

US EPA ARCHIVE DOCUMENT

	B	C
1	Source Description	
2		
3	Phase I ID No.	302
4	EPA ID No.	OHD987048733
5	Facility Name	Lafarge
6	Facility Location	
7	City	Paulding
8	State	OH
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		Mid kiln CO measurement bypass
16	Capacity (MMBtu/hr)	
17	APCS Detailed Acronym	FF
18	APCS General Class	FF
19	APCS Characteristics	Newly installed FF; ESP used during older test conditions
20	Hazardous Wastes	Liq
21	Haz Waste Description	
22	Supplemental Fuel	Coal
23		
24	Stack Characteristics	
25	Diameter (ft)	11.5
26	Height (ft)	250.0
27	Gas Velocity (ft/sec)	2.5
28	Gas Temperature (°F)	355.5
29		
30	Permitting Status	Tier I for Hg, Ag, Tl, Sb, Ba; Tier III for Pb, As, Be, Cd, Cr
31	HWC Burn Status (Date if Terminated)	Y

	B	C
1	Condition Description	
2		
3	302C10	
4		
5	Report Name/Date	Lafarge Corp Paulding, Ohio, August 1998 Trial Burn Report, August 1998
6	Report Prepare	Radian International
7	Testing Firm	Radian International
8	Testing Dates	5/9/98-5/12/98
9	Cond Dates	May-98
10	Condition Descr	CoC; high temperature, max metals, prod rate, waste feed
11	Content	PM, HCl/Cl ₂ , D/F, metals, CO, POHC DRE
12		
13	302C11	
14		
15	Report Name/Date	Lafarge Corp Paulding, Ohio, August 1998 Trial Burn Report, August 1998
16	Report Prepare	Radian International
17	Testing Firm	Radian International
18	Testing Dates	5/7/98-5/8/98
19	Cond Dates	May-98
20	Condition Descr	CoC; low temperature
21	Content	POHC DRE, D/F, CO
22		
23	302C12	
24		
25	Report Name/Date	Lafarge Corp Paulding, Ohio, August 1998 Trial Burn Report, August 1998
26	Report Prepare	Radian International
27	Testing Firm	Radian International
28	Testing Dates	5/5/98-5/6/98
29	Cond Dates	May-98
30	Condition Descr	Risk burn, normal operations
31	Content	PM/PSD, metals, D/F, organics, HCl/Cl ₂ , CO
32		
33	Comments	
34	CO measurement made in mid-kiln	
35		
36	302C1	
37		
38	Report Name/Date	Lafarge Corp Paulding Plant Compliance Test, Certification Package, prepared by Radian, August 1992
39	Report Prepare	Radian
40	Testing Firm	Radian
41	Cond Descr	CoC, MAX COMB TEMP, MIN ESP POWER, MAX PROD
42	Testing Dates	June 18-19, 1992
43	Cond Dates	Jun-92
44		
45	302C2	
46		
47	Report Name/Date	Lafarge Corp Paulding Ohio, Certification of Compliance, Alternative Carbon Monoxide Standard, prepared by Radian, September 1994
48	Report Prepare	Radian
49	Testing Firm	Radian
50	Cond Descr	SUBSTITUTE RAW MATERIALS
51	Testing Dates	September 27-29, 1994
52	Cond Dates	Sep-94
53		
54	302C3	
55		
56	Report Name/Date	Lafarge Corp Paulding Ohio Plant, Recertification of Compliance, prepared by Radian, submitted August 1995
57	Report Prepare	Radian
58	Testing Firm	Radian
59	Cond Descr	CoC, MAX OPERATING CONDITIONS
60	Testing Dates	July 10, 1995
61	Cond Dates	Jul-95
62		
63	302C4	
64		
65	Report Name/Date	Lafarge Corp Paulding Ohio Plant, Recertification of Compliance, prepared by Radian, submitted August 1995
66	Report Prepare	Radian
67	Testing Firm	Radian

	B	C
68	Cond Descr	CoC, OPERATING CONDITIONS @ MIN TEMP
69	Testing Dates	July 11, 1995
70	Cond Dates	Jul-95
71		
72	302C5	
73		
74	Report Name/Date	PCDD/PCDF Testing Data from Lafarge Paulding, Radian Testing during Summer 1994, CRKC Docket No. 733, contained in letter from CKRC to EPA OSW
75	Report Prepare	CKRC
76	Testing Firm	Radian
77	Cond Descr	DIOXIN/FURAN EMISSIONS TESTING
78	Testing Dates	Summer 1994
79	Cond Dates	Aug-94

	B	C	D	E	F	G	H	I	J	K	L	M
1	Stack Gas Emissions 1											
2												
3												
4	302C10	Max comb temp, max metals, (R1		R2		R3		Cond Avg
5												
6	PM	E1	gr/dscf	y		0.0027		0.0018		0.003		0.0025
7												
8	CO (RA)	E1	ppmv	y		17.2		22.4		24.1		21.2
9	CO (MHRA)	E1	ppmv	y		36.3		32.2		53		40.5
10												
11	HCl		g/dscm	y		0.0168		0.0107		0.0123		
12	Cl2		g/dscm	y		3.96E-05		2.08E-04		1.96E-04		
13												
14	Antimony	E2	ug/dscm	y		1.08		1.21		1.31		1.20
15	Arsenic	E2	ug/dscm	y		0.109		0.286		0.171		0.19
16	Barium	E2	ug/dscm	y		4.65		4.05		3.82		4.17
17	Beryllium	E2	ug/dscm	y		0.0573		0.065		0.0871		0.07
18	Cadmium	E2	ug/dscm	y		3.43		0.711		0.076		1.41
19	Chromium	E2	ug/dscm	y		0.942		0.417		0.718		0.69
20	Lead	E2	ug/dscm	y		7.61		7.84		0.79		5.41
21	Mercury	E2	ug/dscm	y		10.5		7.57		10.1		9.39
22	Nickel	E2	ug/dscm	y		2.61		1.98		3.06		2.55
23	Selenium	E2	ug/dscm	y		6.94		10.5		5.54		7.66
24	Silver	E2	ug/dscm	y		0.046		0.0323		0.0368		0.04
25	Thallium	E2	ug/dscm	y		5.99		11.4		5.74		7.71
26												
27	SVM	E2	ug/dscm	y		11.04		8.551		0.866		6.82
28	LVM	E2	ug/dscm	y		1.11		0.77		0.98		0.95
29												
30	POHC DRE	Tetrachloroethene										
31	POHC Feedrate		g/hr			4.34E+04		4.43E+04		4.77E+04		
32	Emission Rate	E3	g/hr	nd		0.412	nd	0.459	nd	0.42		
33	DRE	E3	%	>		99.9991	>	99.9990	>	99.9991		
34												
35	POHC DRE	1,2,4-Trichlorobenzene										
36	POHC Feedrate		g/hr			3.73E+04		3.72E+04		3.78E+04		
37	Emission Rate	E3	g/hr	nd		0.0432	nd	0.045	nd	0.0439		
38	DRE	E3	%	>		99.9999	>	99.9999	>	99.9999		
39												
40	POHC DRE	1,2-Dichlorobenzene										
41	POHC Feedrate		g/hr			5.21E+04		5.94E+04		6.01E+04		
42	Emission Rate	E3	g/hr	nd		0.103	nd	0.057	nd	0.0556		
43	DRE	E3	g/hr	>		99.9998	>	99.9999	>	99.9999		
44												
45	Sampling Train	PM, HCl E1										
46	Stack Gas Flowrate		dscfm			60461		60631		61263		60785
47	O2		%			7.37		7.1		7.5		7.3
48	Moisture		%			34.84		33.75		35.79		34.8
49	Temperature		°F			368.1		366.8		364		366.3
50												
51	Sampling Train	Metals E2										
52	Stack Gas Flowrate		dscfm			60177		60595		58346		59706
53	O2		%			7.37		7.1		7.5		7.3
54	Moisture		%			34.01		34.17		35.71		34.6
55	Temperature		°F			368		368		365.6		367.2
56												
57	Sampling Train	PCDD/P E3										
58	Stack Gas Flowrate		dscfm			60535		60930		61623		61029
59	O2		%			7.37		7.1		7.5		7.3
60	Moisture		%			34.6		34.7		34.65		34.7
61	Temperature		°F			362		362		352		358.7
62												
63	HCl	E1	ppmv	y		11.37		7.10		8.40		9.0
64	Cl2	E1	ppmv	y		0.01		0.07		0.07		0.1
65	Total Chlorine	E1	ppmv	y		11.4		7.2		8.5		9.1
66												
67												
68	302C11	D/F, POHC DRE compliance				R1		R2		R3		Cond Avg
69												
70	CO (RA)	E1	ppmv	y		13.8		8.7		8		10.2
71	CO (MHRA)	E1	ppmv	y		20.5		9.1		8.5		12.7

	B	C	D	E	F	G	H	I	J	K	L	M
72												
73	POHC DRE		Tetrachloroethene									
74	POHC Feedrate		g/hr			4.34E+04		4.27E+04		4.30E+04		
75	Emission Rate	E1	g/hr		nd	0.451	nd	0.455	nd	0.479		
76	DRE	E1	%		>	99.9990	>	99.9989	>	99.9989		
77												
78	POHC DRE		1,2,4-Trichlorobenzene									
79	POHC Feedrate		g/hr			3.52E+04		3.64E+04		3.68E+04		
80	Emission Rate	E1	g/hr		nd	0.0916	nd	0.0893	nd	0.0883		
81	DRE	E1	%		>	99.9997	>	99.9998	>	99.9998		
82												
83	POHC DRE		1,2-Dichlorobenzene									
84	POHC Feedrate		g/hr			4.73E+04		4.90E+04		4.95E+04		
85	Emission Rate	E1	g/hr		nd	0.116	nd	0.113	nd	0.112		
86	DRE	E1	g/hr		>	99.9998	>	99.9998	>	99.9998		
87												
88	Sampling Train	POHC	E1									
89	Stack Gas Flowrate		dscfm			59287		59207		58092		58862.0
90	O2		%			6.7		6.6		6.7		6.7
91	Moisture		%			34.07		34.47		33.94		34.2
92	Temperature		°F			404		413		406		407.7
93												
94	Sampling Train	PCDD/P	E2									
95	Stack Gas Flowrate		dscfm			58433		57769		59278		58493.3
96	O2		%			6.7		6.6		6.84		6.7
97	Moisture		%			33.59		33.93		37.26		34.9
98	Temperature		°F			400.7		407.5		388.7		399.0
99												
100	302C12					R1		R2		R3		Cond Avg
101												
102	PM	E1	gr/dscf	y		0.0023		0.0026		0.0051		0.0033
103												
104	CO (RA)	E1	ppmv	y		33.2		9.8		15.8		19.6
105	CO (MHRA)	E1	ppmv	y		68.2		12.5		38.7		39.8
106												
107	HCl		g/dscm			0.0267		0.0048		0.0232		
108	Cl2		g/dscm			2.65E-06		2.55E-06		1.63E-04		
109												
110	Antimony	E2	ug/dscm	y		1.29		1.51		1.43		1.41
111	Arsenic	E2	ug/dscm	y		0.143		0.163		0.121		0.14
112	Barium	E2	ug/dscm	y		6.16		5.84		5.54		5.85
113	Beryllium	E2	ug/dscm	y		0.0681		0.0754		0.0877		0.08
114	Cadmium	E2	ug/dscm	y		0.053		0.0472		0.0801		0.06
115	Chromium	E2	ug/dscm	y		0.907		0.743		0.441		0.70
116	Lead	E2	ug/dscm	y		0.489		0.818		1.96		1.09
117	Mercury	E2	ug/dscm	y		14.1		14		22.8		16.97
118	Nickel	E2	ug/dscm	y		3.27		3.17		3.01		3.15
119	Selenium	E2	ug/dscm	y		5.83		4.78		6.72		5.78
120	Silver	E2	ug/dscm	y		0.0473		0.0443		0.0529		0.05
121	Thallium	E2	ug/dscm	y		12.5		6.23		10.8		9.84
122												
123	SVM	E2	ug/dscm	y		0.542		0.8652		2.0401		1.15
124	LVM	E2	ug/dscm	y		1.12		0.98		0.65		0.92
125												
126	Sampling Train	PM, HCl	E1									
127	Stack Gas Flowrate		dscfm			58760		61498		61713		60657
128	O2		%			7.6		7.3		7		7.3
129	Moisture		%			34.38		34.21		34.45		34.3
130	Temperature		°F			412.1		401.8		403.2		405.7
131												
132	Sampling Train	Metals	E2									
133	Stack Gas Flowrate		dscfm			57672		57222		58700		57865
134	O2		%			7.6		7.3		7		7.3
135	Moisture		%			33.31		33.64		33.71		33.6
136	Temperature		°F			417.8		408		408.3		411.4
137												
138	Sampling Train	PCDD/P	E3									
139	Stack Gas Flowrate		dscfm			59388		59314		59141		59281
140	O2		%			7.6		7.3		7		7.3
141	Moisture		%			33.03		33.32		33.38		33.2
142	Temperature		°F			411.4		399.7		410.2		407.1

	B	C	D	E	F	G	H	I	J	K	L	M
143												
144	HCl	E1	ppmv	y		18.38		3.23		15.28		12.30
145	Cl2	E1	ppmv	y		0.001		0.001		0.055		0.02
146	Total Chlorine	E1	ppmv	y		18.4		3.2		15.4		12.34

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Stack Gas Emissions 2																		
2																			
3																			
4	302C1						R1	R2	R3			R4	R5	R6					Cond Avg
5																			
6	PM	E1	gr/dscf	y								0.02000	0.06000	0.02074					0.03358
7	HCl	E1	ppmv	y		11.68	11.16	10.66											11.17
8	Cl2	E1	ppmv	y		0.60	0.11	0.56											0.42
9	Total Chlorine	E1	ppmv	y		12.89	11.38	11.79											12.02
10	Arsenic	E2	ug/dscm	y								2.74	6.53	2.72					4.00
11	Beryllium	E2	ug/dscm	y								0.41	0.65	0.41					0.49
12	Cadmium	E2	ug/dscm	y								64.70	157.19	114.28					112.06
13	Chromium	E2	ug/dscm	y								12.32	26.16	13.59					17.36
14	Chromium (Hex)	E3	ug/dscm	y								0.40	0.26	0.27					0.31
15	Lead	E2	ug/dscm	y								715.40	3244.74	871.01					1610.38
16	SVM	E2	ug/dscm	y								780.10	3401.93	985.29					1722.44
17	LVM	E2	ug/dscm	y								15.47	33.34	16.72					21.84
18																			
19	Sampling Train	Halogens	E1																
20	Stack Gas Flowrate		dscfm			43971	45558	43375											
21	O2		%			7	7	7											
22	Moisture		%			36.81	37.74	37.59											
23	Temperature		°F			370	376	384											
24																			
25	Sampling Train	Metals	E2																
26	Stack Gas Flowrate		dscfm									42915	45006	44818					
27	O2		%									7	7	7.5					
28	Moisture		%									37.59	37.69	38.14					
29	Temperature		°F									395	389	392					
30																			
31	Sampling Train	Cr Hex	E3																
32	Stack Gas Flowrate		dscfm									44022	45800	45069					
33	O2		%									7	7	7.5					
34	Moisture		%									37.59	37.69	38.14					
35	Temperature		°F									391	384	394					
36																			
37	302C2						R1	R2	R3			R4	R5	R6					Cond Avg
38																			
39	PM	E1	gr/dscf	y		0.07500	0.07200	0.03600											0.06100
40	CO (MHRA)	E1	ppmv	y		405.00	441.00	403.00											416.3
41	CO (RA)	E1	ppmv	y		200.00	194.00	179.00											191.0
42	HC (MHRA)	E1	ppmv	y		17.00	17.00	18.00											17.3
43	HC (RA)	E1	ppmv	y		14.00	13.00	14.00											13.7
44																			
45	Sampling Train	Particulate	E1																
46	Stack Gas Flowrate		dscfm			22110	21237	21667											
47	O2		%			7.5	6.7	6.9											
48	Moisture		%			34.8	34.6	34.8											
49	Temperature		°F			373	374	372											
50																			
51	302C3						R1	R2	R3			R4	R5	R6					Cond Avg
52																			
53	PM	E1	gr/dscf	y		0.07300	0.05100	0.05700											0.0603
54	CO (MHRA)	E1	ppmv	y		91.00	100.00	104.00											98.33
55	CO (RA)	E1	ppmv	y		87.00	95.00	97.00											93.00
56	HC (MHRA)	E1	ppmv	y		15.00	15.00	15.00											15.00
57	HC (RA)	E1	ppmv	y		11.00	12.00	11.00											11.33
58	HCl	E1	ppmv	y		56.33	56.55	52.57											55.15
59	Cl2	E1	ppmv	y		0.08	0.15	0.10											0.11
60	Total Chlorine	E1	ppmv	y		56.50	56.86	52.78											55.38
61	Antimony	E2	ug/dscm	y		14.39	15.28	14.34											14.67
62	Arsenic	E2	ug/dscm	y		5.53	3.73	3.50											4.25
63	Barium	E2	ug/dscm	y		70.11	59.64	52.46											60.74
64	Beryllium	E2	ug/dscm	y		5.53	3.73	3.50											4.25
65	Cadmium	E2	ug/dscm	y		114.39	141.66	125.89											127.31
66	Chromium	E2	ug/dscm	y		15.50	10.81	9.09											11.80
67	Lead	E2	ug/dscm	y		1033.16	1267.45	1223.95											1174.86
68	Mercury	E2	ug/dscm	y		18.08	14.54	12.24											14.95
69	Silver	E2	ug/dscm	y		1.48	1.12	1.40											1.33
70	Thallium	E2	ug/dscm	y		3.32	4.85	4.90											4.35
71	SVM	E2	ug/dscm	y		1147.55	1409.11	1349.85											1302.17

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
72	LVM	E2	ug/dscm	y		26.57		18.27		16.09								20.31	
73																			
74	Sampling Train	Halogen	E1																
75	Stack Gas Flowrate		dscfm			39921		40703		41963									
76	O2		%			10.3		10.4		10.3									
77	Moisture		%			39.43		37.33		38.23									
78	Temperature		°F			363.54		350.52		346.54									
79																			
80	Sampling Train	Metals	E2																
81	Stack Gas Flowrate		dscfm			41624		41705		44042									
82	O2		%			10.27		10.4		10.3									
83	Moisture		%			38.86		37.54		36.93									
84	Temperature		°F			368.1		355.84		348.64									
85																			
86	302C4						R1	R2		R3		R4		R5		R6		Cond Avg	
87																			
88	PM	E1	gr/dscf	y		0.06100		0.04100		0.04800								0.05000	
89	CO (MHRA)	E1	ppmv	y		265.00		287.00		238.00								263.3	
90	CO (RA)	E1	ppmv	y		184.00		198.00		178.00								186.7	
91	HC (MHRA)	E1	ppmv	y		18.00		15.00		15.00								16.0	
92	HC (RA)	E1	ppmv	y		16.00		13.00		13.00								14.0	
93																			
94	Sampling Train	Particulate	E1																
95	Stack Gas Flowrate		dscfm			39014		38694		36012									
96	O2		%			5.8		7.8		6									
97	Moisture		%			36.45		36.59		39.9									
98	Temperature		°F			339.08		358.14		355.28									
99																			
100	302C5						R1	R2		R3		R4		R5		R6		Cond Avg	
101																			
102	Sampling Train	Dioxin & Fur	E1																
103	Stack Gas Flowrate		dscfm			27725		27725		27725									
104	O2		%			8		7.9		7.1									
105	Moisture		%			36.2		35.7		35.8									
106	Temperature		°F			365		360		380									

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
1	Feedstreams 1																				
2																					
3	302C10	Max comb temp, ma			R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		
4																					
5	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		
6	Feed Class				Raw Material		Raw Material		Raw Material		Raw Material		Liq HW		Liq HW		Liq HW		Liq HW		
7	Feed Class 2				RM		RM		RM		RM		HW		HW		HW		HW		
8	Feedstream Description				Raw Matl		Raw Matl		Raw Matl		Raw Matl		Liq Waste		Liq Waste		Liq Waste		Liq Waste		
9	Feed Rate				g/hr		83027523		83857729		83215369		83366874		6837000		6946000		6774000		6852333
10	Heating Value				Btu/lb		0		0		0		0		12600		12600		12700		12633
11	Thermal Feedrate				MMBtu/hr		0		0		0		0		190		193		189		191
12	Chlorine				g/hr		7320		5690		4240		5750.0		176000		179000		179000		178000.0
13	Antimony				g/hr		90.5		61.3		82.3		78.0		829		632		835		765.3
14	Arsenic				g/hr		230		236		236		234.0		16.9		14.7		19.6		17.1
15	Barium				g/hr		6970		6670		7470		7036.7		3030		2610		2910		2850.0
16	Beryllium				g/hr		33		33.1		25.6		30.6		0.216		0.337		0.19		0.2
17	Cadmium				g/hr		16.9		15.4		19.1		17.1		57		53.4		58.4		56.3
18	Chromium				g/hr		2660		2390		3010		2686.7		470		303		472		415.0
19	Lead				g/hr		118		127		137		127.3		1030		741		1030		933.7
20	Mercury				g/hr		0.057		0.266		0.304		0.2		1.8		1.44		1.83		1.7
21	Nickel				g/hr		1140		1220		1270		1210.0		129		89		141		119.7
22	Selenium				g/hr		69		33.5		86.6		63.0		39.9		36.3		46.2		40.8
23	Silver				g/hr		14.5		21.8		14.2		16.8		12.9		12.3		13.3		12.8
24	Thallium				g/hr		93		49		80.9		74.3		6.57		7.01		6.64		6.7
25																					
26	Stack Gas Flowrate				dscfm		60177		60595		58346		59706.0		60177		60595		58346		59706.0
27	Oxygen				%		7.37		7.1		7.5		7.3		7.37		7.1		7.5		7.3
28																					
29	<i>Feedrate MTEC Calculations</i>																				
30	Chlorine				ug/dscm		73582.6		55699.5		44382.5		58057.7		1769198.8		1752232.7		1873693.4		1797265.0
31	Antimony				ug/dscm		909.7		600.1		861.5		787.9		8333.3		6186.7		8740.4		7727.6
32	Arsenic				ug/dscm		2312.0		2310.2		2470.3		2362.7		169.9		143.9		205.2		172.3
33	Barium				ug/dscm		70064.3		65292.7		78192.7		71049.2		30458.4		25549.3		30460.6		28776.4
34	Beryllium				ug/dscm		331.7		324.0		268.0		308.6		2.2		3.3		2.0		2.5
35	Cadmium				ug/dscm		169.9		150.8		199.9		173.0		573.0		522.7		611.3		568.1
36	Chromium				ug/dscm		26739.0		23395.7		31507.4		27127.3		4724.6		2966.1		4940.7		4190.3
37	Lead				ug/dscm		1186.2		1243.2		1434.1		1285.7		10353.8		7253.7		10781.6		9427.2
38	Mercury				ug/dscm		0.6		2.6		3.2		2.1		18.1		14.1		19.2		17.1
39	Nickel				ug/dscm		11459.6		11942.6		13293.8		12217.4		1296.7		871.2		1475.9		1208.3
40	Selenium				ug/dscm		693.6		327.9		906.5		636.4		401.1		355.3		483.6		412.0
41	Silver				ug/dscm		145.8		213.4		148.6		170.0		129.7		120.4		139.2		129.6
42	Thallium				ug/dscm		934.9		479.7		846.8		750.2		66.0		68.6		69.5		68.1
43																					
44	SVM				ug/dscm		1356.1		1394.0		1634.0		1458.7		10926.8		7776.4		11392.9		9995.4
45	LVM				ug/dscm		29382.8		26030.0		34245.7		29798.6		4896.6		3113.3		5147.8		4365.1
46																					
47	302C11				R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		
48																					
49	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		
50	Feed Class				Raw Material		Raw Material		Raw Material		Raw Material		Liq HW		Liq HW		Liq HW		Liq HW		
51	Feedstream Description				Raw Matl		Raw Matl		Raw Matl		Raw Matl		Liq Waste		Liq Waste		Liq Waste		Liq Waste		
52	Feed Rate				g/hr		76000000		74760000		77700000		76153333		6770000		6910000		6780000		6820000
53	Thermal Feedrate				MMBtu/hr		0		0		0		0		186		191		185		187

	B	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	Feedstreams 1															
2																
3	302C10	R1	R2	R3	Cond Avg	R1	R2	R3	Cond Avg							
4																
5	Feedstream Number	F3	F3	F3	F3	F4	F4	F4	F4							
6	Feed Class	Spike	Spike	Spike	Spike	Total	Total	Total	Total							
7	Feed Class 2	Spike	Spike	Spike	Spike	Total	Total	Total	Total							
8	Feedstream Description	Spike	Spike	Spike	Spike	Total	Total	Total	Total							
9	Feed Rate															
10	Heating Value															
11	Thermal Feedrate					190	193	189	191							
12	Chlorine															
13	Antimony															
14	Arsenic	4090	4080	4670	4.28E+03											
15	Barium															
16	Beryllium															
17	Cadmium	1880	1960	1930	1.92E+03											
18	Chromium	12100	12100	11600	1.19E+04											
19	Lead	11000	11100	10900	1.10E+04											
20	Mercury															
21	Nickel															
22	Selenium															
23	Silver															
24	Thallium															
25																
26	Stack Gas Flowrate	60177	60595	58346	59706.0	60177	60595	58346	59706.0							
27	Oxygen	7.37	7.1	7.5	7.3	7.37	7.1	7.5	7.3							
28																
29	<i>Feedrate MTEC Calculations</i>															
30	Chlorine	0.0	0.0	0.0	0.0	1842781.4	1807932.2	1918075.8	1855322.7							
31	Antimony	0.0	0.0	0.0	0.0	9243.1	6786.7	9601.9	8515.5							
32	Arsenic	41113.8	39939.2	48883.5	43215.1	43595.7	42393.3	51559.0	45750.2							
33	Barium	0.0	0.0	0.0	0.0	100522.7	90842.0	108653.3	99825.6							
34	Beryllium	0.0	0.0	0.0	0.0	333.9	327.3	270.0	311.1							
35	Cadmium	18898.3	19186.5	20202.4	19419.9	19641.1	19859.9	21013.6	20161.0							
36	Chromium	121632.4	118447.0	121423.7	120490.8	153096.0	144808.8	157871.8	151808.3							
37	Lead	110574.9	108658.0	114096.4	111066.9	122114.9	117154.9	126312.1	121779.8							
38	Mercury	0.0	0.0	0.0	0.0	18.7	16.7	22.3	19.2							
39	Nickel	0.0	0.0	0.0	0.0	12756.3	12813.8	14769.7	13425.6							
40	Selenium	0.0	0.0	0.0	0.0	1094.7	683.3	1390.1	1048.4							
41	Silver	0.0	0.0	0.0	0.0	275.4	333.8	287.9	299.5							
42	Thallium	0.0	0.0	0.0	0.0	1000.9	548.3	916.3	818.3							
43																
44	SVM	129473.2	127844.5	134298.8	130486.8	141756.0	137014.8	147325.7	141940.9							
45	LVM	162746.2	158386.2	170307.2	163705.9	197025.6	187529.4	209700.7	197869.6							
46																
47	302C11	R1	R2	R3	Cond Avg	R1	R2	R3	Cond Avg							
48																
49	Feedstream Number	F3	F3	F3	F3	F4	F4	F4	F4							
50	Feed Class	Spike	Spike	Spike	Spike	Total	Total	Total	Total							
51	Feedstream Description	Spike	Spike	Spike	Spike	Total	Total	Total	Total							
52	Feed Rate															
53	Thermal Feedrate	1	1	1	1	187	192	186	189							

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
54	Chlorine		g/hr		4970		4620		2060		3883		107000		114000		118000		113000	
55																				
56	302C12				R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg	
57																				
58	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2	
59	Feed Class				Raw Material		Raw Material		Raw Material		Raw Material		Liq HW		Liq HW		Liq HW		Liq HW	
60	Feedstream Description				Raw Matl		Raw Matl		Raw Matl		Raw Matl		Liq Waste		Liq Waste		Liq Waste		Liq Waste	
61	Feed Rate		g/hr		74800000		75900000		75600000		75433333		7110000		6900000				7005000	
62	Thermal Feedrate		MMBtu/hr		0		0		0		0		185		182		186		184	
63	Chlorine		g/hr		4880		6090		4810		5260		182000		167000		184000		177667	

	B	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
54	Chlorine	46800		48200		48800		47933								
55																
56	302C12	R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
57																
58	Feedstream Number	F3		F3		F3		F3		F4		F4		F4		F4
59	Feed Class	Spike		Spike		Spike		Spike		Total		Total		Total		Total
60	Feedstream Description	Spike		Spike		Spike		Spike		Total		Total		Total		Total
61	Feed Rate															
62	Thermal Feedrate									185		182		186		184
63	Chlorine															

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	Feedstream 2																				
2																					
3																					
4	302C1		R1		R2		R3		R4		R5		R6		R1		R2		R3		
5																					
6	Feedstream Number		F1		F1		F1		F1		F1		F1		F2		F2		F2		
7	Feed Class		Raw Material		Raw Material		Raw Material		Raw Material		Raw Material		Raw Material		Spike		Spike		Spike		
8	Feed Class 2		RM		RM		RM		RM		RM		RM		Spike		Spike		Spike		
9	Feedstream Description		Raw material slur		Raw material slur		Raw material slur		Raw material slur		Raw material slur		Raw material slu		Raw material slu		Spiked metals liq		Spiked metals liquic		Spiked metals
10	Feed Rate	lb/hr	156526		162698		161596		156526		163139		161155		14572		14793		14550		
11	Heating Value	Btu/lb													12400		12300		11900		
12	Thermal Feedrate	MMBtu/hr													181		182		173		
13	Chlorine	lb/hr	31		16		32		63		33		16		452		444		378		
14	Antimony	lb/hr					nd		15.30		nd		13.40		nd		15.70				
15	Arsenic	lb/hr							0.69				0.62				0.75				
16	Barium	lb/hr							29.80				26.10				27.30				
17	Beryllium	lb/hr							0.06				0.05				0.05				
18	Cadmium	lb/hr					nd		0.15		nd		0.13		nd		0.14				
19	Chromium	lb/hr							7.98				4.74				5.16				
20	Lead	lb/hr							0.17				0.17				0.08				
21	Mercury	lb/hr					nd		0.00		nd		0.00		nd		0.00				
22	Silver	lb/hr					nd		6.81		nd		5.95		nd		6.99				
23	Thallium	lb/hr					nd		0.77		nd		0.66		nd		0.82				
24																					
25	Stack Gas Flowrate	dscfm	43971		45558		43375		42915		45006		44818		43971		45558		43375		
26	Oxygen	%	7		7		7		7		7		7.5		7		7		7		
27																					
28	<i>Feedrate MTEC Calculations</i>																				
29	Chlorine	ug/dscm	190325		95662		199105		390017		193671		99606		2748465		2605772		2330078		
30	Antimony	ug/dscm					100		95324		100		79607		100		97131				
31	Arsenic	ug/dscm							4286				3677				4640				
32	Barium	ug/dscm							185663				155056				168897				
33	Beryllium	ug/dscm							371				275				314				
34	Cadmium	ug/dscm					100		959		100		796		100		885				
35	Chromium	ug/dscm							49718				28160				31923				
36	Lead	ug/dscm							1059				1022				518				
37	Mercury	ug/dscm					100		15		100		13		100		16				
38	Silver	ug/dscm					100		42428		100		35348		100		43245				
39	Thallium	ug/dscm					100		4810		100		3927		100		5048				
40	SVM	ug/dscm					48		2019		44		1818		63		1403				
41	LVM	ug/dscm							54375				32112				36877				
42																					
43																					
44	302C2																				
45																					
46	Feedrate																				
47	Heating value																				
48																					
49	302C3		R1		R2		R3		R4		R5		R6		R1		R2		R3		
50																					
51	Feedstream Number		F1		F1		F1		F1		F1		F1		F2		F2		F2		
52	Feed Class		Raw Material		Raw Material		Raw Material		Raw Material		Raw Material		Raw Material		Spike		Spike		Spike		
53	Feed Class 2		RM		RM		RM		RM		RM		RM								

	B	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
1	Feedstream 2																														
2																															
3																															
4	302C1		R4		R5		R6		R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5		R6
5																															
6	Feedstream Number		F2		F2		F2		F3		F3		F3		F3		F3		F3		F3		F4		F4		F4		F4		F4
7	Feed Class		Spike		Spike		Spike		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Coal		Coal		Coal		Coal		Coal
8	Feed Class 2		Spike		Spike		Spike															Coal		Coal		Coal		Coal		Coal	
9	Feedstream Description		Spiked metal		Spiked metal		Spiked metal		Solid contain		Solid contain		Solid contain		Solid contain		Solid contain		Solid contain		Solid contain		Coal		Coal		Coal		Coal		Coal
10	Feed Rate		14528		15146		15057		359		359		359		359		359		359		359										
11	Heating Value		12100		12100		12100																								
12	Thermal Feedrate		176		183		182																								
13	Chlorine		407		414		422																								
14	Antimony		15.6		13.8		16																								
15	Arsenic		7.93		7		8.16																								
16	Barium		45.9		47.5		48.6																								
17	Beryllium		0.545		0.529		0.578																								
18	Cadmium		4.49		4.55		5.17																								
19	Chromium		27		24.5		24.9																								
20	Lead		57.6		68.6		64.2																								
21	Mercury		0.00882		0.00772		0.00838																								
22	Silver		7		6.03		7.39																								
23	Thallium		1.05		0.966		1.11																								
24																															
25	Stack Gas Flowrate		42915		45006		44818		43971		45558		43375		42915		45006		44818		43971		45558		43375		42915		45006		44818
26	Oxygen		7		7		7.5		7		7		7		7		7		7.5		7		7		7		7		7		7.5
27																															
28	<i>Feedrate MTEC Ca</i>																														
29	Chlorine		2535733		2459507		2610793		0		0		0		0		0		0		0		0		0		0		0		0
30	Antimony		97193		81984		98987																								
31	Arsenic		49406		41586		50484																								
32	Barium		285971		282190		300674																								
33	Beryllium		3396		3143		3576																								
34	Cadmium		27974		27031		31985																								
35	Chromium		168218		145551		154049																								
36	Lead		358865		407542		397187																								
37	Mercury		55		46		52																								
38	Silver		43612		35823		45720																								
39	Thallium		6542		5739		6867																								
40	SVM		386839		434572		429172																								
41	LVM		221020		190279		208109																								
42																															
43																															
44	302C2																														
45																															
46	Feedrate																														
47	Heating value																														
48																															
49	302C3		R4		R5		R6		R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5		R6
50																															
51	Feedstream Number		F2		F2		F2		F3		F3		F3		F3		F3		F3		F3		F4		F4		F4		F4		F4
52	Feed Class		Spike		Spike		Spike		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Coal		Coal		Coal		Coal		Coal
53	Feed Class 2																														

	B	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU
1	Feedstream 2																					
2																						
3																						
4	302C1	R1	R2	R3	R4	R5	R6	R1	R2	R3	R4											
5																						
6	Feedstream Number	F5	F5	F5	F5	F5	F5	F5	F6	F6	F6	F6										
7	Feed Class	Liq HW	Liq HW	Liq HW	Liq HW	Liq HW	Liq HW	Liq HW	Spike	Spike	Spike	Spike										
8	Feed Class 2	HW	HW	HW	HW	HW	HW	HW														
9	Feedstream Description	Liquid waste	Liquid waste	Liquid waste	Liquid waste	Liquid waste	Liquid waste	Liquid waste	Metals spike	Metals spike	Metals spike	Metals spike										
10	Feed Rate																					
11	Heating Value																					
12	Thermal Feedrate																					
13	Chlorine																					
14	Antimony																					
15	Arsenic																					
16	Barium																					
17	Beryllium																					
18	Cadmium																					
19	Chromium																					
20	Lead																					
21	Mercury																					
22	Silver																					
23	Thallium																					
24																						
25	Stack Gas Flowrate	43971	45558	43375	42915	45006	44818	43971	45558	43375	42915											
26	Oxygen	7	7	7	7	7	7.5	7	7	7	7											
27																						
28	<i>Feedrate MTEC Ca</i>																					
29	Chlorine	0	0	0	0	0	0	0	0	0	0											
30	Antimony																					
31	Arsenic																					
32	Barium																					
33	Beryllium																					
34	Cadmium																					
35	Chromium																					
36	Lead																					
37	Mercury																					
38	Silver																					
39	Thallium																					
40	SVM																					
41	LVM																					
42																						
43																						
44	302C2																					
45																						
46	Feedrate	12015.07	11221.41	11508.012																		
47	Heating value	10986.2032	10961.19	10948.89369																		
48																						
49	302C3	R1	R2	R3	R4	R5	R6	R1	R2	R3	R4											
50																						
51	Feedstream Number	F5	F5	F5	F5	F5	F5	F5	F6	F6	F6	F6										
52	Feed Class	Liq HW	Liq HW	Liq HW	Liq HW	Liq HW	Liq HW	Liq HW	Spike	Spike	Spike	Spike										
53	Feed Class 2	HW	HW	HW	HW	HW	HW	HW	Spike	Spike	Spike	Spike										

	B	BV	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL
1	Feedstream 2																
2																	
3																	
4	302C1	R5	R6		R1		R2		R3		R4		R5		R6		Cond Avg
5																	
6	Feedstream Number	F6	F6		F7		F7		F7		F7		F7		F7		F7
7	Feed Class	Spike	Spike		Total		Total		Total		Total		Total		Total		Total
8	Feed Class 2				Total		Total		Total		Total		Total		Total		Total
9	Feedstream Description	Metals spike	Metals spike		Total		Total		Total		Total		Total		Total		Total
10	Feed Rate																
11	Heating Value																
12	Thermal Feedrate				181		182		173		176		183		182		180
13	Chlorine																
14	Antimony																
15	Arsenic																
16	Barium																
17	Beryllium																
18	Cadmium																
19	Chromium																
20	Lead																
21	Mercury																
22	Silver																
23	Thallium																
24																	
25	Stack Gas Flowrate	45006	44818														
26	Oxygen	7	7.5														
27																	
28	<i>Feedrate MTEC Ca</i>																
29	Chlorine	0	0		2938790		2701435		2529183		2925749		2653179		2710399		2743122
30	Antimony	0	0						50		192516	49	161591	50	196119	49	183409
31	Arsenic	0	0								53693		45263		55124		51360
32	Barium	0	0								471634		437246		469572		459484
33	Beryllium	0	0								3766		3418		3890		3691
34	Cadmium	0	0						3		28934	3	27827	3	32870	3	29877
35	Chromium	0	0								217936		173710		185973		192540
36	Lead	0	0								359925		408563		397705		388731
37	Mercury	0	0								70	22	59	24	68	23	66
38	Silver	0	0								86040	50	71171	49	88965	49	82059
39	Thallium	0	0								11352	41	9666	42	11916	42	10978
40	SVM	0	0								388858	0	436390	0	430575	0	418608
41	LVM	0	0								275395		222391		244986		247591
42																	
43																	
44	302C2																
45																	
46	Feedrate																
47	Heating value																
48																	
49	302C3	R5	R6		R1		R2		R3		R4		R5		R6		Cond Avg
50																	
51	Feedstream Number	F6	F6		F7		F7		F7		F7		F7		F7		F7
52	Feed Class	Spike	Spike		Total		Total		Total		Total		Total		Total		Total
53	Feed Class 2	Spike	Spike		Total		Total		Total		Total		Total		Total		Total

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
54	Feedstream Description				Raw material slur	Raw material slur	Raw material slur	Raw material slur	Raw material slur	Raw material slur	Raw material slur	Raw material slur	Raw material slur	Raw material slur	Raw material slur	Raw material slur	Spiked metals liq	Spiked metals liquic	Spiked metals		
55	Feed Rate	lb/hr			151896.94		155644.76		155865.22												
56	Heating Value	Btu/lb																			
57	Thermal Feedrate	MMBtu/hr																			
58	Chlorine	lb/hr		nd	0.00		16.51		16.83												
59	Antimony	lb/hr			0.70		0.48		0.39												
60	Arsenic	lb/hr			1.21		0.56		0.75												
61	Barium	lb/hr			23.25		28.42		33.34												
62	Beryllium	lb/hr			0.29		0.21		0.25												
63	Cadmium	lb/hr		nd	0.00	nd	0.00	nd	0.00												
64	Chromium	lb/hr			4.86		3.19		3.90												
65	Lead	lb/hr		nd	0.00	nd	0.00	nd	0.00												
66	Mercury	lb/hr		nd	0.07	nd	0.08	nd	0.08												
67	Silver	lb/hr			0.41		0.38		0.44												
68	Thallium	lb/hr		nd	0.07	nd	0.08		0.08												
69																					
70	Stack Gas Flowrate	dscfm			41624		41705		44042								41624		41705		44042
71	Oxygen	%			10.27		10.4		10.3								10.27		10.4		10.3
72																					
73	Chlorine	ug/dscm		100	0		139762		133666								0		0		0
74	Antimony	ug/dscm			5857		4088		3100								0		0		0
75	Arsenic	ug/dscm			10181		4741		5936								0		0		0
76	Barium	ug/dscm			194822		240622		264845								0		0		0
77	Beryllium	ug/dscm			2420		1773		1979								0		0		0
78	Cadmium	ug/dscm		100	0	100	0	100	0								0		0		0
79	Chromium	ug/dscm			40742		27030		30943								0		0		0
80	Lead	ug/dscm		100	0	100	0	100	0								0		0		0
81	Mercury	ug/dscm		100	628	100	653	100	613								0		0		0
82	Silver	ug/dscm			3437		3229		3467								0		0		0
83	Thallium	ug/dscm		100	628	100	653		613								0		0		0
84	SVM	ug/dscm			0		0		0								0		0		0
85	LVM	ug/dscm			53343		33545		38858								0		0		0
86																					
87	302C4				R1		R2		R3		R4		R5		R6		R1		R2		R3
88																					
89	Feedstream Number				F1		F1		F1		F1		F1		F1		F2		F2		F2
90	Feed Class				Raw Material		Raw Material		Raw Material		Raw Material		Raw Material		Raw Material		Spike		Spike		Spike
91	Feedstream Description				Raw material slur		Raw material slur		Raw material slur		Raw material slur		Raw material slur		Raw material slur		Spiked metals liq		Spiked metals liquic		Spiked metals
92	Feed Rate	lb/hr			150132		141534		146825												
93	Heating Value	Btu/lb																			
94	Chlorine	lb/hr		nd	0	nd	0	nd	0												
95	Antimony	lb/hr			0.450		0.227		0.265												
96	Arsenic	lb/hr			0.752		0.509		0.265												
97	Barium	lb/hr			32.745		29.002		30.549												
98	Beryllium	lb/hr			0.256		0.227		0.265												
99	Cadmium	lb/hr		nd	0.000		0.112	nd	0.000												
100	Chromium	lb/hr			4.356		3.821		3.818												
101	Lead	lb/hr		nd	0.000		0.425	nd	0.000												
102	Mercury	lb/hr			0.075		0.071		0.073												
103	Silver	lb/hr			0.406		0.256		0.337												
104	Thallium	lb/hr			0.075		0.071		0.073												

	B	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
54	Feedstream Descrip	liqu	Spiked metal:	Spiked metal:	Spiked metal:	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal
55	Feed Rate																														
56	Heating Value																														
57	Thermal Feedrate																														
58	Chlorine																														
59	Antimony																														
60	Arsenic																														
61	Barium																														
62	Beryllium																														
63	Cadmium																														
64	Chromium																														
65	Lead																														
66	Mercury																														
67	Silver																														
68	Thallium																														
69																															
70	Stack Gas Flowrate							41624		41705		44042										41624		41705		44042					
71	Oxygen							10.27		10.4		10.3										10.27		10.4		10.3					
72																															
73	Chlorine							0		0		0										0		0		0					
74	Antimony							0		0		0										0		0		0					
75	Arsenic							0		0		0										0		0		0					
76	Barium							0		0		0										0		0		0					
77	Beryllium							0		0		0										0		0		0					
78	Cadmium							0		0		0										0		0		0					
79	Chromium							0		0		0										0		0		0					
80	Lead							0		0		0										0		0		0					
81	Mercury							0		0		0										0		0		0					
82	Silver							0		0		0										0		0		0					
83	Thallium							0		0		0										0		0		0					
84	SVM							0		0		0										0		0		0					
85	LVM							0		0		0										0		0		0					
86																															
87	302C4		R4		R5		R6		R1		R2		R3		R4		R5		R6		R1		R2		R3		R4		R5		R6
88																															
89	Feedstream Numb		F2		F2		F2		F3		F3		F3		F3		F3		F3		F3		F4		F4		F4		F4		F4
90	Feed Class		Spike		Spike		Spike		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Solid HW		Coal		Coal		Coal		Coal		Coal
91	Feedstream Descrip	liqu	Spiked metal:	Spiked metal:	Spiked metal:	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Solid contai	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	
92	Feed Rate																														
93	Heating Value																														
94	Chlorine																														
95	Antimony																														
96	Arsenic																														
97	Barium																														
98	Beryllium																														
99	Cadmium																														
100	Chromium																														
101	Lead																														
102	Mercury																														
103	Silver																														
104	Thallium																														

	B	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU
54	Feedstream Descrij		Liquid waste		Liquid waste		Liquid waste		Liquid waste		Liquid waste		Liquid waste		Metals spike		Metals spike		Metals spike		Metals spike	
55	Feed Rate		12301.668		11772.56		12081.208								43.43062		42.085814		41.380342			
56	Heating Value		12611		12466		16055								0		0		0			
57	Thermal Feedrate		155.1		146.8		194.0															
58	Chlorine		226.306599		231.364		331.0140762															
59	Antimony		0.0970024		0.3		0.2270738															
60	Arsenic		0.0308644		0.030864	nd	0								5.8951004		5.6812542		5.3858378			
61	Barium		2.3765588		7.129676		7.1583362															
62	Beryllium		0.0088184		0.008818		0.0088184															
63	Cadmium		0.0617288		0.090389		0.0859794								1.9775262		1.9598894		1.918002			
64	Chromium		0.319667		1.000888		0.9788424								13.3753082		10.055181		12.1230954			
65	Lead		0.628311		1.410944		1.521174								23.1328678		24.400513		22.5552626			
66	Mercury	nd	0.00617288	nd	0.005952	nd	0.00595242															
67	Silver		0.02821888		0.016535		0.0132276															
68	Thallium	nd	0.00617288		0.005952		0.00595242															
69																						
70	Stack Gas Flowrate		41624		41705		44042								41624		41705		44042			
71	Oxygen		10.27		10.4		10.3								10.27		10.4		10.3			
72																						
73	Chlorine		1896705		1959061		2629310								0		0		0			
74	Antimony		813		2540		1804								0		0		0			
75	Arsenic		259		261	100	0								49408		48106		42781			
76	Barium		19918		60370		56860								0		0		0			
77	Beryllium		74		75		70								0		0		0			
78	Cadmium		517		765		683								16574		16595		15235			
79	Chromium		2679		8475		7775								112100		85142		96296			
80	Lead		5266		11947		12083								193880		206610		179161			
81	Mercury	##	52	100	50	100	47								0		0		0			
82	Silver		237		140		105								0		0		0			
83	Thallium	##	52		50		47								0		0		0			
84	SVM		5783		12712		12766								210454		223205		194396			
85	LVM		3012		8811		7845								161508		133247		139077			
86																						
87	302C4		R1		R2		R3		R4		R5		R6		R1		R2		R3		R4	
88																						
89	Feedstream Numb		F5		F5		F5		F5		F5		F5		F6		F6		F6		F6	
90	Feed Class		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Spike		Spike		Spike		Spike	
91	Feedstream Descrij		Liquid waste		Liquid waste		Liquid waste		Liquid waste		Liquid waste		Liquid waste		Metals spike		Metals spike		Metals spike		Metals spike	
92	Feed Rate		11949		11706		12169															
93	Heating Value		12142		11848		14031															
94	Chlorine		270		274		310															
95	Antimony		0.351		0.174		0.130															
96	Arsenic	nd	0.000	nd	0.000	nd	0.000															
97	Barium		5.635		3.898		3.593															
98	Beryllium		0.004		0.004		0.007															
99	Cadmium		0.062		0.046		0.051															
100	Chromium		0.836		0.562		0.549															
101	Lead		1.279		0.736		1.085															
102	Mercury		0.006		0.006		0.006															
103	Silver		0.015		0.006		0.006															
104	Thallium		0.006		0.006		0.006															

	B	BV	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL
54	Feedstream Description	Metals spike	Metals spike	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
55	Feed Rate																
56	Heating Value																
57	Thermal Feedrate				155.1		146.8		194.0								165.3
58	Chlorine																
59	Antimony																
60	Arsenic																
61	Barium																
62	Beryllium																
63	Cadmium																
64	Chromium																
65	Lead																
66	Mercury																
67	Silver																
68	Thallium																
69																	
70	Stack Gas Flowrate																
71	Oxygen																
72																	
73	Chlorine				1898705		2098823		2762976								2252835
74	Antimony				6670		6628		4903								6067
75	Arsenic				59847		53109		48717								53891
76	Barium				214740		300992		321705								279146
77	Beryllium				2494		1848		2049								2130
78	Cadmium				17091		17361		15918								16790
79	Chromium				155521		120647		135014								137061
80	Lead				199146		218557		191244								202982
81	Mercury			100	680	100	704	100	660							##	681
82	Silver				3673		3369		3572								3538
83	Thallium			100	680	93	704		660							65	681
84	SVM				216237		235918		207162								219772
85	LVM				217863		175603		185780								193082
86																	
87	302C4	R5	R6		R1		R2		R3		R4		R5		R6		Cond Avg
88																	
89	Feedstream Number	F6	F6		F7		F7		F7		F7		F7		F7		F7
90	Feed Class	Spike	Spike		Total		Total		Total		Total		Total		Total		Total
91	Feedstream Description	Metals spike	Metals spike		Total		Total		Total		Total		Total		Total		Total
92	Feed Rate																
93	Heating Value																
94	Chlorine																
95	Antimony																
96	Arsenic																
97	Barium																
98	Beryllium																
99	Cadmium																
100	Chromium																
101	Lead																
102	Mercury																
103	Silver																
104	Thallium																

	B	C	D	E	F	G	H
1	Process Information 1						
2				1	2	3	Cond Avg
3	302C10		CoC, high temp				
4							
5	FF Pressure Drop	in H2O		6.71	6.71	6.71	
6	FF Inlet Temp	F		358	359	392	369.7
7	Burning Zone Temp	F		2967	2992	2963	
8	Mid Kiln Bypass Flow	%		11.7	11.4	11.1	
9							
10	302C11		CoC, low temp				
11							
12	FF Pressure Drop	in H2O		6.69	6.71	6.8	
13	FF Inlet Temp	F		397	411	404	404.0
14	Burning Zone Temp	F		1895	1835	1847	
15	Mid Kiln Bypass	%		11.6	10.9	11.9	
16							
17	302C12		Risk Burn				
18							
19	FF Pressure Drop	in H2O		7.1	6.92	6.92	
20	FF Inlet Temp	F		414	401	395	403.3
21	Burning Zone Temp	F		2483	2635	2729	
22	Mid Kiln Bypass	%		12.1	11.2	11	

	C	D	E	F	G	H	I	J
1	Process Information 2							
2								
3	Note: Old ESP performance. ESP has been removed and replaced with FF.							
4								
5	302C1		1	2	3	4	5	6
6								
7	Combustion Temperature	F	1625	1717	1702	1699	1723	1781
8	ESP Temperature	F	421	408	429	445	429	432
9	ESP Power	kVA	126	127	118	116	114	117
10								
11	302C2							
12								
13	Combustion Temperature	F	1490	1620	1646			
14	ESP Temperature	F	403	403	395			
15								
16	302C3							
17								
18	Combustion Temperature	F	2959	2972	2944			
19	ESP Temperature	F	390	379	375			
20	ESP Power	kVA	119	120	119			
21								
22	302C4							
23								
24	Combustion Temperature	F	2380	2591	2468			
25	ESP Temperature	F	365	383	382			
26	ESP Power	kVA	120	121	124			

	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:																
4		Condition ID:																
5		Condition/Test Date:																
6																		
7																		
8		I-TEF																
9		Wght Fact																
10		Detected in sample volume (ng)																
11		2,3,7,8-TCDD	1		0.19	0.1900	0.190	0.1900		0.15	0.1500	0.150	0.1500		0.16	0.1600	0.160	0.1600
12		TCDD Total	0		12	0.0000	12.000	0.0000		7	0.0000	7.000	0.0000		9.2	0.0000	9.200	0.0000
13		1,2,3,7,8-PCDD	0.5		0.19	0.0950	0.190	0.0950		0.11	0.0550	0.110	0.0550		0.15	0.0750	0.150	0.0750
14		PCDD Total	0		6.6	0.0000	6.600	0.0000		3.7	0.0000	3.700	0.0000		4.9	0.0000	4.900	0.0000
15		1,2,3,4,7,8-HxCDD	0.1		0.14	0.0140	0.140	0.0140		0.06	0.0060	0.060	0.0060		0.09	0.0090	0.090	0.0090
16		1,2,3,6,7,8-HxCDD	0.1		0.08	0.0080	0.080	0.0080		0.04	0.0040	0.040	0.0040		0.06	0.0060	0.060	0.0060
17		1,2,3,7,8,9-HxCDD	0.1		0.04	0.0040	0.040	0.0040		0.02	0.0020	0.020	0.0020		0.03	0.0030	0.030	0.0030
18		HxCDD Total	0		4.6	0.0000	4.600	0.0000		2.7	0.0000	2.700	0.0000		3.3	0.0000	3.300	0.0000
19		1,2,3,4,6,7,8-HpCDD	0.01		0.07	0.0007	0.070	0.0007		0.06	0.0006	0.060	0.0006		0.05	0.0005	0.050	0.0005
20		HpCDD Total	0		0.15	0.0000	0.150	0.0000		0.13	0.0000	0.130	0.0000		0.12	0.0000	0.120	0.0000
21		OCDD	0.001		0.04	0.0000	0.040	0.0000		0.05	0.0001	0.050	0.0001		0.04	0.0000	0.040	0.0000
22		2,3,7,8-TCDF	0.1		0.73	0.0730	0.730	0.0730		0.43	0.0430	0.430	0.0430		0.65	0.0650	0.650	0.0650
23		TCDF Total	0		33	0.0000	33.000	0.0000		18	0.0000	18.000	0.0000		30	0.0000	30.000	0.0000
24		1,2,3,7,8-PCDF	0.05		0.28	0.0140	0.280	0.0140		0.14	0.0070	0.140	0.0070		0.24	0.0120	0.240	0.0120
25		2,3,4,7,8-PCDF	0.5		0.53	0.2650	0.530	0.2650		0.21	0.1050	0.210	0.1050		0.42	0.2100	0.420	0.2100
26		PCDF Total	0		7	0.0000	7.000	0.0000		3.1	0.0000	3.100	0.0000		5.7	0.0000	5.700	0.0000
27		1,2,3,4,7,8-HxCDF	0.1		0.08	0.0080	0.080	0.0080		0.04	0.0040	0.040	0.0040		0.06	0.0060	0.060	0.0060
28		1,2,3,6,7,8-HxCDF	0.1		0.09	0.0090	0.090	0.0090		0.04	0.0040	0.040	0.0040		0.08	0.0080	0.080	0.0080
29		2,3,4,6,7,8-HxCDF	0.1		0.07	0.0070	0.070	0.0070		0.03	0.0030	0.030	0.0030		0.06	0.0060	0.060	0.0060
30		1,2,3,7,8,9-HxCDF	0.1		0.03	0.0030	0.030	0.0030		0.01	0.0010	0.010	0.0010		0.02	0.0020	0.020	0.0020
31		HxCDF Total	0		0.83	0.0000	0.830	0.0000		0.34	0.0000	0.340	0.0000		0.65	0.0000	0.650	0.0000
32		1,2,3,4,6,7,8-HpCDF	0.01		0.03	0.0003	0.030	0.0003		0.02	0.0002	0.020	0.0002		0.02	0.0002	0.020	0.0002
33		1,2,3,4,7,8,9-HpCDF	0.01	nd	0.005	0.0001	0.003	0.0000	nd	0.004	0.0000	0.002	0.0000	nd	0.005	0.0001	0.003	0.0000
34		HpCDF Total	0		0.03	0.0000	0.030	0.0000		0.02	0.0000	0.020	0.0000		0.02	0.0000	0.020	0.0000
35		OCDF	0.001	nd	0.005	0.0000	0.003	0.0000	nd	0.009	0.0000	0.005	0.0000	nd	0.008	0.0000	0.004	0.0000
36																		
37		Gas sample volume (dscf)				145.97	145.97	145.97			147.88	147.88	147.88			150.60	150.60	150.60
38		O2 (%)				7.37	7.37	7.37			7.1	7.1	7.1			7.50	7.5	7.50
39																		
40		PCDD/PCDF (ng in sample)				0.691	64.253	0.691			0.385	35.045	0.385			0.563	53.934	0.563
41		PCDD/PCDF (ng/dscm @ 7% O2)		0.0		0.172	15.976	0.172	0.0		0.093	8.434	0.093	0.0		0.137	13.123	0.137
42																		
43		TEQ Cond Avg		0.134														
44		Total Cond Avg		12.511														

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:	Lafarge, Paulding, OH															
4	Condition ID:	302C11															
5	Condition/Test Date:	CoC burn, low temp, May 1998															
6																	
7		I-TEF	Run 1				Run 2				Run 3						
8		Wght Fact	Total	TEQ	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	Full ND	Full ND	1/2 ND
10	Detected in sample volume (ng)																
11	2,3,7,8-TCDD	1	0.24	0.2400	0.240	0.2400	0.23	0.2300	0.230	0.2300	0.26	0.2600	0.260	0.2600			
12	TCDD Total	0	15	0.0000	15.000	0.0000	14	0.0000	14.000	0.0000	2.2	0.0000	2.200	0.0000			
13	1,2,3,7,8-PCDD	0.5	0.31	0.1550	0.310	0.1550	0.3	0.1500	0.300	0.1500	0.38	0.1900	0.380	0.1900			
14	PCDD Total	0	7.8	0.0000	7.800	0.0000	8.9	0.0000	8.900	0.0000	14	0.0000	14.000	0.0000			
15	1,2,3,4,7,8-HxCDD	0.1	0.12	0.0120	0.120	0.0120	0.18	0.0180	0.180	0.0180	0.25	0.0250	0.250	0.0250			
16	1,2,3,6,7,8-HxCDD	0.1	0.13	0.0130	0.130	0.0130	0.12	0.0120	0.120	0.0120	0.19	0.0190	0.190	0.0190			
17	1,2,3,7,8,9-HxCDD	0.1	0.06	0.0060	0.060	0.0060	0.09	0.0090	0.090	0.0090	0.09	0.0090	0.090	0.0090			
18	HxCDD Total	0	14	0.0000	14.000	0.0000	17	0.0000	17.000	0.0000	16	0.0000	16.000	0.0000			
19	1,2,3,4,6,7,8-HpCDD	0.01	0.34	0.0034	0.340	0.0034	0.39	0.0039	0.390	0.0039	0.37	0.0037	0.370	0.0037			
20	HpCDD Total	0	0.78	0.0000	0.780	0.0000	0.88	0.0000	0.880	0.0000	0.86	0.0000	0.860	0.0000			
21	OCDD	0.001	0.15	0.0002	0.150	0.0002	0.17	0.0002	0.170	0.0002	0.13	0.0001	0.130	0.0001			
22	2,3,7,8-TCDF	0.1	1.1	0.1100	1.100	0.1100	1.1	0.1100	1.100	0.1100	1.3	0.1300	1.300	0.1300			
23	TCDF Total	0	38	0.0000	38.000	0.0000	41	0.0000	41.000	0.0000	50	0.0000	50.000	0.0000			
24	1,2,3,7,8-PCDF	0.05	0.39	0.0195	0.390	0.0195	0.4	0.0200	0.400	0.0200	0.51	0.0255	0.510	0.0255			
25	2,3,4,7,8-PCDF	0.5	0.73	0.3650	0.730	0.3650	0.78	0.3900	0.780	0.3900	1	0.5000	1.000	0.5000			
26	PCDF Total	0	9.1	0.0000	9.100	0.0000	9.8	0.0000	9.800	0.0000	12	0.0000	12.000	0.0000			
27	1,2,3,4,7,8-HxCDF	0.1	0.18	0.0180	0.180	0.0180	0.19	0.0190	0.190	0.0190	0.18	0.0180	0.180	0.0180			
28	1,2,3,6,7,8-HxCDF	0.1	0.14	0.0140	0.140	0.0140	0.16	0.0160	0.160	0.0160	0.17	0.0170	0.170	0.0170			
29	2,3,4,6,7,8-HxCDF	0.1	0.15	0.0150	0.150	0.0150	0.15	0.0150	0.150	0.0150	0.15	0.0150	0.150	0.0150			
30	1,2,3,7,8,9-HxCDF	0.1	0.04	0.0040	0.040	0.0040	0.05	0.0050	0.050	0.0050	0.05	0.0050	0.050	0.0050			
31	HxCDF Total	0	1.5	0.0000	1.500	0.0000	1.6	0.0000	1.600	0.0000	1.7	0.0000	1.700	0.0000			
32	1,2,3,4,6,7,8-HpCDF	0.01	0.07	0.0007	0.070	0.0007	0.08	0.0008	0.080	0.0008	0.07	0.0007	0.070	0.0007			
33	1,2,3,4,7,8,9-HpCDF	0.01	0.01	0.0001	0.010	0.0001	0.02	0.0002	0.020	0.0002	0.01	0.0001	0.010	0.0001			
34	HpCDF Total	0	0.12	0.0000	0.120	0.0000	0.13	0.0000	0.130	0.0000	0.09	0.0000	0.090	0.0000			
35	OCDF	0.001	0.01	0.0000	0.010	0.0000	0.01	0.0000	0.010	0.0000	nd	0.009	0.0000	0.005	0.0000		
36																	
37	Gas sample volume (dscf)			138.80	138.80	138.80		141.98	141.98	141.98		140.78	140.78	140.78			
38	O2 (%)			6.70	6.70	6.70		6.6	6.6	6.6		6.84	6.8	6.84			
39																	
40	PCDD/PCDF (ng in sample)			0.976	86.460	0.976		0.999	93.490	0.999		1.218	96.985	1.218			
41	PCDD/PCDF (ng/dscm @ 7% O2)	0.0		0.243	21.549	0.243	0.0	0.242	22.621	0.242	0.0	0.302	24.068	0.302			
42																	
43	TEQ Cond Avg		0.262														
44	Total Cond Avg		22.746														

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:	Lafarge, Paulding, OH															
4	Condition ID:	302C12															
5	Condition/Test Date:	Risk burn, normal operations, May 1998															
6																	
7		I-TEF				Run 1				Run 2				Run 3			
8		Wght Fact	Total	TEQ	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	Full ND	Full ND	
10	Detected in sample volume (ng)																
11	2,3,7,8-TCDD	1	0.17	0.1700	0.170	0.1700	0.27	0.2700	0.270	0.2700	0.22	0.2200	0.220	0.2200			
12	TCDD Total	0	16	0.0000	16.000	0.0000	26	0.0000	26.000	0.0000	17	0.0000	17.000	0.0000			
13	1,2,3,7,8-PCDD	0.5	0.34	0.1700	0.340	0.1700	0.5	0.2500	0.500	0.2500	0.31	0.1550	0.310	0.1550			
14	PCDD Total	0	12	0.0000	12.000	0.0000	18	0.0000	18.000	0.0000	14	0.0000	14.000	0.0000			
15	1,2,3,4,7,8-HxCDD	0.1	0.14	0.0140	0.140	0.0140	0.4	0.0400	0.400	0.0400	0.22	0.0220	0.220	0.0220			
16	1,2,3,6,7,8-HxCDD	0.1	0.19	0.0190	0.190	0.0190	0.34	0.0340	0.340	0.0340	0.2	0.0200	0.200	0.0200			
17	1,2,3,7,8,9-HxCDD	0.1	0.1	0.0100	0.100	0.0100	0.2	0.0200	0.200	0.0200	0.11	0.0110	0.110	0.0110			
18	HxCDD Total	0	27	0.0000	27.000	0.0000	29	0.0000	29.000	0.0000	22	0.0000	22.000	0.0000			
19	1,2,3,4,6,7,8-HpCDD	0.01	0.93	0.0093	0.930	0.0093	1.11	0.0111	1.110	0.0111	0.55	0.0055	0.550	0.0055			
20	HpCDD Total	0	2.1	0.0000	2.100	0.0000	2.41	0.0000	2.410	0.0000	1.3	0.0000	1.300	0.0000			
21	OCDD	0.001	0.3	0.0003	0.300	0.0003	0.31	0.0003	0.310	0.0003	0.2	0.0002	0.200	0.0002			
22	2,3,7,8-TCDF	0.1	0.71	0.0710	0.710	0.0710	1.3	0.1300	1.300	0.1300	1.1	0.1100	1.100	0.1100			
23	TCDF Total	0	27	0.0000	27.000	0.0000	52	0.0000	52.000	0.0000	40	0.0000	40.000	0.0000			
24	1,2,3,7,8-PCDF	0.05	0.26	0.0130	0.260	0.0130	0.49	0.0245	0.490	0.0245	0.41	0.0205	0.410	0.0205			
25	2,3,4,7,8-PCDF	0.5	0.59	0.2950	0.590	0.2950	1.2	0.6000	1.200	0.6000	0.95	0.4750	0.950	0.4750			
26	PCDF Total	0	6.1	0.0000	6.100	0.0000	13	0.0000	13.000	0.0000	10	0.0000	10.000	0.0000			
27	1,2,3,4,7,8-HxCDF	0.1	0.1	0.0100	0.100	0.0100	0.19	0.0190	0.190	0.0190	0.16	0.0160	0.160	0.0160			
28	1,2,3,6,7,8-HxCDF	0.1	0.11	0.0110	0.110	0.0110	0.2	0.0200	0.200	0.0200	0.15	0.0150	0.150	0.0150			
29	2,3,4,6,7,8-HxCDF	0.1	0.09	0.0090	0.090	0.0090	0.18	0.0180	0.180	0.0180	0.14	0.0140	0.140	0.0140			
30	1,2,3,7,8,9-HxCDF	0.1	0.04	0.0040	0.040	0.0040	0.07	0.0070	0.070	0.0070	0.05	0.0050	0.050	0.0050			
31	HxCDF Total	0	0.95	0.0000	0.950	0.0000	1.7	0.0000	1.700	0.0000	1.5	0.0000	1.500	0.0000			
32	1,2,3,4,6,7,8-HpCDF	0.01	0.06	0.0006	0.060	0.0006	0.09	0.0009	0.090	0.0009	0.07	0.0007	0.070	0.0007			
33	1,2,3,4,7,8,9-HpCDF	0.01	0.02	0.0002	0.020	0.0002	0.02	0.0002	0.020	0.0002	0.02	0.0002	0.020	0.0002			
34	HpCDF Total	0	0.1	0.0000	0.100	0.0000	0.13	0.0000	0.130	0.0000	0.13	0.0000	0.130	0.0000			
35	OCDF	0.001	0.01	0.0000	0.010	0.0000	0.02	0.0000	0.020	0.0000	0.02	0.0000	0.020	0.0000			
36																	
37	Gas sample volume (dscf)			152.58	152.58	152.58		147.77	147.77	147.77		141.98	141.98	141.98			
38	O2 (%)			7.60	7.60	7.60		7.3	7.3	7.3		7.00	7.0	7.00			
39																	
40	PCDD/PCDF (ng in sample)			0.806	91.560	0.806		1.445	142.570	1.445		1.090	106.150	1.090			
41	PCDD/PCDF (ng/dscm @ 7% O2)	0.0		0.195	22.154	0.195	0.0	0.353	34.838	0.353	0.0	0.271	26.419	0.271			
42																	
43	TEQ Cond Avg		0.273														
44	Total Cond Avg		27.803														

	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	302C5	I-TEF			R1				R2				R3	
2		Wght Fact		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
4														
5	4D 2378	1		0.0206	0.0206	0.0206		0.0191	0.0191	0.0191		0.0391	0.0391	0.0391
6	4D Other	0		1.7607	1.7607	0.0000		4.9835	4.9835	0.0000		18.7752	18.7752	0.0000
7	4D Total	0		1.7812	1.7812	0.0000		5.0027	5.0027	0.0000		18.8144	18.8144	0.0000
8	5D 12378	0.5	2	0.0069	0.0069	0.0034		0.0223	0.0223	0.0112		0.0880	0.0880	0.0440
9	5D Other	0		0.9180	0.9180	0.0000		1.8258	1.8258	0.0000		14.9765	14.9765	0.0000
10	5D Total	0		0.9249	0.9249	0.0000		1.8481	1.8481	0.0000		15.0645	15.0645	0.0000
11	6D 123478	0.1		0.0103	0.0103	0.0010		0.0319	0.0319	0.0032		0.1206	0.1206	0.0121
12	6D 123678	0.1		0.0171	0.0171	0.0017		0.0446	0.0446	0.0045		0.1728	0.1728	0.0173
13	6D 123789	0.1		0.0069	0.0069	0.0007		0.0255	0.0255	0.0025		0.1109	0.1109	0.0111
14	6D Other	0		2.3636	2.3636	0.0000		4.9963	4.9963	0.0000		25.5184	25.5184	0.0000
15	6D Total	0		2.3978	2.3978	0.0000		5.0983	5.0983	0.0000		25.9228	25.9228	0.0000
16	7D 1234678	0.01		0.1028	0.1028	0.0010		0.2103	0.2103	0.0021		0.9782	0.9782	0.0098
17	7D Other	0		0.1850	0.1850	0.0000		0.2995	0.2995	0.0000		1.5325	1.5325	0.0000
18	7D Total	0		0.2877	0.2877	0.0000		0.5098	0.5098	0.0000		2.5108	2.5108	0.0000
19	8D	0.001		0.0685	0.0685	0.0001		0.1370	0.1370	0.0001		0.2152	0.2152	0.0002
20	4F 2378	0.1		0.0685	0.0685	0.0069		0.0669	0.0669	0.0067		0.0815	0.0815	0.0082
21	4F Other	0		2.2951	2.2951	0.0000		2.8009	2.8009	0.0000		4.5487	4.5487	0.0000
22	4F Total	0		2.3636	2.3636	0.0000		2.8678	2.8678	0.0000		4.6302	4.6302	0.0000
23	5F 12378	0.05	2	0.0103	0.0103	0.0005	2	0.0127	0.0127	0.0006	2	0.0196	0.0196	0.0010
24	5F 23478	0.5		0.0171	0.0171	0.0086		0.0382	0.0382	0.0191		0.1076	0.1076	0.0538
25	5F Other	0		0.1644	0.1644	0.0000		0.3951	0.3951	0.0000		1.3076	1.3076	0.0000
26	5F Total	0		0.1918	0.1918	0.0000		0.4461	0.4461	0.0000		1.4347	1.4347	0.0000
27	6F 123478	0.1		0.0103	0.0103	0.0010		0.0127	0.0127	0.0013		0.0424	0.0424	0.0042
28	6F 123678	0.1		0.0069	0.0069	0.0007		0.0096	0.0096	0.0010		0.0293	0.0293	0.0029
29	6F 123789	0.1	1	0.0034	0.0017	0.0002	1	0.0029	0.0014	0.0001	1	0.0033	0.0016	0.0002
30	6F 234678	0.1		0.0103	0.0103	0.0010	2	0.0064	0.0064	0.0006		0.0163	0.0163	0.0016
31	6F Other	0		0.0206	0.0206	0.0000		0.0545	0.0545	0.0000		0.3000	0.3000	0.0000
32	6F Total	0		0.0514	0.0514	0.0000		0.0860	0.0860	0.0000		0.3913	0.3913	0.0000
33	7F 1234678	0.01		0.0069	0.0069	0.0001	2	0.0064	0.0064	0.0001		0.0130	0.0130	0.0001
34	7F 1234789	0.01	1	0.0069	0.0034	0.0000	1	0.0032	0.0016	0.0000	1	0.0065	0.0033	0.0000
35	7F Other	0		-0.0034	-0.0034	0.0000		0.0032	0.0032	0.0000		0.0196	0.0196	0.0000
36	7F Total	0		0.0103	0.0103	0.0000	2	0.0127	0.0127	0.0000		0.0391	0.0391	0.0000
37	8F	0.001	1	0.0069	0.0034	0.0000	1	0.0064	0.0032	0.0000	1	0.0098	0.0049	0.0000
38	Total PCDD/PCDF			8.0841	8.0807			16.0149	16.0117			69.0328	69.0279	
39	TEQ		0.9	0.0477		0.0474	0.4	0.0724		0.0722	0.2	0.2058		0.2056