

US EPA ARCHIVE DOCUMENT

	B	C
1	<b>Source Description</b>	
2		
3	Phase II ID No.	759
4	EPA ID No.	TXD008079642
5	Facility Name	E.I. duPont de Nemours & Co., Inc.
6	Facility Location	
7	City	Orange
8	State	TX
9	Unit ID Name/No.	Boiler No. 7
10	Other Sister Facilities	Boiler No. 5
11	Number of Sister Facilities	1
12	Combustor Class	Liquid-fired boiler
13	Combustor Type	Liquid-fired
14	Combustor Characteristics	
15	Capacity (MMBtu/hr)	300
16	Soot Blowing	
17	APCS Detailed Acronym	None
18	APCS General Class	
19	APCS Characteristics	
20	Hazardous Wastes	Liq
21	Haz Waste Description	NVR and HMD pumpable hazardous waste
22	Supplemental Fuel	Natural gas
23		
24	Stack Characteristics	
25	Diameter (ft)	10.0
26	Height (ft)	153
27	Gas Velocity (ft/sec)	23.0
28	Gas Temperature (°F)	
29		
30	Permitting Status	Tier IA for metals (except Cr) and chlorine
	HWC Burn Status (Date if	
31	Terminated)	

	B	C
1	<b>Cond Description</b>	
2		
3	<b>759C1</b>	
4		
5	Report Name/Date	Source Emissions Survey of E.I. Dupont De Nemours & Company, Inc. Sabine River Works
6	Report Prepar	METCO Environmental, Inc.
7	Testing Firm	METCO Environmental, Inc.
8	Testing Dates	June 12, 1995
9	Cond Dates	Jun-95
10	Cond Description	CoC; max comb temp, haz waste feed and steam prod rate
11	Content	PM, CO, Cr+6/Cr
12		
13	<b>759C2</b>	
14		
15	Report Name/Date	Source Emissions Survey of E.I. Dupont De Nemours & Company, Inc. Sabine River Works
16	Report Prepar	METCO Environmental, Inc.
17	Testing Firm	METCO Environmental, Inc.
18	Testing Dates	June 8, 1995
19	Cond Dates	Jun-95
20	Cond Description	CoC; min comb temp
21	Content	CO
22		
23	<b>759C3</b>	
24	Report Name/Date	Source Emissions Survey of E.I. Dupont De Nemours & Company, Inc. Sabine River Works . Risk Burn. 98-183D. Julv 1998
25	Report Prepar	METCO Environmental, Inc.
26	Testing Firm	METCO Environmental, Inc.
27	Testing Dates	July 29-31, 1998
28	Cond Dates	Jul-98
29	Cond Description	Risk burn
30	Content	PM, metals, PCDD/PCDF, organics
31		
32	<b>759C4</b>	
33	Report Name/Date	Source Emissions Survey of E.I. Dupont De Nemours & Company, Inc. Sabine River Works. DRE Burn. Dec. 1998. No. 98-305A
34	Report Prepar	METCO Environmental, Inc.
35	Testing Firm	METCO Environmental, Inc.
36	Testing Dates	Dec. 10-11, 1998
37	Cond Dates	Dec-98
38	Cond Description	Trial burn; DRE
39	Content	HCl/Cl <sub>2</sub> , C <sub>6</sub> H <sub>5</sub> Cl DRE
40		
41	<b>759C5</b>	
42	Report Name/Date	Source Emissions Survey of E.I. Dupont De Nemours & Company, Inc. Sabine River Works. DRE Burn. 98-183C. Julv 1998
43	Report Prepar	METCO Environmental, Inc.
44	Testing Firm	METCO Environmental, Inc.
45	Testing Dates	July 27 - 28, 1998
46	Cond Dates	Jul-98
47	Cond Description	Trial burn; DRE
48	Content	HCl/Cl <sub>2</sub> , C <sub>6</sub> H <sub>5</sub> Cl DRE

	B	C	D	E	F	G	H	I	J	K	L	M	N
1	<b>Stack Gas Emissions</b>												
2													
3		Comments	Units	7% O2									
4										soot blowing			
5													
6	<b>759C1</b>					R1		R2		R3		Cond Avg	
7													
8	PM (total)	E1	gr/dscf	y		0.0176		0.0153		0.0190		0.0173 total	
9	PM	E1	gr/dscf	y		0.0125		0.0133		0.0152		0.0137 front half	
10	CO (MHRA)	E1	ppmv	y		22.7		31.7		84		46.1	
11	CO (RA)	E1	ppmv	y		3.2		16.6		34.7		18.2	
12	Chromium (Hex)		lb/hr			0.003		0.004		0.006		0.004	
13	Chromium		lb/hr			0.085		0.07		0.115		0.090	
14													
15	Sampling Train	PM,CO	E1										
16	Stack Gas Flowrate		dscfm			75566		77242		75543		76117	
17	O2		%			9.1		9.2		9.4		9.2	
18	Moisture		%			14.29		14.49		15.00		14.59	
19	Temperature		°F			369		366		367		367.3	
20													
21	Chromium (Hex)	E1	µg/dscm	y		12.5		16.4		25.6		18.1	
22	Chromium	E1	µg/dscm	y		353.8		287.5		491.2		376.1	
23	LVM	E1	µg/dscm	y		353.8		287.5		491.2		376.1	
24													
25	<b>759C2</b>					R1		R2		R3		Cond Avg	
26													
27	CO (MHRA)	E1	ppmv	y		37.1		38.5		38.1		37.9	
28	CO (RA)	E1	ppmv	y		19.0		21.3		21.6		20.6	
29													
30	Sampling Train	CO	E1										
31	Stack Gas Flowrate		dscfm			51213		51938		51634		51595	
32	O2		%			14.3		14.3		14.0		14.2	
33	Moisture		%			12.97		12.42		13.14		12.84	
34	Temperature		°F			266		264		263		264.3	
35													
36	<b>759C3</b>					R1		R2		R3		Cond Avg	
37													
38	PM	E1	gr/dscf	y		0.0043		0.0047		0.004		0.0043	
39	Antimony		g/s	nd		9.23E-04	nd	3.00E-04	nd	4.02E-04		5.42E-04	
40	Arsenic		g/s	nd		3.42E-03	nd	1.18E-03	nd	1.24E-03		1.95E-03	
41	Barium		g/s	nd		3.33E-03	nd	1.09E-03	nd	1.08E-03		1.83E-03	
42	Beryllium		g/s	nd		6.88E-05	nd	2.28E-05	nd	2.41E-05		3.86E-05	
43	Cadmium		g/s	nd		6.88E-05	nd	2.28E-05	nd	2.41E-05		3.86E-05	
44	Chromium		g/s	nd		8.04E-04	nd	7.40E-04	nd	1.21E-03		9.18E-04	
45	Chromium (Hex)		g/s	nd		3.88E-05	nd	3.57E-05	nd	5.83E-05		4.43E-05	
46	Lead		g/s	nd		1.15E-03	nd	4.40E-04	nd	5.63E-04		7.18E-04	
47	Mercury		g/s	nd		1.91E-05	nd	1.67E-05	nd	1.94E-04		7.66E-05	
48	Nickel		g/s	nd		2.35E-04	nd	1.46E-04	nd	1.75E-04		1.85E-04	
49	Selenium		g/s	nd		3.14E-03	nd	1.16E-03	nd	1.19E-03		1.83E-03	
50	Silver		g/s	nd		9.40E-05	nd	4.64E-05	nd	4.75E-05		6.26E-05	
51	Thallium		g/s	nd		1.26E-02	nd	9.28E-03	nd	9.49E-03		1.05E-02	
52	Zinc		g/s			8.55E-04		2.38E-04		0.00126			
53													
54	Sampling Train	PM, Metals	E1										
55	Stack Gas Flowrate		dscfm			56388.0		59091.0		57060.0		57513	
56	O2		%			12.4		12.9		12.3		12.5	
57	Moisture		%			14.46		13.76		14.66		14.29	
58	Temperature		°F			293		287		282		287.33	
59													
60	Antimony	E1	µg/dscm	y	nd	56.5	nd	18.6	nd	24.0	100	33.0	
61	Arsenic	E1	µg/dscm	y	nd	209.3	nd	73.2	nd	74.1	100	118.9	
62	Barium	E1	µg/dscm	y	nd	203.8	nd	67.6	nd	64.6	100	112.0	
63	Beryllium	E1	µg/dscm	y	nd	4.2	nd	1.4	nd	1.4	100	2.4	
64	Cadmium	E1	µg/dscm	y	nd	4.2	nd	1.4	nd	1.4	100	2.4	
65	Chromium	E1	µg/dscm	y	nd	49.2	nd	45.9	nd	72.3	100	55.8	
66	Chromium (Hex)	E1	µg/dscm	y	nd	2.4	nd	2.2	nd	3.5	100	2.7	
67	Lead	E1	µg/dscm	y	nd	70.4	nd	27.3	nd	33.7	100	43.8	
68	Mercury	E1	µg/dscm	y	nd	1.2	nd	1.0	nd	11.6	100	4.6	
69	Nickel	E1	µg/dscm	y	nd	14.4	nd	9.1	nd	10.5	100	11.3	
70	Selenium	E1	µg/dscm	y	nd	192.2	nd	71.9	nd	71.2	100	111.8	
71	Silver	E1	µg/dscm	y	nd	5.8	nd	2.9	nd	2.8	100	3.8	
72	Thallium	E1	µg/dscm	y	nd	771.2	nd	575.5	nd	567.4	100	638.0	
73	Zinc	E1	µg/dscm	y	nd	52.3	nd	14.8	nd	75.3	100	47.5	
74	SVM	E1	µg/dscm	y	100	74.6	100	28.7	100	35.1	100	46.1	
75	LVM	E1	µg/dscm	y	100	262.8	100	120.5	100	147.9	100	177.1	
76													
77	Particle Size Distribution		in microns										
78	0.5-2.5		% wt			97.8		89.4		90.4			
79	2.5-5		% wt			1.9		6.5		8.0			

	B	C	D	E	F	G	H	I	J	K	L	M	N
80	5-7.5		% wt			0.2		2.4		1.3			
81	7.5-10		% wt			0.0		0.6		0.0			
82	>10		% wt			0.2		1.2		0.3			
83													
84	<b>759C4</b>					R1		R2		R3		Cond Avg	
85													
86	HCl		lb/hr			20.961		20.811		20.357		20.710	
87	Cl2		lb/hr			0.042		0.036		0.021		0.0330	
88													
89	POHC DRE		Chlorobenzene										
90	Feedrate												
91	Emission Rate		µg/dscm		nd	4.471	nd	4.618	nd	4.571		4.553	
92	DRE		%		>	99.998	>	99.998	>	99.998		99.998	
93													
94	Sampling Train		HCl, Cl2, C E1										
95	Stack Gas Flowrate		dscfm			62961.0		62764.0		61523.0		62416	
96	O2		%			14.6		14.1		13.8		14.2	
97	Moisture		%			6.94		8.87		8.93		8.25	
98	Temperature		°F			292		291		291		291.33	
99													
100	HCl	E1	ppmv	y		130.0		120.1		114.9		121.4	
101	Cl2	E1	ppmv	y		0.1		0.1		0.1		0.1	
102	Total Chlorine	E1	ppmv	y		130.3		120.3		115.0		121.6	
103													
104	<b>759C5</b>					R1		R2		R3		Cond Avg	
105													
106	HCl		ppmv	n		58.7		57.5		58.4		58.2	
107	Cl2		ppmv	n	nd	0.2	nd	0.2	nd	0.2		0.2	
108													
109	POHC DRE		Chlorobenzene										
110	POHC Feedrate				na		na		na				
111	Emission Rate		µg/dscm		nd	9.1	nd	29.8	nd	74.2			
112	DRE		%		>		>		>				
113													
114	Sampling Train		HCl, Cl2, C E1										
115	Stack Gas Flowrate		dscfm			66424.0		66612.0		65950.0		66328.7	
116	O2		%			13.5		13.9		13.5		13.6	
117	Moisture		%			14.85		14.7		14.8		14.8	
118	Temperature		°F			322		323		322		322.3	
119													
120	HCl	E1	ppmv	y		109.6		113.4		109.0		110.6	
121	Cl2	E1	ppmv	y		0.4		0.4		0.4		0.4	
122	Total Chlorine	E1	ppmv	y		110.3		114.2		109.8		111.4	

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	
1	<b>Feedstreams</b>																							
2																								
3																								
4	<b>759C1</b>		R1		R2		R3		Cond Avg	R1		R2		R3		Cond Avg	R1		R2					
5																								
6	Feedstream Number	F1		F1		F1		F1		F2		F2		F2		F2								
7	Feed Class	Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW								
8	Feed Class 2																					HW		HW
9	Feedstream Description	NVR		NVR		NVR		NVR		HMD		HMD		HMD		HMD								
10	Feed Rate	g/hr	5352480	5411448	5429592	5397840.0	1728216	1750896	1750896	1750896	1743336.0													
11	Heat Content	Btu/lb	8240	8240	8240	8240.0	5301	5301	5301	5301.3														
12	Thermal Feedrate	MMBtu/hr	97.9	97.6	98.4	98.0	25.5	20.7	14.8	20.3	123.4	118.3												
13	Ash	g/hr	2670	2710	2710	2696.7	864	875	875	871.3														
14	Chlorine	g/hr	nd	681.307	nd	701.719	nd	708.524	nd	697.2														
15	Antimony	g/hr	nd	10.727	nd	11.053	nd	11.336	nd	11.0														
16	Arsenic	g/hr	nd	0.58	nd	0.568	nd	0.567	nd	0.6														
17	Barium	g/hr		0.425		0.351		0.497		0.4														
18	Beryllium	g/hr		0.34		0.351		0.355		0.3														
19	Cadmium	g/hr	nd	0.136	nd	0.14	nd	0.142		0.1														
20	Chromium	g/hr		185.983		148.145		171.267		168.5														
21	Lead	g/hr	nd	10.901	nd	11.227	nd	11.336		11.2														
22	Mercury	g/hr	nd	0.068	nd	0.07	nd	0.071		0.1														
23	Silver	g/hr	nd	1.704	nd	1.755	nd	1.772		1.7														
24	Thallium	g/hr	nd	43.254	nd	44.56	nd	44.637		44.2														
25																								
26	Stack Gas Flowrate	dscfm	75566	77242	75543	76117.0	75566	77242	75543	76117.0														
27	O2	%	9.1	9.2	9.4	9.2	9.1	9.2	9.4	9.2														
28																								
29	Estimated Firing Rate	MMBtu/hr																						
30																								
31	<i>Feedrate MTEC Calculations</i>																							
32	Ash	mg/dscm		24.5		24.5		25.5		24.8			7.9		7.9		8.2		8.0	0.0	32.4	0.0	32.4	
33	Chlorine	ug/dscm	100	6246.8	100	6347.7	100	6666.4	100	6420.3									100	6246.8	100	3173.9		
34	Antimony	ug/dscm	100	98.4	100	100.0	100	106.7	100	101.7									100	98.4	100	100.0		
35	Arsenic	ug/dscm	100	5.3	100	5.1	100	5.3	100	5.3									100	5.3	100	5.1		
36	Barium	ug/dscm		3.9		3.2		4.7		3.9									0	3.9	0	3.2		
37	Beryllium	ug/dscm		3.1		3.2		3.3		3.2									0	3.1	0	3.2		
38	Cadmium	ug/dscm	100	1.2	100	1.3	100	1.3	100	1.3									100	1.2	100	1.3		
39	Chromium	ug/dscm		1705.3		1340.1		1611.4		1552.3									0	1705.3	0	1340.1		
40	Lead	ug/dscm	100	100.0	100	101.6	100	106.7	100	102.7									100	100.0	100	101.6		
41	Mercury	ug/dscm	100	0.6	100	0.6	100	0.7	100	0.6									100	0.6	100	0.6		
42	Silver	ug/dscm	100	15.6	100	15.9	100	16.7	100	16.1									100	15.6	100	15.9		
43	Thallium	ug/dscm	100	396.6	100	403.1	100	420.0	100	406.6									100	396.6	100	403.1		
44																								
45	SVM	ug/dscm		101.2		102.8		108.0		104.0										100	101.2	100	102.8	
46	LVM	ug/dscm		1713.7		1348.4		1620.1		1560.7									0	1713.7	0	1348.4		
47																								
48																								
49																								
50	<b>759C2</b>		R1		R2		R3		Cond Avg	R1		R2		R3		Cond Avg	R1		R2					
51																								
52	Feedstream Number	F1		F1		F1		F1		F2		F2		F2		F2								
53	Feed Class	Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW								
54	Feed Class 2																					HW		HW
55	Feedstream Description	NVR		NVR		NVR		NVR		HMD		HMD		HMD		HMD								
56	Feed Rate	g/hr	2188846	2191265	2189829	2189980.0	1769040	1768949	1770627	1769538.7														
57	Heat Content	Btu/lb	8000	8000	8000	8000	5000	5000	5000	5000														
58																								
59	Stack Gas Flowrate	dscfm																						
60	O2	%																						
61																								
62	Thermal Feedrate	MMBtu/hr	38.6	38.6	38.6	38.6	19.5	19.5	19.5	19.5	58.1	58.1												
63	Estimated Firing Rate	MMBtu/hr																						
64																								
65																								
66	<b>759C3</b>		R1		R2		R3		Cond Avg	R1		R2		R3		Cond Avg	R1		R2					
67																								
68	Feedstream Number	F1		F1		F1		F1		F2		F2		F2		F2								

	B	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR
1	<b>Feedstreams</b>																				
2																					
3																					
4	<b>759C1</b>		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg
5																					
6	Feedstream Number						F3		F3		F3		F3		F4		F4		F4		F4
7	Feed Class						Spike		Spike		Spike		Spike		Total		Total		Total		Total
8	Feed Class 2		HW		HW		Spike		Spike		Spike		Spike		Total		Total		Total		Total
9	Feedstream Description						Spike		Spike		Spike		Spike		Total		Total		Total		Total
10	Feed Rate						30704		31788		31720		31404.0								
11	Heat Content												0								
12	Thermal Feedrate		113.2		118.3								0		123.4		118.3		113.2		118.3
13	Ash						1996		2159		2159		2104.7								
14	Chlorine																				
15	Antimony																				
16	Arsenic																				
17	Barium																				
18	Beryllium																				
19	Cadmium																				
20	Chromium						344.736		340.2		344.736										
21	Lead																				
22	Mercury																				
23	Silver																				
24	Thallium																				
25																					
26	Stack Gas Flowrate						75566		77242		75543		76117.0		75566		77242		75543		76117.0
27	O2						9.1		9.2		9.4		9.2		9.1		9.2		9.4		9.2
28																					
29	Estimated Firing Rate														285.5		289.4		278.2		284.3
30																					
31	<i>Feedrate MTEC Calculati</i>																				
32	Ash	0.0	33.7	0.0	32.9		18.3		19.5		20.3		19.4	0	50.7	0	52.0	0	54.0	0	52.2
33	Chlorine	100	3333.2	100	6420.3									100	6246.8	100	3173.9	100	3333.2	100	6420.3
34	Antimony	100	106.7	100	101.7									100	98.4	100	100.0	100	106.7	100	101.7
35	Arsenic	100	5.3	100	5.3									100	5.3	100	5.1	100	5.3	100	5.3
36	Barium	0	4.7	0	3.9									0	3.9	0	3.2	0	4.7	0	3.9
37	Beryllium	0	3.3	0	3.2									0	3.1	0	3.2	0	3.3	0	3.2
38	Cadmium	100	1.3	100	1.3									100	1.2	100	1.3	100	1.3	100	1.3
39	Chromium	0	1611.4	0	1552.3		3160.8		3077.4		3243.6		3160.6	0	4866.1	0	4417.6	0	4855.0	0	4712.9
40	Lead	100	106.7	100	102.7									100	100.0	100	101.6	100	106.7	100	102.7
41	Mercury	100	0.7	100	0.6									100	0.6	100	0.6	100	0.7	100	0.6
42	Silver	100	16.7	100	16.1									100	15.6	100	15.9	100	16.7	100	16.1
43	Thallium	100	420.0	100	406.6									100	396.6	100	403.1	100	420.0	100	406.6
44																					
45	SVM	100	108.0	100	104.0		0.0		0.0		0.0		0.0	100	101.2	100	102.8	100	108.0	100	104.0
46	LVM	0	1620.1	0	1560.7		3160.8		3077.4		3243.6		3160.6	0	4874.5	0	4425.9	0	4863.7	0	4721.4
47																					
48																					
49																					
50	<b>759C2</b>		R3		Cond Avg																Cond Avg
51																					
52	Feedstream Number																				F3
53	Feed Class																				Total
54	Feed Class 2		HW		HW																Total
55	Feedstream Description																				Total
56	Feed Rate																				
57	Heat Content																				
58																					
59	Stack Gas Flowrate																				51595
60	O2																				14.2
61																					
62	Thermal Feedrate		58.1		58.1																58.1
63	Estimated Firing Rate																				111.4
64																					
65																					
66	<b>759C3</b>		R3		Cond Avg																Cond Avg
67																					
68	Feedstream Number																				F3

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
99	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW				
70	Feed Class 2																					HW	HW
71	Feedstream Description				Diamine		Diamine		Diamine		Diamine		NVR		NVR		NVR		NVR				
72	Feed Rate																						
73	Density	g/ml?			0.9918		0.9591		1.0347		1.00		1.0796		1.0843		1.0852		?		1.04		
74	Heat Content	Btu/lb			445		674		3103		1407.3		8061		9038		8877				5419		
75	Ash	%			0.02		0.014	nd	0.001		0.012		0.03		0.031		0.029				0.03		
76	Chlorine	ppmw			15.5		22.5		19.5		19.2	nd	10		10		10				10		
77	Antimony	ppmw	nd		1	nd	1	nd	1		1	nd	1	nd	1	nd	1				1		
78	Arsenic	ppmw	nd		1	nd	1	nd	1		1	nd	1	nd	1	nd	1				1		
79	Barium	ppmw	nd		20	nd	20	nd	20		20	nd	20	nd	20	nd	20				20		
80	Beryllium	ppmw	nd		0.5	nd	0.5	nd	0.5		0.5	nd	0.5	nd	0.5	nd	0.5				0.5		
81	Cadmium	ppmw	nd		0.2	nd	0.2	nd	0.2		0.2	nd	0.2	nd	0.2	nd	0.2				0.2		
82	Chromium	ppmw	nd		0.5	nd	0.5	nd	0.5		0.5		57.1		56.4		59.3				57.6		
83	Lead	ppmw	nd		0.4	nd	0.4	nd	0.4		0.4	nd	0.41	nd	0.41	nd	0.41				0.4		
84	Mercury	ppmw	nd		0.033	nd	0.033	nd	0.033		0.033	nd	0.33	nd	0.33	nd	0.33				0.033		
85	Nickel	ppmw	nd		4	nd	4	nd	4		4	nd	4	nd	4	nd	4				4		
86	Selenium	ppmw	nd		0.5	nd	0.5	nd	0.5		0.6		2.5		2.5		2.5				2.5		
87	Silver	ppmw	nd		0.5	nd	0.5	nd	0.5		0.5	nd	0.5	nd	0.5	nd	0.5				0.5		
88	Thallium	ppmw	nd		1	nd	1	nd	1		1	nd	1	nd	1	nd	1				1		
89	Zinc	ppmw	nd		2	nd	2	nd	2		2	nd	3.1	nd	2.4	nd	2.1				2.5		
90																							
91	Stack Gas Flowrate	dscfm																					
92	O2	%																					
93																							
94	Thermal Feedrate	MMBtu/hr																					
95	Estimated Firing Rate	MMBtu/hr																					
96	**need total waste feedrate to calc MTECs**																						
97																							
98	<b>759C4</b>				R1		R2		R3		Cond Avg												
99																							
00	Feedstream Number				F1		F1		F1		F1												
01	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW												
02	Feed Class 2				HW		HW		HW		HW												
03	Feedstream Description				NVR		NVR		NVR		NVR												
04	Feed Rate																						
05	Density	g/ml?			1.065		1.065		1.065		1.065												
06	Heat Content	Btu/lb			9079		8844		8916		8946.3												
07	Ash	ppmw	nd		847.5	nd	820	nd	795		820.8												
08	Chlorine	ppmw	nd		20	nd	20	nd	20		20												
09	Antimony	ppmw	nd		6	nd	6	nd	6		6												
10	Arsenic	ppmw	nd		30	nd	30	nd	30		30												
11	Barium	ppmw	nd		20	nd	20	nd	20		20												
12	Beryllium	ppmw	nd		0.5	nd	0.5	nd	0.5		0.5												
13	Cadmium	ppmw	nd		0.5	nd	0.5	nd	0.5		0.5												
14	Chromium	ppmw	nd		51.8		45		46.8		47.9												
15	Lead	ppmw	nd		10	nd	10	nd	10		10												
16	Mercury	ppmw	nd		0.033	nd	0.033	nd	0.033		0.033												
17	Nickel	ppmw	nd		4	nd	4	nd	4		4												
18	Selenium	ppmw	nd		25	nd	25	nd	25		25												
19	Silver	ppmw	nd		1	nd	1	nd	1		1												
20	Thallium	ppmw	nd		200	nd	200	nd	200		200												
21	Zinc	ppmw	nd		2	nd	2	nd	2		2												
22																							
23	Stack Gas Flowrate	dscfm											62416.0										
24	O2	%											14.2										
25																							
26	Estimated Firing Rate	MMBtu/hr											135.4										
27																							
28	**need total waste feedrate to calc MTECs**																						
29																							
30	<b>759C5</b>				R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2
31																							
32	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F2		
33	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW				
34	Feed Class 2																					HW	HW
35	Feedstream Description				Diamine waste		Diamine waste		Diamine waste		Diamine waste		NVR waste		NVR waste		NVR waste		NVR waste				
36	Feed Rate																						



	B	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	
69	Feed Class																					Total
70	Feed Class 2		HW		HW																	Total
71	Feedstream Description																					Total
72	Feed Rate																					
73	Density																					
74	Heat Content																					
75	Ash																					
76	Chlorine																					
77	Antimony																					
78	Arsenic																					
79	Barium																					
80	Beryllium																					
81	Cadmium																					
82	Chromium																					
83	Lead																					
84	Mercury																					
85	Nickel																					
86	Selenium																					
87	Silver																					
88	Thallium																					
89	Zinc																					
90																						
91	Stack Gas Flowrate																					57513
92	O2																					13
93																						
94	Thermal Feedrate																					
95	Estimated Firing Rate																					154.6
96	**need total waste feedrat																					
97																						
98	<b>759C4</b>																					
99																						
100	Feedstream Number																					
101	Feed Class																					
102	Feed Class 2																					
103	Feedstream Description																					
104	Feed Rate																					
105	Density																					
106	Heat Content																					
107	Ash																					
108	Chlorine																					
109	Antimony																					
110	Arsenic																					
111	Barium																					
112	Beryllium																					
113	Cadmium																					
114	Chromium																					
115	Lead																					
116	Mercury																					
117	Nickel																					
118	Selenium																					
119	Silver																					
120	Thallium																					
121	Zinc																					
122																						
123	Stack Gas Flowrate																					
124	O2																					
125																						
126	Estimated Firing Rate																					
127																						
128	**need total waste feedrat																					
129																						
130	<b>759C5</b>		R3		Cond Avg																	Cond Avg
131																						
132	Feedstream Number																					F3
133	Feed Class																					Total
134	Feed Class 2		HW		HW																	Total
135	Feedstream Description																					Total
136	Feed Rate																					

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
37	Density	g/ml			0.9924		0.9922		0.992		0.992		1.0613		1.0645		1.0654		1.06				
38	Heat Content	Btu/lb			1850		804		718		1124		3730		4825		6235		4930				
39	C6H5Cl	ug/L	nd		500	nd	500	nd	500		500 nd		250		250		250		250				
40	Ash	ppmw			31		19.5	nd	18.5		23		205		200		220		208.3				
41	Chlorine	ppmw			17	nd	23.5	nd	10		16.8 nd		10		92.5 nd		10		37.5				
42	Antimony	ppmw	nd		1	nd	1	nd	1		1 nd		1 nd		1 nd		1		1				
43	Arsenic	ppmw	nd		1	nd	1	nd	1		1 nd		1 nd		1 nd		1		1				
44	Barium	ppmw	nd		20	nd	20	nd	20		20 nd		20 nd		20 nd		20		20				
45	Beryllium	ppmw	nd		0.5	nd	0.5	nd	0.5		0.5 nd		0.5 nd		0.5 nd		0.5		0.5				
46	Cadmium	ppmw	nd		0.2	nd	0.2	nd	0.2		0.2 nd		0.2 nd		0.2 nd		0.2		0.2				
47	Chromium	ppmw	nd		0.5	nd	0.5	nd	0.5		0.5		43.8		46.3		50.1		46.7				
48	Lead	ppmw			0.38		0.31		0.38		0.36		0.38		0.33		0.32		0.34				
49	Mercury	ppmw	nd		0.33	nd	0.33	nd	0.33		0.033 nd		0.033 nd		0.033 nd		0.033		0.033				
50	Silver	ppmw	nd		0.5	nd	0.5	nd	0.5		0.5 nd		0.5 nd		0.5 nd		0.5		0.5				
51	Thallium	ppmw	nd		1	nd	1	nd	1		1 nd		1 nd		1 nd		1		1				
52																							
53	Stack Gas Flowrate	dscfm																					
54	O2	%																					
55																							
56	Estimated Firing Rate	MMBtu/hr																					
57																							
58	**need total waste feedrates to calc MTECs**																						

	B	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR
137	Density																				
138	Heat Content																				
139	C6H5Cl																				
140	Ash																				
141	Chlorine																				
142	Antimony																				
143	Arsenic																				
144	Barium																				
145	Beryllium																				
146	Cadmium																				
147	Chromium																				
148	Lead																				
149	Mercury																				
150	Silver																				
151	Thallium																				
152																					
153	Stack Gas Flowrate																				66329
154	O2																				13.6
155																					
156	Estimated Firing Rate																				155.1
157																					
158	**need total waste feedrat																				

	A	B	C	D	E	F
1	<b>Process Information</b>					
2						
3		Units	Run	Run	Run	Avg
4			3	4	5	
5						
6	<b>759C1</b>					
7						
8	Burner Temp	°F	649	658	654	654
9	Production Rate	Mlb/hr	172.5	169.7	167.3	169.8
10						
11	<b>759C2</b>					
12						
13	Burner Temp	°F	514	512	512	513

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1		<b>PCDD/PCDF</b>																
2		N																
3		Facility Name and ID:																
4		Condition ID:																
5		Condition/Test Date:																
6																		
7																		
8		I-TEF																
9		Wght Fact																
10																		
11		Detected in sample volume (ng)																
12		2,3,7,8-TCDD	1	nd	0.0020	0.0020	0.0010	0.0010	nd	0.002	0.0020	0.0010	0.0010	nd	0.001	0.0010	0.0005	0.0005
13		1,2,3,7,8-PCDD	0.5	nd	0.0050	0.0025	0.0025	0.0013	nd	0.005	0.0025	0.0025	0.0013	nd	0.002	0.0010	0.0010	0.0005
14		1,2,3,4,7,8-HxCDD	0.1	nd	0.0060	0.0006	0.0030	0.0003	nd	0.006	0.0006	0.0030	0.0003	nd	0.003	0.0003	0.0015	0.0002
15		1,2,3,6,7,8-HxCDD	0.1	nd	0.0060	0.0006	0.0030	0.0003	nd	0.006	0.0006	0.0030	0.0003	nd	0.003	0.0003	0.0015	0.0002
16		1,2,3,7,8,9-HxCDD	0.1	nd	0.0060	0.0006	0.0030	0.0003	nd	0.006	0.0006	0.0030	0.0003	nd	0.002	0.0002	0.0010	0.0001
17		1,2,3,4,6,7,8-HpCDD	0.01	nd	0.0070	0.0001	0.0035	0.0000	nd	0.008	0.0001	0.0040	0.0000	nd	0.006	0.0001	0.0030	0.0000
18		OCDD	0.001		0.0430	0.0000	0.0430	0.0000		0.019	0.0000	0.0190	0.0000	nd	0.005	0.0000	0.0025	0.0000
19		2,3,7,8-TCDF	0.1	nd	0.0030	0.0003	0.0015	0.0002	nd	0.003	0.0003	0.0015	0.0002	nd	0.003	0.0003	0.0015	0.0002
20		1,2,3,7,8-PCDF	0.05	nd	0.0040	0.0002	0.0020	0.0001	nd	0.005	0.0003	0.0025	0.0001	nd	0.005	0.0003	0.0025	0.0001
21		2,3,4,7,8-PCDF	0.5	nd	0.0040	0.0020	0.0020	0.0010	nd	0.005	0.0025	0.0025	0.0013	nd	0.004	0.0020	0.0020	0.0010
22		1,2,3,4,7,8-HxCDF	0.1	nd	0.0030	0.0003	0.0015	0.0002	nd	0.004	0.0004	0.0020	0.0002	nd	0.004	0.0004	0.0020	0.0002
23		1,2,3,6,7,8-HxCDF	0.1	nd	0.0030	0.0003	0.0015	0.0002	nd	0.004	0.0004	0.0020	0.0002	nd	0.004	0.0004	0.0020	0.0002
24		2,3,4,6,7,8-HxCDF	0.1	nd	0.0030	0.0003	0.0015	0.0002	nd	0.005	0.0005	0.0025	0.0003	nd	0.004	0.0004	0.0020	0.0002
25		1,2,3,7,8,9-HxCDF	0.1	nd	0.0030	0.0003	0.0015	0.0002	nd	0.005	0.0005	0.0025	0.0003	nd	0.005	0.0005	0.0025	0.0003
26		1,2,3,4,6,7,8-HpCDF	0.01	nd	0.0080	0.0001	0.0040	0.0000		0.014	0.0001	0.0140	0.0001	nd	0.009	0.0001	0.0045	0.0000
27		1,2,3,4,7,8,9-HpCDF	0.01	nd	0.0060	0.0001	0.0030	0.0000	nd	0.005	0.0001	0.0025	0.0000	nd	0.006	0.0001	0.0030	0.0000
28		OCDF	0.001	nd	0.0100	0.0000	0.0050	0.0000	nd	0.015	0.0000	0.0075	0.0000		0.015	0.0000	0.0150	0.0000
29		Gas sample volume (dscf)				118.26		118.26			124.37		124.37			122.35		122.35
30		O2 (%)				12.40		12.40			12.90		12.90			12.30		12.30
31																		
32		PCDD/PCDF (ng in sample)				0.0103		0.0052			0.0115		0.0058			0.0073		0.0036
33		PCDD/PCDF (ng/dscm @ 7% O2)		99.6		0.0050		0.0025	98.6		0.0056		0.0029	99.8		0.0034		0.0017
34																		
35		TEQ Cond Avg				0.00235												