

US EPA ARCHIVE DOCUMENT

	B	C
1	<b>Source Description</b>	
2		
3	Phase II ID No.	1000
4	EPA ID No.	NCD042091975
5	Facility Name	Mallinckrodt Inc.
6	Facility Location	
7	City	Raleigh
8	State	NC
9	Unit ID Name/No.	Boiler No. 2
10	Other Sister Facilities	None
11	Number of Sister Facilities	0
12	Combustor Class	Liquid-fired boiler
13	Combustor Type	Liquid injection
14	Combustor Characteristics	Cleaver-Brooks Model D52 watertube boiler, John Zink LoNOx burner LN-HIV-30; 30.3 MMBtu/hr heat input, 25,000 lb/hr steam production @ 125 psig, rotary soot blower
15	Capacity (MMBtu/hr)	30.3
16	Soot Blowing	Yes; once per day for 5 minutes
17	APCS Detailed Acronym	None
18	APCS General Class	
19	APCS Characteristics	
20	Hazardous Wastes	Liq
21	Haz Waste Description	Liquid, aniline, K083
22	Supplemental Fuel	Natural gas
23		
24	Stack Characteristics	
25	Diameter (ft)	2.75
26	Height (ft)	50
27	Gas Velocity (ft/sec)	31
28	Gas Temperature (°F)	616
29		
30	Permitting Status	Adjusted Tier I for all BIF metals and chlorine/chlorides
31	HWC Burn Status (Date if Terminated)	

	B	C
1	<b>Cond Description</b>	
2		
3	<b>1000C1</b>	
4		
5	Report Name/Date	Recertification of Compliance Test Report for Boiler No. 2, 12/4/97; Compliance Emission Test Report - Boiler No. 2, 11/5/97
6	Report Preparer	Compliance Strategies & Solutions
7	Testing Firm	DEECO Inc.
8	Testing Dates	October 1-3, 1997
9	Cond Dates	Oct-97
10	Cond Description	CoC; max waste feedrate
11	Content	PM, CO, Cr and Cr+6 emissions; ash, Cl, and metals feeds
12		
13	<b>1000C2</b>	
14		
15	Report Name/Date	Recertification of Compliance Test Report for Boiler No. 2, 12/4/97; Compliance Emission Test Report - Boiler No. 2, 11/5/97
16	Report Preparer	Compliance Strategies & Solutions
17	Testing Firm	DEECO Inc.
18	Testing Dates	October 3-4, 1997
19	Cond Dates	Oct-97
20	Cond Description	CoC; min combustion temperature
21	Content	CO

	B	C	D	E	F	G	H	I	J	K	L	M
1	<b>Stack Gas Emissions</b>											
2												
3	Cond ID	Comments	Units	7%O2								
4												
5						Sootblow						
6	<b>1000C1</b>					R3	R4	R5		Cond Avg		
7												
8	PM		gr/dscf	n		0.0686	0.0433	0.0417				
9	CO (MHRA)	E1	ppmv	y		3.8	9.9	9.8		7.8		
10	Chromium		µg/dscm	n		77.5	382.8	87.1				
11	Chromium (Hex)		µg/dscm	n		17.1	6.9	2.8				
12												
13	Sampling Train	PM, Metals	E1									
14	Stack Gas Flowrate		dscfm			4100	4200	4400		4233		
15	O2		%			8.8	8.2	8.2		8.4		
16	Moisture		%			10.9	10.8	11.2		11.0		
17	Temperature		°F			672.2	634.3	676.8		661.1		
18												
19	Sampling Train	Cr+6	E2									
20	Stack Gas Flowrate		dscfm			4400	4600	4700		4567		
21	O2		%			8.8	8.2	8.2		8.4		
22	Moisture		%			11.1	10.5	10.8		10.8		
23	Temperature		°F			674.8	665	670.8		670.2		
24												
25	PM	E1	gr/dscf	y		0.0787	0.0474	0.0456		0.050		
26	Chromium	E2	µg/dscm	y		88.9	418.7	95.2		238.9		
27	Chromium (Hex)	E2	µg/dscm	y		19.6	7.5	3.1		6.8		
28	LVM	E2	µg/dscm	y		88.9	418.7	95.2		238.9		
29												
30	<b>1000C2</b>					R1	R2	R3		Cond Avg		
31												
32	CO (MHRA)	E1	ppmv	y		16.6	16.9	17.1		16.9		

	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
1	<b>Feedstreams</b>																										
2	Cond ID No.																										
3																											
4																											
5	<b>1000C1</b>																										
6	Feedstream Number																										
7	Feed Class																										
8	Feed Class 2																										
9	Feedstream Description																										
10	Feed Rate																										
11	Heat Content																										
12	Thermal Feedrate																										
13	Ash																										
14	Chlorine																										
15	Antimony																										
16	Arsenic																										
17	Barium																										
18	Beryllium																										
19	Cadmium																										
20	Chromium																										
21	Lead																										
22	Mercury																										
23	Silver																										
24	Thallium																										
25																											
26																											
27																											
28	Stack Gas Flowrate																										
29	O2																										
30	Estimated Firing Rate																										
31																											
32																											
33	<b>Feedrate MTEC Calculations</b>																										
34	Ash																										
35	Chlorine																										
36	Antimony																										
37	Arsenic																										
38	Barium																										
39	Beryllium																										
40	Cadmium																										
41	Chromium																										
42	Lead																										
43	Mercury																										
44	Silver																										
45	Thallium																										
46	SVM																										
47	LVM																										
48																											
49	<b>BIF Feedrate Limits</b>																										
50																											
51	Antimony																										
52	Arsenic																										
53	Barium																										
54	Beryllium																										
55	Cadmium																										
56	Chromium																										
57	Lead																										
58	Mercury																										



	A	B	C	D	E	F
1	<b>Process Information</b>					
2						
3	Cond ID No.	Units	Run	Run	Run	Avg
4			3	5	6	
5						
6	<b>1000C2</b>					
7						
8	Combustion Temperature	°F	1806.8	1807.4	1800.0	1804.7