

US EPA ARCHIVE DOCUMENT

	B	C
1	<b>Source Description</b>	
2		
3	Phase II ID No.	754
4	EPA ID No.	GAD051011609
5	Facility Name	DSM Chemicals North America, Inc..
6	Facility Location	
7	City	Augusta
8	State	GA
9	Unit ID Name/No.	H-002 Boiler
		H-2002 Boiler (Used only when H-002 is shut down, H-2022 is a larger B&W boiler @ 361 MM Btu/hr, 278,000 lb/hr steam @ 300 psig)
10	Other Sister Facilities	psig)
11	Number of Sister Facilities	0
12	Combustor Class	Liquid-fired boiler
13	Combustor Type	Liquid-fired
	Combustor Characteristics	Babcock & Wilcox, natural gas fired boiler, 162 MMBtu/hr, 125,000 lb/hr steam @ 300 psig
14		
15	Capacity (MMBtu/hr)	162
16	Soot Blowing	None
17	APCS Detailed Acronym	None
18	APCS General Class	
19	APCS Characteristics	NA
20	Hazardous Wastes	Liq
	Haz Waste Description	Liquid, "light residue" organic byproduct from cyclohexanone distillation from caprolactam manufacturing
21		
22	Supplemental Fuel	Natural gas
23		
24	Stack Characteristics	
25	Diameter (ft)	54 in. x 72 in. rectangular
26	Height (ft)	
27	Gas Velocity (ft/sec)	40
28	Gas Temperature (°F)	320
29		
30	Permitting Status	Tier I for metals, chlorine
	HWC Burn Status (Date if Terminated)	
31		

	B	C
1	<b>Cond Description</b>	
2		
3	<b>754C10</b>	
4		
5	Report Name/Date	Revised Certification of Compliance, January 29, 1999
6	Report Prepar	DSM - Beth Connell
7	Testing Firm	Advanced Air Consultants, Inc.
8	Testing Dates	November 4, 1998
9	Cond Dates	Nov-98
10	Cond Description	CoC; max feedrate
11	Content	PM, CO emissions; metals, ash, Cl feed analysis

	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>754C10</b>					R1	R2	R3		Cond Avg		
7												
8	Sampling Train	PM	E1									
9	Stack Gas Flowrate		dscfm			37400	37853	37869		37707		
10	O2		%			7	7.1	7		7.0		
11	Moisture		%			13.1	13	13.6		13.2		
12	Temperature		°F			320	321	320		320.3		
13												
14	PM	E1	gr/dscf	y		0.0024	0.0038	0.0014		0.0025		
15	CO (RA)	E1	ppmv	y		0.97	0.85	0.88		0.90		
16	CO (MHRA)	E1	ppmv	y		0.99	0.9	0.95		0.95		

	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																														
3																														
4	<b>754C10</b>	Units	R1	R2	R3	Cond Avg	R1	R2	R3	Cond Avg	R1	R2	R3	Cond Avg	R1	R2	R3	Cond Avg	R1	R2	R3	Cond Avg	R1	R2	R3	Cond Avg	R1	R2	R3	Cond Avg
5																														
6	Feedstream Number		F1	F1	F1	F1	F2	F2	F2	F2	F3	F3	F3	F3	F3	F3	F3	F3	F3	F3	F3	F3	F3	F3	F3	F3	F3	F3	F3	F3
7	Feed Class		NG	NG	NG	NG	Liq HW	Liq HW	Liq HW	Liq HW	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	
8	Feed Class 2		MF	MF	MF	MF	HW	HW	HW	HW	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	
9	Feedstream Description		Nat gas	Nat gas	Nat gas	Nat gas	Liq waste	Liq waste	Liq waste	Liq waste	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	
10	Feed Rate	g/hr	2960000	2960000	2960000	2960000	1700000	1700000	1700000	1700000																				
11	Heat Content	Btu/lb	20339	20339	20339	20339	14500	14500	14500	14500																				
12	Ash	g/hr	0	0	0	0	1.7	1.7	1.7	1.7																				
13	Chlorine	g/hr	0	0	0	0	23.77	23.77	23.77	23.77																				
14	Mercury	g/hr	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02																				
15	Lead	g/hr	0.33	0.33	0.33	0.33	0.03	0.03	0.03	0.03																				
16	Cadmium	g/hr	0.12	0.12	0.12	0.12	0.03	0.03	0.03	0.03																				
17	Arsenic	g/hr	0.03	0.03	0.03	0.03	0.05	0.05	0.05	0.05																				
18	Beryllium	g/hr	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01																				
19	Chromium	g/hr	0.15	0.15	0.15	0.15	0.03	0.03	0.03	0.03																				
20	Antimony	g/hr	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01																				
21																														
22	Stack Gas Flowrate	dscfm	37400	37853	37869	37707	37400	37853	37869	37707	37400	37853	37869	37707	37400	37853	37869	37707	37400	37853	37869	37707	37400	37853	37869	37707	37400	37853	37869	37707
23	O2	%	7.00	7.10	7.00	7.03	7.00	7.10	7.00	7.03	7.00	7.10	7.00	7.03	7.00	7.10	7.00	7.03	7.00	7.10	7.00	7.03	7.00	7.10	7.00	7.03	7.00	7.10	7.00	7.03
24																														
25	Thermal Feedrate	MMBtu/hr	132.7	132.7	132.7	132.7	54.3	54.3	54.3	54.3	187.1	187.1	187.1	187.1	187.1	187.1	187.1	187.1	187.1	187.1	187.1	187.1	187.1	187.1	187.1	187.1	187.1	187.1	187.1	187.1
26	Estimated Firing Rate	MMBtu/hr									166.2	167.0	168.3	167.2																
27																														
28	<i>Feedrate MTEC Calculations</i>																													
29	Ash	mg/dscm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	Chlorine	µg/dscm	0.0	0.0	0.0	0.0	374.3	372.5	369.7	372.1	374.3	372.5	369.7	372.1	374.3	372.5	369.7	372.1	374.3	372.5	369.7	372.1	374.3	372.5	369.7	372.1	374.3	372.5	369.7	372.1
31	Mercury	µg/dscm	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
32	Lead	µg/dscm	5.2	5.2	5.1	5.2	0.5	0.5	0.5	0.5	5.7	5.6	5.6	5.6	5.7	5.6	5.6	5.6	5.7	5.6	5.6	5.6	5.7	5.6	5.6	5.6	5.7	5.6	5.6	5.6
33	Cadmium	µg/dscm	1.9	1.9	1.9	1.9	0.5	0.5	0.5	0.5	2.4	2.4	2.3	2.4	2.4	2.4	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.3
34	Arsenic	µg/dscm	0.5	0.5	0.5	0.5	0.8	0.8	0.8	0.8	1.3	1.3	1.2	1.3	1.3	1.3	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.3
35	Beryllium	µg/dscm	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
36	Chromium	µg/dscm	2.4	2.4	2.3	2.3	0.5	0.5	0.5	0.5	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
37	Antimony	µg/dscm	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
38	SVM	µg/dscm	7.1	7.1	7.0	7.0	0.9	0.9	0.9	0.9	8.0	8.0	7.9	8.0	8.0	8.0	7.9	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0
39	LVM	µg/dscm	3.1	3.1	3.1	3.1	1.4	1.4	1.4	1.4	4.6	4.5	4.5	4.5	4.6	4.5	4.5	4.5	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
40																														
41	<b>BIF Feedrate Limits</b>																													
42																														
43	Antimony	g/hr					160																							
44	Arsenic	g/hr					1.2																							
45	Barium	g/hr					27,000																							
46	Beryllium	g/hr					2.2																							
47	Cadmium	g/hr					3																							
48	Chromium	g/hr					0.44																							
49	Lead	g/hr					46																							
50	Mercury	g/hr					160																							
51	Silver	g/hr					1600																							
52	Thallium	g/hr					160																							
53																														
54	Chlorine	g/hr					210																							

	A	B	C
1	<b>Process Information</b>		
2			
3		Units	Cond Avg
4			
5	<b>754C10</b>		
6			
7	Steam Production Rate	lb/hr	125000