

US EPA ARCHIVE DOCUMENT

	B	C
1	<b>Source Description</b>	
2		
3	Phase II ID No.	739
4	EPA ID No.	PAD002292068
5	Facility Name	Rohm and Haas Company
6	Facility Location	
7	City	Bristol
8	State	PA
9	Unit ID Name/No.	Boiler No. 7
10	Other Sister Facilities	Boiler Nos. 6 and 8
11	Number of Sister Facilities	2
12	Combustor Class	Liquid-fired boiler
13	Combustor Type	Liquid-fired
	Combustor Characteristics	Watertube boiler. Combustion Engineering Type 30-A-12, package tube water tube boiler (installed 1971), COEN DAF low NOx burners, 110,000 lb/hr superheated steam @ 524 psig and 600°F
14		
15	Capacity (MMBtu/hr)	
16	Soot Blowing	Yes -- 3 times per day, 10 minute each time (cond 1, run 2)
17	APCS Detailed Acronym	None
18	APCS General Class	
19	APCS Characteristics	
20	Hazardous Wastes	Liq
21	Haz Waste Description	Liquid wastes
22	Supplemental Fuel	oil, natural gas
23		No. 6 fuel oil
24	Stack Characteristics	
25	Diameter (ft)	4
26	Height (ft)	210
27	Gas Velocity (ft/sec)	62.7
28	Gas Temperature (°F)	410
29		
30	Permitting Status	Tier I metals/chlorine
	HWC Burn Status (Date if	
31	Terminated)	

	B	C
1	<b>Cond Description</b>	
2		
3	<b>739C10</b>	
4		
5	Report Name/Date	1998 BIF Compliance Recertification, December 1998
6	Report Prepare	ENSR
7	Testing Firm	ENSR
8	Testing dates	September 30, 1998
9	Cond dates	Oct-98
10	Condition Descr	CoC, 3-stage waste bottoms (TSB)
11	Content	PM, CO in stack gas
12		
13	<b>739C11</b>	
14		
15	Report Name/Date	1998 BIF Compliance Recertification, December 1998
16	Report Prepare	ENSR
17	Testing Firm	ENSR
18	Testing dates	October 1, 1998
19	Cond dates	Oct-98
20	Condition Descr	CoC, acryloid coatings waste blend, max ash feed (ash spiking)
21	Content	PM, CO in stack gas

	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								sootblowing				
6	<b>739C10</b>					R1		R2		R3		Cond Avg
7												
8	PM	E1	gr/dscf	y		0.0265		0.1014		0.0289		0.0461
9	CO (RA)	E1	ppmv	y		3.9		5.1		8.1		5.7
10	CO (MHRA)	E1	ppmv	y		6.2		6.7		8.9		7.3
11												
12	Sampling Train	PM	E1									
13	Stack Gas Flowrate		dscfm			25443		25293		25378		25371
14	O2		%			7.4		5.9		6.8		6.7
15	Moisture		%			10.2		10.8		10.8		10.6
16	Temperature		°F			413		408		409		410.0
17												
18												
19	<b>739C11</b>					R1		R2		R3		Cond Avg
20												
21	PM	E1	gr/dscf	y		0.0123		0.0985		0.0116		0.0336
22	CO (RA)	E1	ppmv	y		4.1		5.1		5		4.7
23	CO (MHRA)	E1	ppmv	y		4.3		5.3		5.5		5.0
24												
25	Sampling Train	PM	E1									
26	Stack Gas Flowrate		dscfm			24343		24924		25349		24872
27	O2		%			6.6		6.8		7.3		6.9
28	Moisture		%			14.2		13.9		12.3		13.5
29	Temperature		°F			413		412		415		413.3

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	<b>Feedstreams</b>																
2																	
3																	
4	<b>739C10</b>				Cond Avg		Cond Avg		R1		R2		R3		Cond Avg		
5																	
6	Feedstream Number				F1		F2		F3		F3		F3		F3		F3
7	Feed Class				Liq HW		Oil		Total		Total		Total		Total		Total
8	Feed Class 2				HW		MF		Total		Total		Total		Total		Total
9	Feedstream Description				Liq. waste		Fuel Oil No. 6		Total		Total		Total		Total		Total
10	Feed Rate	lb/hr			1801		4832										
11	Moisture	wt %			10.6												
12	Heating Value	Btu/lb			11100		18000										
13	Ash	g/hr			81.7		1833		1840.5		1617.2		2264.5				
14	Chlorine	g/hr			163.4		515		603		602.1		818.4				
15	Antimony	g/hr	nd		0.05	nd	0.13	nd	0.18	nd	0.18	nd	0.18				
16	Arsenic	g/hr	nd		0.12	nd	0.33	nd	0.45	nd	0.45	nd	0.45				
17	Barium	g/hr	nd		0.12		0.84	nd	1	nd	0.96	nd	0.91				
18	Beryllium	g/hr	nd		0.05	nd	0.13	nd	0.18	nd	0.18	nd	0.18				
19	Cadmium	g/hr	nd		0.02	nd	0.07	nd	0.09	nd	0.09	nd	0.09				
20	Chromium	g/hr			1.1	nd	0.33	nd	1.39	nd	1.47	nd	1.47				
21	Lead	g/hr	nd		0.07		0.99	nd	1.06	nd	1.08	nd	0.99				
22	Mercury	g/hr	nd		0.03	nd	0.09	nd	0.12	nd	0.12	nd	0.12				
23	Silver	g/hr	nd		0.02	nd	0.07	nd	0.09	nd	0.09	nd	0.09				
24	Thallium	g/hr	nd		0.05	nd	0.13	nd	0.18	nd	0.18	nd	0.18				
25																	
26	Stack Gas Flowrate	dscfm			25371		25371		25443		25293		25378		25371		25371
27	Oxygen	%			6.7		6.7		7		6		7		7		7
28																	
29	Thermal Feedrate	MMBtu/hr			20.0		87.0								107.0		
30	Estimated Firing Rate	MMBtu/hr													115.2		
31																	
32	<i>Feedrate MTEC Calculations</i>																
33	Ash	mg/dscm			1.9		41.7		43.9		29.1		51.8	0	41.6		
34	Chlorine	µg/dscm			3713.3		11703.6		14368.1		9928.3		18724.5	0	14340.3		
35	Antimony	µg/dscm	100		1.1	100	3.0	100	4.3	100	2.8	100	4.1	100	3.7		
36	Arsenic	µg/dscm	100		2.7	100	7.5	100	10.7	100	7.0	100	10.3	100	9.3		
37	Barium	µg/dscm	100		2.7		19.1	100	23.8	100	15.2	100	20.8	100	20.0		
38	Beryllium	µg/dscm	100		1.1	100	3.0	100	4.3	100	2.8	100	4.1	100	3.7		
39	Cadmium	µg/dscm	100		0.5	100	1.6	100	2.1	100	1.4	100	2.1	100	1.9		
40	Chromium	µg/dscm			25.0	100	7.5	100	33.1	100	21.9	100	33.6	100	29.5		
41	Lead	µg/dscm	100		1.6		22.5	100	25.3	100	16.4	100	22.7	100	21.5		
42	Mercury	µg/dscm	100		0.7	100	2.0	100	2.9	100	1.9	100	2.7	100	2.5		
43	Silver	µg/dscm	100		0.5	100	1.6	100	2.1	100	1.4	100	2.1	100	1.9		
44	Thallium	µg/dscm	100		1.1	100	3.0	100	4.3	100	2.8	100	4.1	100	3.7		
45																	
46	SVM	µg/dscm	100		2.0	7	24.1	100	27.4	100	17.8	100	24.7	100	23.3		
47	LVM	µg/dscm	13		28.9	100	18.0	100	48.1	100	31.6	100	48.0	100	42.6		
48																	
49																	
50																	
51	<b>739C11</b>				Cond Avg		Cond Avg		Cond Avg	R1		R2		R3		Cond Avg	
52																	
53	Feedstream Number				F1		F2		F3		F4		F4		F4		F4
54	Feed Class				Liq HW		NG		Spike		Total		Total		Total		Total
55	Feed Class 2				HW		MF		Spike		Total		Total		Total		Total
56	Feedstream Description				Liq. waste		Natural Gas		Spike		Total		Total		Total		Total
57	Feed Rate	lb/hr			2198		3300										
58	Moisture	wt %			13.5												
59	Heating Value	Btu/lb			16000		24100										
60	Ash	g/hr			398.7		0		2948.3		3346.8		3347.5		3347.3		

	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
61	Chlorine		g/hr		204		0				204.2		204.7		203.1			
62	Antimony		g/hr	nd	0.06		0			nd	0.06	nd	0.06	nd	0.06			
63	Arsenic		g/hr	nd	0.15		0			nd	0.15	nd	0.15	nd	0.15			
64	Barium		g/hr	nd	0.19		0			nd	0.15	nd	0.15	nd	0.26			
65	Beryllium		g/hr	nd	0.06		0			nd	0.06	nd	0.06	nd	0.06			
66	Cadmium		g/hr	nd	0.03		0			nd	0.03	nd	0.03	nd	0.03			
67	Chromium		g/hr	nd	0.15		0			nd	0.15	nd	0.15	nd	0.15			
68	Lead		g/hr	nd	0.09		0			nd	0.09	nd	0.09	nd	0.09			
69	Mercury		g/hr	nd	0.04		0			nd	0.04	nd	0.04	nd	0.04			
70	Silver		g/hr	nd	0.03		0			nd	0.03	nd	0.03	nd	0.03			
71	Thallium		g/hr	nd	0.06		0			nd	0.06	nd	0.06	nd	0.06			
72																		
73	Gas Flowrate		dscfm		24872		24872		24872		24343		24924		25349		24872	
74	Oxygen		%		6.9		6.9		6.9		7		7		7		7	
75																		
76	Thermal Feedrate		MMBtu/hr		35.2		79.5										114.7	
77	Estimated Firing Rate		MMBtu/hr														111.3	
78																		
79	<i>Feedrate MTEC Calculations</i>																	
80	Ash		mg/dscm		9.4				69.3		78.7		78.0		79.5		78.7	
81	Chlorine		µg/dscm		4796.1						4803.0		4768.7		4821.9		4797.9	
82	Antimony		µg/dscm	100	1.4				100		1.4	100	1.4	100	1.4	100	0.7	
83	Arsenic		µg/dscm	100	3.5				100		3.5	100	3.5	100	3.6	100	1.8	
84	Barium		µg/dscm	100	4.5				100		3.5	100	3.5	100	6.2	100	2.2	
85	Beryllium		µg/dscm	100	1.4				100		1.4	100	1.4	100	1.4	100	0.7	
86	Cadmium		µg/dscm	100	0.7				100		0.7	100	0.7	100	0.7	100	0.4	
87	Chromium		µg/dscm	100	3.5				100		3.5	100	3.5	100	3.6	100	1.8	
88	Lead		µg/dscm	100	2.1				100		2.1	100	2.1	100	2.1	100	1.1	
89	Mercury		µg/dscm	100	0.9				100		0.9	100	0.9	100	0.9	100	0.5	
90	Silver		µg/dscm	100	0.7				100		0.7	100	0.7	100	0.7	100	0.4	
91	Thallium		µg/dscm	100	1.4				100		1.4	100	1.4	100	1.4	100	0.7	
92																		
93	SVM		µg/dscm	100	2.8				100		2.8	100	2.8	100	2.8	100	2.8	
94	LVM		µg/dscm	100	8.5				100		8.5	100	8.4	100	8.5	100	8.5	
95																		
96																		
97	<b>BIF Feedrate Limits</b>																	
98																		
99	Antimony		g/hr		3857													
100	Arsenic		g/hr		29.57													
101	Barium		g/hr		643													
102	Beryllium		g/hr		54													
103	Cadmium		g/hr		72													
104	Chromium		g/hr		11													
105	Lead		g/hr		1157													
106	Mercury		g/hr		1028													
107	Silver		g/hr		38571													
108	Thallium		g/hr		6428													
109	Chlorine		g/hr		51432													

	A	B	C
1	<b>Process Information</b>		
2			
3	<b>739C10</b>		
4			
5	Boiler Steam Prod	lb/hr	81630
6			
7	<b>739C11</b>		
8			
9	Boiler Steam Prod	lb/hr	80320