

US EPA ARCHIVE DOCUMENT

	B	C
1	<b>Source Description</b>	
2		
3	Phase II ID No.	760
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. 8
10	Other Sister Facilities	None
11	Number of Sister Facilities	0
12	Combustor Class	Liquid-fired boiler
13	Combustor Type	Liquid-fired
14	Combustor Characteristics	
15	Capacity (MMBtu/hr)	350
16	Soot Blowing	
17	APCS Detailed Acronym	None
18	APCS General Class	
19	APCS Characteristics	NA
20	Hazardous Wastes	Liq
21	Haz Waste Description	NVR, HMD and Diamine liquid waste
22	Supplemental Fuel	Natural gas
23		
24	Stack Characteristics	
25	Diameter (ft)	10.0
26	Height (ft)	152
27	Gas Velocity (ft/sec)	19.7
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>760C1</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 15, 1995
9	Cond Dates	Jun-95
10	Cond Description	CoC; max temp, haz waste feed and prod rate
11	Content	PM, CO, Cr(+6)/Cr
12		
13	<b>760C2</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 14, 1995
19	Cond Dates	Jun-95
20	Cond Description	CoC; min comb temp
21	Content	CO
22		
23	<b>760C3</b>	
24		
25	Report Name/Date	Source Emissions Survey of E.I. Dupont De Nemours & Company, Inc. Sabine River Works
26	Report Prepar	METCO Environmental, Inc.
27	Testing Firm	METCO Environmental, Inc.
28	Testing Dates	July 9, 14, 15, 16, 1998
29	Cond Dates	Jul-98
30	Cond Description	Trial burn; DRE
31	Content	PM, HCl, Cl <sub>2</sub> , DRE monochlorobenzene
32		
33	<b>760C4</b>	
34		
35	Report Name/Date	Source Emissions Survey of E.I. Dupont De Nemours & Company, Inc. Sabine River Works
36	Report Prepar	METCO Environmental, Inc.
37	Testing Firm	METCO Environmental, Inc.
38	Testing Dates	July 20-24, 1998
39	Cond Dates	Jul-98
40	Cond Description	Risk burn
41	Content	PM, metals, PCDD/PCDF, other organics

	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>760C1</b>					R1	R2	R3				Cond Avg	
7													
8	PM (total)	E1	gr/dscf	y		0.0241	0.0246	0.0378				0.0288	total
9	PM	E1	gr/dscf	y		0.0223	0.0195	0.0359				0.0259	front half
10	CO (MHRA)	E1	ppmv	y		42.1	39.5	92.1				57.9	
11	CO (RA)	E1	ppmv	y		34.0	33.6	42.7				36.8	
12	Chromium (Hex)		lb/hr			0.011	0.009	0.015				0.012	
13	Chromium		lb/hr			0.144	0.121	0.254				0.173	
14													
15	Sampling Train	PM	E1										
16	Stack Gas Flowrate		dscfm			76240	78092	77453				77262	
17	O2		%			7.0	6.8	6.8				6.9	
18	Moisture		%			17.11	16.77	17.39				17.09	
19	Temperature		°F			379	393	384				385.3	
20													
21	Chromium (Hex)	E1	µg/dscm	y		38.6	30.4	51.1				40.0	
22	Chromium	E1	µg/dscm	y		505.0	408.4	864.5				593.0	
23	LVM	E1	µg/dscm	y		505.0	408.4	864.5				593.0	
24													
25													
26	<b>760C2</b>					R1	R2	R3				Cond Avg	
27													
28	CO (MHRA)	E1	ppmv	y		30.8	40.9	29.2				33.6	
29	CO (RA)	E1	ppmv	y		17.1	16.5	15.3				16.3	
30													
31	Sampling Train	CO	E1										
32	Stack Gas Flowrate		dscfm			55847	53240	48928				52672	
33	O2		%			13.6	12.8	12.8				13.1	
34	Moisture		%			12.00	13.04	13.34				12.8	
35	Temperature		°F			285	286	286				285.7	
36													
37	<b>760C3</b>					R1	R2	R3				Cond Avg	
38													
39	PM	E1	gr/dscf	y		0.0119	0.008	0.0076				0.0092	
40	HCl		ppmv	n		61.4	60	65.2					
41	Cl2		ppmv	n	nd	0.2	nd	0.2	nd			0.2	
42													
43	POHC DRE	Monochlorobenzene											
44	Feedrate												
45	Emission Rate	E1	µg/dscm		nd	5.363	nd	8.197	nd			4.680	
46	DRE	E1	%		>	99.998	>	99.997	>			99.998	
47													
48	Sampling Train	PM, HCl/Cl2	E1										
49	Stack Gas Flowrate		dscfm			59298	60000	59566				59621.3	
50	O2		%			11.9	11.5	11.9				11.8	
51	Moisture		%			18.34	18.12	17.83				18.10	
52	Temperature		°F			330	328	322				326.67	
53													
54	HCl	E1	ppmv	y		94.5	88.4	100.3				94.4	
55	Cl2	E1	ppmv	y		0.3	0.3	0.3				0.3	
56	Total Chlorine	E1	ppmv	y		95.1	89.0	100.9				95.0	
57													
58	<b>760C4</b>					R1	R2	R3				Cond Avg	
59													
60	PM	E1	gr/dscf	y		0.0062	0.0040	0.0051				0.0051	
61	Antimony		µg/dscm	n	nd	38.9	nd	13.8	nd			5.9	
62	Arsenic		µg/dscm	n	nd	141.9	nd	40.7	nd			45.0	
63	Barium		µg/dscm	n	nd	138.8	nd	36.7	nd			34.8	
64	Beryllium		µg/dscm	n	nd	2.9	nd	0.8	nd			0.7	
65	Cadmium		µg/dscm	n	nd	2.9	nd	0.8	nd			0.8	
66	Chromium		µg/dscm	n	nd	49.0	nd	51.5	nd			63.0	

	B	C	D	E	F	G	H	I	J	K	L	M	N
67	Lead		µg/dscm	n	nd	47.8	nd	19.5	nd	11.5			
68	Mercury		µg/dscm	n	nd	1.0	nd	0.9	nd	1.0			
69	Nickel		µg/dscm	n	nd	10.0	nd	7.9	nd	7.2			
70	Selenium		µg/dscm	n	nd	128.5	nd	39.6	nd	37.4			
71	Silver		µg/dscm	n	nd	3.8	nd	1.6	nd	1.5			
72	Thallium		µg/dscm	n	nd	470.2	nd	318.3	nd	299.4			
73	Zinc		µg/dscm	n		34.8		12.3		11.7			
74	Chromium (Hex)		g/s		nd	9.6E-05	nd	1.03E-04	nd	1.27E-04			
75													
76	Sampling Train	PM, metals	E1										
77	Stack Gas Flowrate		dscfm			59027		60347		61296		60223	
78	O2		%			12.4		12.3		13.0		12.6	
79	Moisture		%			14.41		14.07		13.87		14.12	
80	Temperature		°F			277		275		286		279	
81													
82	Antimony	E1	µg/dscm	y	nd	63.3	nd	22.2	nd	10.3	100	31.9	
83	Arsenic	E1	µg/dscm	y	nd	231.0	nd	65.5	nd	78.8	100	125.1	high nds?
84	Barium	E1	µg/dscm	y	nd	225.9	nd	59.0	nd	60.9	100	115.3	
85	Beryllium	E1	µg/dscm	y	nd	4.7	nd	1.3	nd	1.3	100	2.4	
86	Cadmium	E1	µg/dscm	y	nd	4.7	nd	1.3	nd	1.5	100	2.5	
87	Chromium	E1	µg/dscm	y	nd	79.8	nd	82.9		110.2	60	90.9	
88	Lead	E1	µg/dscm	y	nd	77.9	nd	31.4	nd	20.1	100	43.1	
89	Mercury	E1	µg/dscm	y	nd	1.6	nd	1.5	nd	1.8	100	1.6	
90	Nickel	E1	µg/dscm	y	nd	16.2	nd	12.8	nd	12.5	100	13.8	
91	Selenium	E1	µg/dscm	y	nd	209.1	nd	63.8	nd	65.4	100	112.8	
92	Silver	E1	µg/dscm	y	nd	6.2	nd	2.6	nd	2.6	100	3.8	
93	Thallium	E1	µg/dscm	y	nd	765.4	nd	512.1	nd	523.9	100	600.5	
94	Zinc	E1	µg/dscm	y		56.6		19.7		20.5		32.3	
95	Chromium (Hex)	E1	µg/dscm	y	nd	5.6	nd	5.8	nd	7.7	100	6.4	
96													
97	SVM	E1	µg/dscm	y	100	82.6	100	32.6	100	21.6	100	45.6	
98	LVM	E1	µg/dscm	y	100	315.5	100	149.6	42	190.3	83	218.5	
99													
100	Particle Size Distribution	in microns											
101	0.5-2.5		% wt			90.3		93.1		92			
102	2.5-5		% wt			7.5		5.4		6.2			
103	5-7.5		% wt			1.7		0.8		1.3			
104	7.5-10		% wt			0.2		0.6		0.2			
105	>10		% wt			0.2		0.1		0.3			

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC																	
1	<b>Feedstreams</b>																																												
2																																													
3																																													
4	<b>760C1</b>				R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg																		
5																																													
6	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F2		F2		F2		F2																		
7	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW																		
8	Feed Class 2																				HW		HW		HW		HW																		
9	Feedstream Description				NVR		NVR		NVR		NVR		HMD		HMD		HMD		HMD		HMD		HMD		HMD		HMD																		
10	Feed Rate				g/hr		8123976		8314488		8269128		8235864		1955016		1397088		1759968		1704024		1704024		1704024		1704024																		
11	Heat Content				Btu/lb		8031		8031		8031		8031		2027		2027		2027		2027		2027		2027		2027																		
12	Thermal Feedrate				MMBtu/hr		147		142		148		145.7		3.52		9.24		8.77		7.2		150.5		151.2		156.8		152.8																
13	Ash				g/hr		nd		4060		nd		4160		nd		4130		4117		977		698		879		851																		
14	Chromium (Tri)				g/hr																																								
15	Chlorine				g/hr		nd		988.394		nd		987.033		nd		987.034		987.5																										
16	Antimony				g/hr		nd		15.004		nd		15.792		nd		15.792		15.5																										
17	Arsenic				g/hr		nd		1.681		nd		0.789		nd		0.789		1.1																										
18	Barium				g/hr		nd		0.557		nd		0.973		nd		0.395		0.6																										
19	Beryllium				g/hr		nd		0.494		nd		0.493		nd		0.494		0.5																										
20	Cadmium				g/hr		nd		0.198		nd		0.197		nd		0.198		0.2																										
21	Chromium				g/hr		nd		238.89		nd		205.82		nd		425.328		290.0																										
22	Lead				g/hr		nd		15.814		nd		15.792		nd		15.792		15.8																										
23	Mercury				g/hr		nd		0.099		nd		0.099		nd		0.099		0.1																										
24	Silver				g/hr		nd		2.489		nd		2.566		nd		2.549		2.5																										
25	Thallium				g/hr		nd		61.638		nd		63.17		nd		63.17		62.7																										
26																																													
27	Stack Gas Flowrate				dscfm				76240				78092				77453		77261.7																										
28	O2				%				7				6.8				6.8		6.9																										
29	Estimated Firing Rate				MMBtu/hr																																								
30																																													
31	<i>Feedrate MTEC Calculations</i>																																												
32	Ash				mg/dscm		100		31.4		100		30.9		100		31.0		100		31.1		7.5		5.2		6.6		6.4		100		38.9		100		36.1		100		37.6		100		37.5
33	Chromium (Tri)				ug/dscm				0.0				0.0				0.0		0.0																										
34	Chlorine				ug/dscm		100		7635.0		100		7338.8		100		7399.4		7457.7																										
35	Antimony				ug/dscm		100		115.9		100		117.4		100		118.4		117.2																										
36	Arsenic				ug/dscm		100		13.0		100		5.9		100		5.9		8.3																										
37	Barium				ug/dscm		100		4.3		100		7.2		100		3.0		4.8																										
38	Beryllium				ug/dscm		100		3.8		100		3.7		100		3.7		3.7																										
39	Cadmium				ug/dscm		100		1.5		100		1.5		100		1.5		1.5																										
40	Chromium				ug/dscm		100		1845.3		100		1530.3		100		3188.5		2188.1																										
41	Lead				ug/dscm		100		122.2		100		117.4		100		118.4		119.3																										
42	Mercury				ug/dscm		100		0.8		100		0.7		100		0.7		0.7																										
43	Silver				ug/dscm		100		19.2		100		19.1		100		19.1		19.1																										
44	Thallium				ug/dscm		100		476.1		100		469.7		100		473.6		473.1																										
45																																													
46	SVM				ug/dscm				123.7				118.9				119.9		120.8																										
47	LVM				ug/dscm				1862.1				1539.9				3198.1		2200.0																										
48																																													
49																																													
50	<b>760C2</b>				R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg																		
51																																													
52	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F2		F2		F2		F2																		
53	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW																		
54	Feed Class 2																				HW		HW		HW		HW																		
55	Feedstream Description				NVR		NVR		NVR		NVR		HMD		HMD		HMD		HMD		HMD		HMD		HMD		HMD waste																		
56	Feed Rate				g/hr		910602		3204533		3205667		2300000		1737817		1738649		1787666		1700000		1700000		1700000		1700000																		
57	Heat Content				Btu/lb		8000		8000		8000		8000		2000		2000		2000		2000		2000		2000		2000																		
58																																													

	B	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR
1	<b>Feedstreams</b>															
2																
3																
4	<b>760C1</b>	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	Spike		Spike		Spike		Spike		Total		Total		Total		Total
9	Feedstream Description	Spike		Spike		Spike		Spike		Total		Total		Total		Total
10	Feed Rate	42266		42938		42693		42632								
11	Heat Content															
12	Thermal Feedrate									150.5		151.2		156.8		152.8
13	Ash	2486		2527		2522		2511								
14	Chromium (Tri)	512.568		521.64		517.104		517								
15	Chlorine															
16	Antimony															
17	Arsenic															
18	Barium															
19	Beryllium															
20	Cadmium															
21	Chromium															
22	Lead															
23	Mercury															
24	Silver															
25	Thallium															
26																
27	Stack Gas Flowrate	76240		78092		77453		77261.7		76240		78092		77453		77261.7
28	O2	7		6.8		6.8		6.9		7		6.8		6.8		6.9
29	Estimated Firing Rate									338.8		352.0		349.2		346.7
30																
31	<i>Feedrate MTEC Calculati</i>															
32	Ash	19.2		18.8		18.9		19.0	67	58.1	66	54.9	67	56.5	66	56.5
33	Chromium (Tri)	3959.4		3878.5		3876.5		3904.8	0	3959.4	0	3878.5	0	3876.5	0	3904.8
34	Chlorine								100	7635.0	100	7338.8	100	7399.4	100	7457.7
35	Antimony								100	115.9	100	117.4	100	118.4	100	117.2
36	Arsenic								100	13.0	100	5.9	100	5.9	100	8.3
37	Barium								100	4.3	0	7.2	100	3.0	50	4.8
38	Beryllium								0	3.8	0	3.7	100	3.7	33	3.7
39	Cadmium								100	1.5	0	1.5	0	1.5	34	1.5
40	Chromium	3959.4		3878.5		3876.5		3904.8	32	5804.8	28	5408.8	0	7065.0	18	6092.9
41	Lead								100	122.2	100	117.4	100	118.4	100	119.3
42	Mercury								100	0.8	100	0.7	100	0.7	100	0.7
43	Silver								100	19.2	100	19.1	100	19.1	100	19.1
44	Thallium								100	476.1	100	469.7	100	473.6	100	473.1
45																
46	SVM								100	123.7	99	118.9	99	119.9	99	120.8
47	LVM	3959.4		3878.5		3876.5		3904.8	32	5821.6	28	5418.4	0	7074.6	19	6104.9
48																
49																
50	<b>760C2</b>															
51																
52	Feedstream Number															
53	Feed Class															
54	Feed Class 2															
55	Feedstream Description															
56	Feed Rate															
57	Heat Content															
58																

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	
59	Stack Gas Flowrate	dscfm			55847		53240		48928		52671.7		55847		53240		48928		52671.7										
60	O2	%			13.6		12.8		12.8		13.1		13.6		12.8		12.8		13.1										
61	Thermal Feedrate	MMBtu/hr			16.0		56.5		56.5		40.5		7.7		7.7		7.9		7.5		23.7		64.1		64.4		50.7		
62																													
63	Estimated Firing Rate	MMBtu/hr																			131		139		127		132.4		
64																													
65	<b>760C3</b>				R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		
66																													
67	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2										
68	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW										
69	Feed Class 2																				HW		HW		HW		HW		
70	Feedstream Description				NVR		NVR		NVR		NVR		Diamine		Diamine		Diamine		Diamine										
71	Feed Rate	lb/hr									?																		
72	Density	ml/g?			1.058		1.057		1.063		1.058		0.9987		0.9972		0.9963		0.997										
73	Heat Content	Btu/lb			2967		2981		2829		2926		348		374		399		374										
74	Monochlorobenzene	ug/l	nd	120	nd	120	nd	120	nd	120.0	nd	50.0	nd	5.0	nd	5.0	nd	5.0	nd	20.0									
75	Ash	ppmw			160		160		160		147.0	nd	13.0	nd	13.0	nd	13.0		13.0										
76	Chlorine	ppmw	nd	10	nd	10	nd	10	nd	10.0	nd	10.0	nd	10.0	nd	10.0		10.0		10.0									
77	Antimony	ppmw	nd	2	nd	2	nd	2	nd	2.0	nd	2.0	nd	2.0	nd	2.0		2.0		2.0									
78	Arsenic	ppmw	nd	2	nd	2	nd	2	nd	2.0	nd	2.0	nd	2.0	nd	2.0		2.0		2.0									
79	Barium	ppmw	nd	40	nd	40	nd	40	nd	40.0	nd	40.0	nd	40.0	nd	40.0		40.0		40.0									
80	Beryllium	ppmw	nd	1	nd	1	nd	1	nd	1.0	nd	1.0	nd	1.0	nd	1.0		1.0		1.0									
81	Cadmium	ppmw	nd	0.4	nd	0.4	nd	0.4	nd	0.4	nd	0.4	nd	0.4	nd	0.4		0.4		0.4									
82	Chromium	ppmw			30.6		28.2		29.8		29.5	nd	1.0	nd	1.0	nd	1.0		1.0										
83	Lead	ppmw	nd	0.6	nd	0.6	nd	0.6	nd	0.6	nd	0.6	nd	0.6	nd	0.6		0.6		0.6									
84	Mercury	ppmw	nd	0.03	nd	0.03	nd	0.03	nd	0.03	nd	0.0	nd	0.0	nd	0.0		0.0		0.03									
85	Silver	ppmw	nd	1	nd	1	nd	1	nd	1.0	nd	1.0	nd	1.0	nd	1.0		1.0		1.0									
86	Thallium	ppmw	nd	2	nd	2	nd	2	nd	2.0	nd	2.0	nd	2.0	nd	2.0		2.0		2.0									
87																													
88	Stack Gas Flowrate	dscfm			59298		60000		59566		59621.3																		
89	O2	%			11.9		11.5		11.9		11.8																		
90																													
91	Thermal Feedrate	MMBtu/hr																											
92	Estimated Firing Rate	MMBtu/hr																				171		181		172		175	
93	can't make MTEC calcs -- need total mass feedrates																												
94																													
95																													
96																													
97	<b>760C4</b>				R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		
98																													
99	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2										
100	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW										
101	Feed Class 2																				HW		HW		HW		HW		
102	Feedstream Description				NVR		NVR		NVR		NVR		Diamine		Diamine		Diamine		Diamine										
103	Feed Rate	lb/hr									?																		
104	Density	ml/g?			1.08		1.075		1.079		1.078		0.9788		0.994		0.9946		0.9891										
105	Heat Content	Btu/lb			8703		8732		8717		8717		4046		936		923		1968										
106	Chlorine	ppmw	nd	15	nd	14	nd	13	nd	14	nd	23	nd	54	nd	66		48		48									
107	Ash	%			0.021		0.019		0.02		0.02	nd	0.0015	nd	0.0014		0.0017		0.0015										
108	Antimony	ppmw	nd	2	nd	2	nd	2	nd	2.0	nd	2.0	nd	2.0	nd	2.0		2.0		2.0									
109	Arsenic	ppmw	nd	2	nd	2	nd	2	nd	2.0	nd	2.0	nd	2.0	nd	2.0		2.0		2.0									
110	Barium	ppmw	nd	40	nd	40	nd	40	nd	40.0	nd	40.0	nd	40.0	nd	40.0		40.0		40.0									
111	Beryllium	ppmw	nd	1	nd	1	nd	1	nd	1.0	nd	1.0	nd	1.0	nd	1.0		1.0		1.0									
112	Cadmium	ppmw	nd	0.4	nd	0.4	nd	0.4	nd	0.40	nd	0.4	nd	0.4	nd	0.4		0.4		0.40									
113	Chromium	ppmw			45.2		45		45.2		44.7	nd	1.0	nd	1.0	nd	1.0		1.0										
114	Lead	ppmw	nd	0.6	nd	0.6	nd	0.6	nd	0.62	nd	0.7	nd	0.6	nd	0.6		0.6		0.63									
115	Mercury	ppmw	nd	0.033	nd	0.033	nd	0.033	nd	0.033	nd	0.0	nd	0.0	nd	0.0		0.033		0.033									
116	Nickel	ppmw	nd	8	nd	8	nd	8	nd	8.0	nd	8.0	nd	8.0	nd	8.0		8.0		8.0									

	B	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR
59	Stack Gas Flowrate															
60	O2															
61	Thermal Feedrate															
62																
63	Estimated Firing Rate															
64																
65	<b>760C3</b>															
66																
67	Feedstream Number															
68	Feed Class															
69	Feed Class 2															
70	Feedstream Description															
71	Feed Rate															
72	Density															
73	Heat Content															
74	Monochlorobenzene															
75	Ash															
76	Chlorine															
77	Antimony															
78	Arsenic															
79	Barium															
80	Beryllium															
81	Cadmium															
82	Chromium															
83	Lead															
84	Mercury															
85	Silver															
86	Thallium															
87																
88	Stack Gas Flowrate															
89	O2															
90																
91	Thermal Feedrate															
92	Estimated Firing Rate															
93	can't make MTEC calcs --															
94																
95																
96																
97	<b>760C4</b>															
98																
99	Feedstream Number															
100	Feed Class															
101	Feed Class 2															
102	Feedstream Description															
103	Feed Rate															
104	Density															
105	Heat Content															
106	Chlorine															
107	Ash															
108	Antimony															
109	Arsenic															
110	Barium															
111	Beryllium															
112	Cadmium															
113	Chromium															
114	Lead															
115	Mercury															
116	Nickel															

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	
117	Selenium		ppmw		2.6		1.9		1.9		2.1		1.1	nd	1.0	nd	1.2		1.1										
118	Silver		ppmw	nd	1	nd	1	nd	1		1.0	nd	1.0	nd	1.0	nd	1.0		1.0										
119	Thallium		ppmw	nd	2	nd	2	nd	2		2.0	nd	2.0	nd	2.0	nd	2.0		2.0										
120	Zinc		ppmw	nd	4	nd	4.7	nd	4		4.4	nd	4.9	nd	4.2	nd	4.0		4.4										
121																													
122	Stack Gas Flowrate		dscfm		59027		60347		61296		60223																		
123	O2		%		12.4		12.3		13		13																		
124																													
125	Estimated Firing Rate		MMBtu/hr																	161.2			166.7		155.7		161.2		
126	can't make MTEC calcs -- need total mass feedrates																												

	B	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR
117	Selenium															
118	Silver															
119	Thallium															
120	Zinc															
121																
122	Stack Gas Flowrate															
123	O2															
124																
125	Estimated Firing Rate															
126	can't make MTEC calcs --															

	A	B	C	D	E	F
1	<b>Process Information</b>					
2						
3		Units	Run	Run	Run	Avg
4			1	2	3	
5						
6	<b>760C1</b>					
7						
8	Burner Temp	°F	703	715	717	712
9	Production Rate	Mlb/hr	193	192	196	194
10						
11	<b>760C2</b>					
12						
13	Burner Temp	°F	572	569	562	568
14	Production Rate					

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:	DuPont Orange TX, Boiler No. 8															
4	Condition ID:	760C4															
5	Condition/Test Date:	Risk burn, July 20-24, 1998															
6																	
7		I-TEF	Run 2				Run 3				Run 4						
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	nd	0.0030	0.0030	0.0015	0.0015	nd	0.002	0.0020	0.0010	0.0010	nd	0.002	0.0020	0.0010	0.0010
12	1,2,3,7,8-PCDD	0.5	nd	0.0040	0.0020	0.0020	0.0010	nd	0.003	0.0015	0.0015	0.0008	nd	0.004	0.0020	0.0020	0.0010
13	1,2,3,4,7,8-HxCDD	0.1	nd	0.0050	0.0005	0.0025	0.0003	nd	0.006	0.0006	0.0030	0.0003	nd	0.004	0.0004	0.0020	0.0002
14	1,2,3,6,7,8-HxCDD	0.1	nd	0.0050	0.0005	0.0025	0.0003	nd	0.006	0.0006	0.0030	0.0003	nd	0.004	0.0004	0.0020	0.0002
15	1,2,3,7,8,9-HxCDD	0.1	nd	0.0040	0.0004	0.0020	0.0002	nd	0.005	0.0005	0.0025	0.0003	nd	0.004	0.0004	0.0020	0.0002
16	1,2,3,4,6,7,8-HpCDD	0.01	nd	0.0070	0.0001	0.0035	0.0000		0.005	0.0001	0.0050	0.0001	nd	0.006	0.0001	0.0030	0.0000
17	OCDD	0.001		0.0180	0.0000	0.0180	0.0000		0.019	0.0000	0.0190	0.0000		0.024	0.0000	0.0240	0.0000
18	2,3,7,8-TCDF	0.1	nd	0.0040	0.0004	0.0020	0.0002	nd	0.003	0.0003	0.0015	0.0002	nd	0.004	0.0004	0.0020	0.0002
19	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
20	2,3,4,7,8-PCDF	0.5	nd	0.0040	0.0020	0.0020	0.0010	nd	0.004	0.0020	0.0020	0.0010	nd	0.004	0.0020	0.0020	0.0010
21	1,2,3,4,7,8-HxCDF	0.1	nd	0.0040	0.0004	0.0020	0.0002	nd	0.004	0.0004	0.0020	0.0002	nd	0.004	0.0004	0.0020	0.0002
22	1,2,3,6,7,8-HxCDF	0.1	nd	0.0040	0.0004	0.0020	0.0002	nd	0.003	0.0003	0.0015	0.0002	nd	0.004	0.0004	0.0020	0.0002
23	2,3,4,6,7,8-HxCDF	0.1	nd	0.0040	0.0004	0.0020	0.0002	nd	0.004	0.0004	0.0020	0.0002	nd	0.004	0.0004	0.0020	0.0002
24	1,2,3,7,8,9-HxCDF	0.1	nd	0.0050	0.0005	0.0025	0.0003	nd	0.004	0.0004	0.0020	0.0002	nd	0.005	0.0005	0.0025	0.0003
25	1,2,3,4,6,7,8-HpCDF	0.01		0.0170	0.0002	0.0170	0.0002		0.017	0.0002	0.0170	0.0002		0.018	0.0002	0.0180	0.0002
26	1,2,3,4,7,8,9-HpCDF	0.01	nd	0.0040	0.0000	0.0020	0.0000	nd	0.004	0.0000	0.0020	0.0000	nd	0.006	0.0001	0.0030	0.0000
27	OCDF	0.001		0.0210	0.0000	0.0210	0.0000		0.015	0.0000	0.0150	0.0000		0.021	0.0000	0.0210	0.0000
28																	
29	Gas sample volume (dscf)				132.535		132.535			127.168		127.168			133.522		133.522
30	O2 (%)				12.40		12.40			12.30		12.30			13.00		13.00
31																	
32	PCDD/PCDF (ng in sample)				0.0110		0.0056			0.0095		0.0049			0.0099		0.0051
33	PCDD/PCDF (ng/dscm @ 7% O2)		98.1		0.0048		0.0024	97.3		0.0043		0.0022	97.7		0.0046		0.0023
34																	
35	TEQ Cond Avg		0.00232														