

US EPA ARCHIVE DOCUMENT

	B	C
1	Source Description	
2		
3	Phase I ID No.	808
4	EPA ID No.	LAD008187080
5	Facility Name	Dow Chemical Co.
6	Facility Location	
7	City	Plaquemine
8	State	LA
9	Unit ID Name/No.	I-200 (not I-300?)
10	Other Sister Facilities	None
11	Number of Sister Facilities	0
12	Combustor Class	Onsite incinerator
13	Combustor Type	Rotary kiln
14	Combustor Characteristics	Rotary kiln with afterburner
15	Capacity (MMBtu/hr)	
16	Soot Blowing	
17	APCS Detailed Acronym	QT/PBS/WESP
18	APCS General Class	WQ, LEWS, WESP
19	APCS Characteristics	Quench tower, packed bed scrubber, wet electrostatic precipitator
20	Hazardous Wastes	liq,solid,sludge
21	Haz Waste Description	HW sludge.solid,liquid
22	Supplemental Fuel	Natural gas, oil
23		diesel
24	Stack Characteristics	
25	Diameter (ft)	4.0
26	Height (ft)	100.0
27	Gas Velocity (ft/sec)	15.2
28	Gas Temperature (°F)	143.0
29		
30	Permitting Status	
31	HWC Burn Status (Date if Terminated)	

	B	C
1	Condition Description	
2		
3	808C1	
4		
5	Report Name/Date	Dow Chemical Trial Burn Report for Rotary Kiln, Prepared by Dow Chemical, Plaquemine, Louisiana, February 10, 1998
6	Report Prepare	Dow Chemical
7	Testing Firm	Dow Chemical
8	Cond Descr	Trial burn, LOW HEATING/LOW TEMP
9	Testing Dates	Nov 17-18, 1987
10	Cond Dates	Nov-87
11		
12	808C2	
13		
14	Report Name/Date	Dow Chemical Trial Burn Report for Rotary Kiln, Prepared by Dow Chemical, Plaquemine, Louisiana, February 10, 1998
15	Report Prepare	Dow Chemical
16	Testing Firm	Dow Chemical
17	Cond Descr	Trial burn, HIGH HEATING/HIGH TEMP
18	Testing Dates	Nov 19-20, 1987
19	Cond Dates	Nov-87

	B	C	D	E	F	G	H	I	J	K	L	M
1	Stack Gas Emissions 2											
2												
3												
4	808C1					R1		R2		R3		Cond Avg
5												
6	PM	E1	gr/dscf	y		0.0596		0.0134		0.0089		0.0273
7	CO (RA)	E1	ppmv	y		487.2		29.1		89.1		201.8
8	HCl	E1	ppmv	y		0.9		0.3		0.7		0.64
9	Total Chlorine	E1	ppmv	y		0.9		0.3		0.7		0.64
10	HBr	E1	ppmv	y		21.8		19.2		25.8		
11												
12	Sampling Train	PM/Halogens	E1									
13	Stack Gas Flowrate		dscfm			29167.0		26850.0		26717.0		
14	O2		%			13.5		13.3		13.3		
15	Moisture		%			19.5		16.0		16.5		
16	Temperature		°F			135.0		128.0		130.0		
17												
18	Carbon Tetrachloride	DRE	%			99.99952		99.99997		99.99992		
19	o-Dichlorobenzene	DRE	%			99.99912		99.99997		99.99953		
20	Tetrachloroethylene	DRE	%			99.99216		99.99999		99.99984		
21												
22	808C2					R1		R2		R3		Cond Avg
23												
24	PM	E1	gr/dscf	y		0.0067		0.0082		0.0178		0.0109
25	CO (RA)	E1	ppmv	y	nd	12.0 nd		12.5 nd		13.6		12.6860
26	HCl	E1	ppmv	y		0.1		0.6		0.1		0.28
27	Total Chlorine	E1	ppmv	y		0.1		0.6		0.1		0.28
28	HBr	E1	ug/dscm	y		1.1		13.1		21.3		
29												
30	Sampling Train	PM/Halogens	E1									
31	Stack Gas Flowrate		dscfm			24217.0		24300.0		24183.0		
32	O2		%			9.3		9.8		10.7		
33	Moisture		%			26.2		27.6		25.6		
34	Temperature		°F			144.0		146.0		139.0		
35												
36	Carbon Tetrachloride	DRE	%			99.99974		99.99959		99.99979		
37	o-Dichlorobenzene	DRE	%			99.99997		99.99972		99.99976		
38	Tetrachloroethylene	DRE	%			99.99995		99.99998		99.99993		

	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	AD	AE	AF	AG	AH	AI					
1	Feedstream 2																																						
2																																							
3																																							
4	808C1																																						
5	Feedstream Number																																						
6	Feed Class																																						
7	Feed Class 2																																						
8	Feedstream Description																																						
9	Feedrate																																						
10	Heating value																																						
11	% Ash																																						
12	Chlorine																																						
13	Bromine																																						
14	Fluorine																																						
15	Stack Gas Flow																																						
16	Oxygen																																						
17	Estimated Firing Rate																																						
18	MMBtu/hr																																						
19																																							
20																																							
21																																							
22	Feedrate MTEC Calculations																																						
23	Ash																																						
24	Chlorine																																						
25																																							
26																																							
27																																							
28	808C2																																						
29	Feedstream Number																																						
30	Feed Class																																						
31	Feed Class 2																																						
32	Feedstream Description																																						
33	Feedrate																																						
34	Heating value																																						
35	% Ash																																						
36	Chlorine																																						
37	Bromine																																						
38	Cadmium																																						
39	Fluorine																																						
40	Lead																																						
41	Mercury																																						
42	Stack Gas Flow																																						
43	Oxygen																																						
44	Estimated Firing Rate																																						
45	MMBtu/hr																																						
46																																							
47																																							
48																																							
49	Feedrate MTEC Calculations																																						
50	Ash																																						
51	Chlorine																																						
52	Cadmium																																						
53	Lead																																						
54	Mercury																																						
55	SVM																																						
56																																							
57																																							

US EPA ARCHIVE DOCUMENT

	AJ	AI	AL	AN	AO	AP	AC	AR	AS	AT	AUJ	AV	AVI	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								
31																								
32																								
33																								
34																								
35																								
36																								
37																								
38																								
39																								
40																								
41																								
42																								
43																								
44																								
45																								
46																								
47																								
48																								
49																								
50																								
51																								
52																								
53																								
54																								
55																								
56																								
57																								

	C	D	E	F	G
1	Process Information 2				
2					
3	808C1		R1	R2	R3
4					
5	Kiln Temperature	F	1170	1276	1276
6	Afterburner Temperature	F	1619	1673	1653
7	WS pH		5.13	5.14	5.14
8					
9	808C2		R1	R2	R3
10					
11	Kiln Temperature	F	1491	1532	1504
12	Afterburner Temperature	F	2007	2039	2011
13	WS pH		5.21	5.55	5.52

	C	D	E	F	G	H	I	J	K	L
1	808C1									
2										
3	ng/dscm									
4		I-TEF Wt Fact		Total Full ND	Run 1 Total 1/2 ND	TEQ 1/2 ND		Total Full ND	Run 2 Total 1/2 ND	TEQ 1/2 ND
5	4D 2378	1		0.018	0.018	0.018		0.035	0.018	0.018
6	4D Other	0		1.473	1.473	0.000		1.784	1.473	0.000
7	4D Total	0		1.491	1.491	0.000		1.818	1.491	0.000
8	5D 12378	0.5	nd	0.073	0.073	0.036	nd	0.073	0.036	0.018
9	5D Other	0		0.036	0.036	0.000		0.218	0.036	0.000
10	5D Total	0		0.109	0.109	0.000		0.291	0.109	0.000
11	6D 123478	0.1	nd	0.091	0.091	0.009	nd	0.073	0.045	0.005
12	6D Other	0		0.000	0.000	0.000		0.000	0.000	0.000
13	6D Total	0	nd	0.091	0.091	0.000	nd	0.073	0.045	0.000
14	7D 1234678	0.01	nd	0.145	0.145	0.001	nd	0.109	0.073	0.001
15	7D Other	0		0.000	0.000	0.000		0.000	0.000	0.000
16	7D Total	0	nd	0.145	0.145	0.000	nd	0.109	0.073	0.000
17	8D	0.001		0.491	0.491	0.000		0.618	0.491	0.000
18	4F 2378	0.1		0.062	0.062	0.006		0.098	0.062	0.006
19	4F Other	0		7.029	7.029	0.000		7.538	7.029	0.000
20	4F Total	0		7.091	7.091	0.000		7.636	7.091	0.000
21	5F 12378	0.5		0.095	0.095	0.047		0.131	0.095	0.047
22	5F Other	0		0.960	0.960	0.000		1.687	0.960	0.000
23	5F Total	0		1.055	1.055	0.000		1.818	1.055	0.000
24	6F 123478	0.1		0.104	0.104	0.010		0.200	0.104	0.010
25	6F Other	0		0.078	0.078	0.000		0.418	0.078	0.000
26	6F Total	0		0.182	0.182	0.000		0.618	0.182	0.000
27	7F 1234678	0.01		0.109	0.109	0.001		0.236	0.109	0.001
28	7F Other	0		0.000	0.000	0.000		0.000	0.000	0.000
29	7F Total	0		0.109	0.109	0.000		0.236	0.109	0.000
30	8F	0.001	nd	0.418	0.418	0.000	nd	0.255	0.209	0.000
31	Total PCDD/PCDF		0.0	11.182	11.182	0.131	79.4	13.473	10.855	0.107
32	TEQ			0.131				0.178		