	B	C
1	**Source Description**	
2		
3	Phase II ID No.	786
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 R-30
10	Other Sister Facilities	None
11	Number of Sister Facilities	0
12	Combustor Class	HCl Production Furnace
13	Combustor Type	
14	Combustor Characteristics	Horizontal fired combustion chamber manufactured by T-Thermal, capacity of 31 MMBtu/hr, operated @ 1700C
15	Capacity (MMBtu/hr)	31
16	Soot Blowing	None
17	APCS Detailed Acronym	DQ/HCLABS/VS/CLWS
18	APCS General Class	LEWS, HEWS
19	APCS Characteristics	(Dry quench, HCl absorbers, venturi, chlorine wet scrubber) Dry quench uses steam and condensate?, T-34 chlorine scrubber uses water/caustic and inorganic reducing agent in scrubber liquor
20	Hazardous Wastes	Liq
21	Haz Waste Description	Liquid wastes (Vinyl Heavies and DC Heavies from EDC and VCM)
22	Supplemental Fuel	Natural gas
23		
24	Stack Characteristics	
25	Diameter (ft)	2.5
26	Height (ft)	120
27	Gas Velocity (ft/sec)	61.5
28	Gas Temperature (°F)	190
29		
30	Permitting Status	Tier I for metals except Cr+6 (Tier III) and Cl (Tier III)
31	HWC Burn Status (Date if Terminated)	

	B	C
1	**Cond Description**	
2		
3	**786C1**	
4		
5	Report Name/Date	R-30 Trial Burn and Risk Report, November 1998
6	Report Prepare	Focus Environmental, Inc.
7	Testing Firm	METCO Environmental
8	Testing Dates	August 27-28, 1998
9	Cond Dates	Aug-98
10	Condition Descr	Trial burn, max waste feed and prod rate, max comb temp, min APCS
11	Content	PM, HCl/Cl2, Cr+6
12		
13	**786C2**	
14		
15	Report Name/Date	R-30 Trial Burn and Risk Report, November 1998
16	Report Prepare	Focus Environmental, Inc.
17	Testing Firm	METCO Environmental
18	Testing Dates	August 31, 1998
19	Cond Dates	Aug-98
20	Condition Descr	Trial burn; DRE, min comb temp, max comb gas flow
21	Content	CO, DRE of POHC (chlorobenzene)
22		
23	**786C3**	
24		
25	Report Name/Date	R-30 Trial Burn and Risk Report, November 1998
26	Report Prepare	Focus Environmental, Inc.
27	Testing Firm	METCO Environmental
28	Testing Dates	August 24-26, 1998
29	Cond Dates	Aug-98
30	Condition Descr	Risk burn; normal operating conditions
31	Content	Stack gas metals, PCDD/F, other organics, PSD

	B	C	D	E	F	G	H	I	J	K	L	M
1	**Stack Gas Emissions**											
2												
3		Comments	Units	7% O2								
4												
5	**786C1**	**Capacity Burn**				R1		R2		R3		Cond Avg
6												
7	PM	E1	gr/dscf	y		0.0075		0.0072		0.007		0.0072
8	CO (MHRA)	E1	ppmv	y		10.7		11.4		11.4		11.2
9	CO (RA)	E1	ppmv	y		10.5		11.4		11.1		11.0
10	Chromium (Hex)		g/hr			0.26		0.33		0.41		0.34
11	HCl		g/hr			8.56		11.8		15		11.8
12	Cl2		g/hr		nd	2.3		35.5	nd	1.9		13.23
13												
14	Chromium (Hex)	E2	µg/dscm	y		24.5		31.5		39.5		32.3
15	HCl	E1	ppmv	y		0.5		0.8		1.0		0.7
16	Cl2	E1	ppmv	y	nd	0.1	nd	1.2	nd	0.1	100	0.4
17	Total Chlorine	E1	ppmv	y		0.7		3.1		1.1		1.6
18												
19	Sampling Train	PM, HCl/Cl2	E1									
20	Stack Gas Flowrate		dscfm			5148		5147		5092		5130
21	O2		%			4		4.2		4.2		4.1
22	Moisture		%									
23	Temperature		°F									
24												
25	Sampling Train	Cr+6	E2									
26	Stack Gas Flowrate		dscfm			5190		5163		5364		5239
27	O2		%									
28	Moisture		%									
29	Temperature		°F									
30												
31	**786C2**	**DRE Burn**				R1		R2		R3		Cond Avg
32												
33	CO (MHRA)	E1	ppmv	y		4.5		4.4		4.3		4.4
34	CO (RA)	E1	ppmv	y		4.3		4.2		4.1		4.2
35												
36	POHC DRE	Chlorobenzene										
37	POHC Feedrate		lb/hr			149.91		149.84		149.91		
38	Emission Rate		lb/hr			4.10E-05		3.84E-05		3.32E-05		
39	DRE		%			99.999973		99.999974		99.999978		
40												
41	Sampling Train	DRE	E1									
42	Stack Gas Flowrate		dscfm			7542		7354		7008		7301
43	O2		%			8		8.2		8.1		8.1
44	Moisture		%			54.94		56.68		57.89		56.5
45	Temperature		°F			189		189		190		189.3
46												
47												
48	**786C3**	**Risk Burn**				R1		R2		R3		Cond Avg
49												
50	CO (MHRA)	E1	ppmv	y		54.7		4.8		4.8		21.43
51	CO (RA)	E1	ppmv	y		11.1		4.3		4.4		6.6
52	Antimony		µg/dscf	n	nd	0.034	nd	0.036	nd	0.033		
53	Arsenic		µg/dscf	n	nd	0.041	nd	0.034	nd	0.03		
54	Barium		µg/dscf	n	nd	0.8	nd	0.98	nd	1.2		
55	Beryllium		µg/dscf	n	nd	0.0008	nd	0.00078	nd	0.00079		
56	Cadmium		µg/dscf	n		0.0423	nd	0.03		0.0571		
57	Chromium		µg/dscf	n		0.08		0.117		0.0863		
58	Cobalt		µg/dscf	n	nd	0.30	nd	0.0083	nd	0.04		
59	Copper		µg/dscf	n		0.80		0.644		0.663		
60	Lead		µg/dscf	n	nd	0.02		0.123		0.0544		
61	Manganese		µg/dscf	n		3.59		12.4		0.906		
62	Mercury		µg/dscf	n	nd	0.019	nd	0.0094	nd	0.0057		
63	Molybdenum		µg/dscf	n	nd	0.12	nd	0.13	nd	0.098		
64	Nickel		µg/dscf	n		0.104		0.278		0.334		
65	Selenium		µg/dscf	n	nd	0.054	nd	0.019	nd	0.02		
66	Silver		µg/dscf	n	nd	0.0015		0.0107	nd	0.014		
67	Thallium		µg/dscf	n	nd	0.0094	nd	0.018	nd	0.026		
68	Vanadium		µg/dscf	n	nd	0.07	nd	0.009	nd	0.0092		
69												
70	Antimony	E1	µg/dscm	y	nd	1.3	nd	1.3	nd	1.2	100	1.3
71	Arsenic	E1	µg/dscm	y	nd	1.5	nd	1.3	nd	1.1	100	1.3

	B	C	D	E	F	G	H	I	J	K	L	M
72	Barium	E1	µg/dscm	y	nd	30.1	nd	36.8	nd	45.1	100	37.3
73	Beryllium	E1	µg/dscm	y	nd	0.03	nd	0.03	nd	0.03	100	0.0
74	Cadmium	E1	µg/dscm	y		1.6	nd	1.1		2.1		1.6
75	Chromium	E1	µg/dscm	y		2.9		4.4		3.2		3.5
76	Cobalt	E1	µg/dscm	y	nd	11.3	nd	0.3	nd	1.5	100	4.4
77	Copper	E1	µg/dscm	y		30.1		24.2		24.9		26.4
78	Lead	E1	µg/dscm	y	nd	0.8		4.6		2.0		2.5
79	Manganese	E1	µg/dscm	y		134.9		465.9		34.0		211.6
80	Mercury	E1	µg/dscm	y	nd	0.7	nd	0.4	nd	0.2	100	0.4
81	Molybdenum	E1	µg/dscm	y	nd	4.5	nd	4.9	nd	3.7	100	4.4
82	Nickel	E1	µg/dscm	y		3.9		10.4		12.5		9.0
83	Selenium	E1	µg/dscm	y	nd	2.0	nd	0.7	nd	0.8	100	1.2
84	Silver	E1	µg/dscm	y	nd	0.1		0.4	nd	0.5	100	0.3
85	Thallium	E1	µg/dscm	y	nd	0.4	nd	0.7	nd	1.0	100	0.7
86	Vanadium	E1	µg/dscm	y	nd	2.7	nd	0.3	nd	0.3	100	1.1
87	SVM	E1	µg/dscm	y	33	2.4	19.6	5.7		4.2	15.6	4.1
88	LVM	E1	µg/dscm	y	35	4.4	23	5.7	26	4.4	27.8	4.8
89												
90	Sampling Train	Metals	E1									
91	Stack Gas Flowrate		dscfm			5131		5295		4877		5101
92	O2		%									
93	Moisture		%									
94	Temperature		°F									
95												
96	Sampling Train	PCDD/PCDF	E2									
97	Stack Gas Flowrate		dscfm			5058		4940		4755		4917.7
98	O2		%			8.1		7.5		7.9		7.8
99	Moisture		%									
100	Temperature		°F									
101												
102	Particle Size Distributior in microns											
103	0.5-1		% wt			16.7						
104	1-5		% wt			54.1						
105	5-10		% wt			20.6						
106	10-20		% wt			2.9						
107	20-50		% wt			5.8						
108	50-100		% wt			0						
109	>100		% wt			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
1	**Feedstreams**																							
2																								
3																								
4	**786C1**		**Capacity 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		5386		5379		5379		5382.0		14		14		14		14					
11	Viscosity		cps		1.4		1.5		1.2		1.37													
12	Heating Value		Btu/lb		2400		3980		5450		3943.3		200000		20000		20000		20000					
13	Density		lb/gal		11		11		11		11.0													
14	Ash		lb/hr		0.41		0.27		0.23		0.30										3.7		3.7	
15	Chlorine		lb/hr		3710		3750		3710		3723.3													
16	Antimony		g/hr	nd	0.1	nd	0.1	nd	0.1		0.1													
17	Arsenic		g/hr	nd	0.02	nd	0.02	nd	0.02		0.02													
18	Barium		g/hr		0.1		0.091		0.1		0.1													
19	Beryllium		g/hr	nd	0.02	nd	0.02	nd	0.02		0.02													
20	Cadmium		g/hr	nd	0.09	nd	0.09	nd	0.09		0.09													
21	Chromium		g/hr		0.81		0.8		0.63		0.75										11		11	
22	Lead		g/hr		0.63	nd	0.2	nd	0.2		0.3													
23	Mercury		g/hr	nd	0.05	nd	0.05	nd	0.05		0.05													
24	Nickel		g/hr	nd	0.6	nd	0.6	nd	0.6		0.6													
25	Selenium		g/hr	nd	0.3	nd	0.3	nd	0.3		0.3													
26	Silver		g/hr	nd	0.03	nd	0.03	nd	0.03		0.03													
27	Thallium		g/hr	nd	0.2	nd	0.2	nd	0.2		0.2													
28	Zinc		g/hr		1.2		1.4		1.6		1.4													
29																								
30	Stack Gas Flowrate		dscfm		5148		5147		5092		5130													
31	Oxygen		%		4		4.2		4.2		4.1													
32																								
33	Thermal Feedrate		MMBtu/hr		12.9		21.4		29.3		21.2		0.28		0.28		0.28		0.28					
34	Estimated Firing Rate		MMBtu/hr																					
35																								
36	*Feedrate MTEC Calculations*																							
37	Ash		mg/dscm		17.5		11.7		10.1	0	13.1										158.3		160.2	
38	Chlorine		ug/dscm		158683822		162335693		162338839	0	161119451													
39	Antimony		ug/dscm	100	9.4	100	9.5	100	9.6	100	9.5													
40	Arsenic		ug/dscm	100	1.9	100	1.9	100	1.9	100	1.9													
41	Barium		ug/dscm		9.4		8.7		9.6	0	9.2													
42	Beryllium		ug/dscm	100	1.9	100	1.9	100	1.9	100	1.9													
43	Cadmium		ug/dscm	100	8.5	100	8.6	100	8.7	100	8.6													
44	Chromium		ug/dscm		76.3		76.3		60.7	0	71.1										1036.3		1048.9	
45	Lead		ug/dscm		59.4	100	19.1	100	19.3	39	32.6													
46	Mercury		ug/dscm	100	4.7	100	4.8	100	4.8	100	4.8													
47	Nickel		ug/dscm	100	56.5	100	57.2	100	57.8	100	57.2													
48	Selenium		ug/dscm	100	28.3	100	28.6	100	28.9	100	28.6													
49	Silver		ug/dscm	100	2.8	100	2.9	100	2.9	100	2.9													
50	Thallium		ug/dscm	100	18.8	100	19.1	100	19.3	100	19.1													
51	Zinc		ug/dscm		113.1		133.5		154.2	0	133.6													
52																								
53	SVM		ug/dscm	13	67.8	100	27.7	100	28.0	52	41.1													
54	LVM		ug/dscm	5	80.1	5	80.1	6	64.6	5	74.9										1036.3		1048.9	
55																								
56																								
57																								
58	**786C2**		**DRE 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	

	B	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	**Feedstreams**											
2												
3												
4	**786C1**	R3		Cond Avg		R1		R2		R3		Cond Avg
5												
6	Feedstream Number	F3		F3		F4		F4		F4		F4
7	Feed Class	Spike		Spike		Total		Total		Total		Total
8	Feed Class 2	Spike		Spike		Total		Total		Total		Total
9	Feedstream Description	Spike		Spike		Total		Total		Total		Total
10	Feed Rate											
11	Viscosity											
12	Heating Value											
13	Density											
14	Ash	3.7		3.7								
15	Chlorine											
16	Antimony											
17	Arsenic											
18	Barium											
19	Beryllium											
20	Cadmium											
21	Chromium	11		11								
22	Lead											
23	Mercury											
24	Nickel											
25	Selenium											
26	Silver											
27	Thallium											
28	Zinc											
29												
30	Stack Gas Flowrate											
31	Oxygen											
32												
33	Thermal Feedrate					13.2		21.7		29.6		21.5
34	Estimated Firing Rate					27.8		27.5		27.2		27.5
35												
36	*Feedrate MTEC Calculations*											
37	Ash	161.9		159.8	0	175.8	0	171.9	0	172.0	0	172.8
38	Chlorine				0	158683822	0	162335693	0	162338839	0	161119451.5
39	Antimony				100	9.4	100	9.5	100	9.6	100	9.5
40	Arsenic				100	1.9	100	1.9	100	1.9	100	1.9
41	Barium				0	9.4	0	8.7	0	9.6	0	9.2
42	Beryllium				100	1.9	100	1.9	100	1.9	100	1.9
43	Cadmium				100	8.5	100	8.6	100	8.7	100	8.6
44	Chromium	1060.2		1046.1	0	1112.6	0	1125.1	0	1120.9	0	1117.2
45	Lead				0	59.4	100	19.1	100	19.3	39	32.6
46	Mercury				100	4.7	100	4.8	100	4.8	100	4.8
47	Nickel				100	56.5	100	57.2	100	57.8	100	57.2
48	Selenium				100	28.3	100	28.6	100	28.9	100	28.6
49	Silver				100	2.8	100	2.9	100	2.9	100	2.9
50	Thallium				100	18.8	100	19.1	100	19.3	100	19.1
51	Zinc				0	113.1	0	133.5	0	154.2	0	133.6
52												
53	SVM				13	67.8	100	27.7	100	28.0	52	41.1
54	LVM	1060.2		1046.1	0	1116.4	0	1129.0	0	1124.8	0	1121.0
55												
56												
57												
58	**786C2**	R3		Cond Avg		R1		R2		R3		Cond Avg
59												
60	Feedstream Number	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	Y
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		4213		4220		4213		4215.3		26		26		26		26					
65	Viscosity		cps		1.2		1.2		1.2		1.2													
66	Heating Value		Btu/lb		4230		5470		5410		5036.7		14000		14000		14000		14000					
67	Density		lb/gal		11.2		11.2		11.2		11.2													
68	Ash		lb/hr		0.26		0.21		0.18		0.22													
69	Chlorine		lb/hr		3030		2960		2930		2973.3										47		47	
70																								
71	Stack Gas Flowrate		dscfm		7542		7354		7008		7301													
72	Oxygen		%		8		8.2		8.1		8.1													
73																								
74	Thermal Feedrate		MMBtu/hr		17.8		23.1		22.8		21.2		0.4		0.4		0.4		0.4					
75	Estimated Firing Rate		MMBtu/hr																					
76																								
77	*Feedrate MTEC Calculations*																							
78	Ash		mg/dscm		9.9		8.4		7.5		8.6													
79	Chlorine		ug/dscm		115680179		117707550		121319335		118172859										1794379		1869005	
80																								
81																								
82																								
83	**786C3**		**Risk burn**		R1		R2		R3		Cond Avg		R1		R2		R3		Cond Avg		R1		R2	
84																								
85	Feedstream Number				F1		F1		F1		F1		F2		F2		F2		F2		F3		F3	
86	Feed Class				Liq HW		Liq HW		Liq HW		Liq HW		NG		NG		NG		NG		Total		Total	
87	Feed Class 2				HW		HW		HW		HW		MF		MF		MF		MF		Total		Total	
88	Feedstream Description				Vinyl Heavies		Vinyl Heavies		Vinyl Heavies		Vinyl Heavies		Natural gas		Natural gas		Natural gas		Natural gas		Total		Total	
89	Feed Rate		lb/hr		4061		4258		4088		4135.0		27.3		27.3		27.3		27.3					
90	Viscosity		cps		1.2		1.2		1.2		1.2													
91	Heating Value		Btu/lb		4340		5400		5440		5060		20000		20000		20000		20000					
92	Density		lb/gal		11.3		11.3		11.3		11.3													
93	Ash		lb/hr		0.307		0.213		0.202		0.23													
94	Chlorine		lb/hr		2850		3010		2800		2777.0													
95	Antimony		g/hr	nd	0.11	nd	0.11	nd	0.141		0.13													
96	Arsenic		g/hr	nd	0.018	nd	0.019	nd	0.019		0.019													
97	Barium		g/hr		0.0651		0.0699		0.073		0.069													
98	Beryllium		g/hr	nd	0.013	nd	0.014	nd	0.013		0.013													
99	Cadmium		g/hr	nd	0.071	nd	0.075	nd	0.072		0.073													
100	Chromium		g/hr		0.424		0.335		0.452		0.40													
101	Lead		g/hr	nd	0.312	nd	0.19	nd	0.18		0.23													
102	Mercury		g/hr	nd	0.037	nd	0.039	nd	0.037		0.038													
103	Nickel		g/hr		0.743	nd	0.46		0.449		0.47													
104	Selenium		g/hr	nd	0.19	nd	0.2	nd	0.19		0.19													
105	Silver		g/hr	nd	0.026	nd	0.027	nd	0.026		0.026													
106	Thallium		g/hr	nd	0.17	nd	0.17	nd	0.17		0.17													
107	Zinc		g/hr		0.871		1.89		1.3		1.35													
108																								
109	Stack Gas Flowrate		dscfm		5131		5295		4877		5101.0													
110	Oxygen		%		8.1		7.5		7.9		7.8													
111																								
112	Thermal Feedrate		MMBtu/hr		17.6		23.0		22.2		20.9		0.5		0.5		0.5		0.5		18.2		23.5	
113	Estimated Firing Rate		MMBtu/hr																		21.0		22.7	
114																								
115	*Feedrate MTEC Calculations*																							
116	Ash		mg/dscm		17.4		11.2		11.8		13.5									0	17.4		11.2	
117	Chlorine		ug/dscm		161175616		157620596		164051491		160949234									0	161175616		157620596	
118	Antimony		ug/dscm	100	13.7	100	12.7	100	18.2	100	14.9									100	13.7	100	12.7	100
119	Arsenic		ug/dscm	100	2.2	100	2.2	100	2.5	100	2.3									100	2.2	100	2.2	100
120	Barium		ug/dscm		8.1		8.1		9.4		8.5									0	8.1	0	8.1	0

	B	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
61	Feed Class	Spike		Spike		Total		Total		Total		Total
62	Feed Class 2	Spike		Spike		Total		Total		Total		Total
63	Feedstream Description	Spike		Spike		Total		Total		Total		Total
64	Feed Rate											
65	Viscosity											
66	Heating Value											
67	Density											
68	Ash											
69	Chlorine	47		47								
70												
71	Stack Gas Flowrate											
72	Oxygen											
73												
74	Thermal Feedrate					18.2		23.4		23.2		21.6
75	Estimated Firing Rate					31.1		29.9		28.7		29.9
76												
77	*Feedrate MTEC Calculations*											
78	Ash					9.9		8.4		7.5		8.6
79	Chlorine	1946078		1867979		117474557.7		119576554.5		123265412.6		120040838.3
80												
81												
82												
83	**786C3**	R3		Cond Avg								
84												
85	Feedstream Number	F3		F3								
86	Feed Class	Total		Total								
87	Feed Class 2	Total		Total								
88	Feedstream Description	Total		Total								
89	Feed Rate											
90	Viscosity											
91	Heating Value											
92	Density											
93	Ash							or 0.36?				
94	Chlorine							on p 19				
95	Antimony											
96	Arsenic											
97	Barium											
98	Beryllium											
99	Cadmium											
100	Chromium							or 1.6?				
101	Lead							on pg 19				
102	Mercury											
103	Nickel											
104	Selenium											
105	Silver											
106	Thallium											
107	Zinc											
108												
109	Stack Gas Flowrate											
110	Oxygen											
111												
112	Thermal Feedrate	22.8		21.5								
113	Estimated Firing Rate	20.3		21.3								
114												
115	*Feedrate MTEC Calculations*											
116	Ash	11.8		13.5								
117	Chlorine	164051491		160949234								
118	Antimony	18.2	100	14.9								
119	Arsenic	2.5	100	2.3								
120	Barium	9.4	0	8.5								

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
121	Beryllium		ug/dscm	100	1.6	100	1.6	100	1.7	100	1.6									100	1.6	100	1.6	100
122	Cadmium		ug/dscm	100	8.8	100	8.7	100	9.3	100	8.9									100	8.8	100	8.7	100
123	Chromium		ug/dscm		53		39		58		49.9									0	52.8	0	38.6	0
124	Lead		ug/dscm	100	39	100	22	100	23	100	28.0									100	38.9	100	21.9	100
125	Mercury		ug/dscm	100	4.6	100	4.5	100	4.8	100	4.6									100	4.6	100	4.5	100
126	Nickel		ug/dscm		92.6		53.1		57.9		67.9									0	92.6	0	53.1	0
127	Selenium		ug/dscm	100	23.7	100	23.1	100	24.5	100	23.8									100	23.7	100	23.1	100
128	Silver		ug/dscm	100	3.2	100	3.1	100	3.4	100	3.2									100	3.2	100	3.1	100
129	Thallium		ug/dscm	100	21.2	100	19.6	100	21.9	100	20.9									100	21.2	100	19.6	100
130	Zinc		ug/dscm		108.5		218.0		167.8		164.8									0	108.5	0	218.0	0
131																								
132	SVM		ug/dscm	100	47.7	100	30.6	100	32.5	100	36.9									100	47.7	100	30.6	100
133	LVM		ug/dscm	7	56.7	9	42.4	7	62.5	7	53.9									7	56.7	9	42.4	7

	B	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
121	Beryllium	1.7	100	1.6								
122	Cadmium	9.3	100	8.9								
123	Chromium	58.3	0	49.9								
124	Lead	23.2	100	28.0								
125	Mercury	4.8	100	4.6								
126	Nickel	57.9	0	67.9								
127	Selenium	24.5	100	23.8								
128	Silver	3.4	100	3.2								
129	Thallium	21.9	100	20.9								
130	Zinc	167.8	0	164.8								
131												
132	SVM	32.5	100	36.9								
133	LVM	62.5	7	53.9								

	A	B	C
1	**Process Information**		
2			
3	**786C1 Capacity burn**		Cond Avg
4			
5	Comb Temp	^{o}F	2696.0
6	Prod Rate	lb/hr	3709.9
7	Ejector Venturi Recirc Flow	gpm	292.0
8	T-34 Scrubber		
9	Effluent pH	pH	7.9
10	Blowdown Flow	gpm	32.0
11	Recirculation Flow	gpm	85.0
12			
13	**786C2 DRE burn**		Cond Avg
14			
15	Comb Temp	^{o}F	2102.0
16	Prod Rate	lb/hr	2654.1
17	Ejector Venturi Recirc Flow	gpm	360.7
18	T-34 Scrubber		
19	Effluent pH	pH	8.5
20	Blowdown Flow	gpm	71.0
21	Recirculation Flow	gpm	99.7
22			
23	**786C3 Risk burn**		Cond Avg
24			
25	Comb Temp	^{o}F	2300.0
26	Prod Rate	lb/hr	2777.0
27	Ejector Venturi Recirc Flow	gpm	366.0
28	T-34 Scrubber		
29	Effluent pH	pH	8.5
30	Blowdown Flow	gpm	57.7
31	Recirculation Flow	gpm	100.0

	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:		786C3															
5	Condition/Test Date:		Risk burn, normal operating condition, August 24-26, 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		20	20	20	20		13	13	13	13		18	18.0	18	18.0
12		Total TCDD	0		180	0	180	0		160	0	160	0		160	0.0	160	0.0
13		1,2,3,7,8-PCDD	0.5		140	70	140	70		94	47	94	47		130	65.0	130	65.0
14		Total PCDD	0		630	0	630	0		460	0	460	0		570	0.0	570	0.0
15		1,2,3,4,7,8-HxCDD	0.1		594	59	594	59		452	45	452	45		614	61.4	614	61.4
16		1,2,3,6,7,8-HxCDD	0.1		674	67	674	67		501	50	501	50		698	69.8	698	69.8
17		1,2,3,7,8,9-HxCDD	0.1		294	29	294	29		199	20	199	20		315	31.5	315	31.5
18		Total HxCDD	0		3010	0	3010	0		2250	0	2250	0		3020	0.0	3020	0.0
19		1,2,3,4,6,7,8-HpCDD	0.01		4360	44	4360	44		3100	31	3100	31		4320	43.2	4320	43.2
20		Total HpCDD	0		6320	0	6320	0		4440	0	4440	0		5900	0.0	5900	0.0
21		OCDD	0.001		22100	22	22100	22		18000	18	18000	18		24800	24.8	24800	24.8
22		2,3,7,8-TCDF	0.1		718	72	718	72		570	57	570	57		780	78.0	780	78.0
23		Total TCDF	0		7250	0	7250	0		6900	0	6900	0		8240	0.0	8240	0.0
24		1,2,3,7,8-PCDF	0.05		3490	175	3490	175		2620	131	2620	131		3670	183.5	3670	183.5
25		2,3,4,7,8-PCDF	0.5		2260	1130	2260	1130		1620	810	1620	810		2250	1125	2250	1125
26		Total PCDF	0		17400	0	17400	0		13100	0	13100	0		17300	0	17300	0
27		1,2,3,4,7,8-HxCDF	0.1		17500	1750	17500	1750		13200	1320	13200	1320		18600	1860	18600	1860
28		1,2,3,6,7,8-HxCDF	0.1		6590	659	6590	659		4580	458	4580	458		6310	631	6310	631
29		1,2,3,7,8,9-HxCDF	0.1		4350	435	4350	435		2670	267	2670	267		4160	416	4160	416
30		2,3,4,6,7,8-HxCDF	0.1		3840	384	3840	384		2460	246	2460	246		3940	394	3940	394
31		Total HxCDF	0		50600	0	50600	0		39600	0	39600	0		52700	0	52700	0
32		1,2,3,4,6,7,8-HpCDF	0.01		50700	507	50700	507		37200	372	37200	372		50400	504	50400	504
33		1,2,3,4,7,8,9-HpCDF	0.01		16500	165	16500	165		11300	113	11300	113		16800	168	16800	168
34		Total HpCDF	0		96000	0	96000	0		69900	0	69900	0		92200	0	92200	0
35		OCDF	0.001		166000	166	166000	166		125000	125	125000	125		170000	170	170000	170
36																		
37		Gas sample volume (dscf)				115.79	115.79	115.79			115.50	115.50	115.50			120.77	120.77	120.77
38		O2 (%)				8.10	8.10	8.10			7.5	7.5	7.5			7.90	7.90	7.90
39																		
40		PCDD/PCDF (pg in sample)				5754.20	369490.0	5754.20			4123.2	279810.0	4123.2			5843.20	374890.0	5843.20
41		PCDD/PCDF (ng/dscm @ 7% O2)		0.0		1.91	122.37	1.91	0.0		1.31	88.77	1.31	0.0		1.83	117.23	1.83
42																		
43		TEQ Cond Avg			1.68													
44		Total Cond Avg			109.46													