

US EPA ARCHIVE DOCUMENT

	B	C
1	<b>Source Description</b>	
2		
3	Phase II ID No.	3034
4	EPA ID No.	TXD067285973
5	Facility Name	Shell Chemicals
6	Facility Location	
7	City	Deer Park
8	State	TX
9	Unit ID Name/No.	The Phenol-3 Boiler H87920
10	Other Sister Facilities	None
11	Number of Sister Facilities	
12	Combustor Class	Liquid-fired boiler
13	Combustor Type	Liquid-fired
	Combustor Characteristics	Constructed in 1998-1999. Water tube-type boiler manufactured by Foster-Wheeler. The BIF unit is a multi-fuel wall boiler with four front burners. Ther boiler will be rated for a maximum heat release of 400 MMBTU/hr. Maximum liquid rate feedrate is 9,260 lbs/hr. It will produce 308,000 lbs/hr of 650 psi team at 540-580°F.
14		
15	Capacity (MMBtu/hr)	400
16	Soot Blowing	None
17	APCS Detailed Acronym	None
18	APCS General Class	
19	APCS Characteristics	NA
20	Hazardous Wastes	Liq
21	Haz Waste Description	Bisphenol acetone (BPA) heavy ends, phenol heavy ends (K022)
22	Supplemental Fuel	Natural gas
23		
24	Stack Characteristics	
25	Diameter (ft)	8.5
26	Height (ft)	150
27	Gas Velocity (ft/sec)	
28	Gas Temperature (°F)	580
29		
30	Permitting Status	
	HWC Burn Status (Date if	
31	Terminated)	

	B	C
1	<b>Cond Description</b>	
2		
3	<b>3034C1</b>	
4		
5	Report Name/Date	Trial Burn and Risk Burn Report and Revised Certification of Compliance, Transfer of Interim Status. October 2000
6	Report Prepare	URS - Radiant Interantional
7	Testing Firm	URS - Radiant Interantional
8	Testing Dates	July 11-13, 2000
9	Cond Dates	Jul-00
10	Condition Descr	Trial burn, normal operating
11	Content	PM, CO
12		
13	<b>3034C2</b>	
14		
15	Report Name/Date	Trial Burn and Risk Burn Report and Revised Certification of Compliance, Transfer of Interim Status. October 2000
16	Report Prepare	URS - Radiant Interantional
17	Testing Firm	URS - Radiant Interantional
18	Testing Dates	July 14, 2000
19	Cond Dates	Jul-00
20	Condition Descr	Risk burn, normal operating
21	Content	PM, CO

	B	C	D	E	F	G	H	I	J	K	L	M
1	<b>Stack Gas Emissions</b>											
2												
3		Comment	Units			7% O2						
4												
5												
6	<b>3034C1</b>					R1		R2		R3		Cond Avg
7												
8	PM	E1	gr/dscf	y		0.025		0.039		0.06		0.0413
9	CO (RA)	E1	ppmv	y		0.37		0.89		0.72		0.7
10	CO (MHRA)	E1	ppmv	y		0.57		1.82		0.92		1.1
11												
12	<b>3034C2</b>					R1		R2		R3		Cond Avg
13												
14	PM	E1	gr/dscf	n		0.025		0.039		0.06		0.0413
15	CO (RA)	E1	ppmv	y		0		0.02		0.07		0.03
16	CO (MHRA)	E1	ppmv	y		0.02		0.03		0.15		0.07
17												
18	<b>PM reported in C2 exactly the same as PM in C1 ??</b>											

B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	<b>Feedstreams</b>																			
2																				
3	<b>3034C1</b>																			
4																				
5	Feedstream Number																			
6	Feed Class	R1																		
7	Feed Class 2	F1																		
8	Feedstream Description	Liq HW																		
9	Feed Rate	4330000																		
10	Thermal Feedrate	149																		
11		Heavy Ends																		
12		4330000																		
13		149																		
14	Feedstream Number																			
15	Feed Class	R1																		
16	Feed Class 2	F1																		
17	Feedstream Description	Liq HW																		
18	Feed Rate	4320000																		
19	Thermal Feedrate	149																		
20	Ash	1730																		
		Cond Avg																		
		105.0																		
		F2																		
		104																		
		110																		
		203																		
		209																		
		210																		
		207.3																		
		4330000																		
		259.0																		
		4320000																		
		352.0																		

	B	W	X	Y	Z	AA	AB
1	Feedstreams						
2							
3	3034C1	R2		R3			Cond Avg
4							
5	Feedstream Number						F3
6	Feed Class						Total
7	Feed Class 2						Total
8	Feedstream Description	Total		Total			Total
9	Feed Rate	4.33E+06		4.33E+06			4330000
10	Thermal Feedrate	253.0		250.0			254.0
11							
12	3034C2	R2		R3			Cond Avg
13							
14	Feedstream Number						F3
15	Feed Class						Total
16	Feed Class 2						Total
17	Feedstream Description	Total		Total			Total
18	Feed Rate	4.33E+06		4.33E+06			4326667
19	Thermal Feedrate	358.0		359.0			356.3
20	Ash						

	A	B	C
1	<b>Process Information</b>		
2			
3	<b>3034C1</b>		Cond Avg
4			
5	Comb Temp	°F	580