	B	C
1	**Source Description**	
2		
3	Phase II ID No.	2016
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 No. 1
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)	400
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)	12.3
26	Height (ft)	150
27	Gas Velocity (ft/sec)	
28	Gas Temperature (°F)	
29		
30	Permitting Status	Tier I for metals, Cl (except Cr+6 Tier III)
31	HWC Burn Status (Date if Terminated)	

	B	C
1	**Cond Description**	
2		
3	**2016C1**	
4		
5	Report Name/Date	Dupont DRE Burn, Boiler No. 1 Stack, Victoria, TX, Feb. 1999
6	Report Prepare	METCO Env
7	Testing Firm	METCO Env
8	Testing Dates	February 19-20, 1999
9	Cond Dates	Feb-99
10	Condition Descr	Trial burn; DRE
11	Content	Monochlorobenzene DRE
12		
13	**2016C2**	
14		
15	Report Name/Date	Dupont Risk Burn, Boiler No. 1 Stack, Victoria, TX, Feb. 1999
16	Report Prepare	METCO Env
17	Testing Firm	METCO Env
18	Testing Dates	February 16-20, 1999
19	Cond Dates	Feb-99
20	Condition Descr	Risk burn
21	Content	PCDD/PCDF, PM, PSD, HCl/Cl2

	B	C	D	E	F	G	H	I	J	K	L	M
1	**Stack Gas Emissions**											
2												
3		Comments	Units	7% O2								
4												
5												
6	**2016C1**					R1		R2		R3		Cond Avg
7												
8	POHC DRE	Chlorobenzene										
9	POHC Feedrate		lb/hr			102.5		102.5		105.6		
10	Emissions Rate											
11	DRE	E1	%		>	99.998	>	99.997	>	99.998		
12												
13	Sampling Train	POHC Train	E1									
14	Stack Gas Flowrate		dscfm			111081		112634		114806		112840.3
15	O2		%			14.8		14.8		14.8		14.8
16	Moisture		%			7.77		7.92		8.45		8.0
17	Temperature		°F			283		281		292		285.3
18												
19	**2016C2**					R1		R2		R3		Cond Avg
20												
21	PM	E1	gr/dscf	y		0.0038		0.0022		0.0025		0.0028
22	HCl		ppmv	n		0.05		0.03		0.04		0.04
23	Cl2		ppmv	n		0.03		0.04		0.02		0.03
24	Chromium (Hex)		µg/dscm	n		183.1		162.2		34.4		126.6
25												
26	Sampling Train	PM, HCl/Cl2	E1									
27	Stack Gas Flowrate		dscfm			95853		108659		112222		105578
28	O2		%			9.6		10.6		10.4		10.2
29	Moisture		%			12.95		11.46		10.66		11.7
30	Temperature		°F			349		300		301		316.7
31												
32	Sampling Train	Cr (+6)	E2									
33	Stack Gas Flowrate		dscfm			92437		109357		112862		104885.3
34	O2		%			9.6		10.6		10.4		10.2
35	Moisture		%			13		11.78		10.91		11.9
36	Temperature		°F			349		302		303		318.0
37												
38	Sampling Train	PCDD/PCDF	E3									
39	Stack Gas Flowrate		dscfm			110709		110417		111852		110992.7
40	O2		%			10.4		10.5		10.4		10.4
41	Moisture		%			11.16		11.64		10.83		11.2
42	Temperature		°F			311		317		312		313.3
43												
44	HCl	E1	ppmv	y		0.06		0.04		0.05		0.05
45	Cl2	E1	ppmv	y		0.04		0.05		0.03		0.04
46	Total Chlorine	E1	ppmv	y		0.14		0.15		0.11		0.13
47	Chromium (Hex)	E2	µg/dscm	y		224.9		218.3		45.4		164.1
48												
49	Particle Size Distribut	in microns										
50	Median Size		microns			3.05		2.85		2.85		
51	<2		% wt			38		44.5		37.8		
52	<10		% wt			85		81.3		91.8		

	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
1	**Feedstreams**																									
2																										
3																										
4	**2016C1**				R1		R2		R3		Cond Avg															
5																										
6	Feedstream Number				F1		F1		F1		F1															
7	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW															
8	Feedstream Description				NVR Waste		NVR Waste		NVR Waste		NVR Waste															
9	Stack Gas Flowrate		dscfm		112840.3		112840.3		112840.3		112840.3															
10	Oxygen		%		14.8		14.8		14.8		14.8															
11	Thermal Feedrate		MMBtu/hr		222.1		222.1		222.1		222.1															
12																										
13	**2016C2**				R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2		R3	
14																										
15	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3		F3	
16	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Liq HW		Spike		Spike		Spike	
17	Feed Class 2				HW		HW		HW		HW															
18	Feedstream Description				NVR Waste		NVR Waste		NVR Waste		NVR Waste		ADN/LBW		ADN/LBW		ADN/LBW		ADN/LBW		Spike		Spike		Spike	
19	Density		g/mL		1.053		1.059		1.063		1.06		0.8088		0.7962		0.8332		0.81							
20	Viscosity		cSt		262.79		21.15		28.25		25.78		0.6617		0.6224		0.8433		0.69							
21	Heating Value		Btu/lb		9146		9051		9508		9242		15106		15380		13795		14899							
22	Ash		wt %	nd	0.1	nd	0.1	nd	0.1		0.1	nd	0.1	nd	0.1	nd	0.1		0.1							
23	Chlorine		ppmw	nd	17		18	nd	11		15	nd	17	nd	11	nd	13		14							
24	Chromium		lb/hr																		0.767		0.767		0.767	
25	Antimony		ppmw	nd	0.1	nd	0.1	nd	0.1		0.1	nd	0.05	nd	0.05	nd	0.05		0.05							
26	Arsenic		ppmw	nd	0.05	nd	0.05	nd	0.05		0.05	nd	0.02	nd	0.02	nd	0.02		0.03							
27	Barium		ppmw	nd	0.05	nd	0.05	nd	0.05		0.05	nd	0.017	nd	0.017	nd	0.017		0.013							
28	Beryllium		ppmw	nd	0.05	nd	0.05	nd	0.05		0.05	nd	0.01	nd	0.01	nd	0.01		0.03							
29	Cadmium		ppmw	nd	0.05	nd	0.05	nd	0.05		0.05	nd	0.01	nd	0.01	nd	0.01		0.01							
30	Chromium		ppmw		2.8		3.3		3.5		3.1		0.14		0.78		0.51		0.47							
31	Cobalt		ppmw		32.7		27.1		25.1		28.5	nd	0.5	nd	0.5	nd	0.5		0.5							
32	Lead		ppmw	nd	0.025	nd	0.025	nd	0.025		0.025	nd	0.012	nd	0.012	nd	0.012		0.016							
33	Manganese		ppmw	nd	0.15	nd	0.15	nd	0.15		0.015	nd	0.15	nd	0.15	nd	0.15		0.15							
34	Mercury		ppmw	nd	0.04	nd	0.04	nd	0.04		0.04	nd	0.4	nd	0.4	nd	0.4		0.04							
35	Molybdenum		ppmw	nd	0.4	nd	0.4	nd	0.4		0.4	nd	0.97	nd	0.97	nd	0.97		0.4							
36	Nickel		ppmw		0.78		0.75		0.93		0.81		0.97		0.029		0.18		0.32							
37	Selenium		ppmw	nd	0.1	nd	0.1	nd	0.1		0.1	nd	0.02	nd	0.02	nd	0.02		0.06							
38	Silver		ppmw	nd	0.05	nd	0.05	nd	0.05		0.05	nd	0.01	nd	0.01	nd	0.01		0.01							
39	Thallium		ppmw	nd	0.05	nd	0.05	nd	0.05		0.05	nd	0.01	nd	0.01	nd	0.01		0.03							
40	Vanadium		ppmw	nd	0.5	nd	0.5	nd	0.5		0.5	nd	0.5	nd	0.5	nd	0.5		0.5							
41																										
42	Stack Gas Flowrate		dscfm								105578								105578							
43	Oxygen		%								10.2								10.2							
44																										
45	Thermal Feedrate		MMBtu/hr																							
46	Estimated Firing Rate		MMBtu/hr																							
47	Ash		mg/dscm																							
48	Chlorine		ug/dscm								can't calculate need waste feedrates															
49	Chromium		ug/dscm																							
50	Antimony		ug/dscm																							
51																										
52	approx waste feed		lb/hr								24295.7054															
53																										
54	MTECs																									
55																										
56	Antimony		ug/dscm								8.0															
57	Arsenic		ug/dscm								4.0															
58	Barium		ug/dscm								4.0															
59	Beryllium		ug/dscm								4.0															
60	Cadmium		ug/dscm								4.0															

	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13	Cond Avg		R1		R2		R3		Cond Avg
14									
15	F3								
16	Spike								
17			Total		Total		Total		Total
18	Spike								
19									
20									
21									
22									
23									
24	0.767								
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42	105578								
43	10.2								
44									
45									
46	362.0								
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									8.0
57									4.0
58									4.0
59									4.0
60									4.0

	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
61	Chromium		ug/dscm								247.3															
62	Cobalt		ug/dscm								2273.1															
63	Lead		ug/dscm								2.0															
64	Manganese		ug/dscm								1.2															
65	Mercury		ug/dscm								3.2															
66	Molybdenum		ug/dscm								31.9															
67	Nickel		ug/dscm								64.6															
68	Selenium		ug/dscm								8.0															
69	Silver		ug/dscm								4.0															
70	Thallium		ug/dscm								4.0															
71	Vanadium		ug/dscm								39.9															
72	SVM		ug/dscm								6.0															
73	LVM		ug/dscm								255.2															

	AB	AC	AD	AE	AF	AG	AH	AI	AJ
61	71.3								247.3
62									2273.1
63									2.0
64									1.2
65									3.2
66									31.9
67									64.6
68									8.0
69									4.0
70									4.0
71									39.9
72									6.0
73									255.2

	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, Victoria, TX, Boiler Nos. 3 and 4															
4		Condition ID:	2016C2															
5		Condition/Test Date:	Risk burn, normal conditions, February, 1999															
6																		
7			I-TEF				Run 1					Run 2					Run 4	
8			Wght Fact		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
10		Stack Gas Cond (ng/dscm @ 7% O2)																
11		2,3,7,8-TCDD	1	nd	0.0010	0.0010	0.0005	0.0005	nd	0.0010	0.0010	0.0005	0.0005	nd	0.0010	0.0010	0.0005	0.0005
12		TCDD Total	0		0.0100	0.0000	0.0100	0.0000		0.0050	0.0000	0.0050	0.0000		0.0040	0.0000	0.0040	0.0000
13		1,2,3,7,8-PCDD	0.5	nd	0.0010	0.0005	0.0005	0.0003	nd	0.0010	0.0005	0.0005	0.0003	nd	0.0010	0.0005	0.0005	0.0003
14		PCDD Total	0		0.0030	0.0000	0.0030	0.0000		0.0020	0.0000	0.0020	0.0000	nd	0.0030	0.0000	0.0015	0.0000
15		1,2,3,4,7,8-HxCDD	0.1	nd	0.0020	0.0002	0.0010	0.0001	nd	0.0020	0.0002	0.0010	0.0001	nd	0.0010	0.0001	0.0005	0.0001
16		1,2,3,6,7,8-HxCDD	0.1	nd	0.0020	0.0002	0.0010	0.0001	nd	0.0010	0.0001	0.0005	0.0001	nd	0.0010	0.0001	0.0005	0.0001
17		1,2,3,7,8,9-HxCDD	0.1	nd	0.0020	0.0002	0.0010	0.0001	nd	0.0010	0.0001	0.0005	0.0001	nd	0.0010	0.0001	0.0005	0.0001
18		HxCDD Total	0	nd	0.0050	0.0000	0.0025	0.0000	nd	0.0070	0.0000	0.0035	0.0000		0.0020	0.0000	0.0020	0.0000
19		1,2,3,4,6,7,8-HpCDD	0.01		0.0020	0.0000	0.0020	0.0000		0.0020	0.0000	0.0020	0.0000		0.0020	0.0000	0.0020	0.0000
20		HpCDD Total	0		0.0040	0.0000	0.0040	0.0000		0.0040	0.0000	0.0040	0.0000		0.0040	0.0000	0.0040	0.0000
21		OCDD	0.001		0.0110	0.0000	0.0110	0.0000		0.0120	0.0000	0.0120	0.0000		0.0090	0.0000	0.0090	0.0000
22		2,3,7,8-TCDF	0.1		0.0010	0.0001	0.0010	0.0001		0.0010	0.0001	0.0010	0.0001	nd	0.0010	0.0001	0.0005	0.0001
23		TCDF Total	0		0.0140	0.0000	0.0140	0.0000		0.0100	0.0000	0.0100	0.0000		0.0050	0.0000	0.0050	0.0000
24		1,2,3,7,8-PCDF	0.05		0.0010	0.0001	0.0010	0.0001		0.0010	0.0001	0.0010	0.0001	nd	0.0010	0.0001	0.0005	0.0000
25		2,3,4,7,8-PCDF	0.5		0.0010	0.0005	0.0010	0.0005		0.0010	0.0005	0.0010	0.0005	nd	0.0010	0.0005	0.0005	0.0003
26		PCDF Total	0		0.0090	0.0000	0.0090	0.0000		0.0060	0.0000	0.0060	0.0000		0.0010	0.0000	0.0010	0.0000
27		1,2,3,4,7,8-HxCDF	0.1		0.0020	0.0002	0.0020	0.0002		0.0020	0.0002	0.0020	0.0002		0.0020	0.0002	0.0020	0.0002
28		1,2,3,6,7,8-HxCDF	0.1		0.0010	0.0001	0.0010	0.0001		0.0010	0.0001	0.0010	0.0001		0.0010	0.0001	0.0010	0.0001
29		2,3,4,6,7,8-HxCDF	0.1		0.0010	0.0001	0.0010	0.0001		0.0010	0.0001	0.0010	0.0001	nd	0.0010	0.0001	0.0005	0.0001
30		1,2,3,7,8,9-HxCDF	0.1	nd	0.0010	0.0001	0.0005	0.0001	nd	0.0010	0.0001	0.0005	0.0001	nd	0.0010	0.0001	0.0005	0.0001
31		HxCDF Total	0		0.0100	0.0000	0.0100	0.0000		0.0070	0.0000	0.0070	0.0000		0.0050	0.0000	0.0050	0.0000
32		1,2,3,4,6,7,8-HpCDF	0.01		0.0070	0.0001	0.0070	0.0001		0.0060	0.0001	0.0060	0.0001		0.0030	0.0000	0.0030	0.0000
33		1,2,3,4,7,8,9-HpCDF	0.01		0.0020	0.0000	0.0020	0.0000	nd	0.0010	0.0000	0.0005	0.0000	nd	0.0010	0.0000	0.0005	0.0000
34		HpCDF Total	0		0.0100	0.0000	0.0100	0.0000		0.0080	0.0000	0.0080	0.0000		0.0030	0.0000	0.0030	0.0000
35		OCDF	0.001		0.0100	0.0000	0.0100	0.0000		0.0100	0.0000	0.0100	0.0000		0.0060	0.0000	0.0060	0.0000
36																		
37		PCDD/PCDF (ng/dscm @ 7% O2)		65.1		0.0034	0.084	0.0023	63.6		0.0032	0.068	0.0022	87.9		0.0030	0.041	0.0017
38																		
39		TEQ Cond Avg	0.0020															
40		Total Cond Avg	0.0638															