

US EPA ARCHIVE DOCUMENT

	B	C
1	Source Description	
2		
3	Phase I ID No.	338
4	EPA ID No.	TXD008081101
5	Facility Name	Dupont Sabine River Works (SRW)
6	Facility Location	
7	City	Orange
8	State	TX
9	Unit ID Name/No.	SRW Incinerator
10	Other Sister Facilities	
11	Number of Sister Facilities	0
12	Combustor Class	Onsite incinerator
13	Combustor Type	Rotary kiln
14	Combustor Characteristics	Rotary kiln, afterburner. Kiln has 14.5' diameter, 40' length. Afterburner: 21 ft wide, 24 ft high.
15		
16	Capacity (MMBtu/hr)	
17	Soot Blowing	
18	APCS Detailed Acronym	FF/VS/CD
19	APCS General Class	FF, HEWS
20	APCS Characteristics	Baghouse, venturi scrubber, condenser
21	Hazardous Wastes	Liq, sludge
22	Haz Waste Description	
23	Supplemental Fuel	
24		
25	Stack Characteristics	
26	Diameter (ft)	5.00
27	Height (ft)	50.0
28	Gas Velocity (ft/sec)	76.0
29	Gas Temperature (°F)	183
30		
31	Permitting Status	RCRA
32	HWC Burn Status (Date if Terminated)	

	B	C
1	Condition Description	
2		
3	338C10	338C10
4		
5	Report Name/Date	Source Emission Survey of Dupont SRW Incinerator Stack Trial Burn, Orange, TX, July 2000
6	Report Prepare	METCO
7	Testing Firm	METCO
8	Testing Dates	July 25, 27, 28, 2000
9	Cond Dates	Jul-00
10	Condition Descr	Trial - risk burn (DRE)
11	Content	PM, HCl/Cl2, metals, Cr6, D/Fs, VOCs/SVOCs, PSD, SO2 (No CO)
12		
13	338C11	338C11
14		
15	Report Name/Date	Source Emission Survey of Dupont SRW Incinerator Stack Trial Burn, Orange, TX, July 2000
16	Report Prepare	METCO
17	Testing Firm	METCO
18	Testing Dates	July 29, 2000
19	Cond Dates	Jul-00
20	Condition Descr	Trial - risk burn (Metals)
21	Content	Metals (As, Cd, Cr, Pb), Cr6
22		
23	338C1	
24		
25	Report Name/Date	E. I. Dupont Company Trial Burn Test Program Emission Test Results, Orange, Texas, Prepared by Alliance Technologies, Project # 5-954999, August 1990
26	Report Prepare	Alliance Technologies
27	Testing Firm	Alliance Technologies
28	Cond Descr	Trial burn, MEDIUM TEMP/TYPICAL OP PARAMETERS
29	Testing Dates	
30	Cond Dates	Aug-90
31		
32	338C2	
33		
34	Report Name/Date	E. I. Dupont Company Trial Burn Test Program Emission Test Results, Orange, Texas, Prepared by Alliance Technologies, Project # 5-954999, August 1990
35	Report Prepare	Alliance Technologies
36	Testing Firm	Alliance Technologies
37	Cond Descr	Trial burn, MAX TEMP/MAX WASTE,CL,ASH FEED
38	Testing Dates	
39	Cond Dates	Aug-90

	B	C	D	E	F	G	H	I	J	K	L	M
1	Stack Gas Emissions 1											
2												
3		Commr Units		7% O2								
4												
5												
6	338C10	Trial - risk burn (DRE)				R1		R2		R3		Cond Avg
7												
8	PM	E1	gr/dscf	y		0.001		0.0003		0.0004		0.0006
9												
10	HCl		ppm	n		0.55		0.65		0.38		
11	Cl2		ppm	n		0.07		0.11		0.04		
12												
13	HCl	E1	ppmv	y		0.71		0.86		0.51		0.692
14	Cl2	E1	ppmv	y		0.09		0.15		0.05		0.096
15	Total chlorine	E1	ppmv	y		0.89		1.15		0.62		0.885
16												
17												
18												
19	POHC		Acrylonitrile									
20	POHC Feedrate		lb/hr			199.12		200.21		201.46		
21	Emission Rate	E1	lb/hr			5.21E-04		5.32E-04		5.12E-04		
22	DRE	E1	%			99.99974		99.99973		99.99975		
23												
24	POHC		1,4-dichlorobenzene									
25	POHC Feedrate		lb/hr			193.01		194.08		194.79		
26	Emission Rate	E1	lb/hr			1.90E-04		1.98E-04		1.93E-04		
27	DRE	E1	%			99.99990		99.99990		99.99990		
28												
29	Antimony		ug/dscm	n	nd	1.142	nd	4.217	nd	4.78		
30	Arsenic		ug/dscm	n	nd	0.222	nd	115.8	nd	106.7		
31	Barium		ug/dscm	n	nd	12.36	nd	32.73	nd	42.8		
32	Beryllium		ug/dscm	n	nd	0.136	nd	0.174	nd	0.149		
33	Cadmium		ug/dscm	n	nd	0.171	nd	0.156	nd	0.133		
34	Chromium		ug/dscm	n		0.955		1.406		1.693		
35	Chromium (Hex)		ug/dscm	n		34.332		1.317		3.099		
36	Copper		ug/dscm	n	nd	1.67		5.415		2.739		
37	Lead		ug/dscm	n	nd	0.648		2.707		1.809		
38	Manganese		ug/dscm	n		1.876		164.4		7.004		
39	Nickel		ug/dscm	n		2.387	nd	5.085	nd	4.365		
40	Selenium		ug/dscm	n		1.279		1.753		2.905		
41	Silver		ug/dscm	n	nd	0.682	nd	0.694	nd	0.664		
42	Thallium		ug/dscm	n	nd	0.682	nd	0.694	nd	0.664		
43	Zinc		ug/dscm	n		10.435		35.8		24.8		
44	Mercury		ug/dscm	n	nd	2.182	nd	2.083	nd	1.71		
45												
46	Sampling Train		PM/HCE1									
47	Stack Gas Flowrate		dscfm			39094		40231		38711		39345.3
48	O2		%			10.1		10.4		10.6		10.4
49	Moisture		%			32.6		30		33.2		31.9
50	Temperature		°F			184		181		183		182.7
51												
52												
53	Sampling Train		Metals E2									
54	Stack Gas Flowrate		dscfm			39990		39023		39232		39415
55	O2		%			10.1		10.4		10.6		10.4
56	Moisture		%			33.7		34.5		33.7		34.0
57	Temperature		°F			184		183		181		183
58												
59	Antimony	E2	ug/dscm	y	nd	1.5	nd	5.6	nd	6.4		4.5
60	Arsenic	E2	ug/dscm	y		0.3		152.9		143.6		99.0
61	Barium	E2	ug/dscm	y		15.9		43.2		57.6		38.9
62	Beryllium	E2	ug/dscm	y	nd	0.2	nd	0.2	nd	0.2	100	0.2
63	Cadmium	E2	ug/dscm	y		0.2		0.2	nd	0.2		0.2
64	Chromium	E2	ug/dscm	y		1.2		1.9		2.3		1.8
65	Chromium (Hex)	E2	ug/dscm	y		44.1		1.7		4.2		16.7
66	Copper	E2	ug/dscm	y		2.1		7.2		3.7		4.3
67	Lead	E2	ug/dscm	y		0.8		3.6		2.4		2.3
68	Manganese	E2	ug/dscm	y	nd	2.4	nd	217.1	nd	9.4		76.3
69	Nickel	E2	ug/dscm	y		3.1		6.7		5.9		5.2
70	Selenium	E2	ug/dscm	y	nd	1.6	nd	2.3	nd	3.9		2.6
71	Silver	E2	ug/dscm	y		0.9	nd	0.9	nd	0.9		0.9

	B	C	D	E	F	G	H	I	J	K	L	M
72	Thallium	E2	ug/dscm	y	nd	0.9	nd	0.9	nd	0.9		0.9
73	Zinc	E2	ug/dscm	y		13.4		47.3		33.4		31.4
74	Mercury	E2	ug/dscm	y	nd	2.8	nd	2.8	nd	2.3		1.3
75												
76	SVM	E2	ug/dscm	y		1.1		3.8	6.8	2.6	2.4	2.5
77	LVM	E2	ug/dscm	y	10	1.7	0.1	155.0	0.1	146.1	0.2	100.9
78												
79												
80		Commr Units		7% O2								
81												
82	338C11		Trial - risk burn (Metals)			R1		R2		R3		Cond Avg
83												
84	CO (RA)		ppmv	y								
85	CO (MHRA)		ppmv	y								
86												
87	PM		gr/dscf	y								
88												
89	HCl		ppm	n								
90	Cl2		ppm	n								
91												
92	HCl		ppmv	y		0.00		0.00		0.00		0.000
93	Cl2		ppmv	y		0.00		0.00		0.00		0.000
94	Total chlorine		ppmv	y		0.00		0.00		0.00		0.000
95												
96	Silver		ug/dscm	n	nd	1.173	nd	2.456	nd	1.308		
97	Arsenic		ug/dscm	n	nd	38.51	nd	7.636	nd	44.981		
98	Barium		ug/dscm	n	nd	8.063		18.64		8.526		
99	Beryllium		ug/dscm	n	nd	0.733	nd	2.777	nd	0.941		
100	Cadmium		ug/dscm	n	nd	0.88	nd	2.456	nd	0.785		
101	Chromium (via Cr6 train)		ug/dscm	n		6.79		2.72		10.8		
102	Chromium (Hex)		ug/dscm	n		4.789		1.762		5.23		
103	Copper		ug/dscm	n		14.56		26.75		17.78		
104	Manganese		ug/dscm	n	nd	2.834	nd	21.25		4.08		
105	Nickel		ug/dscm	n		6.597	nd	5.020	nd	4.760		
106	Lead		ug/dscm	n		3.665		9.345		4.603		
107	Antimony		ug/dscm	n	nd	1.173	nd	4.859	nd	0.941		
108	Selenium		ug/dscm	n	nd	1.955	nd	4.486	nd	2.197		
109	Thallium		ug/dscm	n	nd	1.613	nd	2.83	nd	1.674		
110	Zinc		ug/dscm	n		26.047		26.753		27.198		
111												
112	Sampling Train	Metals E1										
113	Stack Gas Flowrate		dscfm			34316		34639		34499		34485
114	O2		%			6.4		6.4		6.3		6.4
115	Moisture		%			35.7		35.4		33.4		34.8
116	Temperature		°F			188		183		180		184
117												
118	Sampling Train	Cr 6 E2										
119	Stack Gas Flowrate		dscfm			35130		34382		34363		34756
120	O2		%			6.4		6.4		6.3		6.4
121	Moisture		%			33.4		34.9		34.7		34
122	Temperature		°F			180		182		175		181
123												
124	Silver	E1	ug/dscm	y	nd	1.1	nd	2.4	nd	1.2		1.6
125	Arsenic	E1	ug/dscm	y	nd	36.9	nd	7.3	nd	42.8		29.0
126	Barium	E1	ug/dscm	y	nd	7.7		17.9		8.1		11.2
127	Beryllium	E1	ug/dscm	y	nd	0.7	nd	2.7	nd	0.9		1.4
128	Cadmium	E1	ug/dscm	y	nd	0.8	nd	2.4	nd	0.7		1.3
129	Chromium	E2	ug/dscm	y		6.5		2.6		10.3		6.5
130	Chromium (Hex)	E2	ug/dscm	y		4.6		1.7		5.0		3.8
131	Copper	E1	ug/dscm	y		14.0		25.7		16.9		18.8
132	Manganese	E1	ug/dscm	y	nd	2.7	nd	20.4		3.9		9.0
133	Nickel	E1	ug/dscm	y		6.3	nd	4.8	nd	4.5		5.2
134	Lead	E1	ug/dscm	y		3.5		9.0		4.4		5.6
135	Antimony	E1	ug/dscm	y	nd	1.1	nd	4.7	nd	0.9		2.2
136	Selenium	E1	ug/dscm	y	nd	1.9	nd	4.3	nd	2.1		2.8
137	Thallium	E1	ug/dscm	y	nd	1.5	nd	2.7	nd	1.6		2.0
138	Zinc	E1	ug/dscm	y	nd	25.0		25.7	nd	25.9		25.5
139												
140	SVM	E1	ug/dscm	y	20	4.4	##	11.3	###	5.1	19.0	6.9
141	LVM	E1	ug/dscm	y	85	44.1	##	12.6	###	54.0	82.5	36.9

	B	C	D	E	F	G	H	I	J	K	L	M	Z
1	Stack Gas Emissions 2												
2													
3													
4	338C1						R1		R2		R3		Cond Avg
5													
6	PM	E1	gr/dscf	y		0.0013		0.0020		0.0008		0.0014	
7	CO	E1	ppmv	y		2.8		1.0		2.1		1.99	
8	HC	E1	ppmv	y		1.1		1.6		1.3		1.32	
9													
10	HCl	E1	ppmv	y	nd	0.1	nd	0.1	nd	0.1	100	0.14	
11	Cl2	E1	ppmv	y		0.1	nd	0.0	nd	0.0	100	0.05	
12	Total Chlorine	E1	ppmv	y	100	0.3	100	0.2	100	0.2	100	0.24	
13													
14	Antimony	E1	ug/dscm	y	nd	35.0	nd	31.3	nd	27.7		31.34	
15	Arsenic	E1	ug/dscm	y	nd	23.3	nd	20.6	nd	18.5		20.82	high NDs?
16	Barium	E1	ug/dscm	y		2.2		2.8		2.1		2.39	
17	Beryllium	E1	ug/dscm	y	nd	1.5	nd	0.7	nd	0.7	100	0.96	
18	Cadmium	E1	ug/dscm	y	nd	1.5	nd	1.4	nd	1.4	100	1.43	
19	Chromium	E1	ug/dscm	y		19.7		11.4		101.0		44.01	
20	Lead	E1	ug/dscm	y	nd	29.2	nd	26.3	nd	22.8	100	26.08	
21	Mercury	E1	ug/dscm	y		8.2		31.5		43.3		27.7	
22	Silver	E1	ug/dscm	y	nd	11.7	nd	10.7	nd	9.2		10.53	
23	Thallium	E1	ug/dscm	y	nd	40.8	nd	36.3	nd	32.0		36.37	
24	SVM	E1	ug/dscm	y	100	30.6	100	27.8	100	24.2	100	27.5	
25	LVM	E1	ug/dscm	y	69	35.7	53	40.4	15	127.0	32	67.7	
26													
27	POHC DRE	Carbon Tetrachloride											
28	POHC Feedrate		lb/hr			193.9		126.6		97.2			
29	Emission Rate	E1	lb/hr			0.0074	nd	0.0030	nd	0.0030			
30	DRE	E1	%			99.996		99.998		99.997			
31													
32	POHC DRE	Chlorobenzene											
33	POHC Feedrate		lb/hr			126.4		122.3		117.2			
34	Emission Rate	E1	lb/hr			0.0062		0.0023		0.0027			
35	DRE	E1	%			99.995		99.998		99.998			
36													
37	POHC DRE	Trichloro Trifluoro ethane											
38	POHC Feedrate		lb/hr			225.4		82.6		81.3			
39	Emission Rate	E1	lb/hr		nd	0.0028	nd	0.0030	nd	0.0030			
40	DRE	E1	%			99.999		99.996		99.996			
41													
42													
43	Sampling Train	Metals	E1										
44	Stack Gas Flowrate		dscfm			40058.0		42014.0		41590.0		41220.7	
45	O2		%			8.2		8.5		8.4		8.4	
46	Moisture		%			27.8		21.7		21.6		23.7	
47	Temperature		°F			167.9		159.4		159.6		162.3	
48													
49	338C2						R1		R2		R3		Cond Avg
50													
51	PM	E1	gr/dscf	y		0.0017		0.0005		0.0012		0.0011	
52	CO	E1	ppmv	y		1.9		1.8		2.6		2.1	
53	HC	E1	ppmv	y		2.4		1.9		2.4		2.2	
54	HCl	E1	ppmv	y	nd	0.2	nd	0.2	nd	0.2	100	0.2	
55	Cl2	E1	ppmv	y	nd	0.1	nd	0.0	nd	0.0	100	0.1	
56	Total Chlorine	E1	ppmv	y	100	0.3	100	0.3	100	0.3	100	0.3	
57	Antimony	E1	ug/dscm	y	nd	39.1	nd	31.7	nd	36.4		35.7	
58	Arsenic	E1	ug/dscm	y	nd	25.8	nd	21.1	nd	24.3		23.7	
59	Barium	E1	ug/dscm	y		4.2		4.1		2.4		3.6	
60	Beryllium	E1	ug/dscm	y	nd	1.3	nd	0.8	nd	0.8	100	1.0	
61	Cadmium	E1	ug/dscm	y	nd	1.7	nd	1.6	nd	1.6	100	1.6	
62	Chromium	E1	ug/dscm	y		15.0		8.9		10.5		11.5	
63	Lead	E1	ug/dscm	y	nd	32.4	nd	26.8	nd	29.9	100	29.7	
64	Mercury	E1	ug/dscm	y		103.1		75.9		89.8		89.6	
65	Silver	E1	ug/dscm	y	nd	13.3	nd	10.6	nd	12.1		12.0	
66	Thallium	E1	ug/dscm	y	nd	45.7	nd	36.6	nd	42.1		41.5	
67	SVM	E1	ug/dscm	y	100	34.1	100	28.4	100	31.6	100	31.4	
68	LVM	E1	ug/dscm	y	64	42.1	71	30.9	70	35.6	68	36.2	
69													
70													
71	POHC DRE	Carbon Tetrachloride											

	B	C	D	E	F	G	H	I	J	K	L	M	Z
72	POHC Feedrate		lb/hr			97		122.1		263.2			
73	Emission Rate	E1	lb/hr			0.0016	nd	0.0029	nd	0.0031			
74	DRE	E1	%			99.998		99.998		99.999			
75													
76	POHC DRE		Chlorobenzene										
77	POHC Feedrate		lb/hr			13.5		118.9		128.8			
78	Emission Rate	E1	lb/hr		nd	0.0031	nd	0.0029	nd	0.0031			
79	DRE	E1	%			99.977		99.998		99.998			
80													
81	POHC DRE		Trichlorotrifluoroethane										
82	POHC Feedrate		lb/hr			89.6		82.9		79.7			
83	Emission Rate	E1	lb/hr		nd	0.0031	nd	0.0029	nd	0.0031			
84	DRE	E1	%			99.997		99.997		99.996			
85													
86													
87	Sampling Train	Metals	E1										
88	Stack Gas Flowrate		dscfm			43802.0		42149.0		44494.0		43481.7	
89	O2		%			10.7		10.1		10.6		10.5	
90	Moisture		%			23.8		24.7		22.6		23.7	
91	Temperature		°F			155.8		170.0		171.9		165.9	

	B	C	D	E	F	G	H	I	J	K	L	M
1	Feedstream 1											
2												
3												
4	338C10	Trial - risk burn (DRE)				R1		R2		R3		Cond Avg
5												
6	Feedstream Number					F1		F1		F1		F1
7	Feed Class					Total		Total		Total		Total
8	Feed Class 2					Total		Total		Total		Total
9	Feedstream Description					Total of 11 streams		Total of 11 streams		Total of 11 streams		Total of 11 streams
10	Feed Rate		lb/hr			52283		51443		52974		52233
11	Ash		lb/hr			9497		8980		11221		9899
12	Chlorine		lb/hr			1204		1384		1283		1290
13												
14	Stack Gas Flowrate		dscfm			39094		40231		38711		39345
15	Oxygen		%			10.1		10.4		10.6		10.4
16												
17	<i>Feedrate MTEC Calculations</i>											
18	Ash		mg/dscm y			83425		78824		104330		88860
19	Chlorine		ug/dscm y			10576357		12148303		11929030		11551230
20												
21												
22	338C11	Trial - risk burn (Metal)				R1		R2		R3		Cond Avg
23	Feedstream Number					F1		F1		F1		F1
24	Feed Class					Total		Total		Total		Total
25	Feedstream Description					Total of 11 streams		Total of 11 streams		Total of 11 streams		Total of 11 streams
26	Feed Rate		lb/hr			32391		31953		32254		32199
27												
28												
29	Need spiking report (Appendix R) to calculate total complete feedrates											
30												
31												
32												
33												
34												
35												
36												
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68												
69												

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y		
1	Feedstream 2																									
2																										
3																										
4	338C1		R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1		
5																										
6	Feedstream Number		F1	F1	F1	F2	F2	F2	F3	F3	F3	F4	F4	F4	F4	F4	F4	F4	F4	F4	F4	F4	F4	F4	F4	
7	Feed Class		Sludge HW	Sludge HW	Sludge HW	Liq HW	Liq HW	Liq HW	Liq HW	Liq HW	Liq HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	
8	Feed Class 2																									
9	Feedstream Description		Sludge	Sludge	Sludge	Liq aqueous	Liq aqueous	Liq aqueous	Liq primary	Liq primary	Liq primary	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	
10	Feedrate	lb/hr	1719.84	1727.7	1726.17		3713.89		1991.41	2078.99	1919.68	4825														
11	Heating value	Btu/lb	9060	9129	8925	1391	1738	1333	7678	8484	8589	872														
12	Thermal Feedrate	MMBtu/hr	15.6	15.8	15.4		6.5	0.0	15.3	17.6	16.5	4.2														
13	Ash	wt %	0.02	0.02	0.02		0.01		0.01	0.01	0.01	61.14														
14	Chlorine	ppmw	200000	46000	52000		450		1500	2700	3100	620														
15	Ash	lb/hr	0.3	0.3	0.3		0.4		0.2	0.2	0.2	2950.0														
16	Chlorine	lb/hr	344.0	79.5	89.8		1.7		3.0	5.6	6.0	3.0														
17	Arsenic	lb/hr																								
18	Beryllium	lb/hr																								
19	Chromium	lb/hr																								
20	Lead	lb/hr																								
21	Mercury	lb/hr																								
22																										
23	Stack Gas Flowrate	dscfm																								
24	Oxygen	%																								
25																										
26	Estimated Firing Rate	MMBtu/hr																								
27																										
28	Ash	mg/dscm																								
29	Chlorine	ug/dscm																								
30	Arsenic	ug/dscm																								
31	Beryllium	ug/dscm																								
32	Chromium	ug/dscm																								
33	Lead	ug/dscm																								
34	Mercury	ug/dscm																								
35	SVM	ug/dscm																								
36	LVM	ug/dscm																								
37																										
38	338C2		R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1		
39																										
40	Feedstream Number		F1	F1	F1	F2	F2	F2	F3	F3	F3	F4	F4	F4	F4	F4	F4	F4	F4	F4	F4	F4	F4	F4	F4	
41	Feed Class		Sludge HW	Sludge HW	Sludge HW	Liq HW	Liq HW	Liq HW	Liq HW	Liq HW	Liq HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	Slurry HW	
42	Feed Class 2																									
43	Feedstream Description		Sludge	Sludge	Sludge	Liq aqueous	Liq aqueous	Liq aqueous	Liq primary	Liq primary	Liq primary	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	Thick slurry	
44	Feedrate	lb/hr	1686.42	1735.7	1734.36		3501.93	3512.14	1999.79	2033.84	2053.78	4583														
45	Heating value	Btu/lb	9238	9153	9147	1341	1301	1222	8648	8672	8713	891														
46	Thermal Feedrate	MMBtu/hr	15.6	15.9	15.9	0.0	4.6	4.3	17.3	17.6	17.9	4.1														
47	Ash	wt %	0.02	0.02	0.02		0.01	0.01	0.01	0.01	0.01	61.93														
48	Chlorine	ppmw	43000	47000	53000		440	410	2600	2900	18000	1100														
49	Ash	lb/hr	0.3	0.3	0.3		0.4	0.4	0.2	0.2	0.2	2838.3														
50	Chlorine	lb/hr	72.5	81.6	91.9		1.5	1.4	5.2	5.9	37.0	5.0														
51	Arsenic	lb/hr																								
52	Beryllium	lb/hr																								
53	Chromium	lb/hr																								
54	Lead	lb/hr																								
55	Mercury	lb/hr																								
56																										
57	Stack Gas Flowrate	dscfm																								
58	Oxygen	%																								
59																										
60	Estimated Firing Rate	MMBtu/hr																								

	B	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV
1	Feedstream 2																							
2																								
3																								
4	338C1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1		
5																								
6	Feedstream Number	F4	F4	F5	F5	F5	F6	F6	F6	F7	F7	F7												
7	Feed Class	Slurry HW	Slurry HW	Liq HW	Liq HW	Liq HW	Solid HW	Solid HW	Solid HW	Liq HW	Liq HW	Liq HW												
8	Feed Class 2																							HW
9	Feedstream Description	Thick slurry	Thick slurry	Direct burn	Direct burn	Direct burn	Containerized	Containerized	Containerized	Liquid secondary	Liquid secondary	Liquid secondary												
10	Feedrate	2028	1289	691.7	746.91	749.45	3720.5	3343.3	3291.1															
11	Heating value	668	718	8607	9396	9367	7944	7821	7820	14332	14289	14490												
12	Thermal Feedrate	1.4	0.9	6.0	7.0	7.0	29.6	26.1	25.7															
13	Ash	63.46	62.99	0.01	0.01	0.01	49.6	50.3	50.4															
14	Chlorine	1300	1100	340000	21000	23000	64000	63000	63000	280	180	190												
15	Ash	1287.0	811.9	0.1	0.1	0.1	1845.4	1681.7	1658.7	0.0	0.0	0.0												
16	Chlorine	2.6	1.4	235.2	15.7	17.2	238.1	210.6	207.3	0.0	0.0	0.0												
17	Arsenic																							
18	Beryllium																							
19	Chromium																							
20	Lead																							
21	Mercury																							
22																								
23	Stack Gas Flowrate																							
24	Oxygen																							
25																								
26	Estimated Firing Rate																							
27																								
28	Ash																							35012.6
29	Chlorine																							6009960.9
30	Arsenic																							459.9
31	Beryllium																							58.4
32	Chromium																							9045.2
33	Lead																							10425.0
34	Mercury																							102.2
35	SVM																							10425.0
36	LVM																							9563.5
37																								
38	338C2	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1	R2	R3	R1		
39																								
40	Feedstream Number	F4	F4	F5	F5	F5	F6	F6	F6	F7	F7	F7												
41	Feed Class	Slurry HW	Slurry HW	Liq HW	Liq HW	Liq HW	Solid HW	Solid HW	Solid HW	Liq HW	Liq HW	Liq HW												
42	Feed Class 2																							HW
43	Feedstream Description	Thick slurry	Thick slurry	Direct burn	Direct burn	Direct burn	Containerized	Containerized	Containerized	Liquid secondary	Liquid secondary	Liquid secondary												
44	Feedrate	5212	6512	789.8	715.48	720.32	6917.6	6310.4	6310.4	5047.22	4933.09	4924.11												
45	Heating value	704	737	9571	9468	9412	3354	3354	3354	8832	9017	8676												
46	Thermal Feedrate	3.7	4.8	7.6	6.8	6.8	23.2	21.2	21.2	44.6	44.5	42.7												
47	Ash	62.25	62.01	0.01	0.01	0.01	72.6	72.6	72.6	0.01	0.01	0.01												
48	Chlorine	820	770	24000	13000	14000	95000	95000	95000	2400	2200	14000												
49	Ash	3244.5	4038.1	0.1	0.1	0.1	5022.2	4581.4	4581.4	0.5	0.5	0.5												
50	Chlorine	4.3	5.0	19.0	9.3	10.1	657.2	599.5	599.5	12.1	10.9	68.9												
51	Arsenic																							
52	Beryllium																							
53	Chromium																							
54	Lead																							
55	Mercury																							
56																								
57	Stack Gas Flowrate																							
58	Oxygen																							
59																								
60	Estimated Firing Rate																							

	B	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH
1	Feedstream 2												
2													
3													
4	338C1		R2		R3		R1		R2		R3		Cond Avg
5													
6	Feedstream Number						F8		F8		F8		F8
7	Feed Class						Total		Total		Total		Total
8	Feed Class 2		HW		HW		Total		Total		Total		Total
9	Feedstream Description						Total		Total		Total		Total
10	Feedrate												
11	Heating value												
12	Thermal Feedrate												
13	Ash												
14	Chlorine												
15	Ash						4796.0		2969.6		2471.3		3428.21
16	Chlorine						823.2		315.7		321.7		531.24
17	Arsenic						0.063		0.056		0.055		
18	Beryllium						0.008		0.007		0.007		
19	Chromium						1.239		1.113		1.096		
20	Lead						1.428		1.282		1.262		
21	Mercury						0.014		0.013		0.013		
22													
23	Stack Gas Flowrate						40058		42014		41590		41220.7
24	Oxygen						8.2		8.5		8.36		8.4
25													
26	Estimated Firing Rate												165
27													
28	Ash		21166.4		17597		35013		21166		17597		24616
29	Chlorine		2250235.3		2290709		6009961		2250235		2290709		3814573
30	Arsenic		399.1		392		460		399		392		417
31	Beryllium		49.9		50		58		50		50		53
32	Chromium		7933.0		7804		9045		7933		7804		8261
33	Lead		9137.6		8986		10425		9138		8986		9516
34	Mercury		92.7		93		102		93		93		96
35	SVM		9137.6		8986		10425		9138		8986		9516
36	LVM		8382.0		8246		9564		8382		8246		8730
37													
38	338C2		R2		R3		R1		R2		R3		Cond Avg
39													
40	Feedstream Number						F8		F8		F8		F8
41	Feed Class						Total		Total		Total		Total
42	Feed Class 2		HW		HW		Total		Total		Total		Total
43	Feedstream Description						Total		Total		Total		Total
44	Feedrate												
45	Heating value												
46	Thermal Feedrate												
47	Ash												
48	Chlorine												
49	Ash						7861.6		7827.3		8620.9		8104.37
50	Chlorine						771.0		712.9		813.9		808.65
51	Arsenic						0.083		0.076		0.076		
52	Beryllium						0.011		0.01		0.01		
53	Chromium						1.649		1.504		1.504		
54	Lead						1.899		1.733		1.733		
55	Mercury						0.019		0.017		0.017		
56													
57	Stack Gas Flowrate						43802		42149		44494		43481.7
58	Oxygen						10.74		10.09		10.62		10.5
59													
60	Estimated Firing Rate												145

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
61																								
62	Ash		mg/dscm																					
63	Chlorine		ug/dscm																					
64	Arsenic		ug/dscm																					
65	Beryllium		ug/dscm																					
66	Chromium		ug/dscm																					
67	Lead		ug/dscm																					
68	Mercury		ug/dscm																					
69	SVM		ug/dscm																					
70	LVM		ug/dscm																					

	B	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV
61																								
62	Ash																							65480.7
63	Chlorine																							6421814.9
64	Arsenic																							691.3
65	Beryllium																							91.6
66	Chromium																							13734.9
67	Lead																							15817.2
68	Mercury																							158.3
69	SVM																							15817.2
70	LVM																							14517.8

	B	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH
61													
62	Ash		63715.5		69872		65481		63716		69872		66341
63	Chlorine		5803403.3		6596196		6421815		5803403		6596196		6619459
64	Arsenic		618.7		616		691		619		616		642
65	Beryllium		81.4		81		92		81		81		85
66	Chromium		12242.8		12190		13735		12243		12190		12722
67	Lead		14106.9		14046		15817		14107		14046		14657
68	Mercury		138.4		138		158		138		138		145
69	SVM		14106.9		14046		15817		14107		14046		14657
70	LVM		12942.9		12887		14518		12943		12887		13449

	B	C	D	E
1	Process Information			
2				
3	338C10	Trial - risk burn Cond Avg		
4				
5	Kiln Temp	°F		1086
6	Afterburner temp (minimum)	°F		1659
7	BH inlet temp	°F		479
8	Venturi pressure drop	in H2O		24
9	Venturi water flow	gpm		303
10	Condenser water flow	gpm		2338
11	Scrubber water pH			5.9
12				
13	338C11	Trial - risk burn Cond Avg		
14				
15	Afterburner temp (maximum)	°F		2352
16	BH inlet temp	°F		476

	C	D	E	F	G
1	Process Information 2				
2					
3	338C1				
4					
5	Afterburner Temperature	F	2101	2138	2152
6	VS Temperature	F	147	140	138
7	FF Temperature	F	423	414	413
8	FF Pressure Drop	in H2O	8.1	7.4	6.6
9	VS Pressure Drop	in H2O	29	27.7	27.8
10					
11	338C2				
12					
13	Afterburner Temperature	F	1869	1816	1756
14	VS Temperature	F	142	145	139
15	FF Temperature	F	414	415	413
16	FF Pressure Drop	in H2O	6.9	6.8	8.2
17	VS Pressure Drop	in H2O	27.9	27.6	27.8

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:	Dupont Sabine River Works (SRW)															
4	Condition ID:	338C10															
5	Condition/Test Date:	Trial - risk burn, July 25, 26, 28, 2000															
6																	
7																	
8	I-TEF	Run 2				Run 4				Run 5							
9	Wght Fact	Total	TEQ	Total	TEQ	Total	TEQ	Total	TEQ	Total	TEQ	Total	TEQ	Total	TEQ	Total	TEQ
10	Detected in sample volume (pg)	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	1/2 ND
11	2,3,7,8-TCDD	1	nd	70	70.00	35.00	35.00	nd	61.9	61.90	30.95	30.95	nd	71	71	36	36
12	Total TCDD	0	nd	2862	0	1431	0	nd	2362	0.00	1181	0.00	nd	2681	0	1341	0
13	1,2,3,7,8-PCDD	0.5	nd	270	135.00	135.00	67.50	nd	222	111.00	111.00	55.50	nd	258	129	129	65
14	Total PCDD	0	nd	3814	0	1907	0	nd	3063	0.00	1532	0.00	nd	3454	0	1727	0
15	1,2,3,4,7,8-HxCDD	0.1	nd	177	17.70	88.50	8.85	nd	144	14.40	72.00	7.20	nd	154	15	77	8
16	1,2,3,6,7,8-HxCDD	0.1	nd	334	33.40	167.00	16.70	nd	260	26.00	130.00	13.00	nd	295	30	148	15
17	1,2,3,7,8,9-HxCDD	0.1	nd	193	19.30	96.50	9.65	nd	158	15.80	79.00	7.90	nd	180	18	90	9
18	Total HxCDD	0	nd	3573	0	1787	0	nd	2724	0.00	1362	0.00	nd	3106	0	1553	0
19	1,2,3,4,6,7,8-HpCDD	0.01	nd	721	7.21	360.50	3.61	nd	486	4.86	243.00	2.43	nd	576	6	576	6
20	Total HpCDD	0	nd	1426	0	713	0	nd	945	0.00	473	0.00	nd	1130	0	565	0
21	OCDD	0.001	nd	630	0.63	630.00	0.63	nd	411	0.41	411	0.41	nd	502	1	502	1
22	2,3,7,8-TCDF	0.1	nd	747	74.70	373.50	37.35	nd	637	63.70	319	31.85	nd	789	79	395	39
23	Total TCDF	0	nd	20502	0	10251	0	nd	17702	0.00	8851	0.00	nd	21101	0	10551	0
24	1,2,3,7,8-PCDF	0.05	nd	740	37	370	19	nd	677	33.85	339	16.93	nd	777	39	389	19
25	2,3,4,7,8-PCDF	0.5	nd	1252	626	626	313	nd	1152	576.00	576	288.00	nd	1514	757	757	379
26	Total PCDF	0	nd	11602	0	5801	0	nd	11402	0.00	5701	0.00	nd	13704	0	6852	0
27	1,2,3,4,7,8-HxCDF	0.1	nd	727	73	364	36	nd	807	80.70	404	40.35	nd	979	98	979	98
28	1,2,3,6,7,8-HxCDF	0.1	nd	609	61	305	30	nd	631	63.10	316	31.55	nd	776	78	776	78
29	2,3,4,6,7,8-HxCDF	0.1	nd	599	60	300	30	nd	565	56.50	283	28.25	nd	690	69	690	69
30	1,2,3,7,8,9-HxCDF	0.1	nd	286	29	143	14	nd	254	25.40	127	12.70	nd	308	31	154	15
31	Total HxCDF	0	nd	5212	0	2606	0	nd	5292	0.00	2646	0.00	nd	6517	0	3259	0
32	1,2,3,4,6,7,8-HpCDF	0.01	nd	938	9	469	5	nd	1000	10.00	500	5.00	nd	1257	13	1257	13
33	1,2,3,4,7,8,9-HpCDF	0.01	nd	189	2	95	1	nd	186	1.86	93	0.93	nd	277	3	139	1
34	Total HpCDF	0	nd	1534	0	767	0	nd	1553	0.00	777	0.00	nd	2077	0	1039	0
35	OCDF	0.001	nd	250	0	125	0	nd	241	0.24	121	0.12	nd	345	0	345	0
36																	
37	Gas sample volume (dscf)				239.62	239.62	239.62			243.09	243.09	243.09			249.821	249.821	249.821
38	O2 (%)				10.10	10.10	10.10			10.4	10.4	10.4			10.6	10.6	10.6
39																	
40	PCDD/PCDF (ng in sample)				1.255	26.0	0.628			1.146	23.1	0.573			1.43	27.7	0.85
41	PCDD/PCDF (ng/dscm @ 7% O2)	99.9			0.238	4.928	0.119	100.0		0.22	4.43	0.11	81.6		0.27	5.28	0.16