	B	C
1	**Source Description**	
2		
3	Phase I ID No.	318
4	EPA ID No.	TXD0007349327
5	Facility Name	TEXAS INDUSTRIES, INC.
6	Facility Location	
7	City	MIDLOTHIAN
8	State	TX
9	Unit ID Name/No.	KILN NO. 1
10	Other Sister Facilities	Kiln Nos. 2, 3, 4 (only 2 kilns can burn at any one time)
11	Number of Sister Facilities	3
12	Combustor Class	Cement Kiln (CK)
13	Combustor Type	Wet, long
14	Combustor Characteristics	
15	Capacity (MMBtu/hr)	
16	Soot Blowing	
17	APCS Detailed Acronym	ESP
18	APCS General Class	ESP
19	APCS Characteristics	Western Precipitation ESP, 70,000 ft plate area, SCA = 430
20	Hazardous Wastes	Liq
21	Haz Waste Description	
22	Supplemental Fuel	Coal
23		
24	Stack Characteristics	
25	Diameter (ft)	8.0
26	Height (ft)	200.0
27	Gas Velocity (ft/sec)	15.5
28	Gas Temperature (°F)	366.3
29		
30	Permitting Status	
31	HWC Burn Status (Date if Terminated)	

	B	C
1	**Condition Description**	
2		
3	**318C1**	
4		
5	Report Name/Date	Texas Industries, Midlothian Cement Plant, Second Revision, Certification of Compliance, submitted to EPA Region VI and Texas Waste Commission of May 24, 1993, Revised October 10, 1992, prepared by Entellect
6	Report Prepare	Entellect
7	Testing Firm	
8	Cond Descr	CoC, DRE Mode 1, MAX HW FEED, POHC SPIKING, NO QUENCH
9	Testing Dates	June 16, 1992
10	Cond Dates	Jun-92
11		
12	**318C2**	
13		
14	Report Name/Date	Texas Industries, Midlothian Cement Plant, Second Revision, Certification of Compliance, submitted to EPA Region VI and Texas Waste Commission of May 24, 1993, Revised October 10, 1992, prepared by Entellect
15	Report Prepare	Entellect
16	Testing Firm	
17	Cond Descr	CoC, Metal mode
18	Testing Dates	June 11, 1992
19	Cond Dates	Jun-92
20		
21	**318C3**	
22		
23	Report Name/Date	Texas Industries, Midlothian Cement Plant, Second Revision, Certification of Compliance, submitted to EPA Region VI and Texas Waste Commission of May 24, 1993, Revised October 10, 1992, prepared by Entellect
24	Report Prepare	Entellect
25	Testing Firm	
26	Cond Descr	CoC, DRE Mode 2, COLD MODE QUENCH USED
27	Testing Dates	June 19, 1992
28	Cond Dates	Jun-92

	B	C	D	E	F	G	H	I	J	K	L	M
1	**Stack Gas Emissions 2**											
2												
3												
4	**318C1**					R1		R2		R3		Cond Avg
5												
6	PM	E1	gr/dscf	y		0.01135		0.00827		0.00923		0.00962
7	CO (MHRA)	E1	ppmv	y		206.75		262.28		276.27		248.43
8	HC (MHRA)	E1	ppmv	y		4.64		6.03		7.56		6.07
9	HCl	E1	ppmv	y		59.14		36.77		45.15		47.02
10	Cl2	E1	ppmv	y		0.08		0.08	nd	0.02		0.06
11	Total Chlorine	E1	ppmv	y		59.30		36.93		45.19		47.14
12												
13	Chlorobenzene	E1	%			99.9993		99.9993		99.9993		
14	Perchloroethylene	E1	%			99.9995		99.9995		99.9995		
15												
16	Sampling Train	Halog	E1									
17	Stack Gas Flowrate		dscfm			60075		60161		59410		
18	O2		%			5.9		5.2		6		
19	Moisture		%			38.35		38.79		39.137		
20	Temperature		°F			372.67		369.38		356.75		
21												
22	**318C2**					R1		R2		R3		Cond Avg
23												
24	HC (MHRA)	E1	ppmv	y		4.67		5.30		5.20		5.06
25	Antimony	E1	ug/dscm	y	nd	2.35		0.36		0.39		1.04
26	Arsenic	E1	ug/dscm	y	nd	0.77	nd	0.73	nd	0.74		0.75
27	Barium	E1	ug/dscm	y		123.00		179.76		126.61		143.12
28	Beryllium	E1	ug/dscm	y	nd	3.90	nd	3.60	nd	3.66		3.72
29	Cadmium	E1	ug/dscm	y		3.48		11.74		2.35		5.86
30	Chromium (Hex)	E2	ug/dscm	y	nd	0.64	nd	0.60	nd	0.61		0.62
31	Lead	E1	ug/dscm	y		125.21		155.00		102.32		127.51
32	Thallium	E1	ug/dscm	y		1.65		1.64	nd	1.30		1.53
33	SVM	E1	ug/dscm	y		128.69		166.74		104.67		133.37
34	LVM	E1	ug/dscm	y		4.67		4.33		4.40		4.47
35												
36	Sampling Train	Cr He	E2									
37	Stack Gas Flowrate		dscfm			59625		59788		62149		
38	O2		%			6.32		7		7		
39	Moisture		%			39.75		37.4		36.95		
40	Temperature		°F			370.21		362.79		359.29		
41												
42	Sampling Train	Metal	E1									
43	Stack Gas Flowrate		dscfm			57546		58217		60306		
44	O2		%			6.32		7		7		
45	Moisture		%			38.66		38.87		38.9		
46	Temperature		°F			371		363.6		360		
47												
48	**318C3**											
49												
50	HC (MHRA)		ppmv	y		10.56		4.99		7.20		
51												
52	Chlorobenzene	DRE	%			99.9990		99.9992		99.9973		
53	Perchloroethylene	DRE	%			99.9994		99.9994		99.9995		

	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	AC
1	**Feedstreams 2**																											
2																												
3																												
4	**318C1**				R1		R2		R3		R1		R2		R3		R1		R2		R3		R1		R2		R3	
5																												
6	Feedstream Number				F1		F1		F1		F2		F2		F2		F3		F3		F3		F4		F4		F4	
7	Feed Class				Spike		Spike		Spike		HW		HW		HW		Raw Mater		Raw Mater		Raw Mater		Spike		Spike		Spike	
8	Feed Class 2										HW		HW		HW		RM		RM		RM							
9	Feedstream Description				Spike metals		Spike metals		Spike metals		HW Fuel		HW Fuel		HW Fuel		Raw mater		Raw mater		Raw mater		Spike organic		Spike organic		Spike organics	
10	Feed Rate		lb/hr								13674		13546		13404								145		177		147	
11	Heating Value		Btu/lb								14800		14800		14800													
12	Thermal Feedrate		MMBtu/hr								202		200		198													
13	Chlorine		lb/hr								37		36.6		36.2								124		151		126	
14																												
15	Stack Gas Flowrate		dscfm		60075		60161		59410		60075		60161		59410		60075		60161		59410		60075		60161		59410	
16	Oxygen		%		5.9		5.2		6		5.9		5.2		6		5.9		5.2		6		5.9		5.2		6	
17																												
18	Chlorine		ug/dscm		0		0		0		152678.2593		144130.2549		152056.1401		0		0		0		512737.6		595875.7		529051.2932	
19																												
20	**318C2**				R1		R2		R3		R1		R2		R3		R1		R2		R3		R1		R2		R3	
21																												
22	Feedstream Number				F1		F1		F1		F2		F2		F2		F3		F3		F3		F4		F4		F4	
23	Feed Class				Spike		Spike		Spike		HW		HW		HW		Raw Mater		Raw Mater		Raw Mater		Spike		Spike		Spike	
24	Feed Class 2										HW		HW		HW		RM		RM		RM							
25	Feedstream Description				Spike metals		Spike metals		Spike metals		HW Fuel		HW Fuel		HW Fuel		Raw mater		Raw mater		Raw mater		Spike organic		Spike organic		Spike organics	
26	Feed Rate		lb/hr		651.7		670		638.7		13734.15976		13380		13578.06085		148400		149800		148600							
27	Heating Value		Btu/lb								14800		14800		14800													
28	Thermal Feedrate		MMBtu/hr								203		198		201													
29	Antimony		lb/hr		3.48		3.58		3.41		0.426		0.415		0.421													
30	Arsenic		lb/hr		0.028		0.0287		0.0274																			
31	Barium		lb/hr		52.1		53.6		51.1								3.56		3.75		3.57							
32	Beryllium		lb/hr		0.024		0.0247		0.0235								0.0535		0.0585		0.055							
33	Cadmium		lb/hr		2.56		2.63		2.51		0.165		0.161		0.163		0.253		0.27		0.253							
34	Chromium		lb/hr		11.393902		11.7138555		11.16661																			
35	Chromium (Hex)		lb/hr		11.4		11.7		11.2																			
36	Lead		lb/hr		23		23.6		22.5		0.137		0.134		0.136		1.44		1.65		2.08							
37	Thallium		lb/hr		0.351		0.361		0.344		0.179		0.174		0.177													
38																												
39	Stack Gas Flowrate		dscfm		57546		58217		60306		57546		58217		60306		57546		58217		60306		57546		58217		60306	
40	Oxygen		%		6.32		7		7		6.32		7		7		6.32		7		7		6.32		7		7	
41																												
42	*Feedrate MTEC Calculations*																											
43	Antimony		ug/dscm		15420		16442		15119		1888		1906		1867		0		0		0							
44	Arsenic		ug/dscm		124		132		121		0		0		0		0		0		0							
45	Barium		ug/dscm		230857		246169		226558		0		0		0		15774		17223		15828							
46	Beryllium		ug/dscm		106		113		104		0		0		0		237		269		244							
47	Cadmium		ug/dscm		11343		12079		11128		731		739		723		1121		1240		1122							
48	Chromium		ug/dscm		50487		53798		49508		0		0		0		0		0		0							
49	Chromium (Hex)		ug/dscm		50514		53735		49656		0		0		0		0		0		0							
50	Lead		ug/dscm		101914		108388		99756		607		615		603		6381		7578		9222							
51	Thallium		ug/dscm		1555		1658		1525		793		799		785		0		0		0							
52	SVM		ug/dscm		113257		120467		110885		1338		1355		1326		7502		8818		10344							
53	LVM		ug/dscm		50717		54044		49734		0		0		0		237		269		244							

	B	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV
1	**Feedstreams 2**																			
2																				
3																				
4	**318C1**	R1		R2		R3		R1		R2		R3		R1		R2		R3		Cond Avg
5																				
6	Feedstream Number	F5		F5		F5								F6		F6		F6		F6
7	Feed Class	Spike		Spike		Spike								Total		Total		Total		Total
8	Feed Class 2							Spike		Spike		Spike		Total		Total		Total		Total
9	Feedstream Description	Spike organics		Spike organics		Spike organics								Total		Total		Total		Total
10	Feed Rate	107		117		103		253		294		251								
11	Heating Value																			
12	Thermal Feedrate													202		200		198		200
13	Chlorine	34		37		33														
14																				
15	Stack Gas Flowrate	60075		60161		59410														
16	Oxygen	5.9		5.2		6														
17																				
18	Chlorine	139491.7617		145487.6		136670.0		652229.4		741363.38		665721.3		804908		885494		817777		836060
19																				
20	**318C2**	R1		R2		R3		R1		R2		R3		R1		R2		R3		Cond Avg
21																				
22	Feedstream Number	F5		F5		F5								F6		F6		F6		F6
23	Feed Class	Spike		Spike		Spike								Total		Total		Total		Total
24	Feed Class 2							Spike		Spike		Spike		Total		Total		Total		Total
25	Feedstream Description	Spike organics		Spike organics		Spike organics								Total		Total		Total		Total
26	Feed Rate							651.7		670		638.7								
27	Heating Value																			
28	Thermal Feedrate													203.3		198.0		201.0		200.7
29	Antimony																			
30	Arsenic																			
31	Barium																			
32	Beryllium																			
33	Cadmium																			
34	Chromium																			
35	Chromium (Hex)																			
36	Lead																			
37	Thallium																			
38																				
39	Stack Gas Flowrate	57546		58217		60306														
40	Oxygen	6.32		7		7														
41																				
42	*Feedrate MTEC Calculati*																			
43	Antimony							15420		16442		15119		17308		18348		16985		17547
44	Arsenic							124		132		121		124		132		121		126
45	Barium							230857		246169		226558		246631		263392		242386		250803
46	Beryllium							106		113		104		343		382		348		358
47	Cadmium							11343		12079		11128		13196		14058		12973		13409
48	Chromium							50487		53798		49508		50487		53798		49508		51264
49	Chromium (Hex)							50514		53735		49656		50514		53735		49656		51302
50	Lead							101914		108388		99756		108902		116581		109581		111688
51	Thallium							1555		1658		1525		2348		2457		2310		2372
52	SVM							113257		120467		110885		122097		130639		122554		125097
53	LVM							50717		54044		49734		50954		54312		49978		51748

	C	D	E	F	G
1	**Process Information 2**				
2					
3	**318C1**				
4					
5	ESP Temperature	F	434	431	408
6	ESP Power	kVA	93.5	96	96.4
7					
8	**318C2**				
9					
10	ESP Temperature	F	418	414	412
11	ESP Power	kVA	79.5	82.5	98.8