

US EPA ARCHIVE DOCUMENT

	B	C
1	Source Description	
2		
3	Phase II ID No.	2006
4	EPA ID No.	SCD980500052
5	Facility Name	3V Inc.
6	Facility Location	
7	City	Georgetown
8	State	SC
9	Unit ID Name/No.	Unit No. 1 (or No. 2?)
10	Other Sister Facilities	None
11	Number of Sister Facilities	0
12	Combustor Class	Liquid-fired boiler
13	Combustor Type	Liquid-fired
	Combustor Characteristics	Cleaver Brooks Model CB 600-800, 800 HP (33.5 MMBtu/hr input, 26.8 MMBtu/hr output), firetube design, steam @ 150 psig, 4 pass furnace tube
14		
15	Capacity (MMBtu/hr)	34
16	Soot Blowing	
17	APCS Detailed Acronym	None
18	APCS General Class	None
19	APCS Characteristics	NA
20	Hazardous Wastes	Liq
	Haz Waste Description	Distillate light end waste byproducts (vinyl acetate, methanol, methyl acetate)
21		
22	Supplemental Fuel	Natural gas, oil
23		No. 2 fuel oil
24	Stack Characteristics	
25	Diameter (ft)	2
26	Height (ft)	63
27	Gas Velocity (ft/sec)	60
28	Gas Temperature (°F)	400
29		
30	Permitting Status	Tier I metals and chlorine
	HWC Burn Status (Date if	
31	Terminated)	

	B	C
1	Cond Description	
2		
3	2006C1	
4		
5	Report Name/Date	Results of the Feb. 1999 Compliance Certification Testing of Energy Recovery Boiler No. 1, March 3, 1999
6	Report Prepare	General Engineering
7	Testing Firm	General Engineering
8	Testing Dates	Feb. 16, 1999
9	Cond Dates	Feb-99
10	Condition Descr	CoC; low Btu, low ash, min temp CO demo
11	Content	PM, CO in stack gas (metals, chlorine in feedstreams)
12		
13	2006C2	
14		
15	Report Name/Date	Results of the Feb. 1999 Compliance Certification Testing of Energy Recovery Boiler No. 1, March 3, 1999
16	Report Prepare	General Engineering
17	Testing Firm	General Engineering
18	Testing Dates	Feb. 17, 1999
19	Cond Dates	Feb-99
20	Condition Descr	CoC; max firing rate, high Btu, high ash
21	Content	PM, CO in stack gas (metals, chlorine in feedstreams)

	B	C	D	E	F	G	H	I	J	K	L	M
1	Stack Gas Emissions											
2												
3		Comments	Units	7% O2								
4												
5												
6	2006C1					R1	R2	R3		Cond Avg		
7												
8	PM		gr/dscf	n		0.01019	0.00909	0.00918		0.0095		
9	CO (RA)	E1	ppmv	y		33.67	10.6	9.11		17.8		
10	CO (MHRA)	E1	ppmv	y		46.15	22.66	11.73		26.8		
11												
12	Sampling Train	PM	E1									
13	Stack Gas Flowrate		dscfm			5200	4917	5600		5239		
14	O2		%			2.65	2.6	2.75		2.7		
15	Moisture		%			19	19	18		18.7		
16	Temperature		°F			387	398	403		396.0		
17												
18	PM	E1	gr/dscf	y		0.0078	0.0069	0.0070		0.0072		
19												
20	2006C2					R1	R2	R3		Cond Avg		
21												
22	PM		gr/dscf	n		0.01022	0.01345	0.01297		0.0122		
23												
24	Sampling Train	PM	E1									
25	Stack Gas Flowrate		dscfm			5017	5100	4900		5006		
26	O2		%			2.55	2.6	2.85		2.7		
27	Moisture		%			16	13	17		15.3		
28	Temperature		°F			392	388	394		391.3		
29												
30	PM	E1	gr/dscf	y		0.0078	0.0102	0.0100		0.0093		

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		
61	Ash	ppmw		680		650		615		648																		
62	Chlorine	ppmw		864		898		749		847																		
63	Heating Value	Btu/lb		9900		9850		9090		9613																		
64	Arsenic	ppbw	nd	26.6	nd	26.6	nd	26.6		26.6																		
65	Mercury	ppbw	nd	13.5	nd	13.5	nd	13.5		13.5																		
66	Silver	ppbw	nd	36	nd	36	nd	36		36																		
67	Barium	ppbw	nd	27	nd	27	nd	27		27																		
68	Beryllium	ppbw	nd	12	nd	12	nd	12		12																		
69	Cadmium	ppbw	nd	19	nd	19	nd	19		19																		
70	Chromium	ppbw	nd	38	nd	38	nd	38		38																		
71	Nickel	ppbw	nd	290	nd	301	nd	343		290																		
72	Lead	ppbw	nd	78.5	nd	78.5	nd	78.5		78.5																		
73	Antimony	ppbw	nd	191	nd	191	nd	191		191																		
74	Thallium	ppbw	nd	221	nd	221	nd	221		221																		
75	Stack Gas Flowrate	dscfm		5017		5100		4900		5006																		
76	Oxygen	%		3		3		3		3																		
77	Thermal Feedrate	MMBtu/hr		9.76		10.41		9.57		10.06																		
78	Estimated Firing Rate	MMBtu/hr																										
79	Thermal Feedrate	MMBtu/hr		9.76		10.41		9.57		10.06																		
80	Estimated Firing Rate	MMBtu/hr																										
81																												
82	Feedrate MTEC Calculations																											
83	Ash	mg/dscm		27.1		27.4		27.3		27.7																		
84	Chlorine	µg/dscm		34431.2		37866.5		33202.9		36147.1																		
85	Arsenic	µg/dscm	100	1.1	100	1.1	100	1.2	100	1.1																		
86	Mercury	µg/dscm	100	0.5	100	0.6	100	0.6	100	0.6																		
87	Silver	µg/dscm	100	1.4	100	1.5	100	1.6	100	1.5																		
88	Barium	µg/dscm	100	1.1	100	1.1	100	1.2	100	1.2																		
89	Beryllium	µg/dscm	100	0.5	100	0.5	100	0.5	100	0.5																		
90	Cadmium	µg/dscm	100	0.8	100	0.8	100	0.8	100	0.8																		
91	Chromium	µg/dscm	100	1.5	100	1.6	100	1.7	100	1.6																		
92	Nickel	µg/dscm	100	11.6	100	12.7	100	15.2	100	12.4																		
93	Lead	µg/dscm	100	3.1	100	3.3	100	3.5	100	3.4																		
94	Antimony	µg/dscm	100	7.6	100	8.1	100	8.5	100	8.2																		
95	Thallium	µg/dscm	100	8.8	100	9.3	100	9.8	100	9.4																		
96	SVM	µg/dscm	100	1.9	100	2.1	100	2.2	100	2.1																		
97	LVM	µg/dscm	100	1.5	100	1.6	100	1.7	100	1.6																		