

US EPA ARCHIVE DOCUMENT

	B	C
1	Source Description	
2		
3	Phase II ID No.	2013
4	EPA ID No.	TXD008123317
5	Facility Name	E.I. Du Pont De Nemours & Company, Inc.
6	Facility Location	
7	City	Victoria
8	State	TX
9	Unit ID Name/No.	Boiler Nos. 3 & 4
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)	1000
16	Soot Blowing	None
17	APCS Detailed Acronym	
18	APCS General Class	
19	APCS Characteristics	
20	Hazardous Wastes	Liq
21	Haz Waste Description	Liquid wastes
22	Supplemental Fuel	?
23		
24	Stack Characteristics	
25	Diameter (ft)	13.7
26	Height (ft)	150
27	Gas Velocity (ft/sec)	50.0
28	Gas Temperature (°F)	506
29		
30	Permitting Status	Tier I for metals, CI (except Cr+6 Tier III)
	HWC Burn Status (Date if	
31	Terminated)	

	B	C
1	Cond Description	
2		
3	2013C1	
4		
5	Report Name/Date	Source Emission Survey of E.I. Du Pont De Nemours & Company, Inc. Boiler 3 and 4 Stack, June 1995
6	Report Prepare	METCO Env
7	Testing Firm	METCO Env
8	Testing Dates	June 26-27, 1995
9	Cond Dates	Jun-95
10	Condition Descr	CoC
11	Content	PM, Cr+6/Cr
12		
13	2013C2	
14		
15	Report Name/Date	Source Emission Survey of E.I. Du Pont De Nemours & Company, Inc. Boiler 3 and 4 Stack, June 1995
16	Report Prepare	METCO Env
17	Testing Firm	METCO Env
18	Testing Dates	June 27-28, 1995
19	Cond Dates	Jun-95
20	Condition Descr	CoC
21	Content	PM, Cr+6/Cr
22		
23	2013C3	
24		
25	Report Name/Date	Dupont DRE Burn, Boiler No. 3 Stack, Victoria, TX, Feb. 1999
26	Report Prepare	METCO Env
27	Testing Firm	METCO Env
28	Testing Dates	February 15-16, 1999
29	Cond Dates	Feb-99
30	Condition Descr	Trial burn; DRE
31	Content	Monochlorobenzene DRE
32		
33	2013C4	
34		
35	Report Name/Date	Dupont Risk Burn, Boiler No. 3 Stack, Victoria, TX, Feb. 1999
36	Report Prepare	METCO Env
37	Testing Firm	METCO Env
38	Testing Dates	February 8-12, 1999
39	Cond Dates	Feb-99
40	Condition Descr	Risk burn, normal op cond w/ Cr spike
41	Content	PCDD/PCDF, PM, PSD, HCl/Cl ₂ , Cr+6

	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Stack Gas Emissions												
2													
3		Comments	Units	7% O2									
4													
5													
6	2013C1					R1	R2	R3		Cond Avg			
7													
8	PM	E1	gr/dscf	y		0.0273	0.0444	0.0302		0.034			
9	Chromium		lb/hr			0.101	0.112	0.071		0.095			
10	Chromium (Hex)		lb/hr			0.029	0.035	0.02		0.028			
11													
12	Sampling Train	PM	E1										
13	Stack Gas Flowrate		dscfm			162567	168691	167774		166344.0			
14	O2		%			8.6	8.2	8		8.3			
15	Moisture		%			14.87	14.55	15.57		15.0			
16	Temperature		°F			504	507	497		502.7			
17													
18	Sampling Train	Cr/Cr+6	E2										
19	Stack Gas Flowrate		dscfm			166803	162826	161282		163637.0			
20	O2		%			8.6	8.2	8		8.3			
21	Moisture		%			11.22	13.95	15.73		13.6			
22	Temperature		°F			504	508	503		505.0			
23													
24	Chromium	E2	µg/dscm	y		183	201	127		170			
25	Chromium (Hex)	E2	µg/dscm	y		52	63	36		50			
26													
27	LVM	E2	µg/dscm	y		183	201	127		170 (Cr only)			
28													
29	2013C2					R1	R2	R3		Cond Avg			
30													
31	PM	E1	gr/dscf	y		0.0386	0.0208	0.0729		0.044			
32	Chromium		lb/hr			0.064	0.085	0.333		0.161			
33	Chromium (Hex)		lb/hr			0.026	0.035	0.043		0.035			
34													
35	Sampling Train	PM	E1										
36	Stack Gas Flowrate		dscfm			62068	64650	63185		63301.0			
37	O2		%			11.6	11.4	11.6		11.5			
38	Moisture		%			17.19	17.26	16.76		17.1			
39	Temperature		°F			289	284	276		283.0			
40													
41	Sampling Train	Cr/Cr+6	E2										
42	Stack Gas Flowrate		dscfm			67981	78911	65272		70721.3			
43	O2		%			11.6	11.4	11.6		11.5			
44	Moisture		%			16.7	16.64	17.69		17.0			
45	Temperature		°F			294	287	278		286.3			
46													
47	Chromium	E1	µg/dscm	y		375	420	2032		898			
48	Chromium (Hex)	E1	µg/dscm	y		152	173	262		196			
49	LVM	E1	µg/dscm	y		375	420	2032		898			
50													
51	2013C3					R1	R2	R3		Cond Avg			
52													
53	POHC DRE	Chlorobenzene											
54	POHC Feedrate		lb/hr			160	160	160					
55	Emissions Rate												
56	DRE	E1	%	>		99.998 >	99.998 >	99.998					
57													
58	Sampling Train	POHC	E1										
59	Stack Gas Flowrate		dscfm			163984	169132	165576		166230.7			
60	O2		%			13.6	13.5	13.8		13.6			
61	Moisture		%			8.9	10.4	8.88		9.4			
62	Temperature		°F			318	314	314		315.3			
63													
64	2013C4					R1	R2	R3		Cond Avg			
65													
66	PM	E1	gr/dscf	y		0.0088	0.0069	0.0076		0.0078			
67	HCl		ppmv	n		16.3	10.1	11.8		12.73			
68	Cl2		ppmv	n		0.02	0.02	0.01		0.02			
69	Chromium (Hex)		µg/dscm	n		118.6	161.5	138.5		139.5			
70													
71	Sampling Train	PM, HCl/Cl2 E1											

	B	C	D	E	F	G	H	I	J	K	L	M	N
72	Stack Gas Flowrate		dscfm			213385		222830		225725		220646.67	
73	O2		%			6.3		6.6		6.6		6.5	
74	Moisture		%			18.2		17.6		16.3		17.4	
75	Temperature		°F			382		387		383		384.0	
76													
77	Sampling Train	Cr+6	E2										
78	Stack Gas Flowrate		dscfm			228175		216511		227662		224116.0	
79	O2		%			6.3		6.6		6.6		6.5	
80	Moisture		%			11.3		17.98		10.48		13.3	
81	Temperature		°F			385		391		381		385.7	
82													
83	HCl	E1	ppmv	y		15.52		9.82		11.47		12.29	
84	Cl2	E1	ppmv	y		0.02		0.02		0.01		0.02	
85	Total Chlorine	E1	ppmv	y		15.56		9.86		11.49		12.33	
86													
87	Chromium (Hex)	E2	µg/dscm	y		113.0		157.0		134.7		134.7	
88													
89													
90	Particle Size Distribution		in microns										
91	Median Size		microns			1.5		2.95 <		0.68			
92	<2		% wt			59.5		39		85.8			
93	<10		% wt			95.9		88.5		97.6			

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	
1	Feedstreams																										
2																											
3																											
4	2013C1																										
5	Feedstream Number																										
6	Feed Class																										
7	Feed Class 2																										
8	Feedstream Description																										
9	Ash	g/hr	nd	5196.4	nd	5145.2	nd	17377.0	Liq waste																		
10	Chlorine	g/hr	nd	7184.7	nd	6714.2	nd	6981.4	Liq HW																		
11	Antimony	g/hr	nd	15.84	nd	15.675	nd	16.483	HW																		
12	Arsenic	g/hr	nd	0.832	nd	0.824	nd	1.544																			
13	Barium	g/hr	nd	0.725	nd	0.839	nd	0.642																			
14	Beryllium	g/hr	nd	0.104	nd	0.103	nd	0.104																			
15	Cadmium	g/hr	nd	0.104	nd	0.103	nd	0.104																			
16	Chromium	g/hr	nd	8.899	nd	9.766	nd	13.612																			
17	Lead	g/hr	nd	16.629	nd	18.445	nd	17.432																			
18	Mercury	g/hr	nd	0.104	nd	0.103	nd	0.104																			
19	Silver	g/hr	nd	2.608	nd	2.573	nd	2.61																			
20	Thallium	g/hr	nd	0.832	nd	1.605	nd	0.832																			
21	Gas Flowrate	dsdcm		162567		168691		167774																			
22	Oxygen	%		8.6		8.2		8																			
23	Thermal Feedrate	MMBtu/hr																									
24	Estimated Firing Rate	MMBtu/hr																									
25																											
26	Feedrate MTEC Calculations																										
27	Ash	mg/dscm	100	21.3	100	19.6	100	65.7	100																		
28	Chlorine	ug/dscm	100	29386.4	100	25637.8	100	26391.5	100																		
29	Antimony	ug/dscm	100	64.8	100	59.9	100	62.3	100																		
30	Arsenic	ug/dscm	100	3.4	100	3.1	100	5.8	100																		
31	Barium	ug/dscm	100	3.0	100	3.2	100	2.4	100																		
32	Beryllium	ug/dscm	100	0.4	100	0.4	100	0.4	100																		
33	Cadmium	ug/dscm	100	0.4	100	0.4	100	0.4	100																		
34	Chromium	ug/dscm	100	36.4		37.3		51.5																			
35	Lead	ug/dscm	100	68.0	100	70.4	100	65.9	100																		
36	Mercury	ug/dscm	100	0.4	100	0.4	100	0.4	100																		
37	Silver	ug/dscm	100	10.7	100	9.8	100	9.9	100																		
38	Thallium	ug/dscm	100	3.4	100	6.1	100	3.1	100																		
39	SVM	ug/dscm	100	68.4	100	35.4	100	33.1	100																		
40	LVM	ug/dscm	9.5	40.2	8.7	40.8	10.8	57.7	9.8																		
41																											
42	2013C2																										
43	Feedstream Number																										
44	Feed Class																										
45	Feed Class 2																										
46	Feedstream Description																										
47	Ash	g/hr	nd	1292.0	nd	1806.8	nd	1671.5	Liq waste																		
48	Chlorine	g/hr	nd	3245.6	nd	2855.7	nd	2202.7	Liq HW																		
49	Antimony	g/hr	nd	4.091	nd	3.635	nd	3.542	HW																		
50	Arsenic	g/hr	nd	0.207	nd	0.184	nd	0.187																			
51	Barium	g/hr	nd	0.261	nd	0.257	nd	0.21																			
52	Beryllium	g/hr	nd	0.025	nd	0.023	nd	0.023																			
53	Cadmium	g/hr	nd	0.025	nd	0.028	nd	0.028																			
54	Chromium	g/hr	nd	2.697	nd	1.846	nd	2.017																			
55	Lead	g/hr	nd	4.178	nd	3.931	nd	3.723																			
56	Mercury	g/hr	nd	0.025	nd	0.023	nd	0.023																			
57																											
58																											
59																											
60																											

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
121																											
122	Thermal Feedrate																										
123	Estimated Firing Rate																										
124	Ash																										
125	Chlorine																										
126	Chromium																										
127	Antimony																										
128	Arsenic																										
129	Barium																										
130	Beryllium																										
131	Cadmium																										
132	Chromium																										
133	Cobalt																										
134	Lead																										
135	Manganese																										
136	Mercury																										
137	Molybdenum																										
138	Nickel																										
139	Selenium																										
140	Silver																										
141	Thallium																										
142	Vanadium																										
143																											

can't calculate; need feedrates of waste

1015.7

A	B	C	D	E	F	G	H	I	J	K	L		M	N	O	P	Q	R
											TEQ	Total						
1	PCDD/PCDF																	
2	Facility Name and ID:	DuPont, Victoria, TX, Boiler Nos. 3 and 4																
3	Condition ID:	2013C4																
4	Condition/Test Date:	Risk burn, normal conditions, February, 1999																
5																		
6																		
7																		
8																		
9																		
10	Stack Gas ng/dscm @ 7% O2																	
11	2,3,7,8-TCDD	1	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0010	0.0010	0.0010	0.0010	0.0010	nd	0.0010	0.0010	0.0005	0.0005
12	TCDD Total	0	0.0340	0.0000	0.0340	0.0000	0.0000	0.0000	0.0330	0.0000	0.0330	0.0000	0.0000	nd	0.0030	0.0000	0.0030	0.0000
13	1,2,3,7,8-PCDD	0.5	0.0050	0.0025	0.0050	0.0025	0.0025	0.0025	0.0050	0.0025	0.0050	0.0025	0.0025	nd	0.0010	0.0005	0.0005	0.0003
14	PCDD Total	0	0.0510	0.0000	0.0510	0.0000	0.0000	0.0000	0.0480	0.0000	0.0480	0.0000	0.0000	nd	0.0050	0.0000	0.0050	0.0000
15	1,2,3,4,7,8-HxCDD	0.1	0.0050	0.0005	0.0050	0.0005	0.0005	0.0005	0.0040	0.0004	0.0040	0.0004	0.0004	nd	0.0020	0.0002	0.0010	0.0001
16	1,2,3,6,7,8-HxCDD	0.1	0.0040	0.0004	0.0040	0.0004	0.0004	0.0004	0.0060	0.0006	0.0060	0.0006	0.0006	nd	0.0020	0.0002	0.0010	0.0001
17	1,2,3,7,8,9-HxCDD	0.1	0.0030	0.0003	0.0030	0.0003	0.0003	0.0003	0.0030	0.0003	0.0030	0.0003	0.0003	nd	0.0020	0.0002	0.0010	0.0001
18	HxCDD Total	0	0.0470	0.0000	0.0470	0.0000	0.0000	0.0000	0.0450	0.0000	0.0450	0.0000	0.0000	nd	0.0060	0.0000	0.0060	0.0000
19	1,2,3,4,6,7,8-HpCDD	0.01	0.0140	0.0001	0.0140	0.0001	0.0001	0.0001	0.0170	0.0002	0.0170	0.0002	0.0002		0.0040	0.0000	0.0040	0.0000
20	HpCDD Total	0	0.0250	0.0000	0.0250	0.0000	0.0000	0.0000	0.0280	0.0000	0.0280	0.0000	0.0000		0.0060	0.0000	0.0060	0.0000
21	OCDD	0.001	0.0150	0.0000	0.0150	0.0000	0.0000	0.0000	0.0160	0.0000	0.0160	0.0000	0.0000		0.0070	0.0000	0.0070	0.0000
22	2,3,7,8-TCDF	0.1	0.0210	0.0021	0.0210	0.0021	0.0021	0.0021	0.0170	0.0017	0.0170	0.0017	0.0017		0.0020	0.0002	0.0020	0.0002
23	TCDF Total	0	0.6700	0.0000	0.6700	0.0000	0.0000	0.0000	0.5270	0.0000	0.5270	0.0000	0.0000		0.0640	0.0000	0.0640	0.0000
24	1,2,3,7,8-PCDF	0.05	0.0310	0.0016	0.0310	0.0016	0.0016	0.0016	0.0250	0.0013	0.0250	0.0013	0.0013		0.0040	0.0002	0.0040	0.0002
25	2,3,4,7,8-PCDF	0.5	0.0470	0.0235	0.0470	0.0235	0.0235	0.0235	0.0380	0.0190	0.0380	0.0190	0.0190		0.0060	0.0030	0.0060	0.0030
26	PCDF Total	0	0.5360	0.0000	0.5360	0.0000	0.0000	0.0000	0.4770	0.0000	0.4770	0.0000	0.0000		0.0730	0.0000	0.0730	0.0000
27	1,2,3,4,7,8-HxCDF	0.1	0.0380	0.0038	0.0380	0.0038	0.0038	0.0038	0.0350	0.0035	0.0350	0.0035	0.0035		0.0070	0.0007	0.0070	0.0007
28	1,2,3,6,7,8-HxCDF	0.1	0.0340	0.0034	0.0340	0.0034	0.0034	0.0034	0.0330	0.0033	0.0330	0.0033	0.0033		0.0050	0.0005	0.0050	0.0005
29	2,3,4,6,7,8-HxCDF	0.1	0.0450	0.0045	0.0450	0.0045	0.0045	0.0045	0.0380	0.0038	0.0380	0.0038	0.0038		0.0070	0.0007	0.0070	0.0007
30	1,2,3,7,8,9-HxCDF	0.1	0.0190	0.0019	0.0190	0.0019	0.0019	0.0019	0.0170	0.0017	0.0170	0.0017	0.0017		0.0040	0.0004	0.0040	0.0004
31	HxCDF Total	0	0.3580	0.0000	0.3580	0.0000	0.0000	0.0000	0.3260	0.0000	0.3260	0.0000	0.0000		0.0620	0.0000	0.0620	0.0000
32	1,2,3,4,6,7,8-HpCDF	0.01	0.0420	0.0004	0.0420	0.0004	0.0004	0.0004	0.0430	0.0004	0.0430	0.0004	0.0004		0.0110	0.0001	0.0110	0.0001
33	1,2,3,4,7,8,9-HpCDF	0.01	0.0210	0.0002	0.0210	0.0002	0.0002	0.0002	0.0230	0.0002	0.0230	0.0002	0.0002		0.0050	0.0001	0.0050	0.0001
34	HpCDF Total	0	0.1070	0.0000	0.1070	0.0000	0.0000	0.0000	0.1080	0.0000	0.1080	0.0000	0.0000		0.0200	0.0000	0.0200	0.0000
35	OCDF	0.001	0.0070	0.0000	0.0070	0.0000	0.0000	0.0000	0.0110	0.0000	0.0110	0.0000	0.0000		0.0060	0.0000	0.0060	0.0000
36																		
37	PCDD/PCDF (ng/dscm @ 7% O2)		0.0	0.047	1.850	0.047	0.0	0.0	0.040	1.619	0.040	0.040	0.040	26.2	0.252	0.008	0.252	0.007
38																		
39	TEQ Cond Avg																	
40	Total Cond Avg																	