

US EPA ARCHIVE DOCUMENT

	B	C
1	<b>Source Description</b>	
2		
3	Phase I ID No.	3030
4	EPA ID No.	TXD0007349327
5	Facility Name	TXI
6	Facility Location	
7	City	Midlothian
8	State	TX
9	Unit ID Name/No.	Kiln No. 4
10	Other Sister Facilities	4 kilns; only 2 can burn at any one time
11	Number of Sister Facilities	4
12	Combustor Class	Cement Kiln (CK)
13	Combustor Type	Wet, long
14	Combustor Characteristics	
15	Capacity (MMBtu/hr)	
16	APCS Detailed Acronym	ESP
17	APCS General Class	ESP
18	APCS Characteristics	
19	Hazardous Wastes	Liq
20	Haz Waste Description	
21	Supplemental Fuel	Coal
22		
23	Stack Characteristics	
24	Diameter (ft)	12
25	Height (ft)	
26	Gas Velocity (ft/sec)	
27	Gas Temperature (°F)	
28		
29	Permitting Status	
30	HWC Burn Status (Date if Terminated)	

	B	C
1	<b>Condition Description</b>	
2		
3	<b>3030C1</b>	
4		
5	Report Name/Date	Filterable, Condensable, and Total Particulate, Dioxins and Furans, Multi-Metals, Hydrogen Chloroide, and Chlorine Emissions Evaluation Conducted March 12-16, 2001, Report Date July 2001
6	Report Prepare	Air Control Techniques, P.C., En-Tellect Environmental Services Inc.
7	Testing Firm	Airtech Environmental Services
8	Testing Dates	March 12-13, 2001
9	Cond Dates	Mar-01
10	Condition Descr	Periodic air emissions evaluation
11	Content	PM, HCl/Cl2, metals, D/F

	B	C	D	E	F	G	H	I	J	K	L	M
1	<b>Stack Gas Emissions 1</b>											
2												
3												
4	<b>3030C1</b>					R1		R2		R3		Cond Avg
5												
6	PM	E1	gr/dscf	y		0.0013		0.0001		0.0012		0.0009
7	PM (total)	E1	gr/dscf	y		0.0273		0.0287		0.0239		0.0266
8												
9	HCl		lb/hr			6.07		1.91		2.69		
10	Cl2		lb/hr			0.00017		0.0002		0.00034		
11												
12	HCl	E2	ppmv	y		18.416		5.517		8.061		10.66
13	Cl2	E2	ppmv	y		0.0003		0.0003		0.0005		0.00
14	Total Chlorine	E2	ppmv	y		18.42		5.52		8.06		10.67
15												
16	Antimony		ug/dscm	n		6.04 nd		0.4 nd		0.41		
17	Arsenic		ug/dscm	n	nd	0.43 nd		0.4 nd		0.52		
18	Barium		ug/dscm	n		4.7		4.9		4.3		
19	Beryllium		ug/dscm	n	nd	0.04 nd		0.04 nd		0.04		
20	Cadmium		ug/dscm	n		0.53		0.19		0.64		
21	Chromium		ug/dscm	n		1.83		1.36		20.2		
22	Lead		ug/dscm	n		1.25		1.13		1.03		
23	Mercury		ug/dscm	n		9.8		13.8		20.6		
24	Nickel		ug/dscm	n		2.02		1.04		10.6		
25	Selenium		ug/dscm	n		14.8		7.3		19.5		
26	Silver		ug/dscm	n	nd	0.17		1.2 nd		0.16		
27	Thallium		ug/dscm	n		0.93		0.85		0.82		0.87
28												
29	Sampling Train	PM	E1									
30	Stack Gas Flowrate		dscfm			59559		53542		61114		58071.7
31	O2		%			7.8		7.8		7.7		7.8
32	Moisture		%			37.28		37.09		36.14		36.8
33	Temperature		°F			382.1		380.2		391.5		384.6
34												
35	Sampling Train	HCl/Cl2	E2									
36	Stack Gas Flowrate		dscfm			59842		61941		61491		61091.3
37	O2		%			7.4		7.2		7.6		7.4
38	Moisture		%			40.376		37.06		39.03		38.8
39	Temperature		°F			360.6		356.9		351.3		356.3
40												
41	Sampling Train	Metals	E3									
42	Stack Gas Flowrate		dscfm			63363		66626		66065		65351.3
43	O2		%			7.9		7.9		8.1		8.0
44	Moisture		%			36.38		36.04		35.91		36.1
45	Temperature		°F			381		382.1		378.5		380.5
46												
47	Antimony	E3	ug/dscm	y		6.5 nd		0.4 nd		0.4		2.44
48	Arsenic	E3	ug/dscm	y	nd	0.5 nd		0.4 nd		0.6	100	0.48
49	Barium	E3	ug/dscm	y		5.0		5.2		4.7		4.98
50	Beryllium	E3	ug/dscm	y	nd	0.0 nd		0.0 nd		0.0	100	0.04
51	Cadmium	E3	ug/dscm	y		0.6		0.2		0.7		0.49
52	Chromium	E3	ug/dscm	y		2.0		1.5		21.9		8.44
53	Lead	E3	ug/dscm	y		1.3		1.2		1.1		1.22
54	Mercury	E3	ug/dscm	y		10.5		14.7		22.4		15.86
55	Nickel	E3	ug/dscm	y		2.2		1.1		11.5		4.92
56	Selenium	E3	ug/dscm	y		15.8		7.8		21.2		14.93
57	Silver	E3	ug/dscm	y	nd	0.2		1.3 nd		0.2		0.55
58	Thallium	E3	ug/dscm	y		1.0		0.9		0.9		0.93
59												
60	SVM	E3	ug/dscm	y		1.9		1.4		1.8		1.71
61	LVM	E3	ug/dscm	y		2.46		1.92		22.53		8.97

	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
1	Feedstream 1																								
2																									
3	3030C10																								
4																									
5	Feedstream Number																								
6	Feed Class																								
7	Feed Class 2																								
8	Feedstream Description																								
9	Chlorine																								
10																									
11	Feedrate MTEC Calculations																								
12	Chlorine																								

	B	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP
1	Feedstream 1																
2																	
3	3030C10	R3			R1	R2	R2	R3	R3	R1	R1	R2	R2	R3	R3		Cond Avg
4																	
5	Feedstream Number				F4	F4	F4	F4	F4	F5	F5	F5	F5	F5	F5	F5	F5
6	Feed Class				Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Total
7	Feed Class 2				Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Coal	Total
8	Feedstream Description		HW		1.65	1.37	1.37	1.89	1.89	92.2	92.2	88.16	88.16	47.1	47.1	47.1	Total
9	Chlorine																Total
10																	Total
11	Feedrate MTEC Calculations		185485		7589	5999	5999	8586	8586	424065	424065	386065	386065	213969	213969		341366
12	Chlorine																

	B
1	Process Information 1

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	<b>PCDD/PCDF</b>																
2	Facility Name and ID:	TXI, Midlothian, TX															
3	Condition ID:	3030C1															
4	Condition/Test Date:	Periodic performance evaluation, March 2001															
5																	
6																	
7																	
8																	
9																	
10	Detected in sample volume (ng)																
11	2,3,7,8-TCDD	1	nd	0.00153	0.0015	0.001	0.0008	nd	0.0014	0.0014	0.001	0.0007	nd	0.001	0.0010	0.001	0.0005
12	1,2,3,7,8-PCDD	0.5		0.00586	0.0029	0.006	0.0029		0.0236	0.0118	0.024	0.0118		0.0358	0.0179	0.036	0.0179
13	1,2,3,4,7,8-HxCDD	0.1	nd	0.00401	0.0004	0.002	0.0002	nd	0.0076	0.0008	0.004	0.0004	nd	0.009	0.0009	0.005	0.0005
14	1,2,3,6,7,8-HxCDD	0.1		0.0123	0.0012	0.012	0.0012	nd	0.0085	0.0009	0.004	0.0004	nd	0.01	0.0010	0.005	0.0005
15	1,2,3,7,8,9-HxCDD	0.1		0.00693	0.0007	0.007	0.0007	nd	0.0076	0.0008	0.004	0.0004	nd	0.009	0.0009	0.005	0.0005
16	1,2,3,4,6,7,8-HpCDD	0.01		0.0643	0.0006	0.064	0.0006		0.0374	0.0004	0.037	0.0004		0.0552	0.0006	0.055	0.0006
17	OCDD	0.001		0.086	0.0001	0.086	0.0001	nd	0.011	0.0000	0.006	0.0000	nd	0.04	0.0000	0.020	0.0000
18	2,3,7,8-TCDF	0.1		0.0527	0.0053	0.053	0.0053		0.0314	0.0031	0.031	0.0031		0.0535	0.0054	0.054	0.0054
19	1,2,3,7,8-PCDF	0.05		0.015	0.0008	0.015	0.0008		0.0084	0.0004	0.008	0.0004		0.0128	0.0006	0.013	0.0006
20	2,3,4,7,8-PCDF	0.5		0.0267	0.0134	0.027	0.0134		0.0114	0.0057	0.011	0.0057		0.0217	0.0109	0.022	0.0109
21	1,2,3,4,7,8-HxCDF	0.1		0.0145	0.0015	0.015	0.0015	nd	0.003	0.0003	0.002	0.0002		0.00818	0.0008	0.008	0.0008
22	1,2,3,6,7,8-HxCDF	0.1		0.0128	0.0013	0.013	0.0013		0.0085	0.0009	0.009	0.0009		0.0128	0.0013	0.013	0.0013
23	2,3,4,6,7,8-HxCDF	0.1		0.0143	0.0014	0.014	0.0014	nd	0.003	0.0003	0.002	0.0002	nd	0.005	0.0005	0.003	0.0003
24	1,2,3,7,8,9-HxCDF	0.1	nd	0.004	0.0004	0.002	0.0002	nd	0.0038	0.0004	0.002	0.0002	nd	0.006	0.0006	0.003	0.0003
25	1,2,3,4,6,7,8-HpCDF	0.01		0.0522	0.0005	0.052	0.0005	nd	0.0066	0.0001	0.003	0.0000	nd	0.009	0.0001	0.005	0.0000
26	1,2,3,4,7,8,9-HpCDF	0.01	nd	0.004	0.0000	0.002	0.0000	nd	0.008	0.0001	0.004	0.0000	nd	0.011	0.0001	0.006	0.0001
27	OCDF	0.001		0.0222	0.0000	0.022	0.0000	nd	0.013	0.0000	0.007	0.0000	nd	0.027	0.0000	0.014	0.0000
28																	
29	TCDD Total	0		0.346	0.0000	0.346	0.0000		3.52	0.0000	3.520	0.0000		4.75	0.0000	4.750	0.0000
30	PCDD Total	0		0.32	0.0000	0.320	0.0000		1.61	0.0000	1.610	0.0000		2.19	0.0000	2.190	0.0000
31	HxCDD Total	0		0.369	0.0000	0.369	0.0000		2.86	0.0000	2.860	0.0000		4.09	0.0000	4.090	0.0000
32	HpCDD Total	0		0.117	0.0000	0.117	0.0000		0.838	0.0000	0.884	0.0000		0.119	0.0000	0.119	0.0000
33	TCDF Total	0		0.79	0.0000	0.790	0.0000		0.598	0.0000	0.598	0.0000		0.861	0.0000	0.861	0.0000
34	PCDF Total	0		0.218	0.0000	0.218	0.0000		0.965	0.0000	0.997	0.0000		0.175	0.0000	0.175	0.0000
35	HxCDF Total	0		0.0827	0.0000	0.083	0.0000		0.085	0.0000	0.009	0.0000		0.0335	0.0000	0.034	0.0000
36	HpCDF Total	0		0.0522	0.0000	0.052	0.0000	nd	0.01	0.0000	0.005	0.0000	nd	0.01	0.0000	0.005	0.0000
37																	
38	Gas sample volume (dscf)			115.8	115.8	115.8	115.8		111.8	111.8	111.8	111.8		118.6	118.6	118.6	118.6
39	O2 (%)			7.8	7.8	7.8	7.8		7.8	7.8	7.8	7.8		8.0	8.0	8.0	8.0
40																	
41	PCDD/PCDF (ng in sample)			0.032	0.0104	2.403	0.031		0.027	0.027	8.794	0.025		0.043	12.257	0.040	0.040
42	PCDD/PCDF (ng/dscfm @ 7% O2)		7.4	0.0104	0.778	0.0100	18.1		0.0091	0.0091	2.947	0.0083	12.1	0.0137	3.934	0.0128	0.0128
43																	
44	TEQ Cond Avg		0.0104														
45	Total Cond Avg		2.55														