJ	BK	BL	BM
61	*Feedrate MTEC Calculations*								
62	Chlorine	2073595		1317455				1675294	
63									
64									
65									
66	**403C13**	R2		R3		R4		Cond Avg	
67									
68	Feedstream Number	F6		F6		F6		F6	
69	Feed Class	Total		Total		Total		Total	
70	Feedstream Description	Total		Total		Total		Total	
71	Feed Rate								
72	Heating Value								
73	Chlorine								

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	**Feedstreams 2**																					
2																						
3																						
4	**403C1**				R1		R2		R3		R4		R1		R2		R3		R4		R1	
5																						
6	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3	
7	Feed Class				Coal		Coal		Coal		Coal		Spike		Spike		Spike		Spike		Spike	
8	Feed Class 2				Coal		Coal		Coal		Coal											
9	Feedstream Description				Coal								Solid spike								Spike liquid	
10	Feedrate		lb/hr		8680		8280		7780		6640		3420		3280		3300		3260		12280	
11	Heating value		Btu/lb		13594		13647		13625		13614		8304.1		8628.0		8090.9		8159.5		14007	
12	Chlorine		lb/hr		9		8		8		7		41		33		110		36		491	
13	Antimony		lb/hr	1	0.0521	1	0.0497	1	0.04668	1	0.0398		15.7320		10.496		0.1881		0.5216		0.09824	
14	Arsenic		lb/hr		0.6423		0.3974		0.3890		0.4515	1	0.0051		0.012136		0.01452		0.018908		2.7016	
15	Barium		lb/hr		0.3125		0.2981		0.2490		0.2523		11.6280		2.624		1.815		1.8256		14.736	
16	Beryllium		lb/hr		0.0035		0.0041		0.0023		0.0027	1	0.0002		0.0014432		0.000264	1	0.000163		0.1228	
17	Cadmium		lb/hr	1	0.0035	1	0.0033	1	0.0031	1	0.0027		0.0096		0.04592		0.0099		0.00489		0.69996	
18	Chromium		lb/hr		0.0200		0.0381		0.0163		0.0113		2.1546		0.7544		1.287		1.8908		4.298	
19	Lead		lb/hr		0.0521		0.0331		0.0311		0.0398		8.8920		2.6896		23.76		1.1084		25.788	
20	Mercury		lb/hr		0.0016		0.0013		0.0014		0.0013		0.0017		0.020336		0.00165		0.00163		0.01842	
21	Silver		lb/hr	1	0.0052	1	0.0050	1	0.0047	1	0.0040	1	0.0103	1	0.00984	1	0.0099	1	0.00978		0.01228	1
22	Thallium		lb/hr	1	0.1302	1	0.1242	1	0.1167	1	0.0996		0.0308		0.0656	1	0.0066		0.03912	1	0.04912	1
23																						
24	Gas flowrate				72246		69418		67344		68532		72246		69418		67344		68532		72246	
25	Oxygen				5.5		5.5		4.9		6.4		5.5		5.5		4.9		6.4		5.5	
26																						
27	Thermal Feedrate		MMBtu/hr		118		113		106		90.4		28.4		28.3		26.7		26.6		172	
28	Estimated Firing Rate		MMBtu/hr																			
29																						
30	*Feedrate MTECs*																					
31	Chlorine		ug/dscm		30085		27831		27619		26188		137052		114804		379764		134680		1641278	
32	Antimony		ug/dscm	100	174	100	173	100	161	100	149		52588		36515		649		1951		328	
33	Arsenic		ug/dscm		2147		1383		1343		1689	100	17		42		50		71		9031	
34	Barium		ug/dscm		1045		1037		860		944		38869		9129		6266		6830		49258	
35	Beryllium		ug/dscm		12		14		8		10	100	1		5		1	100	1		410	
36	Cadmium		ug/dscm	100	12	100	12	100	11	100	10		32		160		34		18		2340	
37	Chromium		ug/dscm		67		133		56		42		7202		2624		4443		7074		14367	
38	Lead		ug/dscm		174		115		107		149		29724		9357		82029		4147		86202	
39	Mercury		ug/dscm		6		5		5		5		6		71		6		6		62	
40	Silver		ug/dscm	100	17	100	17	100	16	100	15	100	34	100	34	100	34	100	37		41	100
41	Thallium		ug/dscm	100	435	100	432	100	403	100	373		103		228	100	23		146	100	164	100
42	SVM		ug/dscm	6.3	186	9.1	127	9.1	118	6.3	159		29756		9517		82063		4165		88542	
43	LVM		ug/dscm		2225		1530		1407		1741		7220		2672		4494		7145		23808	
44																						
45	**403C2**				R1		R2		R3		R4		R1		R2		R3		R4		R1	
46																						
47	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3	
48	Feed Class				Coal		Coal		Coal		Coal		Spike		Spike		Spike		Spike		Spike	
49	Feed Class 2				Coal		Coal		Coal		Coal											
50	Feedstream Description				Coal								Solid spike								Spike liquid	
51	Feedrate		lb/hr		7960		7900		7240		6980		2840		3300		3320		3320		12280	
52	Heating value		Btu/lb		6846.733668		10865.19115		11530.37383		12050.63291		8732		8575		8042		8012		14007	
53	Chlorine		lb/hr	1	16	1	10	1	9	1	8	1	3		3		3		3		540	
54																						
55	Gas flowrate				66914		64624		63569		64868		66914		64624		63569		64868		66914	
56	Oxygen				8		8		6.8		7.7		8		8		6.8		7.7		8	
57																						
58	Thermal Feedrate		MMBtu/hr		54.5		85.83501006		83.47990654		84.11341772		24.79888		28.2975		26.69944		26.59984		172.00596	
59	Estimated Firing Rate		MMBtu/hr																			
60																						

	B	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS
1	**Feedstreams 2**																						
2																							
3																							
4	**403C1**	R2		R3		R4		R1		R2		R3		R4		R1		R2		R3		R4	
5																							
6	Feedstream Number	F3		F3		F3		F4		F4		F4		F4									
7	Feed Class	Spike		Spike		Spike		Spike		Spike		Spike		Spike									
8	Feed Class 2															Spike		Spike		Spike		Spike	
9	Feedstream Description							Spike															
10	Feedrate	12280		12280		12300																	
11	Heating value	15472		16938		16992																	
12	Chlorine	393		282		369									1								
13	Antimony	0.09824		0.07368		0.0738									1								
14	Arsenic	2.2104		2.3332		1.968		9.87		10.8		11		11	1								
15	Barium	14.736		9.3328		7.38																	
16	Beryllium	0.1228		0.120344		0.11931																	
17	Cadmium	0.65084		0.66312		0.6519									1								
18	Chromium	7.368		9.3328		8.364		20.4		21.9		22		22.1									
19	Lead	25.788		18.42		30.75									1								
20	Mercury	0.019648		0.002456	1	0.00246									1								
21	Silver	0.007368	1	0.007368		0.00861									1								
22	Thallium	0.04912	1	0.04912	1	0.0492									1								
23																							
24	Gas flowrate	69418		67344		68532		72246		69418		67344		68532									
25	Oxygen	5.5		4.9		6.4		5.5		5.5		4.9		6.4									
26																							
27	Thermal Feedrate	190		208		209										200		218		235		236	
28	Estimated Firing Rate																						
29																							
30	*Feedrate MTECs*																						
31	Chlorine	1367209		973577		1380468		0		0		0		0		1778330		1482013		1353342		1515148	100
32	Antimony	342		254		276		0		0		0		0		52916		36856		904		2227	100
33	Arsenic	7690		8055		7362		32993		37572		37976		41152		42041		45304		46082		48585	100
34	Barium	51265		32221		27609		0		0		0		0		88128		60394		38487		34439	
35	Beryllium	427		415		446		0		0		0		0	0.1	411		432		416	0.1	447	
36	Cadmium	2264		2289		2439		0		0		0		0		2372		2424		2324		2457	100
37	Chromium	25633		32221		31291		68192		76188		75953		82678		89761		104445		112617		121043	
38	Lead	89714		63593		115039		0		0		0		0		115926		99071		145622		119186	100
39	Mercury	68		8	100	9		0		0		0		0		67		139		14	60	15	100
40	Silver	26	100	25		32		0		0		0		0	46	75	100	60	100	60	53	69	100
41	Thallium	171	100	170	100	184		0		0		0		0	61	267	43	399	100	192	56	330	100
42	SVM	91978		65883		117478		0		0		0		0	0	118297		101495		147946		121643	100
43	LVM	33750		40691		39099		101184		113760		113929		123831	0	132212		150181		159115		170075	48
44																							
45	**403C2**	R2		R3		R4		R1		R2		R3		R4		R1		R2		R3		R4	
46																							
47	Feedstream Number	F3		F3		F3		F4		F4		F4		F4									
48	Feed Class	Spike		Spike		Spike		Spike		Spike		Spike		Spike									
49	Feed Class 2															Spike		Spike		Spike		Spike	
50	Feedstream Description							Spike															
51	Feedrate	12240		11940		12220																	
52	Heating value	15522		17420		17103																	
53	Chlorine	330		310		269									1								
54																							
55	Gas flowrate	64624		63569		64868																	
56	Oxygen	8		6.8		7.7																	
57																							
58	Thermal Feedrate	189.98928		207.9948		208.99866										197		218		235		236	
59	Estimated Firing Rate																						
60																							

	B	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP
1	**Feedstreams 2**																							
2																								
3																								
4	**403C1**	R1		R2		R3		R4		R1		R2		R3		R4		R1		R2		R3		R4
5																								
6	Feedstream Number	F5		F5		F5		F5																
7	Feed Class	Raw material		Raw material		Raw material		Raw material																
8	Feed Class 2	RM		RM		RM		RM																
9	Feedstream Description	Raw material chalk and iron								Organic spike liquid								Solid organic						
10	Feedrate	117920		117880		117160		117420																
11	Heating value																							
12	Chlorine	118	1	118	1	117	1	117																
13	Antimony	0.70752	1	0.70728	1	0.70296	1	0.70452																
14	Arsenic	0.35376	1	0.35364	1	0.35148	1	0.35226																
15	Barium	3.41968		2.59336		3.04616		2.9355																
16	Beryllium	0.023584		0.011788		0.023432		0.023484																
17	Cadmium	0.047168	1	0.047152	1	0.046864	1	0.046968																
18	Chromium	0.35376		0.483308		0.515504		0.493164																
19	Lead	0.35376	1	0.35364	1	0.35148	1	0.35226																
20	Mercury	0.0023584	1	0.0023576	1	0.0023432	1	0.0023484																
21	Silver	0.070752	1	0.070728	1	0.070296	1	0.070452																
22	Thallium	0.47168	1	0.47152	1	0.46864	1	0.46968																
23																								
24	Gas flowrate	72246		69418		67344		68532		72246		69418		67344		68532		72246		69418		67344		68532
25	Oxygen	5.5		5.5		4.9		6.4		5.5		5.5		4.9		6.4		5.5		5.5		4.9		6.4
26																								
27	Thermal Feedrate	0		0		0		0																
28	Estimated Firing Rate																							
29																								
30	*Feedrate MTECs*																							
31	Chlorine	394442	100	410511	100	403931	100	437709																
32	Antimony	2365	100	2461	100	2427	100	2636																
33	Arsenic	1183	100	1230	100	1213	100	1318																
34	Barium	11431		9022		10517		10982																
35	Beryllium	79		41		81		88																
36	Cadmium	158	100	164	100	162	100	176																
37	Chromium	1183		1681		1780		1845																
38	Lead	1183	100	1230	100	1213	100	1318																
39	Mercury	8	100	8	100	8	100	9																
40	Silver	237	100	246	100	243	100	264																
41	Thallium	1577	100	1640	100	1618	100	1757																
42	SVM	1340	100	1394	100	1375	100	1494																
43	LVM	2444	42	2953	39	3074	41	3251																
44																								
45	**403C2**	R1		R2		R3		R4		R1		R2		R3		R4		R1		R2		R3		R4
46																								
47	Feedstream Number	F5		F5		F5		F5		F6		F6		F6		F6		F7		F7		F7		F7
48	Feed Class	Raw Material		Raw Material		Raw Material		Raw Material		Spike		Spike		Spike		Spike		Solid HW		Solid HW		Solid HW		Solid HW
49	Feed Class 2																							
50	Feedstream Description	Raw material chalk and iron								Organic spike liquid								Solid organic						
51	Feedrate	118140		118100		117560		118020		148		173		201		281								
52	Heating value									0		0		0		0								
53	Chlorine	118	1	118	1	118	1	118		101		118		134		190								
54																								
55	Gas flowrate	66914		64624		63569		64868		66914		64624		63569		64868		66914		64624		63569		64868
56	Oxygen	8		8		6.8		7.7		8		8		6.8		7.7		8		8		6.8		7.7
57																								
58	Thermal Feedrate																							
59	Estimated Firing Rate																							
60																								

	B	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF
1	**Feedstreams 2**																
2																	
3																	
4	**403C1**		R1		R2		R3		R4		Cond Avg						
5																	
6	Feedstream Number		F6		F6		F6		F6		F6						
7	Feed Class		Total		Total		Total		Total		Total						
8	Feed Class 2		Total		Total		Total		Total		Total						
9	Feedstream Description		Total											HW	Spike	Other	Total
10	Feedrate																
11	Heating value																
12	Chlorine																
13	Antimony																
14	Arsenic																
15	Barium																
16	Beryllium																
17	Cadmium																
18	Chromium																
19	Lead																
20	Mercury																
21	Silver																
22	Thallium																
23																	
24	Gas flowrate		72246		69418		67344		68532		69385						
25	Oxygen		5.5		5.5		4.9		6.4		5.575						
26																	
27	Thermal Feedrate		318		331		341		326		329.1						
28	Estimated Firing Rate		355.5		341.6		344.2		317.6		339.7						
29																	
30	*Feedrate MTECs*																
31	Chlorine	17.9	2202856	21	1920355	23	1784892	22	1979045	21	1971787			1532208	0	233755	1765963
32	Antimony	4.58	55455	6.7	39490	74	3492	56	5012	10	25862						
33	Arsenic	2.61	45370	2.6	47917	2.5	48638	2.6	51592	2.6	48379						
34	Barium		100603		70453		49863		46365		66821						
35	Beryllium	0.11	501		488		505		545		510						
36	Cadmium	6.66	2541	6.8	2600	6.9	2496	7	2643	6.8	2570						
37	Chromium		91010		106259		114453		122930		108663						
38	Lead	1.01	117282	1.2	100416	0.8	146943	1.1	120653	1	121324						
39	Mercury	9.77	81	5.4	152	30	27	62	29	15	72			59	0	9	68
40	Silver	87.5	329	100	323	100	318	91	347	94	330						
41	Thallium	95.5	2279	91	2472	100	2213	94	2460	95	2356						
42	SVM	1.13	119823	1.4	103016	0.9	149439	1.2	123295	1.1	123893			122345	0	1548	123893
43	LVM	0.86	136882	0.8	154664	0.7	163596	0.8	175067	0.8	157552			39720	113176	4656	157552
44																	
45	**403C2**		R1		R2		R3		R4		Cond Avg						
46																	
47	Feedstream Number		F8		F8		F8		F8		F8						
48	Feed Class		Total		Total		Total		Total		Total						
49	Feed Class 2		Total		Total		Total		Total		Total						
50	Feedstream Description		Total											HW	Spike	Other	Total
51	Feedrate																
52	Heating value																
53	Chlorine																
54																	
55	Gas flowrate		66914		64624		63569		64868		64993.75						
56	Oxygen		8		8		6.8		7.7		7.625						
57																	
58	Thermal Feedrate		251		304		318		320		298.32817						
59	Estimated Firing Rate		276.15		266.70		286.57		273.89		275.82684						
60																	

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
61	*Feedrate MTECs*																					
62	Chlorine		ug/dscm		68850		44556		37321		34710		12909		13367		12440		13016		2323698	
63																						
64	**403C3**				R1		R2		R3		R4		R1		R2		R3		R4		R1	
65																						
66	Feedstream Number				F1		F1		F1		F1										F2	
67	Feed Class				Coal		Coal		Coal		Coal										Spike	
68	Feed Class 2				Coal		Coal		Coal		Coal											
69	Feedstream Description				Coal								Solid spike								Spike liquid	
70	Feedrate		lb/hr		4960		4980		5640		6960										12080	
71	Heating value		Btu/lb		10323.23289		10323.23289		10323.23289		10323.23289										17100	
72	Chlorine		lb/hr																			
73	Antimony		lb/hr		0.00198		0.00348		0.00337		0.00558										0.0496035	
74	Arsenic		lb/hr		0.20833		0.15432		0.22487		0.34171										15.013326	
75	Barium		lb/hr		0.09921		0.15939		0.14661		0.18100										0.7253134	
76	Beryllium		lb/hr	1	0.00099	1	0.00100	1	0.00113	1	0.00139										0.4828074	
77	Cadmium		lb/hr		0.00893		0.00847		0.00847		0.01671										2.491198	
78	Chromium		lb/hr	1	0.01488	1	0.01495	1	0.01691	1	0.02088										37.91912	
79	Copper		lb/hr		0.20326		0.03924		0.04916		0.05159										0.4100556	
80	Lead		lb/hr		0.02623		0.01495		0.02359		0.02712										46.51706	
81	Mercury		lb/hr		0.00183		0.00169		0.00164		0.00293										0.00291007	
82	Nickel		lb/hr		0.36596		0.34833		0.35053		0.69665										0.03615544	
83	Silver		lb/hr	1	0.00025	1	0.00025	1	0.00028	1	0.00035										0.00892863	
84	Thallium		lb/hr		0.00198		0.00149		0.00169		0.00278										0.00120812	
85	Zinc		lb/hr		0.21826		0.12456		0.15234		0.13911										3.373038	
86																						
87	Gas flowrate				64175.4		69541		69329.2		80872.3		64175.4		69541		69329.2		80872.3		64175.4	
88	Oxygen				6.6		6.6		6.6		6.6		6.6		6.6		6.6		6.6		6.6	
89																						
90	Thermal Feedrate		MMBtu/hr		51.203		51.410		58.223		71.850										206.568	
91	Estimated Firing Rate		MMBtu/hr																			
92																						
93	*Feedrate MTECs*																					
94	Chlorine		ug/dscm		0.0		0.0		0.0		0.0										0.0	
95	Antimony		ug/dscm		8.1		13.0		12.7		18.0										201.3	
96	Arsenic		ug/dscm		845.5		578.0		844.7		1100.4										60927.8	
97	Barium		ug/dscm		402.6		596.9		550.7		582.9										2943.5	
98	Beryllium		ug/dscm	100	4.0	100	3.7	100	4.2	100	4.5										1959.4	
99	Cadmium		ug/dscm		36.2		31.7		31.8		53.8										10109.9	
100	Chromium		ug/dscm	100	60.4	100	56.0	100	63.5	100	67.2										153885.1	
101	Copper		ug/dscm		824.9		147.0		184.7		166.1										1664.1	
102	Lead		ug/dscm		106.5		56.0		88.6		87.3										188777.7	
103	Mercury		ug/dscm		7.4		6.3		6.1		9.4										11.8	
104	Nickel		ug/dscm		1485.2		1304.5		1316.8		2243.5										146.7	
105	Silver		ug/dscm	100	1.0	100	0.9	100	1.1	100	1.1										36.2	
106	Thallium		ug/dscm		8.1		5.6		6.4		8.9										4.9	
107	SVM		ug/dscm		142.7		87.7		120.4		141.1										198887.6	
108	LVM		ug/dscm	7.1	909.9	9.4	637.7	7.4	912.5	6.1	1172.2										216772.3	
109																						
110	**403C4**																					
111	Feedstream Number																					
112	Feed Class																					
113	Feedstream Description																					
114	Feedrate		lb/hr																			
115	Heating value		Btu/lb																			
116	Chlorine		lb/hr																			

	B	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS
61	*Feedrate MTECs*																						
62	Chlorine	1470358		1285506		1167122										2771225		2009489		1853617		2004500	
63																							
64	**403C3**	R2		R3		R4		R1		R2		R3		R4		R1		R2		R3		R4	
65																							
66	Feedstream Number	F2		F2		F2																	
67	Feed Class	Spike		Spike		Spike																	
68	Feed Class 2															Spike		Spike		Spike		Spike	
69	Feedstream Description							Spike															
70	Feedrate	12320		11480		11420																	
71	Heating value	17900		16800		16700																	
72	Chlorine																						
73	Antimony	0.1084663		0.1124346		0.10956862																	
74	Arsenic	24.2506		19.113882		18.320226																	
75	Barium	4.321016		4.122602		1.4836958																	
76	Beryllium	0.4673752		0.6128788		0.2336876									1								
77	Cadmium	2.403014		1.851864		2.64552																	
78	Chromium	39.46234		39.90326		31.9667																	
79	Copper	2.711658		2.0657102		0.628311																	
80	Lead	52.24902		51.58764		41.44648																	
81	Mercury	0.0049383		0.0045856		0.003990326									1								
82	Nickel	0.1355829		0.286598		0.05709914																	
83	Silver	0.0050485		0.0036817		0.010273436									1								
84	Thallium	0.0012324		0.0011486		0.001141983									1								
85	Zinc	6.768122		7.231088		2.403014																	
86																							
87	Gas flowrate	69541		69329.2		80872.3																	
88	Oxygen	6.6		6.6		6.6																	
89																							
90	Thermal Feedrate	220.528		192.864		190.714										394		381		367		371	
91	Estimated Firing Rate																						
92																							
93	*Feedrate MTECs*																						
94	Chlorine	0.0		0.0		0.0										2979288		2988852		2724686		2215091	
95	Antimony	406.2		422.4		352.9										201		406		422		353	
96	Arsenic	90821.5		71802.5		58998.1										60928		90821		71803		58998	
97	Barium	16182.7		15486.8		4778.1										2944		16183		15487		4778	
98	Beryllium	1750.4		2302.3		752.6										1959		1750		2302		753	100
99	Cadmium	8999.6		6956.6		8519.6										10110		9000		6957		8520	
100	Chromium	147791.3		149899.2		102944.9										153885		147791		149899		102945	
101	Copper	10155.5		7760.0		2023.4										1664		10155		7760		2023	
102	Lead	195679.0		193792.3		133473.4										188778		195679		193792		133473	
103	Mercury	18.5		17.2		12.9										12		18		17		13	100
104	Nickel	507.8		1076.6		183.9										147		508		1077		184	
105	Silver	18.9		13.8		33.1										36		19		14		33	100
106	Thallium	4.6		4.3		3.7										5		5		4		4	100
107	SVM	204678.6		200748.9		141993.0										198888		204679		200749		141993	
108	LVM	240363.2		224004.0		162695.6										216772		240363		224004		162696	3
109																							
110	**403C4**																						
111	Feedstream Number																						
112	Feed Class																						
113	Feedstream Description																						
114	Feedrate																						
115	Heating value																						
116	Chlorine																						

	B	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP
61	*Feedrate MTECs*																							
62	Chlorine	507771		525764		489322		511972		434618		525764		555670		824361		0		0		0		0
63																								
64	**403C3**	R1		R2		R3		R4		R1		R2		R3		R4		R1		R2		R3		R4
65																								
66	Feedstream Number	F3		F3		F3		F3		F4		F4		F4		F4		F5		F5		F5		F5
67	Feed Class	Raw Material		Raw Material		Raw Material		Raw Material		Spike		Spike		Spike		Spike		Solid HW		Solid HW		Solid HW		Solid HW
68	Feed Class 2	RM		RM		RM		RM										HW		HW		HW		HW
69	Feedstream Description	Raw material chalk and iron								Organic spike liquid								Solid organic						
70	Feedrate	128600		129600		127400		128200		12080		12320		11480		11420		5020		4820		4820		4760
71	Heating value									15480		12987		15157		15762		6050		6960		4930		5920
72	Chlorine									734.1318		798.0652		725.3134		687.8352								
73	Antimony	0.18011582		0.2711658		0.2932118		0.16666776										0.25573		0.27998		0.03704		1.61818
74	Arsenic	0.09634102		0.1179461		0.10956862		0.09104998										1.70636		3.61554		0.09634		3.04235
75	Barium	3.350992		2.843934		3.174624		2.821888										0.75397		1.06041		9.34750		1.52338
76	Beryllium	0.0385805		0.03880096	1	0.02557336	1	0.02557336										0.00904		0.00963		0.00096		0.00858
77	Cadmium	0.10295482		0.09060906		0.016556546		0.05004442										0.08025		0.10119		0.04145		0.09039
78	Chromium	1.1309598		0.1036162		0.8531802		0.9237274										2.75575		3.81396		7.95861		3.32895
79	Copper	0.3593498		0.3108486		0.2799842		0.3461222										1.45504		1.49472		3.17462		1.90477
80	Lead	0.14153532		0.16843144		0.2292784		0.17945444										1.10450		0.91491		13.24965		1.19048
81	Mercury	0.002579382	1	0.002601428	1	0.002557336	1	0.002557336										0.01757		0.02756		0.01206		0.03704
82	Nickel	1.2852818		2.0745286		1.6556546		1.6666776										0.18563		0.24030		0.16865		0.26235
83	Silver	0.006437432		0.00518081	1	0.005092626	1	0.005136718										0.01003		0.00963		0.00390		0.01237
84	Thallium	0.012852818	1	0.012963048	1	0.012742588	1	0.012830772										0.00050		0.00193		0.00048		0.00048
85	Zinc	1.8011582		1.554243		1.5277878		1.5388108										1.06923		1.20592		1.03175		1.52338
86																								
87	Gas flowrate	64175.4		69541		69329.2		80872.3		64175.4		69541		69329.2		80872.3		64175.4		69541		69329.2		80872.3
88	Oxygen	6.6		6.6		6.6		6.6		6.6		6.6		6.6		6.6		6.6		6.6		6.6		6.6
89																								
90	Thermal Feedrate									186.998		160.000		174.002		180.002		30.371		33.547		23.763		28.179
91	Estimated Firing Rate																							
92																								
93	*Feedrate MTECs*																							
94	Chlorine	0.0		0.0		0.0		0.0		2979287.9		2988852.3		2724686.4		2215091.2		0.0		0.0		0.0		0.0
95	Antimony	731.0		1015.5		1101.5		536.7		0.0		0.0		0.0		0.0		1037.8		1048.6		139.1		5211.1
96	Arsenic	391.0		441.7		411.6		293.2		0.0		0.0		0.0		0.0		6924.8		13540.7		361.9		9797.5
97	Barium	13599.2		10650.9		11925.7		9087.6		0.0		0.0		0.0		0.0		3059.8		3971.4		35114.5		4905.9
98	Beryllium	156.6		145.3	100	96.1	100	82.4		0.0		0.0		0.0		0.0		36.7		36.1		3.6		27.6
99	Cadmium	417.8		339.3		62.2		161.2		0.0		0.0		0.0		0.0		325.7		379.0		155.7		291.1
100	Chromium	4589.7		388.1		3205.0		2974.8		0.0		0.0		0.0		0.0		11183.5		14283.7		29897.0		10720.5
101	Copper	1458.3		1164.2		1051.8		1114.6		0.0		0.0		0.0		0.0		5904.9		5597.9		11925.7		6134.1
102	Lead	574.4		630.8		861.3		577.9		0.0		0.0		0.0		0.0		4482.4		3426.4		49773.1		3833.8
103	Mercury	10.5	100	9.7	100	9.6	100	8.2		0.0		0.0		0.0		0.0		71.3		103.2		45.3		119.3
104	Nickel	5216.0		7769.4		6219.6		5367.3		0.0		0.0		0.0		0.0		753.3		900.0		633.6		844.9
105	Silver	26.1		19.4	100	19.1	100	16.5		0.0		0.0		0.0		0.0		40.7		36.1		14.7		39.8
106	Thallium	52.2	100	48.5	100	47.9	100	41.3		0.0		0.0		0.0		0.0		2.0		7.2		1.8		1.5
107	SVM	992.2		970.1		923.5		739.1		0.0		0.0		0.0		0.0		4808.0		3805.4		49928.8		4124.9
108	LVM	5137.3		975.1	2.6	3712.7	2.5	3350.3		0.0		0.0		0.0		0.0		18145.0		27860.5		30262.5		20545.6
109																								
110	**403C4**																							
111	Feedstream Number									F1		F1		F1		F1		F2		F2		F2		F2
112	Feed Class									Spike		Spike		Spike		Spike		Solid HW		Solid HW		Solid HW		Solid HW
113	Feedstream Description									Organic spike liquid								Solid organic						
114	Feedrate									5860		4520		5760		4800		2220		2260		2320		2600
115	Heating value									0		0		0		0		6760		5260		8880		7410
116	Chlorine									686		646		648		655								

	B	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF
61	*Feedrate MTECs*																
62	Chlorine		3347846		2579809		2380260		2551182		2714774			1574604	585103	555067	2714774
63																	
64	**403C3**		R1		R2		R3		R4		Cond Avg						
65																	
66	Feedstream Number		F6		F6		F6		F6		F6						
67	Feed Class		Total		Total		Total		Total		Total						
68	Feed Class 2		Total		Total		Total		Total		Total						
69	Feedstream Description		Total											HW	Spike	Other	Total
70	Feedrate																
71	Heating value																
72	Chlorine																
73	Antimony																
74	Arsenic																
75	Barium																
76	Beryllium																
77	Cadmium																
78	Chromium																
79	Copper																
80	Lead																
81	Mercury																
82	Nickel																
83	Silver																
84	Thallium																
85	Zinc																
86																	
87	Gas flowrate		64175.4		69541		69329.2		80872.3		70979.475						
88	Oxygen		6.6		6.6		6.6		6.6		6.6						
89																	
90	Thermal Feedrate		475		465		449		471		465.05558						
91	Estimated Firing Rate		292.82		317.30		316.33		369.00		323.86306						
92																	
93	*Feedrate MTECs*																
94	Chlorine		2979288		2988852		2724686		2215091		2726979			0	2726979	0	2726979
95	Antimony		1978		2483		1676		6119		3064						
96	Arsenic		69089		105382		73421		70189		79520						
97	Barium		20005		31402		63078		19354		33460						
98	Beryllium	7.45	2157	0.2	1936	4.2	2406	10	867	4.8	1841						
99	Cadmium		10890		9750		7206		9026		9218						
100	Chromium		169719		162519		183065		116707		158002						
101	Copper		9852		17065		20922		9438		14319						
102	Lead		193941		199792		244515		137972		194055						
103	Mercury	10.9	96	7.3	133	13	73	5.7	146	8.5	112			100	0	12	112
104	Nickel		7601		10482		9247		8640		8992						
105	Silver	26.1	104	1.2	75	41	49	20	91	21	80						
106	Thallium	77.7	67	74	66	79	60	74	55	76	62						
107	SVM		204831		209542		251722		146998		203273			15667	186577	1029	203273
108	LVM	0.09	240964		269836	0.1	258892		187764		239364			24203	210959	4202	239364
109																	
110	**403C4**																
111	Feedstream Number																
112	Feed Class																
113	Feedstream Description																
114	Feedrate																
115	Heating value																
116	Chlorine																

	B	C	D	E	F	G	H	I
1	**Process Information 1**							
2								
3	**403C10**		max op cond	1	2	3	4	Cond Avg
4								
5	ESP Inlet Temp	F	max HRA	463	451	443	446	450.8
6	ESP Inlet Temp	F	RA	450	441	440	445	
7	ESP Power	kVA	min HRA	42.5	65.4	66.1	65.9	
8	ESP Power	kVA	RA	44.7	66.7	66.9	67.1	
9	Chain Temp	F	max HRA	1755	1730	1735	1749	
10	Chain Temp	F	RA	1705	1705	1725	1721	
11								
12	**403C11**		D/F test	5	6	7		
13								
14	ESP Inlet Temp	F	max HRA	415	391	405		403.7
15	ESP Inlet Temp	F	RA	403	388	395		
16	ESP Power	kVA	min HRA	71.7	68.4	66.8		
17	ESP Power	kVA	RA	72.7	71.5	68.1		
18	Chain Temp	F	max HRA	1654	1582	1608		
19	Chain Temp	F	RA	1615	1569	1576		
20								
21	**403C12**		PM retest	8	9	10		
22								
23	ESP Inlet Temp	F	max HRA	405	445	433		
24	ESP Inlet Temp	F	RA	387	436	425		
25	ESP Power	kVA	min HRA	49.4	45.5	48.7		
26	ESP Power	kVA	RA	49.8	45.7	51.8		
27	Chain Temp	F	max HRA	1548	1656	1635		
28	Chain Temp	F	RA	1507	1647	1632		
29								
30	**403C13**		PM retest	11	12	13		
31								
32	ESP Inlet Temp	F	max HRA	405	445	433		
33	ESP Inlet Temp	F	RA	387	436	425		
34	ESP Power	kVA	min HRA	49.4	45.5	48.7		
35	ESP Power	kVA	RA	49.8	45.7	51.8		
36	Chain Temp	F	max HRA	1548	1656	1635		
37	Chain Temp	F	RA	1507	1647	1632		

	C	D	E	F	G	H
1	**Process Information 2**					
2						
3	**403C1**					
4						
5	Combustion Temperature	F	1558	1594	1705	1639
6	ESP Temperature	F	487	495	503	490
7	ESP Power	kVA	25.4	28.2	20.2	16.6
8						
9	**403C2**					
10						
11	Combustion Temperature	F	1311	1319	1293	1322
12	ESP Temperature	F	423	363	392	368
13	ESP Power	kVA	24.8	25.2	25.9	26.1
14						
15	**403C3**					
16						
17	Combustion Temperature	F	1393	1630	1601	1662
18	ESP Temperature	F	416	428	436	445
19	ESP Power	kVA	42	45.6	42.1	43.5
20						
21	**403C4**					
22						
23	Combustion Temperature	F	1393	1415	1380	1442
24	ESP Temperature	F	372	386	371	369
25	ESP Power	kVA	46.3	46.3	47.6	47.8

PCDD/PCDF

N

Facility Name and ID: Ash Grove, Foreman, AR, Kiln No. 1

Condition ID: 403C10

Condition/Test Date: CoC burn, 12/9 - 12/10/97

	I-TEF	Run 1				Run 2				Run 3				Run 4			
	Wght Fact	Total Full ND	TEQ Full ND	Total 1/2 ND	TEQ 1/2 ND	Total Full ND	TEQ Full ND	Total 1/2 ND	TEQ 1/2 ND	Total Full ND	TEQ Full ND	Total 1/2 ND	TEQ 1/2 ND	Total Full ND	TEQ Full ND	Total 1/2 ND	TEQ 1/2 ND
Detected in sample volume (ng)																	
2,3,7,8-TCDD	1	0.06	0.0600	0.060	0.0600	0.09	0.0900	0.090	0.0900	0.07	0.0700	0.070	0.0700	0.07	0.0700	0.070	0.0700
TCDD Total	0	39.8	0.0000	39.800	0.0000	16.5	0.0000	16.500	0.0000	14.4	0.0000	14.400	0.0000	20.2	0.0000	20.200	0.0000
1,2,3,7,8-PCDD	0.5	0.2	0.1000	0.200	0.1000	0.16	0.0800	0.160	0.0800	0.25	0.1250	0.250	0.1250	0.29	0.1450	0.290	0.1450
PCDD Total	0	38.9	0.0000	38.900	0.0000	21.3	0.0000	21.300	0.0000	23.3	0.0000	23.300	0.0000	33.7	0.0000	33.700	0.0000
1,2,3,4,7,8-HxCDD	0.1	0.22	0.0220	0.220	0.0220	0.19	0.0190	0.190	0.0190	0.41	0.0410	0.410	0.0410	0.66	0.0660	0.660	0.0660
1,2,3,6,7,8-HxCDD	0.1	0.52	0.0520	0.520	0.0520	0.45	0.0450	0.450	0.0450	0.99	0.0990	0.990	0.0990	1.8	0.1800	1.800	0.1800
1,2,3,7,8,9-HxCDD	0.1	0.38	0.0380	0.380	0.0380	0.23	0.0230	0.230	0.0230	0.6	0.0600	0.600	0.0600	1.1	0.1100	1.100	0.1100
HxCDD Total	0	206	0.0000	206.000	0.0000	92.1	0.0000	92.100	0.0000	89.6	0.0000	89.600	0.0000	14.4	0.0000	14.400	0.0000
1,2,3,4,6,7,8-HpCDD	0.01	2.1	0.0210	2.100	0.0210	4.5	0.0450	4.500	0.0450	8.6	0.0860	8.600	0.0860	11.9	0.1190	11.900	0.1190
HpCDD Total	0	3.9	0.0000	3.900	0.0000	9.2	0.0000	9.200	0.0000	17.2	0.0000	17.200	0.0000	23.6	0.0000	23.600	0.0000
OCDD	0.001	1.4	0.0014	1.400	0.0014	1	0.0010	1.000	0.0010	1.8	0.0018	1.800	0.0018	2.2	0.0022	2.200	0.0022
2,3,7,8-TCDF	0.1	0.27	0.0270	0.270	0.0270	0.17	0.0170	0.170	0.0170	0.21	0.0210	0.210	0.0210	0.2	0.0200	0.200	0.0200
TCDF Total	0	8.9	0.0000	8.900	0.0000	6.6	0.0000	6.600	0.0000	7.8	0.0000	7.800	0.0000	8.4	0.0000	8.400	0.0000
1,2,3,7,8-PCDF	0.05	0.14	0.0070	0.140	0.0070	0.09	0.0045	0.090	0.0045	0.11	0.0055	0.110	0.0055	0.13	0.0065	0.130	0.0065
2,3,4,7,8-PCDF	0.5	0.39	0.1950	0.390	0.1950	0.24	0.1200	0.240	0.1200	0.32	0.1600	0.320	0.1600	0.38	0.1900	0.380	0.1900
PCDF Total	0	2.5	0.0000	2.500	0.0000	1.9	0.0000	1.900	0.0000	2.4	0.0000	2.400	0.0000	3.1	0.0000	3.100	0.0000
1,2,3,4,7,8-HxCDF	0.1	0.27	0.0270	0.270	0.0270	0.16	0.0160	0.160	0.0160	0.22	0.0220	0.220	0.0220	0.32	0.0320	0.320	0.0320
1,2,3,6,7,8-HxCDF	0.1	0.08	0.0080	0.080	0.0080	0.06	0.0060	0.060	0.0060	0.1	0.0100	0.100	0.0100	0.15	0.0150	0.150	0.0150
2,3,4,6,7,8-HxCDF	0.1	0.21	0.0210	0.210	0.0210	0.15	0.0150	0.150	0.0150	0.26	0.0260	0.260	0.0260	0.43	0.0430	0.430	0.0430
1,2,3,7,8,9-HxCDF	0.1	0.03	0.0030	0.030	0.0030	0.02	0.0020	0.020	0.0020	0.03	0.0030	0.030	0.0030	0.06	0.0060	0.060	0.0060
HxCDF Total	0	1.4	0.0000	1.400	0.0000	0.77	0.0000	0.770	0.0000	1.1	0.0000	1.100	0.0000	2.3	0.0000	2.300	0.0000
1,2,3,4,6,7,8-HpCDF	0.01	0.95	0.0095	0.950	0.0095	0.08	0.0008	0.080	0.0008	0.11	0.0011	0.110	0.0011	0.15	0.0015	0.150	0.0015
1,2,3,4,7,8,9-HpCDF	0.01	0.3	0.0030	0.300	0.0030	0.02	0.0002	0.020	0.0002	0.05	0.0005	0.050	0.0005	0.09	0.0009	0.090	0.0009
HpCDF Total	0	1.8	0.0000	1.800	0.0000	0.21	0.0000	0.210	0.0000	0.16	0.0000	0.160	0.0000	0.43	0.0000	0.430	0.0000
OCDF	0.001	0.03	0.0000	0.030	0.0000	0.04	0.0000	0.040	0.0000	0.04	0.0000	0.040	0.0000	0.06	0.0001	0.060	0.0001
Gas sample volume (dscf)			112.80	112.76	112.80		118.50	118.48	118.50		115.10	115.09	115.10		119.20	119.19	119.20
O2 (%)			9.20	9.20	9.20		8.8	8.8	8.8		8.80	8.8	8.80		9.20	9.2	9.20
PCDD/PCDF (ng in sample)			0.595	304.630	0.595		0.485	149.620	0.485		0.732	157.800	0.732		1.007	108.390	1.007
PCDD/PCDF (ng/dscm @ 7% O2)	0.0		0.221	113.264	0.221		0.166	51.206	0.166		0.258	55.598	0.258		0.354	38.126	0.354
TEQ Cond Avg	0.250																
Total Cond Avg	64.548																

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1		**PCDD/PCDF**																
2		N																
3		Facility Name and ID:	Ash Grove, Foreman, AR, Kiln No. 1															
4		Condition ID:	403C11															
5		Condition/Test Date:	CoC burn, 12/11 - 12/12/97															
6																		
7			I-TEF			Run 5						Run 6					Run 7		
8			Wght Fact		Total	TEQ	Total	TEQ		Total	TEQ	Total	TEQ		Total	TEQ	Total	TEQ
9					Full ND	Full ND	1/2 ND	1/2 ND		Full ND	Full ND	1/2 ND	1/2 ND		Full ND	Full ND	1/2 ND	1/2 ND
10		Detected in sample volume (ng)																
11		2,3,7,8-TCDD	1		0.04	0.0400	0.040	0.0400		0.08	0.0800	0.080	0.0800		0.06	0.0600	0.060	0.0600
12		TCDD Total	0		2.2	0.0000	2.200	0.0000		2	0.0000	2.000	0.0000		2.9	0.0000	2.900	0.0000
13		1,2,3,7,8-PCDD	0.5		0.04	0.0200	0.040	0.0200		0.18	0.0900	0.180	0.0900		0.06	0.0300	0.060	0.0300
14		PCDD Total	0		1.7	0.0000	1.700	0.0000		1.5	0.0000	1.500	0.0000		2	0.0000	2.000	0.0000
15		1,2,3,4,7,8-HxCDD	0.1		0.02	0.0020	0.020	0.0020		0.28	0.0280	0.280	0.0280		0.02	0.0020	0.020	0.0020
16		1,2,3,6,7,8-HxCDD	0.1		0.04	0.0040	0.040	0.0040		0.34	0.0340	0.340	0.0340		0.04	0.0040	0.040	0.0040
17		1,2,3,7,8,9-HxCDD	0.1		0.05	0.0050	0.050	0.0050		0.35	0.0350	0.350	0.0350		0.06	0.0060	0.060	0.0060
18		HxCDD Total	0		3.8	0.0000	3.800	0.0000		2.1	0.0000	2.100	0.0000		1.7	0.0000	1.700	0.0000
19		1,2,3,4,6,7,8-HpCDD	0.01		0.28	0.0028	0.280	0.0028		0.67	0.0067	0.670	0.0067		0.16	0.0016	0.160	0.0016
20		HpCDD Total	0		0.6	0.0000	0.600	0.0000		0.93	0.0000	0.930	0.0000		0.47	0.0000	0.470	0.0000
21		OCDD	0.001		0.14	0.0001	0.140	0.0001		2	0.0020	2.000	0.0020		0.15	0.0002	0.150	0.0002
22		2,3,7,8-TCDF	0.1		0.06	0.0060	0.060	0.0060		0.08	0.0080	0.080	0.0080		0.16	0.0160	0.160	0.0160
23		TCDF Total	0		1.2	0.0000	1.200	0.0000		3	0.0000	3.000	0.0000		6.2	0.0000	6.200	0.0000
24		1,2,3,7,8-PCDF	0.05		0.02	0.0010	0.020	0.0010		0.18	0.0090	0.180	0.0090		0.07	0.0035	0.070	0.0035
25		2,3,4,7,8-PCDF	0.5		0.03	0.0150	0.030	0.0150		0.22	0.1100	0.220	0.1100		0.12	0.0600	0.120	0.0600
26		PCDF Total	0		0.34	0.0000	0.340	0.0000		1.2	0.0000	1.200	0.0000		1.3	0.0000	1.300	0.0000
27		1,2,3,4,7,8-HxCDF	0.1		0.04	0.0040	0.040	0.0040		0.28	0.0280	0.280	0.0280		0.09	0.0090	0.090	0.0090
28		1,2,3,6,7,8-HxCDF	0.1		0.02	0.0020	0.020	0.0020		0.28	0.0280	0.280	0.0280		0.03	0.0030	0.030	0.0030
29		2,3,4,6,7,8-HxCDF	0.1		0.04	0.0040	0.040	0.0040		0.41	0.0410	0.410	0.0410		0.06	0.0060	0.060	0.0060
30		1,2,3,7,8,9-HxCDF	0.1		0.006	0.0006	0.006	0.0006		0.4	0.0400	0.400	0.0400		0.006	0.0006	0.006	0.0006
31		HxCDF Total	0		0.18	0.0000	0.180	0.0000		1.5	0.0000	1.500	0.0000		0.45	0.0000	0.450	0.0000
32		1,2,3,4,6,7,8-HpCDF	0.01		0.03	0.0003	0.030	0.0003		0.64	0.0064	0.640	0.0064		0.06	0.0006	0.060	0.0006
33		1,2,3,4,7,8,9-HpCDF	0.01		0.01	0.0001	0.010	0.0001		0.64	0.0064	0.640	0.0064		0.001	0.0000	0.001	0.0000
34		HpCDF Total	0		0.05	0.0000	0.050	0.0000		1.3	0.0000	1.300	0.0000		0.08	0.0000	0.080	0.0000
35		OCDF	0.001		0.02	0.0000	0.020	0.0000		1.6	0.0016	1.600	0.0016		0.01	0.0000	0.010	0.0000
36																		
37		Gas sample volume (dscf)				109.80	109.79	109.80			109.70	109.68	109.70			111.00	110.99	111.00
38		O2 (%)				8.80	8.80	8.80			9.8	9.8	9.8			9.00	9.0	9.00
39																		
40		PCDD/PCDF (ng in sample)				0.107	10.230	0.107			0.554	17.130	0.554			0.202	15.260	0.202
41		PCDD/PCDF (ng/dscm @ 7% O2)		0.0		0.040	3.778	0.040	0.0		0.223	6.898	0.223	0.0		0.075	5.668	0.075
42																		
43		TEQ Cond Avg	0.113															
44		Total Cond Avg	5.448															

	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	**403C1**	I-TEF			R1				R2				R3				R4	
2		Wght Fact		Total	Total	TEQ		Total	Total	TEQ		Total	Total	TEQ		Total	Total	TEQ
3	ng/dscm			Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND
4																		
5	4D 2378	1	1	0.0205	0.0103	0.0103		3.1884	3.1884	3.1884	1	0.0293	0.0146	0.0146	1	0.1187	0.0593	0.0593
6	4D Other	0		11.4126	11.4126	0.0000		167.8874	167.8874	0.0000		44.1561	44.1561	0.0000		17.6218	17.6218	0.0000
7	4D Total	0		11.4332	11.4332	0.0000		171.0758	171.0758	0.0000		44.1854	44.1854	0.0000		17.7405	17.7405	0.0000
8	5D 12378	0.5		0.1143	0.1143	0.0572		2.5027	2.5027	1.2514		0.2897	0.2897	0.1448		0.1750	0.1750	0.0875
9	5D Other	0		14.8074	14.8074	0.0000		251.5397	251.5397	0.0000		50.3333	50.3333	0.0000		23.0241	23.0241	0.0000
10	5D Total	0		14.9217	14.9217	0.0000		254.0425	254.0425	0.0000		50.6230	50.6230	0.0000		23.1991	23.1991	0.0000
11	6D 123478	0.1		0.1906	0.1906	0.0191		1.0971	1.0971	0.1097		0.4682	0.4682	0.0468		0.1572	0.1572	0.0157
12	6D 123678	0.1		0.3518	0.3518	0.0352		1.9199	1.9199	0.1920		0.8779	0.8779	0.0878		0.3857	0.3857	0.0386
13	6D 123789	0.1		0.3225	0.3225	0.0322		1.9885	1.9885	0.1988		0.8486	0.8486	0.0849		0.3560	0.3560	0.0356
14	6D Other	0		30.2099	30.2099	0.0000		120.1302	120.1302	0.0000		128.0205	128.0205	0.0000		42.1173	42.1173	0.0000
15	6D Total	0		31.0748	31.0748	0.0000		125.1356	125.1356	0.0000		130.2151	130.2151	0.0000		43.0162	43.0162	0.0000
16	7D 1234678	0.01		1.8762	1.8762	0.0188		11.6565	11.6565	0.1166		5.3257	5.3257	0.0533		2.3733	2.3733	0.0237
17	7D Other	0		2.7850	2.7850	0.0000		17.4504	17.4504	0.0000		7.5788	7.5788	0.0000		3.2336	3.2336	0.0000
18	7D Total	0		4.6612	4.6612	0.0000		29.1069	29.1069	0.0000		12.9045	12.9045	0.0000		5.6069	5.6069	0.0000
19	8D	0.001		2.0521	2.0521	0.0021		109.3651	109.3651	0.1094		2.7799	2.7799	0.0028		1.5130	1.5130	0.0015
20	4F 2378	0.1		0.9088	0.9088	0.0909		15.3248	15.3248	1.5325		2.4287	2.4287	0.2429		0.6823	0.6823	0.0682
21	4F Other	0		3.5765	3.5765	0.0000		58.7280	58.7280	0.0000		8.0470	8.0470	0.0000		2.1953	2.1953	0.0000
22	4F Total	0		4.4853	4.4853	0.0000		74.0529	74.0529	0.0000		10.4757	10.4757	0.0000		2.8776	2.8776	0.0000
23	5F 12378	0.05		0.1407	0.1407	0.0070		1.6799	1.6799	0.0840		0.3804	0.3804	0.0190		0.1187	0.1187	0.0059
24	5F 23478	0.5		0.3225	0.3225	0.1612		4.8340	4.8340	2.4170		1.2290	1.2290	0.6145		0.3560	0.3560	0.1780
25	5F Other	0		1.5889	1.5889	0.0000		29.1412	29.1412	0.0000		7.7544	7.7544	0.0000		1.5130	1.5130	0.0000
26	5F Total	0		2.0521	2.0521	0.0000		35.6551	35.6551	0.0000		9.3638	9.3638	0.0000		1.9876	1.9876	0.0000
27	6F 123478	0.1		0.2375	0.2375	0.0237		12.6507	12.6507	1.2651		0.7315	0.7315	0.0732		0.1899	0.1899	0.0190
28	6F 123678	0.1		0.1055	0.1055	0.0106		5.7597	5.7597	0.5760		0.2604	0.2604	0.0260		0.0771	0.0771	0.0077
29	6F 123789	0.1		0.0264	0.0264	0.0026	1	0.8228	0.4114	0.0411		0.0790	0.0790	0.0079	1	0.1483	0.0742	0.0074
30	6F 234678	0.1		0.2023	0.2023	0.0202		14.3306	14.3306	1.4331		0.6145	0.6145	0.0614		0.1750	0.1750	0.0175
31	6F Other	0		0.6303	0.6303	0.0000		24.0329	24.0329	0.0000		1.8845	1.8845	0.0000		0.2106	0.2106	0.0000
32	6F Total	0		1.2019	1.2019	0.0000		57.5967	57.5967	0.0000		3.5699	3.5699	0.0000		0.8010	0.8010	0.0000
33	7F 1234678	0.01		0.1524	0.1524	0.0015		5.8968	5.8968	0.0590		0.3511	0.3511	0.0035		0.1216	0.1216	0.0012
34	7F 1234789	0.01	1	0.0293	0.0147	0.0001		1.7485	1.7485	0.0175		0.0936	0.0936	0.0009	1	0.1780	0.0890	0.0009
35	7F Other	0		0.1407	0.1407	0.0000		6.5482	6.5482	0.0000		0.0527	0.0527	0.0000		-0.1454	-0.1454	0.0000
36	7F Total	0		0.3225	0.3225	0.0000		14.1935	14.1935	0.0000		0.4975	0.4975	0.0000		0.1543	0.1543	0.0000
37	8F	0.001		0.0616	0.0616	0.0001		3.5312	3.5312	0.0035		0.1258	0.1258	0.0001	1	0.4153	0.2077	0.0002
38	Total PCDD/PCDF			72.2664	72.2664			873.7552	873.7552			264.7405	264.7405			97.3116	97.1039	
39	TEQ		4.1	0.5032		0.4928	0.7	12.6361		12.5949	2.0	1.4991		1.4845	21.3	0.6359		0.5681

	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	**403C3**	I-TEF			R1				R2				R3				R4	
2		Wght Fact		Total	Total	TEQ		Total	Total	TEQ		Total	Total	TEQ		Total	Total	TEQ
3	ng/dscm			Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND
4																		
5	4D 2378	1		0.0120	0.0120	0.0120		0.0112	0.0112	0.0112		0.0151	0.0151	0.0151		0.0142	0.0142	0.0142
6	4D Other	0		0.6769	0.6769	0.0000		0.4940	0.4940	0.0000		1.4050	1.4050	0.0000		1.0932	1.0932	0.0000
7	4D Total	0		0.6889	0.6889	0.0000		0.5052	0.5052	0.0000		1.4201	1.4201	0.0000		1.1073	1.1073	0.0000
8	5D 12378	0.5		0.0210	0.0210	0.0105		0.0112	0.0112	0.0056		0.0544	0.0544	0.0272		0.0341	0.0341	0.0170
9	5D Other	0		0.6679	0.6679	0.0000		0.4098	0.4098	0.0000		3.6318	3.6318	0.0000		2.2658	2.2658	0.0000
10	5D Total	0		0.6889	0.6889	0.0000		0.4210	0.4210	0.0000		3.6862	3.6862	0.0000		2.2999	2.2999	0.0000
11	6D 123478	0.1		0.0210	0.0210	0.0021		0.0056	0.0056	0.0006		0.0695	0.0695	0.0069		0.0398	0.0398	0.0040
12	6D 123678	0.1		0.0509	0.0509	0.0051		0.0196	0.0196	0.0020		0.2417	0.2417	0.0242		0.1164	0.1164	0.0116
13	6D 123789	0.1		0.0509	0.0509	0.0051		0.0225	0.0225	0.0022		0.1783	0.1783	0.0178		0.0994	0.0994	0.0099
14	6D Other	0		1.6443	1.6443	0.0000		0.4295	0.4295	0.0000		13.6813	13.6813	0.0000		4.9405	4.9405	0.0000
15	6D Total	0		1.7672	1.7672	0.0000		0.4772	0.4772	0.0000		14.1708	14.1708	0.0000		5.1960	5.1960	0.0000
16	7D 1234678	0.01		0.3894	0.3894	0.0039		0.2105	0.2105	0.0021		1.3899	1.3899	0.0139		0.6814	0.6814	0.0068
17	7D Other	0		0.5092	0.5092	0.0000		0.1544	0.1544	0.0000		2.2661	2.2661	0.0000		0.8518	0.8518	0.0000
18	7D Total	0		0.8986	0.8986	0.0000		0.3649	0.3649	0.0000		3.6560	3.6560	0.0000		1.5333	1.5333	0.0000
19	8D	0.001		0.7188	0.7188	0.0007		0.7298	0.7298	0.0007		0.9971	0.9971	0.0010		0.7950	0.7950	0.0008
20	4F 2378	0.1		0.2815	0.2815	0.0282		0.2161	0.2161	0.0216		0.9367	0.9367	0.0937		0.4259	0.4259	0.0426
21	4F Other	0		1.5156	1.5156	0.0000		0.9908	0.9908	0.0000		4.6833	4.6833	0.0000		2.3283	2.3283	0.0000
22	4F Total	0		1.7971	1.7971	0.0000		1.2070	1.2070	0.0000		5.6200	5.6200	0.0000		2.7542	2.7542	0.0000
23	5F 12378	0.05		0.0240	0.0240	0.0012		0.0168	0.0168	0.0008		0.0816	0.0816	0.0041		0.0483	0.0483	0.0024
24	5F 23478	0.5		0.0509	0.0509	0.0255		0.0253	0.0253	0.0126		0.1904	0.1904	0.0952		0.0965	0.0965	0.0483
25	5F Other	0		0.5541	0.5541	0.0000		0.2947	0.2947	0.0000		2.0244	2.0244	0.0000		0.9909	0.9909	0.0000
26	5F Total	0		0.6290	0.6290	0.0000		0.3368	0.3368	0.0000		2.2963	2.2963	0.0000		1.1357	1.1357	0.0000
27	6F 123478	0.1		0.0300	0.0300	0.0030		0.0225	0.0225	0.0022		0.1450	0.1450	0.0145		0.0738	0.0738	0.0074
28	6F 123678	0.1		0.0180	0.0180	0.0018		0.0084	0.0084	0.0008		0.0604	0.0604	0.0060		0.0312	0.0312	0.0031
29	6F 123789	0.1		0.0090	0.0090	0.0009		0.0022	0.0022	0.0002		0.0151	0.0151	0.0015		0.0085	0.0085	0.0009
30	6F 234678	0.1		0.0389	0.0389	0.0039		0.0168	0.0168	0.0017		0.1178	0.1178	0.0118		0.0625	0.0625	0.0062
31	6F Other	0		0.0659	0.0659	0.0000		0.0679	0.0679	0.0000		0.5076	0.5076	0.0000		0.1647	0.1647	0.0000
32	6F Total	0		0.1617	0.1617	0.0000		0.1179	0.1179	0.0000		0.8460	0.8460	0.0000		0.3407	0.3407	0.0000
33	7F 1234678	0.01		0.0240	0.0240	0.0002		0.0168	0.0168	0.0002		0.0695	0.0695	0.0007		0.0454	0.0454	0.0005
34	7F 1234789	0.01		0.0090	0.0090	0.0001		0.0056	0.0056	0.0001		0.0272	0.0272	0.0003		0.0170	0.0170	0.0002
35	7F Other	0		0.0030	0.0030	0.0000		0.0225	0.0225	0.0000		0.0755	0.0755	0.0000		0.0426	0.0426	0.0000
36	7F Total	0		0.0359	0.0359	0.0000		0.0449	0.0449	0.0000		0.1722	0.1722	0.0000		0.1051	0.1051	0.0000
37	8F	0.001		0.0300	0.0300	0.0000		0.0421	0.0421	0.0000		0.0514	0.0514	0.0001		0.0454	0.0454	0.0000
38	Total PCDD/PCDF			7.4160	7.4160			4.2468	4.2468			32.9161	32.9161			15.3126	15.3126	
39	TEQ		0.0	0.1041		0.1041	0.0	0.0648		0.0648	0.0	0.3339		0.3339	0.0	0.1759		0.1759

	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	**403C4**	I-TEF			R1				R2				R3				R4	
2		Wght Fact		Total	Total	TEQ		Total	Total	TEQ		Total	Total	TEQ		Total	Total	TEQ
3	ng/dscm			Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND		Full ND	1/2 ND	1/2 ND
4																		
5	4D 2378	1		0.0119	0.0119	0.0119		0.0085	0.0085	0.0085		0.0065	0.0065	0.0065		0.0059	0.0059	0.0059
6	4D Other	0		0.3735	0.3735	0.0000		0.2756	0.2756	0.0000		0.1845	0.1845	0.0000		0.2469	0.2469	0.0000
7	4D Total	0		0.3853	0.3853	0.0000		0.2842	0.2842	0.0000		0.1910	0.1910	0.0000		0.2528	0.2528	0.0000
8	5D 12378	0.5		0.0059	0.0059	0.0030		0.0057	0.0057	0.0028		0.0032	0.0032	0.0016		0.0030	0.0030	0.0015
9	5D Other	0		0.1986	0.1986	0.0000		0.1279	0.1279	0.0000		0.0842	0.0842	0.0000		0.1368	0.1368	0.0000
10	5D Total	0		0.2045	0.2045	0.0000		0.1336	0.1336	0.0000		0.0874	0.0874	0.0000		0.1398	0.1398	0.0000
11	6D 123478	0.1		0.0030	0.0030	0.0003		0.0028	0.0028	0.0003		0.0065	0.0065	0.0006		0.0030	0.0030	0.0003
12	6D 123678	0.1		0.0059	0.0059	0.0006		0.0114	0.0114	0.0011		0.0097	0.0097	0.0010		0.0089	0.0089	0.0009
13	6D 123789	0.1		0.0119	0.0119	0.0012		0.0142	0.0142	0.0014		0.0065	0.0065	0.0006		0.0089	0.0089	0.0009
14	6D Other	0		0.1986	0.1986	0.0000		0.2472	0.2472	0.0000		0.1457	0.1457	0.0000		0.1338	0.1338	0.0000
15	6D Total	0		0.2193	0.2193	0.0000		0.2756	0.2756	0.0000		0.1684	0.1684	0.0000		0.1547	0.1547	0.0000
16	7D 1234678	0.01		0.0682	0.0682	0.0007		0.1222	0.1222	0.0012		0.1327	0.1327	0.0013		0.1190	0.1190	0.0012
17	7D Other	0		0.0741	0.0741	0.0000		0.1023	0.1023	0.0000		0.0971	0.0971	0.0000		0.0833	0.0833	0.0000
18	7D Total	0		0.1423	0.1423	0.0000		0.2245	0.2245	0.0000		0.2299	0.2299	0.0000		0.2023	0.2023	0.0000
19	8D	0.001		0.2757	0.2757	0.0003		0.4263	0.4263	0.0004		0.4857	0.4857	0.0005		0.5057	0.5057	0.0005
20	4F 2378	0.1		1.3932	1.3932	0.1393		1.0514	1.0514	0.1051		0.6799	0.6799	0.0680		0.0833	0.0833	0.0083
21	4F Other	0		14.9099	14.9099	0.0000		12.5603	12.5603	0.0000		7.8353	7.8353	0.0000		0.6603	0.6603	0.0000
22	4F Total	0		16.3030	16.3030	0.0000		13.6117	13.6117	0.0000		8.5152	8.5152	0.0000		0.7436	0.7436	0.0000
23	5F 12378	0.05		0.0534	0.0534	0.0027		0.0313	0.0313	0.0016		0.0389	0.0389	0.0019		0.0059	0.0059	0.0003
24	5F 23478	0.5		0.0949	0.0949	0.0474		0.0540	0.0540	0.0270		0.0615	0.0615	0.0308		0.0089	0.0089	0.0045
25	5F Other	0		1.2450	1.2450	0.0000		0.7388	0.7388	0.0000		0.8709	0.8709	0.0000		0.1279	0.1279	0.0000
26	5F Total	0		1.3932	1.3932	0.0000		0.8241	0.8241	0.0000		0.9713	0.9713	0.0000		0.1428	0.1428	0.0000
27	6F 123478	0.1		0.0119	0.0119	0.0012		0.0171	0.0171	0.0017		0.0453	0.0453	0.0045		0.0059	0.0059	0.0006
28	6F 123678	0.1		0.0059	0.0059	0.0006		0.0085	0.0085	0.0009		0.0259	0.0259	0.0026		0.0030	0.0030	0.0003
29	6F 123789	0.1		0.0015	0.0015	0.0001		0.0014	0.0014	0.0001		0.0023	0.0023	0.0002		0.0015	0.0015	0.0001
30	6F 234678	0.1		0.0089	0.0089	0.0009		0.0114	0.0114	0.0011		0.0259	0.0259	0.0026		0.0059	0.0059	0.0006
31	6F Other	0		0.0459	0.0459	0.0000		0.0384	0.0384	0.0000		0.1434	0.1434	0.0000		0.0164	0.0164	0.0000
32	6F Total	0		0.0741	0.0741	0.0000		0.0767	0.0767	0.0000		0.2428	0.2428	0.0000		0.0327	0.0327	0.0000
33	7F 1234678	0.01		0.0119	0.0119	0.0001		0.0199	0.0199	0.0002		0.0032	0.0032	0.0000		0.0059	0.0059	0.0001
34	7F 1234789	0.01		0.0021	0.0021	0.0000		0.0057	0.0057	0.0001		0.0032	0.0032	0.0000		0.0024	0.0024	0.0000
35	7F Other	0		0.0098	0.0098	0.0000		0.0142	0.0142	0.0000		0.0486	0.0486	0.0000		0.0065	0.0065	0.0000
36	7F Total	0		0.0237	0.0237	0.0000		0.0398	0.0398	0.0000		0.0550	0.0550	0.0000		0.0149	0.0149	0.0000
37	8F	0.001		0.0237	0.0237	0.0000		0.0341	0.0341	0.0000		0.0227	0.0227	0.0000		0.0357	0.0357	0.0000
38	Total PCDD/PCDF			19.0449	19.0449			15.9306	15.9306			10.9694	10.9694			2.2249	2.2249	
39	TEQ		0.0	0.2102		0.2102	0.0	0.1537		0.1537	0.0	0.1229		0.1229	0.0	0.0261		0.0261