	B	C
1	**Source Description**	
2		
3	Phase II ID No.	842
4	EPA ID No.	TXD008092793
5	Facility Name	Dow Chemical Company
6	Facility Location	
7	City	Freeport
8	State	TX
9	Unit ID Name/No.	Unit FTB-400
10	Other Sister Facilities	None
11	Number of Sister Facilities	0
12	Combustor Class	HCl Production Furnace
13	Combustor Type	
14	Combustor Characteristics	Firetube boiler, Johnston Boiler Company, horizontal-fired combustion chamber made by John Zink Company, capacity 28 MMBtu/hr, operated @ 1700C
15	Capacity (MMBtu/hr)	28
16	Soot Blowing	None
17	APCS Detailed Acronym	WHB/HCLABS/WS
18	APCS General Class	WHB, LEWS
19	APCS Characteristics	HCl absorber, chlorine scrubber. T-401 Chlorine Scrubber, the gases and water are contacted and caustic in scrubbing medium which incorporates an inorganic reducing agent to capture chlorine.
20	Hazardous Wastes	Liq
21	Haz Waste Description	Liquid wastes (Vinyl Heavies)
22	Supplemental Fuel	Natural gas
23		
24	Stack Characteristics	
25	Diameter (ft)	2.5
26	Height (ft)	120
27	Gas Velocity (ft/sec)	25.9
28	Gas Temperature (°F)	151
29		
30	Permitting Status	Tier lll for Cr+6, Tier l for other metals
31	HWC Burn Status (Date if Terminated)	

	B	C
1	**Cond Description**	
2		
3	**842C1**	
4		
5	Report Name/Date	FTB-400 Trial Burn and Risk Burn Report, August 11 and 12, 1998
6	Report Prepare	Focus Environmental, Inc.
7	Testing Firm	METCO Environmental
8	Testing Dates	May 21, 1998
9	Cond Dates	May-98
10	Condition Descr	Trial burn, max prod rate, min APCS, thermal capacity, max waste feed rate
11	Content	PM, HCl/Cl2, Cr+6
12		
13	**842C2**	
14		
15	Report Name/Date	FTB-400 Trial Burn and Risk Burn Report, August 11 and 12, 1998
16	Report Prepare	Focus Environmental, Inc.
17	Testing Firm	METCO Environmental
18	Testing Dates	May 22, 1998
19	Cond Dates	May-98
20	Condition Descr	Trial burn, min comb temp, max stack gas flow rate
21	Content	CO, DRE of POHC (chlorobenzene)
22		
23	**842C3**	
24		
25	Report Name/Date	FTB-400 Trial Burn and Risk Burn Report, August 11 and 12, 1998
26	Report Prepare	Focus Environmental, Inc.
27	Testing Firm	METCO Environmental
28	Testing Dates	May 19-20, 1998
29	Cond Dates	May-98
30	Condition Descr	Risk burn, normal operating conditions
31	Content	PCDD/F, metals

	B	C	D	E	F	G	H	I	J	K	L	M
1	**Stack Gas Emissions**											
2												
3		Comments	Units	7% O2								
4												
5	**842C1**	**Trial Burn**				R1		R2		R3		Cond Avg
6												
7	PM	E1	gr/dscf	y		0.0064		0.0065		0.008		0.0070
8	CO (MHRA)	E1	ppmv	y		2.3		13.5		2.2		6.00
9	CO (RA)	E1	ppmv	y		2.2		7.5		2.2		3.97
10	Chromium (Hex)		g/hr			0.031		0.024		0.012		0.023
11	HCl		g/hr			186		156		193		178
12	Cl2		g/hr		nd	1.1	nd	1.1	nd	1.2		1.1
13												
14	Chromium (Hex)	E2	µg/dscm	y		4.6		3.9		1.8		3.5
15	HCl	E1	ppmv	y		18.3		16.8		19.0		18.1
16	Cl2	E1	ppmv	y	nd	0.06	nd	0.06	nd	0.06	100	0.06
17	Total Chlorine	E1	ppmv	y	1	18.46	0.7	16.91	0.6	19.14	1	18.11
18												
19	Sampling Train	PM, HCl/Cl2	E1									
20	Stack Gas Flowrate		dscfm			4104		3763		4049		3972
21	O2		%			7.4		7.4		7.2		7.33
22	Moisture		%									
23	Temperature		°F									
24												
25	Sampling Train	Cr+6	E2									
26	Stack Gas Flowrate		dscfm			4269		4249		4523		4347
27	O2		%									
28	Moisture		%									
29	Temperature		°F									
30												
31	**842C2**	**Trial burn**				R1		R2		R3		Cond Avg
32												
33	CO (MHRA)	E1	ppmv	y		3.3		3.2		3.3		3.27
34	CO (RA)	E1	ppmv	y		3.2		3.1		3.2		3.17
35												
36	POHC DRE	Chlorobenzene										
37	POHC Feedrate		lb/hr			15		15		15		
38	Emission Rate	E1	lb/hr			9.00E-06	nd	1.40E-05	nd	1.50E-05		
39	DRE	E1	%			99.99994	>	99.99991	>	99.99990		
40												
41	Sampling Train	DRE	E1									
42	Stack Gas Flowrate		dscfm			5555		5247		5291		5364.3
43	O2		%			11		10.9		10.9		10.9
44	Moisture		%			25.68		25.96		25.71		25.8
45	Temperature		°F			152		152		150		151.3
46												
47												
48	**842C3**	**Risk Burn**				R1		R2		R3		Cond Avg
49												
50	CO (MHRA)	E1	ppmv	y		2.8		3.4		2.7		2.97
51	CO (RA)	E1	ppmv	y		2.5		2.9		2.6		2.67
52	Antimony		µg/dscf	n	nd	0.0049	nd	0.005	nd	0.005		
53	Arsenic		µg/dscf	n	nd	0.009	nd	0.0075	nd	0.0094		
54	Barium		µg/dscf	n		0.02	nd	0.73		0.0177		
55	Beryllium		µg/dscf	n	nd	0.0006	nd	0.00061	nd	0.00061		
56	Cadmium		µg/dscf	n		0.035	nd	0.019		0.0171		
57	Chromium		µg/dscf	n	nd	2.50		0.389		0.245		
58	Cobalt		µg/dscf	n	nd	0.12	nd	0.061	nd	0.075		
59	Copper		µg/dscf	n		0.47		0.323		0.394		
60	Lead		µg/dscf	n	nd	0.05	nd	0.026	nd	0.021		
61	Manganese		µg/dscf	n		1.77		0.649		1.03		
62	Mercury		µg/dscf	n	nd	0.005	nd	0.0048	nd	0.004		
63	Molybdenum		µg/dscf	n	nd	0.270	nd	0.16	nd	0.13		
64	Nickel		µg/dscf	n	nd	2.00	nd	0.73	nd	0.67		
65	Selenium		µg/dscf	n	nd	0.0086	nd	0.0088	nd	0.0088		
66	Silver		µg/dscf	n	nd	0.0045	nd	0.0012	nd	0.0042		
67	Thallium		µg/dscf	n	nd	0.0074	nd	0.0076	nd	0.0077		
68	Vanadium		µg/dscf	n	nd	0.03	nd	0.0071	nd	0.0071		
69												
70	Antimony	E1	µg/dscm	y	nd	0.2	nd	0.2	nd	0.2	100	0.2
71	Arsenic	E1	µg/dscm	y	nd	0.4	nd	0.3	nd	0.4	100	0.4

	B	C	D	E	F	G	H	I	J	K	L	M
72	Barium	E1	µg/dscm	y		0.9	nd	31.1		0.7		10.9
73	Beryllium	E1	µg/dscm	y	nd	0.0	nd	0.0	nd	0.0	100	0.0
74	Cadmium	E1	µg/dscm	y		1.4	nd	0.8		0.7		1.0
75	Chromium	E1	µg/dscm	y		99.7		16.6		10.3		42.2
76	Cobalt	E1	µg/dscm	y	nd	4.8	nd	2.6	nd	3.1	100	3.5
77	Copper	E1	µg/dscm	y		18.6		13.8		16.5		16.3
78	Lead	E1	µg/dscm	y	nd	2.0	nd	1.1	nd	0.9	100	1.3
79	Manganese	E1	µg/dscm	y		70.6		27.7		43.2		47.2
80	Mercury	E1	µg/dscm	y	nd	0.2	nd	0.2	nd	0.2	100	0.2
81	Molybdenum	E1	µg/dscm	y	nd	10.8	nd	6.8	nd	5.5	100	7.7
82	Nickel	E1	µg/dscm	y	nd	79.8	nd	31.1	nd	28.1	100	46.3
83	Selenium	E1	µg/dscm	y	nd	0.3	nd	0.4	nd	0.4	100	0.4
84	Silver	E1	µg/dscm	y	nd	0.2	nd	0.1	nd	0.2	100	0.1
85	Thallium	E1	µg/dscm	y	nd	0.3	nd	0.3	nd	0.3	100	0.3
86	Vanadium	E1	µg/dscm	y	nd	1.4	nd	0.3	nd	0.3	100	0.7
87	SVM	E1	µg/dscm	y	59	3.4	100	1.9	55	1.6	57	2.3
88	LVM	E1	µg/dscm	y		100.1		16.9		10.7		42.6
89												
90	Sampling Train	Metals	E1									
91	Stack Gas Flowrate		dscfm			4067		4031		3949		4015.7
92	O2		%									
93	Moisture		%									
94	Temperature		°F									
95												
96	Sampling Train	PCDD/PCDF	E2									
97	Stack Gas Flowrate		dscfm			3929		3814		4054		3932.3
98	O2		%			8.6		9.4		9.2		9.1
99	Moisture		%									
100	Temperature		°F									
101												
102	Particle Size Distributi	in microns										
103	0.5-1		% wt			5.1						
104	1-5		% wt			72.7						
105	5-10		% wt			1.1						
106	10-20		% wt			2.1						
107	20-50		% wt			7.4						
108	50-100		% wt			6.0						
109	>100		% wt			5.7						

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1	**Feedstreams**																						
2																							
3																							
4	**842C1**	**Trial burn**			R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2
5																							
6	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3
7	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		NG		NG		NG		NG		Spike		Spike
8	Feed Class 2				HW		HW		HW		HW		MF		MF		MF		MF		Spike		Spike
9	Feedstream Description				Vinyl Heavies		Vinyl Heavies		Vinyl Heavies		Vinyl Heavies		Natural Gas		Natural Gas		Natural Gas		Natural Gas		Spike		Spike
10	Feed Rate		lb/hr		2406		2406		2406		2406.0		227.0		227.0		227.0		227.0		16		16
11	Thermal Feedrate		MMBtu/hr		13.3		13.6		13.6		13.5												
12	Viscosity		cps		1.3		1.3		1.4		1.30												
13	Heating Value		Btu/lb		5520		5650		5640		5603.3												
14	Density		lb/gal		11.1		11.1		11.1		11.1												
15	Ash		lb/hr		0.13		0.091		0.043		0.09										1		1
16	Chlorine		lb/hr		1650		1660		1680		1663.3												
17	Antimony		g/hr	100	0.03	100	0.03	100	0.03		0.03												
18	Arsenic		g/hr	100	0.02	100	0.02	100	0.02		0.02												
19	Barium		g/hr		0.0085		0.0059		0.004		0.006												
20	Beryllium		g/hr	100	0.003	100	0.003	100	0.003		0.003												
21	Cadmium		g/hr	100	0.037		0.02	100	0.02		0.026												
22	Chromium		g/hr		0.34		0.32		0.28		0.31										15		15
23	Lead		g/hr		0.072		0.04		0.05		0.054												
24	Mercury		g/hr	100	0.4	100	0.4	100	0.4		0.4												
25	Nickel		g/hr		0.37		0.28		0.1		0.25												
26	Selenium		g/hr	100	0.05	100	0.05	100	0.05		0.05												
27	Silver		g/hr	100	0.006	100	0.006	100	0.006		0.006												
28	Thallium		g/hr	100	0.04	100	0.04	100	0.04		0.04												
29	Zinc		g/hr		2.1		0.85		1.3		1.42												
30																							
31	Stack Gas Flowrate		dscfm		4104		3763		4049		3972.0												
32	Oxygen		%		7.4		7.4		7.2		7.3												
33																							
34	Estimated Firing Rate		MMBtu/hr																				
35																							
36	*Feedrate MTEC Calculations*																						
37	Ash		mg/dscm		8.7		6.7		2.9		6.1										67.1		73.1
38	Chlorine		ug/dscm		110658273		121417466		112545626		114873788.1												
39	Antimony		ug/dscm	100	4.4	100	4.8	100	4.4	100	4.6												
40	Arsenic		ug/dscm	100	3.0	100	3.2	100	3.0	100	3.0												
41	Barium		ug/dscm		1.3		1.0		0.6		0.9												
42	Beryllium		ug/dscm	100	0.4	100	0.5	100	0.4	100	0.5												
43	Cadmium		ug/dscm	100	5.5	100	3.2	100	3.0	100	3.9												
44	Chromium		ug/dscm		50.2		51.6		41.3		47.7										2215.8		2416.6
45	Lead		ug/dscm		10.6		6.4		7.4		8.2												
46	Mercury		ug/dscm	100	59.1	100	64.4	100	59.0	100	60.9												
47	Nickel		ug/dscm		54.7		45.1		14.8		38.2												
48	Selenium		ug/dscm	100	7.4	100	8.1	100	7.4	100	7.6												
49	Silver		ug/dscm	100	0.9	100	1.0	100	0.9	100	0.9												
50	Thallium		ug/dscm	100	5.9	100	6.4	100	5.9	100	6.1												
51	Zinc		ug/dscm		310.2		136.9		191.8		213.0												
52																							
53	SVM		ug/dscm	34	16.1	33	9.7	29	10.3	32	12.0												
54	LVM		ug/dscm	6	53.6	7	55.3	8	44.7	7	51.2										2215.8		2416.6
55																							
56																							
57																							
58	**842C2**	**Trial burn**			R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2
59																							
60	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3

	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1												
2												
3												
4		R3		Cond Avg		R1		R2		R3		Cond Avg
5												
6		F3		F3		F4		F4		F4		F4
7		Spike		Spike		Total		Total		Total		Total
8		Spike		Spike		Total		Total		Total		Total
9		Spike		Spike		Total		Total		Total		Total
10		16		16								
11						13.3		13.6		13.6		13.5
12												
13												
14												
15		1		1								
16												
17												
18												
19												
20												
21												
22		15		15								
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34						17.7		16.2		17.7		17.2
35												
36												
37		67.0		69.0		75.8		79.8		69.9		75.0
38						110658272.6		121417465.8		112545626.0		114873788
39					100	4.4	100	4.8	100	4.4	100	4.6
40					100	3.0	100	3.2	100	3.0	100	3.0
41					0	1.3	0	1.0	0	0.6	0	0.9
42					100	0.4	100	0.5	100	0.4	100	0.5
43					100	5.5	100	3.2	100	3.0	100	3.9
44		2213.4		2278.3	0	2266.0	0	2468.2	0	2254.7	0	2326.0
45					0	10.6	0	6.4	0	7.4	0	8.2
46					100	59.1	100	64.4	100	59.0	100	60.9
47					0	54.7	0	45.1	0	14.8	0	38.2
48					100	7.4	100	8.1	100	7.4	100	7.6
49					100	0.9	100	1.0	100	0.9	100	0.9
50					100	5.9	100	6.4	100	5.9	100	6.1
51					0	310.2	0	136.9	0	191.8	0	213.0
52												
53					34	16.1	33	9.7	29	10.3	32	12.0
54		2213.4		2278.3	6	2269.4	7	2471.9	8	2258.1	7	2329.5
55												
56												
57												
58		R3		Cond Avg		R1		R2		R3		Cond Avg
59												
60		F3		F3		F4		F4		F4		F4

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
61	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		NG		NG		NG		NG		Spike		Spike
62	Feed Class 2				HW		HW		HW		HW		MF		MF		MF		MF		Spike		Spike
63	Feedstream Description				Vinyl Heavies		Vinyl Heavies		Vinyl Heavies		Vinyl Heavies		Natural Gas		Natural Gas		Natural Gas		Natural Gas		Spike		Spike
64	Feed Rate		lb/hr		1691		1691		1691		1691.0		305.0		305.0		305.0		305.0		15		15
65	Thermal Feedrate		MMBtu/hr		9.5		9.6		9.8		9.6												
66	Viscosity		cps		1.4		1.4		1.4		1.4												
67	Heating Value		Btu/lb		5600		5670		5800		5690.0												
68	Density		lb/gal		11.1		11.1		11.1		11.1												
69	Ash		lb/hr		0.049		0.039		0.01		0.03												
70	Chlorine		lb/hr		1190		1170		1210		1190.0										4.7		4.7
71	Chlorobenzene		lb/hr																		15		15
72																							
73	Stack Gas Flowrate		dscfm		5555		5247		5291		5364.3												
74	Oxygen		%		11		10.9		10.9		10.9												
75																							
76											Vinyl Heavies												
77	Estimated Firing Rate		MMBtu/hr																				
78																							
79	*Feedrate MTEC Calculations*																						
80	Ash		mg/dscm		3.3		2.8		0.7		2.3												
81	Chlorine		ug/dscm		80187948		82641773		84756387		82488180										316709		331980
82																							
83																							
84																							
85	**842C3**	**Risk burn**			R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2
86																							
87	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3
88	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		NG		NG		NG		NG		Total		Total
89	Feed Class 2				HW		HW		HW		HW		MF		MF		MF		MF		Total		Total
90	Feedstream Description				Vinyl Heavies		Vinyl Heavies		Vinyl Heavies		Vinyl Heavies		Natural Gas		Natural Gas		Natural Gas		Natural Gas		Total		Total
91	Feed Rate		lb/hr		2016		2016		2016		2016.0		110.0		110.0		110.0		110.0		110.0		110.0
92	Thermal Feedrate		MMBtu/hr		10.6		10.8		11		10.8		2.2		2.2		2.2		2.2		12.8		13.0
93	Viscosity		cps		1.3		1.3		1.3		1.3												
94	Heating Value		Btu/lb		5260		5350		5460		5356.7		20000.0		20000.0		20000.0		20000				
95	Density		lb/gal		11.2		11.2		11.2		11.2												
96	Ash		lb/hr		0.149		0.129		0.147		0.14												
97	Chlorine		lb/hr		1400		1400		1400		1400.0												
98	Antimony		g/hr	nd	0.022		0.022		0.022		0.02												
99	Arsenic		g/hr	nd	0.02		0.02		0.02		0.02												
100	Barium		g/hr		0.0328		0.00392		0.00328		0.0035												
101	Beryllium		g/hr	nd	0.0026		0.0026		0.0026		0.0026												
102	Cadmium		g/hr	nd	0.014		0.014		0.014		0.014												
103	Chromium		g/hr		0.218		0.244		0.246		0.24												
104	Lead		g/hr		0.035		0.103		0.0633		0.07												
105	Mercury		g/hr	nd	0.37		0.37		0.37		0.37												
106	Nickel		g/hr		0.122		0.162		0.188		0.16												
107	Selenium		g/hr	nd	0.038		0.038		0.038		0.038												
108	Silver		g/hr	nd	0.0051		0.0051		0.0051		0.0051												
109	Thallium		g/hr	nd	0.033		0.033		0.0442		0.036												
110	Zinc		g/hr		1.12		1.19		1.51		1.27												
111																							
112	Stack Gas Flowrate		dscfm		3929		3814		4054		3932.3												
113	Oxygen		%		8.6		9.4		9.2		9.1												
114																							
115	Estimated Firing Rate		MMBtu/hr																				
116																							
117	*Feedrate MTEC Calculations*																						
118	Ash		mg/dscm		11.4		10.9		11.5		11.3									0	11.4	0	10.9
119	Chlorine		ug/dscm		107564887		118450135		109549017		111854680									0	107564887	0	118450135
120	Antimony		ug/dscm	100	3.7	100	4.1	100	3.8	100	3.9									100	3.7	100	4.1

	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
61		Spike		Spike		Total		Total		Total		Total
62		Spike		Spike		Total		Total		Total		Total
63		Spike		Spike		Total		Total		Total		Total
64		15		15								
65						9.5		9.6		9.8		9.6
66												
67												
68												
69												
70		4.7		4.7								
71		15		15								
72												
73												
74												
75												
76												
77						17.6		16.8		17.0		17.1
78												
79												
80						3.3		2.8		0.7		2.3
81		329219		325794		80504657		82973753		85085606		82813973
82												
83												
84												
85		R3		Cond Avg								
86												
87		F3		F3								
88		Total		Total								
89		Total		Total								
90		Total		Total								
91		110.0		110.0								
92		13.2		13.0								
93												
94												
95												
96												
97												
98												
99												
100												
101												
102												
103												
104												
105												
106												
107												
108												
109												
110												
111												
112												
113												
114												
115				14.9								
116												
117												
118	0	11.5	0	11.3								
119	0	109549017	0	111854680								
120	100	3.8	100	3.9								

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
121	Arsenic		ug/dscm	100	3.4	100	3.7	100	3.4	100	3.5									100	3.4	100	3.7
122	Barium		ug/dscm		5.6		0.7		0.6		2.3									0	5.6	0	0.7
123	Beryllium		ug/dscm	100	0.4	100	0.5	100	0.4	100	0.5									100	0.4	100	0.5
124	Cadmium		ug/dscm	100	2.4	100	2.6	100	2.4	100	2.5									100	2.4	100	2.6
125	Chromium		ug/dscm		36.9		45.5		42.4		41.6									0	36.9	0	45.5
126	Lead		ug/dscm		5.9		19.2		10.9		12.0									0	5.9	0	19.2
127	Mercury		ug/dscm	100	62.6	100	69.0	100	63.8	100	65.1									100	62.6	100	69.0
128	Nickel		ug/dscm		20.6		30.2		32.4		27.7									0	20.6	0	30.2
129	Selenium		ug/dscm	100	6.4	100	7.1	100	6.5	100	6.7									100	6.4	100	7.1
130	Silver		ug/dscm	100	0.9	100	1.0	100	0.9	100	0.9									100	0.9	100	1.0
131	Thallium		ug/dscm	100	5.6	100	6.1	100	7.6	100	6.5									100	5.6	100	6.1
132	Zinc		ug/dscm		189.5		221.8		260.3		223.9									0	189.5	0	221.8
133																							
134	SVM		ug/dscm	29	8.3	12	21.8	18	13.3	17	14.5									29	8.3	12	21.8
135	LVM		ug/dscm	9	40.7	8	49.7	8	46.3	9	45.6									9	40.7	8	49.7

	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
121	100	3.4	100	3.5								
122	0	0.6	0	2.3								
123	100	0.4	100	0.5								
124	100	2.4	100	2.5								
125	0	42.4	0	41.6								
126	0	10.9	0	12.0								
127	100	63.8	100	65.1								
128	0	32.4	0	27.7								
129	100	6.5	100	6.7								
130	100	0.9	100	0.9								
131	100	7.6	100	6.5								
132	0	260.3	0	223.9								
133												
134	18	13.3	17	14.5								
135	8	46.3	9	45.6								

	A	B	C
1	**Process Information**		
2			Cond Avg
3	**842C1**	Trial burn	
4			
5	Comb Temp	^{o}F	2586.2
6	Prod Rate	lb/hr	1645
7	T-401 Scrubber		
8	Effluent pH	pH	9
9	Effluent Flow	gpm	35
10	Liq Recirc Flow	gpm	181
11			
12	**842C2**	Trial burn	Cond Avg
13			
14	Comb Temp	^{o}F	2004.8
15	Prod Rate	lb/hr	1190.0
16	T-401 Scrubber		
17	Effluent pH	pH	9.5
18	Effluent Flow	gpm	51.0
19	Liq Recirc Flow	gpm	200.0
20			
21	**842C3**	Risk burn	Cond Avg
22			
23	Comb Temp	^{o}F	2282
24	Prod Rate	lb/hr	1400
25	T-401 Scrubber		
26	Effluent pH	pH	9.6
27	Effluent Flow	gpm	56
28	Liq Recirc Flow	gpm	169

	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:		Dow Chemical Company, Freeport, TX															
4	Condition ID:		842C3															
5	Condition/Test Date:		Risk burn, normal operating condition, May 19-20, 1998															
6																		
7			I-TEF			Run 1						Run 2					Run 3	
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	Detected in sample volume (pg)																	
11		2,3,7,8-TCDD	1	nd	8	8	4	4	nd	6.9	7	3	3	nd	8	8	4	4
12		Total TCDD	0		33	0	33	0		11	0	11	0		10	0	10	0
13		1,2,3,7,8-PCDD	0.5		36	18	36	18		37	19	37	19		34	17	34	17
14		Total PCDD	0		180	0	180	0		160	0	160	0		130	0	130	0
15		1,2,3,4,7,8-HxCDD	0.1		190	19	190	19		190	19	190	19		180	18	180	18
16		1,2,3,6,7,8-HxCDD	0.1		180	18	180	18		180	18	180	18		170	17	170	17
17		1,2,3,7,8,9-HxCDD	0.1		110	11	110	11		100	10	100	10		110	11	110	11
18		Total HxCDD	0		1200	0	1200	0		1100	0	1100	0		1100	0	1100	0
19		1,2,3,4,6,7,8-HpCDD	0.01		3200	32	3200	32		3400	34	3400	34		3300	33	3300	33
20		Total HpCDD	0		5000	0	5000	0		5200	0	5200	0		5000	0	5000	0
21		OCDD	0.001		33000	33	33000	33		38000	38	38000	38		39000	39	39000	39
22		2,3,7,8-TCDF	0.1		1500	150	1500	150		1600	160	1600	160		2000	200	2000	200
23		Total TCDF	0		5600	0	5600	0		6600	0	6600	0		8700	0	8700	0
24		1,2,3,7,8-PCDF	0.05		5000	250	5000	250		5700	285	5700	285		6800	340	6800	340
25		2,3,4,7,8-PCDF	0.5		2800	1400	2800	1400		3500	1750	3500	1750		3900	1950	3900	1950
26		Total PCDF	0		15000	0	15000	0		18000	0	18000	0		21000	0	21000	0
27		1,2,3,4,7,8-HxCDF	0.1		7600	760	7600	760		8800	880	8800	880		9300	930	9300	930
28		1,2,3,6,7,8-HxCDF	0.1		3400	340	3400	340		3600	360	3600	360		4000	400	4000	400
29		1,2,3,7,8,9-HxCDF	0.1		1900	190	1900	190		1900	190	1900	190		2000	200	2000	200
30		2,3,4,6,7,8-HxCDF	0.1		1700	170	1700	170		2100	210	2100	210		2500	250	2500	250
31		Total HxCDF	0		24000	0	24000	0		26000	0	26000	0		27000	0	27000	0
32		1,2,3,4,6,7,8-HpCDF	0.01		37000	370	37000	370		34000	340	34000	340		34000	340	34000	340
33		1,2,3,4,7,8,9-HpCDF	0.01		6100	61	6100	61		7200	72	7200	72		7700	77	7700	77
34		Total HCDF	0		59000	0	59000	0		61000	0	61000	0		60000	0	60000	0
35		OCDF	0.001		190000	190	190000	190		270000	270	270000	270		280000	280	280000	280
36																		
37		Gas sample volume (dscf)				110.03	110.03	110.03			110.54	110.54	110.54			118.23	118.23	118.23
38		O2 (%)				8.60	8.60	8.60			9.4	9.4	9.4			9.20	9.20	9.20
39																		
40		PCDD/PCDF (pg in sample)				4020.00	333013.0	4016.00			4661.400	426071.0	4657.950			5110.30	441940.0	5106.15
41		PCDD/PCDF (ng/dscm @ 7% C		0.2		1.46	121	1.46	0.1		1.80	164.38	1.80	0.2		1.81	156.71	1.81
42																		
43		TEQ Cond Avg	1.69															
44		Total Cond Avg	147.3															