

US EPA ARCHIVE DOCUMENT

	B	C
1	Source Description	
2		
3	Phase I ID No.	480
4	EPA ID No.	LAD053783445
5	Facility Name	CIBA-GEIGY CORPORATION
6	Facility Location	
7	City	ST. GABRIEL
8	State	LA
9	Unit ID Name/No.	MULTI-PURPOSE INCINERATOR
10	Other Sister Facilities	
11	Number of Sister Facilities	0
12	Combustor Class	Onsite incinerator
13	Combustor Type	Rotary kiln
14	Combustor Characteristics	Kiln: 12' diameter, 40' long, with afterburner
15	Capacity (MMBtu/hr)	
16	Soot Blowing	
17	APCS Detailed Acronym	QC/HS
18	APCS General Class	WQ, HEWS
19	APCS Characteristics	Quench, hydrosonic scrubber
20	Hazardous Wastes	Liq, sludge, solid
21	Haz Waste Description	
22	Supplemental Fuel	
23		
24	Stack Characteristics	
25	Diameter (ft)	4.0
26	Height (ft)	140.0
27	Gas Velocity (ft/sec)	18.9
28	Gas Temperature (°F)	185.9
29		
30	Permitting Status	
31	HWC Burn Status (Date if Terminated)	

	B	C
1	Condition Description	
2		
3	480C1	
4		
5	Report Name/Date	Source Emissions Survey of Ciba-Geigy Corporation, Multi Purpose Incinerator Stack, St. Gabriel, Louisiana, Prepared by METCO Environmental, File # 93-265, December 1993
6	Report Prepare	METCO Environmental
7	Testing Firm	METCO Environmental
8	Cond Descr	CONTAINER FEED
9	Testing Dates	December 10-13, 1993
10	Cond Dates	Dec-93
11		
12	480C2	
13		
14	Report Name/Date	Source Emissions Survey of Ciba-Geigy Corporation, Multi Purpose Incinerator Stack, St. Gabriel, Louisiana, Prepared by METCO Environmental, File # 93-265, December 1993
15	Report Prepare	METCO Environmental
16	Testing Firm	METCO Environmental
17	Cond Descr	?
18	Testing Dates	
19	Cond Dates	Dec-93
20		
21	480C3	
22		
23	Report Name/Date	Source Emissions Survey of Ciba-Geigy Corporation, Multi Purpose Incinerator Stack, St. Gabriel, Louisiana, Prepared by METCO Environmental, File # 93-265, December 1993
24	Report Prepare	METCO Environmental
25	Testing Firm	METCO Environmental
26	Cond Descr	CONTAINER AND BULK SOLIDS FEED
27	Testing Dates	December 14-16, 1993
28	Cond Dates	Dec-93

	B	C	D	E	F	G	H	I	J	K	L	M
1	Stack Gas Emissions											
2												
3												
4	480C1					R1	R2	R3	Cond Avg			
5												
6	PM	E1	gr/dscf	y		0.0130		0.0144		0.0168		0.0147
7	CO (RA)	E1	ppmv	y	nd	0.5	nd	0.5	nd	0.5		0.5
8	HC (RA)	E1	ppmv	y		6.1		9.3		6.7		7.4
9	HCl	E1	ppmv	y		2.8		3.7		5.9		4.1
10	Cl2	E1	ppmv	y		0.1		0.1		0.1		0.1
11	Total Chlorine	E1	ppmv	y		3.0		3.9		6.1		4.4
12												
13	Carbon Tetrachloride	DRE	%			99.9997		99.9998		99.9998		
14	Chlorobenzene	DRE	%			99.9996		99.9999		99.9999		
15	Toluene	DRE	%			99.9988		99.9994		99.9992		
16												
17	Sampling Train	Particulate	E1									
18	Stack Gas Flowrate		dscfm			18717.0		17670.0		17178.0		
19	O2		%			9.0		7.5		7.0		
20	Moisture		%			52.0		55.6		55.5		
21	Temperature		°F			184.0		186.0		186.0		
22												
23	Sampling Train	Dioxin & Fu	E2									
24	Stack Gas Flowrate		dscfm			17294.0		15786.0		16250.0		
25	O2		%			9.0		7.5		7.0		
26	Moisture		%			53.9		55.7		55.3		
27	Temperature		°F			183.0		185.0		185.0		
28												
29	480C2					R1	R2	R3	Cond Avg			
30												
31	PM	E1	gr/dscf	y		0.0057		0.0057		0.0058		0.0057
32	CO (RA)	E1	ppmv	y	nd	0.6	nd	0.6	nd	0.6		0.6
33	HC (RA)	E1	ppmv	y		6.6		6.8		9.0		7.5
34	HCl	E1	ppmv	y		1.0		1.7		1.6		1.4
35	Cl2	E1	ppmv	y		0.1		0.1		0.1		0.1
36	Total Chlorine	E1	ppmv	y		1.2		1.9		1.8		1.6
37												
38	Carbon Tetrachloride	E1	%			99.9999		99.9999		99.9997		
39	Chlorobenzene	E1	%			99.9999		99.9999		99.9999		
40	Toluene	E1	%			99.9993		99.9994		99.999		
41												
42	Sampling Train	Particulate	E1									
43	Stack Gas Flowrate		dscfm			18578.0		19063.0		19170.0		
44	O2		%			8.2		8.7		8.4		
45	Moisture		%			49.9		49.7		50.4		
46	Temperature		°F			185.0		184.0		183.0		
47												
48	480C3					R1	R2	R3	Cond Avg			
49												
50	PM	E1	gr/dscf	y		0.0286		0.0294		0.0285		0.0288
51	CO (RA)	E1	ppmv	y		1.4		1.4		0.5		1.1
52	HC (RA)	E1	ppmv	y		4.2		4.2		4.2		4.2
53	HCl	E1	ppmv	y		2.8		2.2		2.5		2.5
54	Cl2	E1	ppmv	y		0.2		0.1		0.1		0.1
55	Total Chlorine	E1	ppmv	y		3.2		2.3		2.7		2.7
56	Antimony	E2	ug/dscm	y		207.2		198.0		136.2		180.5
57	Arsenic	E2	ug/dscm	y		1632.0		3142.6		3713.9		2829.5
58	Barium	E2	ug/dscm	y		10.1		11.3		7.3		9.6
59	Beryllium	E2	ug/dscm	y		11.5		7.3		17.0		11.9
60	Cadmium	E2	ug/dscm	y		4244.0		6311.0		6720.4		5758.5
61	Chromium	E2	ug/dscm	y		1062.1		1508.6		1711.1		1427.2
62	Chromium (Hex)	E3	ug/dscm	y		200.5		191.6		262.6		218.2
63	Lead	E2	ug/dscm	y		7684.9		11282.1		11053.3		10006.8
64	Mercury	E2	ug/dscm	y		41355.2		39502.4		26348.1		35735.2
65	Silver	E2	ug/dscm	y		2.2		2.0		2.0		2.1
66	Thallium	E2	ug/dscm	y	nd	0.1	nd	0.1	nd	0.1	100	0.1
67	SVM	E2	ug/dscm	y		11928.9		17593.1		17773.8		15765.3
68	LVM	E2	ug/dscm	y		2705.5		4658.5		5442.0		4268.7
69												
70	Sampling Train	Particulate	E1									
71	Stack Gas Flowrate		dscfm			16684.0		17092.0		17331.0		

	B	C	D	E	F	G	H	I	J	K	L	M
72	O2		%			6.0		6.1		6.4		
73	Moisture		%			55.8		55.1		54.5		
74	Temperature		°F			186.0		186.0		186.0		
75												
76	Sampling Train	Metals	E2									
77	Stack Gas Flowrate		dscfm			17466.0		18169.0		17921.0		
78	O2		%			6.0		6.2		6.4		
79	Moisture		%			55.5		54.6		54.2		
80	Temperature		°F			186.0		186.0		186.0		
81												
82	Sampling Train	Cr Hex	E3									
83	Stack Gas Flowrate		dscfm			16749.0		16475.0		16723.0		
84	O2		%			6.0		6.1		6.4		
85	Moisture		%			56.0		55.9		54.6		
86	Temperature		°F			186.0		186.0		185.0		
87												
88	Carbon Tetrachloride	DRE	%			99.9998		99.9999		99.9999		
89	Chlorobenzene	DRE	%			99.9998		99.9999		99.9999		
90	Toluene	DRE	%			99.999		99.9992		99.9987		

	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	
1	Feedstream 2																															
2																																
3																																
4																																
5	480C1		R1	R2	R3	R1	R2	R3	R1	R2	R3	Cond Avg	R1	R2	R3	Cond Avg																
6																																
7	Feedstream Number		F1	F1	F1	F2	F2	F2	F3	F3	F3	F3																				
8	Feed Class		Solid HW	Solid HW	Solid HW	Solid HW	Solid HW	Solid HW	Total	Total	Total	Total																				
9	Feed Class 2								Total	Total	Total	Total																				
10	Feedstream Description		Drums			Trash			Total	Total	Total	Total																				
11	Feedrate	lb/hr	20.8	20.8	19.2																											
12	Heating value																															
13	Ash	lb/hr																														
14	Chlorine	lb/hr											1115.0	1102.8	1024.9																	
15																																
16	Stack Gas Flowrate	dscfm											18717	17670	17178																	
17	Oxygen	%											9	7.5	7																	
18																																
19	Estimated Firing Rate	MMBtu/hr											71.30	75.73	76.35																	
20																																
21	<i>Feedrate MTEC Calculations</i>																															
22	Ash	mg/dscm															118463.2															
23	Chlorine	ug/dscm															18582876	17304728	15952407	17280003	18582876	17304728	15952407	17280003								
24																																
25																																
26	480C2		R1	R2	R3	R1	R2	R3	R1	R2	R3	Cond Avg																				
27																																
28	Feedstream Number								F1	F1	F1	F1																				
29	Feed Class								Total	Total	Total	Total																				
30	Feed Class 2								Total	Total	Total	Total																				
31	Feedstream Description		Drums			Trash			Total	Total	Total	Total																				
32	Ash	lb/hr																														
33	Chlorine	lb/hr											90.034	96.514	91.165																	
34																																
35	Stack Gas Flowrate	dscfm											18578	19063	19170																	
36	Oxygen	%											8.2	8.7	8.4																	
37																																
38	Estimated Firing Rate	MMBtu/hr											75.49	74.44	76.68																	
39																																
40	<i>Feedrate MTEC Calculations</i>																															
41	Ash	mg/dscm															4412.125															
42	Chlorine	ug/dscm															1417241.4	1540778.3	1412803.2	1456941												
43																																
44	480C3		R1	R2	R3	R1	R2	R3	R1	R2	R3	Cond Avg																				
45																																
46	Feedstream Number		F1	F1	F1	F2	F2	F2	F3	F3	F3	F3																				
47	Feed Class		Solid HW	Solid HW	Solid HW	Solid HW	Solid HW	Solid HW	Total	Total	Total	Total																				
48	Feed Class 2								Total	Total	Total	Total																				
49	Feedstream Description		Drums			Trash			Total	Total	Total	Total																				
50	Feedrate	lb/hr (drum/hr)	16.9	17	17.3	4333	4345	3260.5																								
51	Heating value																															
52	Ash																610.5															
53	Chlorine	lb/hr											123.667	87.605	81.742																	
54	Arsenic	lb/hr											2.869	3.015	2.898																	
55	Beryllium	lb/hr											0.105	0.109	0.104																	
56	Cadmium	lb/hr											3.818	3.8	3.83																	
57	Chromium	lb/hr											3.918	4.09	3.998																	
58	Lead	lb/hr											9.137	9.049	8.995																	
59	Mercury	lb/hr											4.518	4.132	4.144																	
60	Chromium (Hex)	lb/hr											3.878	4.038	3.948																	

	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		
61																																	
62	Stack Gas Flowrate		dscfm														16684	17092			17331			17036									
63	Oxygen		%														6	6.1			6.4			6.2									
64																																	
65	Estimated Firing Rate		MMBtu/hr														79.45	80.85			80.33			80.22									
66																																	
67	<i>Feedrate MTEC Calculations</i>																																
68	Ash		mg/dscm																					9043									
69	Chlorine		ug/dscm														1849731	1287644			1209247			1448874									
70	Arsenic		ug/dscm														42913	44315			42871			43366									
71	Beryllium		ug/dscm														1571	1602			1539			1570									
72	Cadmium		ug/dscm														57107	55854			56659			56540									
73	Chromium		ug/dscm														58603	60116			59144			59288									
74	Lead		ug/dscm														136665	133005			133067			134246									
75	Mercury		ug/dscm														67577	60733			61304			63205									
76	Chromium (Hex)		ug/dscm														58005	59352			58405			58587									
77																																	
78	SVM		ug/dscm														193773	188858			189726			190786									
79	LVM		ug/dscm														103086	106034			103554			104225									

	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	480C1													
2														
3	ng/dscm	I-TEF		Full	R1 Total	TEQ		Full	R2 Total	TEQ		Full	R3 Total	TEQ
4		Wt Fact		ND	1/2 ND	1/2 ND		ND	1/2 ND	1/2 ND		ND	1/2 ND	1/2 ND
5	4D 2378	1	1	0.002	0.001	0.001	1	0.002	0.001	0.001	1	0.002	0.001	0.001
6	4D Other	0		0.025	0.025	0.000		0.024	0.024	0.000		0.023	0.023	0.000
7	4D Total	0		0.027	0.027	0.000		0.026	0.026	0.000		0.025	0.025	0.000
8	5D 12378	0.5	1	0.004	0.002	0.001	1	0.003	0.002	0.001	1	0.003	0.002	0.001
9	5D Other	0		0.015	0.015	0.000	1	0.010	0.005	0.000		0.029	0.029	0.000
10	5D Total	0		0.019	0.019	0.000	1	0.013	0.007	0.000		0.032	0.032	0.000
11	6D 123478	0.1	1	0.004	0.002	0.000	1	0.003	0.002	0.000	1	0.003	0.002	0.000
12	6D 123678	0.1	1	0.003	0.002	0.000	1	0.003	0.001	0.000	1	0.003	0.002	0.000
13	6D 123789	0.1	1	0.004	0.002	0.000	1	0.003	0.001	0.000	1	0.003	0.002	0.000
14	6D Other	0		0.004	0.004	0.000		0.000	0.000	0.000		0.022	0.022	0.000
15	6D Total	0		0.015	0.015	0.000	1	0.007	0.003	0.000		0.032	0.032	0.000
16	7D 1234678	0.01		0.012	0.012	0.000	1	0.003	0.002	0.000	1	0.006	0.003	0.000
17	7D Other	0		0.008	0.008	0.000		0.003	0.003	0.000		0.003	0.003	0.000
18	7D Total	0		0.019	0.019	0.000		0.007	0.007	0.000		0.010	0.010	0.000
19	8D	0.001		0.035	0.035	0.000		0.020	0.020	0.000		0.022	0.022	0.000
20	4F 2378	0.1		0.012	0.012	0.001	1	0.007	0.003	0.000		0.019	0.019	0.002
21	4F Other	0		0.323	0.323	0.000		0.352	0.352	0.000		0.459	0.459	0.000
22	4F Total	0		0.335	0.335	0.000		0.358	0.358	0.000		0.478	0.478	0.000
23	5F 12378	0.05		0.012	0.012	0.001		0.007	0.007	0.000		0.016	0.016	0.001
24	5F 23478	0.5		0.015	0.015	0.008	1	0.010	0.005	0.002		0.022	0.022	0.011
25	5F Other	0		0.081	0.081	0.000		0.088	0.088	0.000		0.191	0.191	0.000
26	5F Total	0		0.108	0.108	0.000		0.104	0.104	0.000		0.229	0.229	0.000
27	6F 123478	0.1		0.019	0.019	0.002		0.010	0.010	0.001		0.025	0.025	0.003
28	6F 123678	0.1		0.008	0.008	0.001	1	0.003	0.002	0.000		0.013	0.013	0.001
29	6F 123789	0.1	1	0.003	0.002	0.000	1	0.002	0.001	0.000	1	0.003	0.001	0.000
30	6F 234678	0.1		0.012	0.012	0.001		0.007	0.007	0.001		0.013	0.013	0.001
31	6F Other	0		0.028	0.028	0.000		0.011	0.011	0.000		0.048	0.048	0.000
32	6F Total	0		0.069	0.069	0.000		0.033	0.033	0.000		0.102	0.102	0.000
33	7F 1234678	0.01	1	0.015	0.008	0.000		0.007	0.007	0.000	1	0.013	0.006	0.000
34	7F 1234789	0.01	1	0.004	0.002	0.000	1	0.003	0.002	0.000	1	0.003	0.002	0.000
35	7F Other	0		0.008	0.008	0.000		0.000	0.000	0.000		0.000	0.000	0.000
36	7F Total	0	1	0.027	0.013	0.000		0.007	0.007	0.000		0.003	0.003	0.000
37	8F	0.001		0.019	0.019	0.000	1	0.007	0.003	0.000	1	0.006	0.003	0.000
38	Total PCDD/PCDF			0.674	0.660			0.580	0.567			0.940	0.936	
39	TEQ		30.3	0.019		0.016	83.5	0.012		0.007	21.7	0.024		0.022