

US EPA ARCHIVE DOCUMENT

	B	C
1	Source Description	
2		
3	Phase I ID No.	824
4	EPA ID No.	NJD980753875
5	Facility Name	Pennwalt Corporation
6	Facility Location	
7	City	Thorofare
8	State	NJ
9	Unit ID Name/No.	Isotron 142
10	Other Sister Facilities	None
11	Number of Sister Facilities	0
12	Combustor Class	Onsite incinerator
13	Combustor Type	Liquid injection?
14	Combustor Characteristics	
15	Capacity (MMBtu/hr)	
16	Soot Blowing	
17	APCS Detailed Acronym	QT/VS/PT/DM
18	APCS General Class	WQ, HEWS, LEWS
19	APCS Characteristics	Quench, venturi scrubber, packed tower, demister
20	Hazardous Wastes	Liq
21	Haz Waste Description	liquid and gas HW
22	Supplemental Fuel	Natural gas
23		
24	Stack Characteristics	
25	Diameter (ft)	0.7
26	Height (ft)	48.0
27	Gas Velocity (ft/sec)	15.8
28	Gas Temperature (°F)	67.6
29		
30	Permitting Status	
31	HWC Burn Status (Date if Terminated)	

	B	C
1	Condition Description	
2		
3	824C1	
4		
5	Report Name/Date	Trial Burn Test Report, Pennwalt Corporation, Isotron 142b Incinerator, Thorofare, New Jersey, June 1989, Volume 1 of 2, prepared by PEI Associates, Inc.
6	Report Prepare	PEI
7	Testing Firm	PEI
8	Cond Descr	DCFE Trial Burn
9	Testing Dates	June 20-22, 1989
10	Cond Dates	Jun-89

	B	C	D	E	F	G	H	I	J	K	L	M
1	Stack Gas Emissions 2											
2												
3												
4	824C1					R1		R2		R3		Cond Avg
5												
6	PM	E3	gr/dscf	y		0.0056		0.0064		0.0068		0.0063
7	CO (RA)	E1	ppmv	y		8.5		8.7		5.1		7.4
8	HCl	E1	ppmv	y		2.4		2.4		1.6		2.1
9	Total Chlorine	E1	ppmv	y		2.4		2.4		1.6		2.1
10	HF	E2	ppmv	y	nd	0.2 nd		0.2 nd		0.2	100	0.2
11	Arsenic	E2	ug/dscm	y		23.4		18.7		19.4		20.5
12	Barium	E2	ug/dscm	y		12.2		13.0		10.3		11.9
13	Beryllium	E2	ug/dscm	y	nd	0.3 nd		0.3 nd		0.3	100	0.3
14	Cadmium	E2	ug/dscm	y		0.8		5.3		14.8		7.0
15	Chromium	E2	ug/dscm	y		54.8		60.5		91.9		69.1
16	Lead	E2	ug/dscm	y		48.4		8.5		49.8		35.6
17	Mercury	E2	ug/dscm	y		0.7		0.9		0.6		0.8
18	Nickel	E2	ug/dscm	y		15.2		26.3		74.6		38.7
19	Selenium	E2	ug/dscm	y		4.9		0.3		0.4		1.9
20	Silver	E2	ug/dscm	y	nd	1.2		10.9		6.1		6.1
21												
22	SVM	E2	ug/dscm	y		49.1		13.9		64.6		42.5
23	LVM	E2	ug/dscm	y		78.5		79.5		111.6		89.9
24												
25	Sampling Train	Halogens	E1									
26	Stack Gas Flowrate		dscfm			1123.0		1073.0		1053.0		
27	O2		%			3.5		3.2		3.4		
28	Moisture		%			2.1		1.8		2.2		
29	Temperature		°F			66.0		66.0		67.0		
30												
31												
32	Sampling Train	Metals	E2									
33	Stack Gas Flowrate		dscfm			1042.0		1093.0		1043.0		
34	O2		%			3.2		3.2		3.8		
35	Moisture		%			1.5		1.7		1.5		
36	Temperature		°F			68.0		68.0		69.0		
37												
38	Sampling Train	Particulate	E3									
39	Stack Gas Flowrate		dscfm			1097.0		1064.0		1028.0		
40	O2		%			3.5		3.0		3.2		
41	Moisture		%			1.6		2.0		2.2		
42	Temperature		°F			67.0		68.0		69.0		
43												
44												
45	1,1,1-dichloroflouroethane	DRE	%			99.992		99.994		99.994		

	B	AC	AD	AE	AF	AG	AH	AI	AJ	AK	
1	Feedstream 2										
2											
3											
4	824C1	R3		R1		R2		R3		Cond Avg	
5	Feedstream Number	F3		F4		F4		F4		F4	
6	Feed Class	NG		Total		Total		Total		Total	
7	Feed Class 2	MF		Total		Total		Total		Total	
8	Feedstream Description	Nat gas		Total		Total		Total		Total	
9	Feedrate	31.6									
10	Heating value										
11	Ash										
12	Chlorine										
13	Arsenic										
14	Barium										
15	Beryllium										
16	Cadmium										
17	Chromium										
18	Fluorine										
19	Lead										
20	Mercury										
21	Nickel										
22	Selenium										
23	Silver										
24											
25	Stack gas flowrate	1053								1053	
26	O2	3.4								3.4	
27											
28											
29	Estimated Firing Rate									5.9	
30											
31	Feedrate MTEC Calculat										
32	Chlorine			0	3360667	0	4938863	0	6297690	0	4865740
33	Arsenic			0	5380	0	5188	0	4879	0	5149
34	Barium			0	151	0	213	0	142	0	169
35	Beryllium			100	3	100	3	100	4	100	3
36	Cadmium			2	35	100	7	100	8	31	17
37	Chromium			0	2643	0	2977	0	4268	0	3296
38	Fluorine			0	90406964	0	86294488	0	94229034	0	90310162
39	Lead			3	362	2	436	4	263	3	354
40	Mercury			0	4.0	6	4.1	4	6.9	3	5.0
41	Nickel			0	6794.2	0	7508.2	0	11598.2	0	8633.5
42	Selenium			100	4.1	100	4.1	100	4.5	100	4.2
43	Silver			0	59.1	0	77.0	0	100.7	0	78.9
44											
45	SVM			3	396	4	443	6	271	4	370
46	LVM			0	8027	0	8169	0	9151	0	8449

	C	D	E	F	G
1	Process Information 2				
2					
3	824C1		R1	R2	R3
4					
5	Combustion Temperature	F	2089	2094	2102
6	WS Temperature	F	89	88	90
7	WS Pressure Drop	in H2O	62	62	60