

US EPA ARCHIVE DOCUMENT

	B	C
1	Source Description	
2		
3	Phase II ID No.	908
4	EPA ID No.	WVD005005483
5	Facility Name	Union Carbide Corporation
6	Facility Location	
7	City	South Charleston
8	State	WV
9	Unit ID Name/No.	Boiler 25
10	Other Sister Facilities	None
11	Number of Sister Facilities	0
12	Combustor Class	Coal-fired boiler
13	Combustor Type	Pulverized, suspension
14	Combustor Characteristics	Watertube boiler, 323 MMBtu/hr, inlet water at 380F, 6 opposed firing burners
15	Capacity (MMBtu/hr)	323
16	Soot Blowing	Yes, run 3 (8 minutes)
17	APCS Detailed Acronym	ESP
18	APCS General Class	ESP
19	APCS Characteristics	5 fields
20	Hazardous Wastes	Liq
21	Haz Waste Description	Liquid residue wastes
22	Supplemental Fuel	Coal, natural gas
23		Pulverized coal
24	Stack Characteristics	
25	Diameter (ft)	10
26	Height (ft)	150
27	Gas Velocity (ft/sec)	25.7
28	Gas Temperature (°F)	330.1
29		
30	Permitting Status	Tier I : Sb, Ba, Hg, Ag, Pb, Tl; Tier III : As, Be, Cd, Cr, Cl
31	HWC Burn Status (Date if Terminated)	

	B	C
1	Cond Description	
2		
3	908C1	
4		
5	Report Name/Date	Certification of Compliance Boilers #15 and #25, August 1998
6	Report Prepare	TRC Environmental Corporation
7	Testing Firm	TRC Environmental Corporation
8	Testing Dates	May 18, 1998
9	Cond Dates	May-98
10	Condition Descr	CoC, max haz waste feed rate, max load
11	Content	PM, HCl/Cl ₂ , Cr, Be, Cd, As

	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Stack Gas Emissions													
2														
3		Comments	Units	7% O2										
4										Sootblow				
5														
6	908C1					R1	R2	R3		Cond Avg				
7														
8	PM	E1	gr/dscf	y		0.0517	0.0224	0.0228		0.0365				
9	CO (MHRA)	E1	ppmv	y		14	83	47		48.0				
10	CO (RA)	E1	ppmv	y		10	36	33		26.3				
11	HCl		g/hr			28112	32790	30830		30453				
12	Cl2		g/hr			193	143	134		168				
13	Arsenic		g/hr			1.3	1.78	1.63		1.54				
14	Beryllium		g/hr			0.19	0.43	0.42		0.31				
15	Cadmium		g/hr			0.26	0.26	0.34		0.26				
16	Chromium		g/hr			3.46	2.41	1.52		2.93				
17	Chromium (Hex)		g/hr		nd	0.02 nd	0.021 nd	0.02 nd		0.02				
18														
19	Sampling Train	PM, HCl/Cl2	E1											
20	Stack Gas Flowrate		dscfm			65496	73547	73573		70872.0				
21	O2		%			7.1	7.3	7.2		7.2				
22	Moisture		%			10.5	10.5	11		10.7				
23	Temperature		°F			328.1	330.9	325		328.0				
24														
25	Sampling Train	Cr/Cr+6	E2											
26	Stack Gas Flowrate		dscfm			72865	73232	76151		74082.7				
27	O2		%			7.1	7.3	7.2		7.2				
28	Moisture		%			8.4	8.9	10.1		9.1				
29	Temperature		°F			330.9	332.6	328.5		330.7				
30														
31	Sampling Train	Metals	E3											
32	Stack Gas Flowrate		dscfm			67063	66951	72323		68779.0				
33	O2		%			7.1	7.3	7.2		7.2				
34	Moisture		%			10.6	10.7	11.2		10.8				
35	Temperature		°F			334	331.7	329.4		331.7				
36														
37	HCl	E1	ppmv	y		170.0	179.2	167.2		171.4				
38	Cl2	E1	ppmv	y		0.6	0.4	0.4		0.5				
39	Total Chlorine	E1	ppmv	y		171.2	180.0	167.9		172.4				
40														
41	Arsenic	E3	µg/dscm	y		11.8	14.6	13.2		13.0				
42	Beryllium	E3	µg/dscm	y		1.7	3.5	3.4		2.6				
43	Cadmium	E3	µg/dscm	y		2.4	2.1	2.8		2.2				
44	Chromium	E3	µg/dscm	y		31.3	19.7	12.3		24.7				
45	Chromium (Hex)	E2	µg/dscm	y	nd	0.2 nd	0.2 nd	0.2 100		0.2				
46														
47	SVM	E3	µg/dscm	y		2.4	2.1	2.8		2.2				Cd only
48	LVM	E3	µg/dscm	y		44.8	37.8	29.0		40.3				

B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
Feedstreams																							
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61	Silver	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
62	Thallium																							

15506
2584

g/hr
g/hr

	A	B	C
1	Process Information		
2			
3	908C1		Cond Avg
4			
5	Steam Prod	lb/hr	262000
6	Comb Temp	F	784
7	ESP Power Input	kVA	35.2
8	ESP Inlet Temp	F	355