

US EPA ARCHIVE DOCUMENT

	B	C
1	<b>Source Description</b>	
2		
3	Phase II ID No.	1016
4	EPA ID No.	TXD067261412
5	Facility Name	BASF Corporation
6	Facility Location	
7	City	Beaumont
8	State	TX
9	Unit ID Name/No.	WOD K541
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)	
16	Soot Blowing	
17	APCS Detailed Acronym	WS
18	APCS General Class	LEWS
19	APCS Characteristics	
20	Hazardous Wastes	Liq
21	Haz Waste Description	DCP Waste Feed, WWTB Waste Feed, Caustic Feed, Process Water
22	Supplemental Fuel	?
23		
24	Stack Characteristics	
25	Diameter (ft)	2.5
26	Height (ft)	
27	Gas Velocity (ft/sec)	
28	Gas Temperature (°F)	
29		
30	Permitting Status	Tier I for metals and chlorine
31	HWC Burn Status (Date if Terminated)	

	B	C
1	<b>Cond Description</b>	
2		
3	<b>1016C1</b>	
4		
5	Report Name/Date	Source Emissions Survey BASF Corp. WOD K541 Stack Risk Burn; No report date
6	Report Prepare	METCO Environmental
7	Testing Firm	METCO Environmental
8	Testing Dates	September 21-24, 1998
9	Cond Dates	Sep-98
10	Condition Descr	Trial Burn/Risk Burn
	Content	
11		Stack PM, HCl, Cl2, D/F, SVOC, Total Organics, CO, and O2; Metals, D/F, Chlorine, VOCs characterization of waste feed steams.

	B	C	D	E	F	G	H	I	J	K	L	M
1	<b>Stack Gas Emissions</b>											
2												
3		Comments	Units	7% O2								
4												
5												
6	<b>1016C1</b>	<b>(Risk Burn)</b>				R1	R2	R3	Cond Avg			
7												
8	PM	E1	gr/dscf	y		0.0039	0.0034	0.0028	0.0034			
9	CO (RA)	E1	ppmv	y		0.5	0.2	0.2	0.30			
10	HCl		ppmv	n		0.68	0.62	0.58	0.63			
11	Cl2		ppmv	n		0.03	0.03	0.03	0.03			
12												
13	Sampling Train	PM, HCl/Cl2	E1									
14	Stack Gas Flowrate		dscfm			2278	2257	2364	2299.67			
15	O2		%			3	3.5	3.7	3.40			
16	Moisture		%			45.18	44.52	44.03	44.58			
17	Temperature		°F			189	190	189	189.33			
18												
19	HCl	E1	ppmv	y		0.53	0.50	0.47	0.50			
20	Cl2	E1	ppmv	y		0.02	0.02	0.02	0.02			
21	Total Chlorine	E1	ppmv	y		0.58	0.54	0.52	0.55			
22												
23	Particle Size Distribution	in microns										
24												
25	0.5-2.5		% wt			58	63	84				
26	>2.5-5.0		% wt			40	18	15				
27	>5.0-7.5		% wt			2	17	1				
28	>7.5-10.0		% wt			0	1	0				
29	>10		% wt			0	0	0				

A	B	C	D	E	F	G	H	I	J
1	<b>Feedstreams</b>								
2									
3									
4	<b>1016C1</b>	<b>(Risk Burn)</b>			Cond Avg	Cond Avg	Cond Avg	Cond Avg	Cond Avg
5									
6	Feedstream Number				F1	F2			
7	Feed Class				Liq HW	Liq HW			
8	Feed Class 2				HW				Total
9	Feedstream Description				DCP Waste	WWTB Waste			
10	Feed Rate		g/hr						
11	Viscosity		cSt				2.05		
12	Heating Value		Btu/lb		8902		9658		
13	Density		g/ml		1.477		2.052		
14	Ash		% wt	nd	0.02	nd	0.04		
15	Chlorine		%wt		38.3		36.5		
16	Antimony		ppmw	nd	6	nd	12		
17	Arsenic		ppmw	nd	30	nd	60		
18	Barium		ppmw	nd	20	nd	40		
19	Beryllium		ppmw	nd	0.5	nd	1		
20	Cadmium		ppmw	nd	0.5	nd	1		
21	Chromium		ppmw	nd	1	nd	2		
22	Lead		ppmw	nd	10	nd	20		
23	Mercury		ppmw	nd	0.03	nd	0.034		
24	Silver		ppmw	nd	1	nd	2		
25	Thallium		ppmw	nd	200	nd	400		
26	Selenium		ppmw	nd	25	nd	50		
27	Nickel		ppmw	nd	6.3	nd	8		
28									
29	Stack Gas Flowrate		dscfm		2299.7				
30	Oxygen		%		3.4				
31									
32	Estimated Firing Rate		MMBtu/hr		12.8				
33									
34									
35									
36	need total waste feedrates to calculate MTECs								
37	approx waste feedrate				1443.37578				
38									
39	approx feedrate MTECs								
40	Antimony		ug/dscm	100	801		100	801	
41	Arsenic		ug/dscm	100	4005		100	4005	
42	Barium		ug/dscm	100	2670		100	2670	
43	Beryllium		ug/dscm	100	67		100	67	
44	Cadmium		ug/dscm	100	67		100	67	
45	Chromium		ug/dscm	100	133		100	133	
46	Lead		ug/dscm	100	1335		100	1335	
47	Mercury		ug/dscm	100	4		100	4	
48	Silver		ug/dscm	100	133		100	133	
49	Thallium		ug/dscm	100	26698		100	26698	
50	Selenium		ug/dscm	100	3337		100	3337	
51	Nickel		ug/dscm	100	841		100	841	
52	SVM		ug/dscm	100	1402		100	1402	
53	LVM		ug/dscm	100	4205		100	4205	

A	
1	Process Information
2	
3	1016C1
4	
5	None available

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	<b>PCDD/PCDF</b>																
2	N																
3	Facility Name and ID:	BASF Corporation, Beaumont, TX															
4	Condition ID:	1016C1															
5	Condition/Test Date:	Trial Burn/Risk Burn; September 21-24, 1998															
6																	
7		I-TEF															
8		Wght Fact															
9																	
10	Detected in sample volume (ng)																
11	2,3,7,8-TCDD	1															
12	TCDD Total	0	0.089	0.0890	0.0890	0.0890	0.0890	0.0890	0.074	0.0740	0.0740	0.0740	0.0740	0.081	0.0810	0.0810	0.0810
13	1,2,3,7,8-PCDD	0.5	0.540	0.0000	0.5400	0.5400	0.0000	0.0000	0.5	0.0000	0.5000	0.0000	0.0000	0.54	0.0000	0.5400	0.0000
14	PCDD Total	0	0.049	0.0245	0.0490	0.0490	0.0245	0.0245	0.051	0.0255	0.0510	0.0255	0.0255	0.047	0.0235	0.0470	0.0235
15	1,2,3,4,7,8-HxCDD	0.1	0.520	0.0000	0.5200	0.5200	0.0000	0.0000	0.53	0.0000	0.5300	0.0000	0.0000	0.47	0.0000	0.4700	0.0000
16	1,2,3,6,7,8-HxCDD	0.1	0.030	0.0030	0.0300	0.0300	0.0030	0.0030	0.033	0.0033	0.0330	0.0033	0.0033	0.03	0.0030	0.0300	0.0030
17	1,2,3,7,8,9-HxCDD	0.1	0.110	0.0110	0.1100	0.1100	0.0110	0.0110	0.12	0.0120	0.1200	0.0120	0.0120	0.089	0.0089	0.0890	0.0089
18	HxCDD Total	0	0.060	0.0060	0.0600	0.0600	0.0060	0.0060	0.058	0.0058	0.0580	0.0058	0.0058	0.05	0.0050	0.0500	0.0050
19	1,2,3,4,6,7,8-HpCDD	0.01	0.027	0.0003	0.0270	0.0270	0.0003	0.0003	0.29	0.0029	0.2900	0.0029	0.0029	0.2	0.0020	0.2000	0.0020
20	HpCDD Total	0	0.450	0.0000	0.4500	0.4500	0.0000	0.0000	0.5	0.0000	0.5000	0.0000	0.0000	0.34	0.0000	0.3400	0.0000
21	OCDD	0.001	0.990	0.0010	0.9900	0.9900	0.0010	0.0010	0.86	0.0009	0.8600	0.0009	0.0009	0.35	0.0004	0.3500	0.0004
22	2,3,7,8-TCDF	0.1	2.500	0.2500	2.5000	2.5000	0.2500	0.2500	1.9	0.1900	1.9000	0.1900	0.1900	2.1	0.2100	2.1000	0.2100
23	TCDF Total	0	17.000	0.0000	17.0000	17.0000	0.0000	0.0000	15	0.0000	15.0000	0.0000	0.0000	18	0.0000	18.0000	0.0000
24	1,2,3,7,8-PCDF	0.05	0.074	0.0037	0.0740	0.0740	0.0037	0.0037	0.64	0.0320	0.6400	0.0320	0.0320	0.62	0.0310	0.6200	0.0310
25	2,3,4,7,8-PCDF	0.5	0.620	0.3100	0.6200	0.6200	0.3100	0.3100	0.59	0.2950	0.5900	0.2950	0.2950	0.57	0.2850	0.5700	0.2850
26	PCDF Total	0	7.200	0.0000	7.2000	7.2000	0.0000	0.0000	7.1	0.0000	7.1000	0.0000	0.0000	7	0.0000	7.0000	0.0000
27	1,2,3,4,7,8-HxCDF	0.1	0.850	0.0850	0.8500	0.8500	0.0850	0.0850	0.84	0.0840	0.8400	0.0840	0.0840	0.71	0.0710	0.7100	0.0710
28	1,2,3,6,7,8-HxCDF	0.1	0.530	0.0530	0.5300	0.5300	0.0530	0.0530	0.54	0.0540	0.5400	0.0540	0.0540	0.45	0.0450	0.4500	0.0450
29	2,3,4,6,7,8-HxCDF	0.1	0.380	0.0380	0.3800	0.3800	0.0380	0.0380	0.39	0.0390	0.3900	0.0390	0.0390	0.35	0.0350	0.3500	0.0350
30	1,2,3,7,8,9-HxCDF	0.1	0.190	0.0190	0.1900	0.1900	0.0190	0.0190	0.22	0.0220	0.2200	0.0220	0.0220	0.19	0.0190	0.1900	0.0190
31	HxCDF Total	0	4.700	0.0000	4.7000	4.7000	0.0000	0.0000	5	0.0000	5.0000	0.0000	0.0000	4.3	0.0000	4.3000	0.0000
32	1,2,3,4,6,7,8-HpCDF	0.01	1.000	0.0100	1.0000	1.0000	0.0100	0.0100	1.2	0.0120	1.2000	0.0120	0.0120	0.94	0.0094	0.9400	0.0094
33	1,2,3,4,7,8,9-HpCDF	0.01	0.300	0.0030	0.3000	0.3000	0.0030	0.0030	0.33	0.0033	0.3300	0.0033	0.0033	0.27	0.0027	0.2700	0.0027
34	HpCDF Total	0	2.000	0.0000	2.0000	2.0000	0.0000	0.0000	2.3	0.0000	2.3000	0.0000	0.0000	1.9	0.0000	1.9000	0.0000
35	OCDF	0.001	0.5500	0.0006	0.5500	0.5500	0.0006	0.0006	0.55	0.0006	0.5500	0.0006	0.0006	0.39	0.0004	0.3900	0.0004
36																	
37	Gas sample volume (discf)		124.68	124.68	124.68	124.68	124.68	124.68	126.62	126.62	126.62	126.62	126.62	127.48	127.48	127.48	127.48
38	O2 (%)		3.00	3.00	3.00	3.00	3.00	3.00	3.50	3.50	3.50	3.50	3.50	3.70	3.70	3.70	3.70
39																	
40	PCDD/PCDF (ng in sample)		34.690	0.907	34.690	34.690	0.907	0.907	33.100	0.856	33.100	0.856	0.856	33.880	0.832	33.880	0.832
41	PCDD/PCDF (ng/dscm @ 7% O2)		0.0	7.647	0.200	7.647	7.647	0.200	7.390	0.191	7.390	0.191	0.191	7.600	0.187	7.600	0.187
42																	
43	TEQ Cond Avg		0.193														
44	Total Cond Avg		7.5454														