Permit Renewal
Source Analysis & Technical Review

Company	**TXI Operations LP**	Permit Number	**1360A and PSD-TX-632M1**
City	**Midlothian**	Project Number	**139252**
County	**Ellis**	Account Number	**ED-0066-B**
Project Type	**Renewal**	Regulated Entity Number	**RN100217199**
Project Reviewer	**Ms. Ruth Alvirez**	Customer Reference Number	**CN600125157**
Site Name	**Cement Manufacturing Plant**		

Project Overview

TXI is requesting a no increase renewal for their Portland Cement Plant in Midlothian Texas. The plant currently consists of four wet kiln (kilns 1-4) and one dry process kiln (kiln 5), a quarry, a raw material storage and processing area, finish mills, facilities for loading out cement by either rail or truck and related support systems. Kilns 1-4 are wet process cement kilns, which were constructed in various phases beginning in 1960 and completed in 1972. The four wet kilns are permitted to fire a variety of fuels including natural gas, coal (1980), petroleum m coke (1983), fuel oil (1974), waste derived fuel (1987) and tire derived fuel (2002). Kiln 5 is a dry process cement kiln, which begin operating in June of 2001 and is authorized to fire coal and natural gas.

In response to the public notice, the agency received 195 hearing request letters, 21 comment letters and 2 public meetings requests. The Texas Clean Air Act, in Tex. Health Safety Code § 382.056 provides that if during the public comment period, a person requests that the commission hold a public hearing and the request is not withdrawn, the commission shall consider the request for public hearing under the procedures provided by Tex. Health Safety Code § 382.056 (i) - (n). This statute also provides that the commission may not seek further public comment or hold a public hearing under the procedures provided by Subsections (i) - (n) in response to a request for a public hearing on an amendment, modification, or renewal that would not result in an increase in allowable emissions and would not result in the emission of an air contaminant not previously emitted. Therefore, no Notice of Preliminary Decision, commonly referred to as "second notice," is required nor was a public meeting held under the commission's public participation rules in 30 TAC Chapter 39, Subchapters H and K.

Administrative changes were made to remove language that referenced past permit actions that had been consolidated by incorporation. Special Condition 1 (K) was deleted as all listed facilities have been listed on the MAERT and Special Condition 2 (C)(2) had the last paragraph deleted due to Permit 6698 having been voided when consolidated. Numerous standard exemptions/permits by rule (PBRs) are being consolidated by reference and PBR 75198/SB1126 (project no. 118978) is being consolidated by incorporation into the permit with this renewal action. Additional identifiers were added to EPN names to ease in their identification to match the emission inventory list.

Compliance History Evaluation - 30 TAC Chapter 60 Rules

A compliance history report was reviewed on:	**October 12, 2007**
Compliance period:	**August 31, 2008 to September 1, 2003**
Site rating & classification:	**Average 0.56**
Company rating & classification:	**Average 2.09**
Has the permit changed on the basis of the compliance history or rating?	**No**

Public Notice Information - 30 TAC Chapter 39 Rules

Rule Citation	Requirement	
39.403	Is Public Notice Required?	**Yes**
	Date Application Received:	**June 24, 2008**
	Date Administratively Complete:	**July 10, 2008**
	Small Business Source?	**No**
	Date Leg Letters mailed:	**July 11, 2008**
39.603	Date Published:	**August 27, 2008 Note: although the applicant originally published notice on July 24, 2008, it voluntarily republished to ensure compliance with all applicable requirements.**
	Publication Name:	***Waxahachie Daily Light/Midlothian Mirror***
	Pollutants:	**NOx, CO, hydrogen chloride, VOC, SO2, chlorine, hydrogen flouride,**

Rule Citation	Requirement	
		H2SO4, total reduced sulfur, H2S, PM, PM10, Ba, trivalent Cr, Ni, Pb, Se, Tl, Zn and trace metal including but not limited to Hg and Pb
	Date Affidavits/Copies Received:	**September 08, 2008**
	Is bilingual notice required?	**Yes**
	Language:	**Spanish**
	Date Published:	**August 27, 2008**
	Publication Name:	***no Spanish publication available***
	Date Certification of Sign Posting / Application Availability Received:	**September 17, 2008**
39.604	Public Comments Received?	**Yes**
	Hearing Requested?	**Yes**
	Meeting Request?	**Yes**
	Date Meeting Held:	**Meeting not held (no increase renewal)**
	Date Response to Comments sent to OCC:	**November 25, 2008**
	Request(s) withdrawn?	**No**
	Consideration of Comments:	**Waiting for commission to schedule hearing requests for consideration**
	Is 2nd Public Notice required?	**No**
39.419	If no, give reason:	**Second notice is not required for no increase renewal applications**

Renewal Requirements - 30 TAC Chapter 116 Rules

Rule Citation	Requirement	
116.315(a)	Date of permit expiration:	**November 01, 2008**
116.310	Date written notice of review was mailed:	**October 22, 2007**
116.315(a)	Date application for Renewal (PI-1R) received:	**June 24, 2008**
116.311(a)(1)	Do dockside vessel emissions associated with the facility comply with all regulations?	**NA**
116.311(a)(2)	Is the facility being operated in accordance with all requirements and conditions of the existing permit, including representations in the application for permit to construct and subsequent amendments, and any previously granted renewal, unless otherwise authorized for a qualified facility?	**Yes**
116.311(a)(3)	Subject to NSPS?	**Yes**
	Subparts **A & F, Kb, OOO Y**	
116.311(a)(4)	Subject to NESHAPS?	**Yes (kilns 1-4)**
	Subparts **A & J, FF**	
116.311(a)(5)	Subject to NESHAPS (MACT) for source categories?	**Yes (kilns 1-5)**
	Subparts **A & EEE, LLL**	
116.311(a)(6)	Does this project require case-by-case MACT?	**No**
116.311(b)	Was there a condition of air pollution that had to be addressed during this project review?	**No**
116.314(a)	Does the facility meet all permit renewal requirements?	**Yes**
116.313	Permit Renewal Fee: $ **10,000** Fee certification:	**Yes**
	Applicable Outstanding Fees:	**No**

Request for Comments

Received From	Program/Area Name	Reviewed By	Comments
Region:	4	**Jaret Wessel**	**phoned in comments**

Process/Project Description

TXI is requesting a no increase renewal for their Portland Cement Plant in Midlothian Texas. TXI Operations, LP operates four identical wet process and one dry process cement kilns at their Midlothian Cement Plant in Ellis County Texas.

The four wet kilns are permitted to fire a variety of fuels including natural gas, coal, petroleum m coke, fuel oil, waste derived fuel and tire derived fuel. Emissions are controlled by good combustion practices, good engineering, and electrostatic precipitators. The pyroprocessing for the wet-process kilns requires the raw materials fed to the kiln to be ground with water to form a slurry. This slurry is then mixed and blended before being pumped into the kiln. From this point, the raw materials undergo a four-stage pyrolitic process including dehydration, calcination, clinkerization and cooling. The dry process kiln is permitted to fire natural gas and coal. The exhaust emissions are controlled by the use of baghouses (particulates), a wet scrubber (sulfur dioxide and sulfuric acid), and the regenerative thermal oxidizer (carbon monoxide, volatile organics and reduced sulfur compounds). The pyro-processing for the dry kiln utilizes an in-line raw mill to prepare raw materials prior to entry into a four-stage preheater/precalciner system before being pumped into the kiln. In the next stage of the cement making process for all 5 kilns, the clinker is proportioned with gypsum and ground into cement in a grinding mill where it is then pumped into a bulk storage area awaiting shipment by bulk truck or rail car.

Pollution Prevention, Sources, Controls

Kilns 1-4 are wet process cement kilns, which were constructed in various phases beginning in 1960 and completed in 1972. The four wet kiln are permitted to fire a variety of fuels including natural gas, coal (1980), petroleum m coke (1983), fuel oil (1974), waste derived fuel (1987) and tire derived fuel (2002). Emissions are controlled by good combustion practices, good engineering, and electrostatic precipitators.

Kiln 5 is a dry process cement kiln, which begin operating in June of 2001 and is authorized to fire coal and natural gas. The exhaust emissions are controlled by a baghouse (particulates), a wet scrubber (sulfur dioxide and sulfuric acid), and the regenerative thermal oxidizer (carbon monoxide, volatile organics and reduced sulfur compounds).

Raw material handling, solid fuel handling, clinker and finished product handling, road emission and nuisance dust are controlled by water and chemical dust suppression, enclosures, reduced-fall drops, covered conveyors and fabric filters.

TXI is not requesting any changes to the existing authorized equipment; therefore, a BACT review was not triggered.

A BACT review was triggered on Finish Mill No.5 (PBR 75198); as it is being consolidated by incorporation into the permit. Finish Mill No. 5 has an outlet grain loading of 0.005 gr/dscf, which represents BACT.

Permit Concurrence and Related Authorization Actions

Is the applicant in agreement with special conditions?	**Yes**
Company representative(s):	**Nancy Garnett**
Contacted Via:	**phone**
Date of contact:	**November 14, 2008**
Other permit(s) or permits by rule affected by this action:	**Yes**
List permit and/or PBR number(s) and actions required or taken:	**PBR 41046 - consolidated by reference** **PBR 49617 - consolidated by reference** **PBR 50056 - consolidated by reference** **PBR 50701 - consolidated by reference** **PBR 51232 - consolidated by reference** **PBR 51234 - consolidated by reference** **PBR 81823 - consolidated by reference** **PBR 83073 - consolidated by reference** **PBR 83128 - consolidated by reference** **Standard Permit 53424 - consolidated by reference** **PBR 75198 - consolidated by incorporation** **SB1126 (project no 118978) - consolidated by incorporation**

Project Reviewer | Date | Team Leader/Section Manager/Backup | Date

1-13-09 | 1/13/09

Compliance History Report

Customer/Respondent/Owner-Operator:	CN600125157	TXI Operations, LP	Classification: AVERAGE	Rating: 2.08
Regulated Entity:	RN100217199	TXI OPERATIONS	Classification: AVERAGE	Site Rating: 0.56

ID Number(s):

AIR OPERATING PERMITS	ACCOUNT NUMBER	ED0066B
AIR OPERATING PERMITS	PERMIT	1077
INDUSTRIAL AND HAZARDOUS WASTE GENERATION	EPA ID	TXD007349327
INDUSTRIAL AND HAZARDOUS WASTE GENERATION	SOLID WASTE REGISTRATION # (SWR)	33918
INDUSTRIAL AND HAZARDOUS WASTE STORAGE	PERMIT	50316
INDUSTRIAL AND HAZARDOUS WASTE STORAGE	PERMIT	33918
INDUSTRIAL AND HAZARDOUS WASTE STORAGE	PERMIT	50319001
INDUSTRIAL AND HAZARDOUS WASTE STORAGE	PERMIT	50316
USED OIL	REGISTRATION	A85557
AIR NEW SOURCE PERMITS	AFS NUM	4813900009
AIR NEW SOURCE PERMITS	PERMIT	53424
AIR NEW SOURCE PERMITS	ACCOUNT NUMBER	ED0066B
AIR NEW SOURCE PERMITS	PERMIT	56271
AIR NEW SOURCE PERMITS	PERMIT	1360A
AIR NEW SOURCE PERMITS	PERMIT	49617
AIR NEW SOURCE PERMITS	PERMIT	50701
AIR NEW SOURCE PERMITS	PERMIT	50056
AIR NEW SOURCE PERMITS	REGISTRATION	75198
AIR NEW SOURCE PERMITS	PERMIT	76371
AIR NEW SOURCE PERMITS	REGISTRATION	79370
AIR NEW SOURCE PERMITS	REGISTRATION	79979
AIR NEW SOURCE PERMITS	REGISTRATION	81823
AIR NEW SOURCE PERMITS	REGISTRATION	83073
AIR NEW SOURCE PERMITS	REGISTRATION	83984
AIR NEW SOURCE PERMITS	REGISTRATION	83128
AIR NEW SOURCE PERMITS	EPA ID	PSDTX632M1
WASTEWATER	PERMIT	WQ0004379000
WASTEWATER	PERMIT	TPDES0064777
WASTEWATER	PERMIT	TX0064777
STORMWATER	PERMIT	TXR05K042

Location: 245 WARD RD, MIDLOTHIAN, TX, 76065

TCEQ Region: REGION 04 - DFW METROPLEX

Date Compliance History Prepared: March 04, 2009

Agency Decision Requiring Compliance History: Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.

Compliance Period: June 24, 2003 to March 03, 2009

TCEQ Staff Member to Contact for Additional Information Regarding this Compliance History

Name: Ms. Ruth Alvirez Phone: 239 - 5220

Site Compliance History Components

1. Has the site been in existence and/or operation for the full five year compliance period? Yes
2. Has there been a (known) change in ownership of the site during the compliance period? No
3. If Yes, who is the current owner? N/A
4. if Yes, who was/were the prior owner(s)?
5. When did the change(s) in ownership occur? N/A
6. Rating Date: 9/1/2008 Repeat Violator: NO

Components (Multimedia) for the Site :

A. Final Enforcement Orders, court judgements, and consent decrees of the state of Texas and the federal government.

N/A

See addendum for information regarding federal actions.

B. Any criminal convictions of the state of Texas and the federal government.

N/A

C. Chronic excessive emissions events.

N/A

D. The approval dates of investigations. (CCEDS Inv. Track. No.)

1	06/24/2003	(114297)
2	07/08/2003	(35987)
3	07/10/2003	(310208)
4	07/10/2003	(310210)
5	07/10/2003	(310212)
6	07/31/2003	(145531)
7	10/16/2003	(310214)
8	10/16/2003	(310215)
9	10/16/2003	(310216)
10	10/28/2003	(252643)
11	12/12/2003	(254100)
12	01/27/2004	(310217)
13	01/27/2004	(310218)
14	01/27/2004	(310219)
15	02/19/2004	(252061)
16	03/09/2004	(256198)
17	04/07/2004	(267085)
18	04/07/2004	(267885)
19	04/27/2004	(358090)
20	04/27/2004	(358091)
21	04/27/2004	(358092)
22	07/28/2004	(310209)
23	07/28/2004	(310211)
24	07/28/2004	(310213)
25	08/09/2004	(281606)
26	08/13/2004	(274106)
27	08/18/2004	(279850)
28	10/04/2004	(283028)
29	10/29/2004	(358093)
30	10/29/2004	(358094)
31	10/29/2004	(358095)
32	01/24/2005	(385152)
33	01/24/2005	(385153)
34	01/24/2005	(385154)
35	02/09/2005	(350243)
36	04/20/2005	(376591)
37	05/02/2005	(423167)
38	05/02/2005	(423168)
39	05/02/2005	(423169)
40	06/21/2005	(371957)
41	07/31/2005	(444039)
42	07/31/2005	(444040)
43	07/31/2005	(444041)
44	08/05/2005	(397942)
45	08/10/2005	(398636)
46	08/19/2005	(398486)
47	08/25/2005	(404972)

48	08/30/2005	(407145)
49	10/19/2005	(434543)
50	10/31/2005	(474327)
51	10/31/2005	(474328)
52	10/31/2005	(474329)
53	11/09/2005	(436682)
54	11/22/2005	(436571)
55	01/27/2006	(438638)
56	04/05/2006	(460280)
57	04/24/2006	(502195)
58	04/24/2006	(502196)
59	04/24/2006	(502197)
60	05/10/2006	(465454)
61	07/24/2006	(524542)
62	07/24/2006	(524543)
63	07/24/2006	(524544)
64	08/01/2006	(488997)
65	08/22/2006	(466039)
66	08/31/2006	(510450)
67	09/27/2006	(510043)
68	10/20/2006	(549497)
69	10/20/2006	(549498)
70	10/20/2006	(549499)
71	10/31/2006	(514213)
72	11/07/2006	(497706)
73	11/07/2006	(516450)
74	11/07/2006	(517100)
75	11/07/2006	(518378)
76	12/14/2006	(533536)
77	01/18/2007	(583301)
78	01/18/2007	(583302)
79	01/18/2007	(583303)
80	02/28/2007	(537123)
81	04/03/2007	(555048)
82	04/18/2007	(583294)
83	04/18/2007	(583295)
84	04/18/2007	(583296)
85	05/08/2007	(583297)
86	06/15/2007	(583298)
87	07/10/2007	(560476)
88	07/17/2007	(583299)
89	08/08/2007	(567610)
90	08/08/2007	(567613)
91	08/09/2007	(567609)
92	08/13/2007	(583300)
93	09/17/2007	(603877)
94	10/03/2007	(593801)
95	11/16/2007	(622654)
96	11/29/2007	(609729)
97	12/05/2007	(610617)
98	12/14/2007	(622655)
99	01/17/2008	(622656)
100	01/23/2008	(613725)
101	02/19/2008	(674203)
102	02/28/2008	(636265)
103	03/19/2008	(674204)
104	04/18/2008	(674205)
105	05/14/2008	(618853)
106	05/19/2008	(692531)

107 05/21/2008 (618858)
108 05/21/2008 (639848)
109 06/04/2008 (641857)
110 06/09/2008 (692532)
111 07/07/2008 (683771)
112 07/07/2008 (685193)
113 07/11/2008 (692533)
114 08/07/2008 (681644)
115 08/14/2008 (713644)
116 08/19/2008 (683816)
117 08/19/2008 (689001)
118 08/20/2008 (699805)
119 08/21/2008 (700437)
120 08/26/2008 (700632)
121 09/11/2008 (713645)
122 09/16/2008 (685635)
123 10/17/2008 (713646)
124 11/17/2008 (729649)
125 12/04/2008 (699997)
126 12/15/2008 (729650)
127 12/17/2008 (708155)
128 01/16/2009 (729651)

E. Written notices of violations (NOV). (CCEDS Inv. Track. No.)

Date: 08/05/2003 (145531)
Self Report? NO Classification: Minor
Citation: 30 TAC Chapter 116, SubChapter B 116.115(b)(2)(G)
Description: Permit MAERT exceeded (for THC) during tire trial burn test.

Date: 03/08/2004 (256198) CN600125157
Self Report? NO Classification: Moderate
Citation: 30 TAC Chapter 281, SubChapter A 281.25(a)(4)
TXR050000 PERMIT
Description: Failure to collect samples for hazardous metals monitoring since permit issuance.

Self Report? NO Classification: Moderate
Citation: 30 TAC Chapter 281, SubChapter A 281.25(a)(4)
TXR050000 PERMIT
Description: Failure to conduct storm water discharge sampling required for this activity since permit issuance.

Self Report? NO Classification: Moderate
Citation: 30 TAC Chapter 281, SubChapter A 281.25(a)(4)
TXR050000 PERMIT
Description: Failure to conduct benchmark sampling for this activity.

Date: 07/31/2004 (358093) CN600125157
Self Report? YES Classification: Moderate
Citation: 30 TAC Chapter 305, SubChapter F 305.125(1)
TWC Chapter 26 26.121(a)
Description: Failure to meet the limit for one or more permit parameter

Date: 10/04/2004 (283028) CN600125157
Self Report? NO Classification: Minor
Citation: 30 TAC Chapter 101, SubChapter F 101.201(g)
5C THC Chapter 382, SubChapter A 382.085(b)
Description: Failed to electronically report the excess opacity event that occurred on 4/16/04.

Date: 05/17/2005 (349193) CN600125157
Self Report? NO Classification: Moderate
Citation: 1360A, Special Condition 2D PERMIT
30 TAC Chapter 116, SubChapter B 116.115(c)
5C THC Chapter 382, SubChapter A 382.085(b)
Description: Failure to restrict operation of the cement kilns so that no more than two of Kilns 1, 2, 3 or 4 are operated at the same time as Kiln 5.

Date: 04/21/2006 (455047) CN600125157
Self Report? NO Classification: Moderate
Citation: 1360A, Special Condition 7B PERMIT

30 TAC Chapter 116, SubChapter B 116.115(c)
5C THC Chapter 382, SubChapter D 382.085(b)

Description: Failure to effectively prevent fugitive emissions from the northeast clinker barn door.

Date: 01/25/2008 (613725) CN600125157

Self Report? NO Classification: Moderate

Citation: 1360A, Condition 8B PERMIT
30 TAC Chapter 101, SubChapter F 101.201(a)(1)(B)
5C THSC Chapter 382 382.085(b)

Description: Failure to comply with opacity limits for Kiln #4 Exhaust Stack stated under Permit No. 1360A.

Date: 06/05/2008 (641857) CN600125157

Self Report? NO Classification: Minor

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
5C THSC Chapter 382 382.085(b)
SC 18.A.2 PERMIT

Description: Failure to record the daily calibration for the Kiln 4 NOx and SO2 analyzers for 5/18/07.

Self Report? NO Classification: Minor

Citation: 30 TAC Chapter 113, SubChapter C 113.690
40 CFR Chapter 63, SubChapter C, PT 63, SubPT LLL 63.1350(e)
5C THSC Chapter 382 382.085(b)

Description: Failure to perform visible emission observations according to Reference Method 22 as required.

Self Report? NO Classification: Minor

Citation: 30 TAC Chapter 122, SubChapter B 122.145(2)(A)
30 TAC Chapter 122, SubChapter B 122.146(5)(C)
5C THSC Chapter 382 382.085(b)

Description: Failure to report a deviation for missed record of calibration on 5/18/07.

Date: 12/08/2008 (699997) CN600125157

Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 335, SubChapter C 335.69(d)(1)
40 CFR Chapter 262, SubChapter I, PT 262, SubPT C 262.34(c)(1)(i)
40 CFR Chapter 265, SubChapter I, PT 265, SubPT I 265.173(a)

Description: It is alleged that TXI did not immediately close a satellite accumulation container after use.

F. Environmental audits.

Notice of Intent Date: 08/19/2005 (439752)
Disclosure Date: 08/30/2005

Viol. Classification: Moderate
Rqmt Prov: PERMIT HW-50316-001 Sections I.I.4 and II.D.4

Description: Accepted a waste load for which there is no record that a required profile sheet had been previously received and reviewed by the Facility.

Viol. Classification: Moderate
Rqmt Prov: PERMIT HW-50316-001 Sections I.I.4 and I.C.1

Description: Facility generated wastewater was pumped into Trailer #314 owned by TXI Transportation and parked at TXI's truck yard for 10 days. In addition, A tanker truck containing waste liquids was recieved, the contents were pumped to an empty trailer and parked in the TXI truck yard for 34 days.

Viol. Classification: Minor
Rqmt Prov: PERMIT HW-50316-001 Section I.I.5

Description: New employee did not receive formal off-site training or on-site class room training described in Section 2 of the Personnel Training Plan.

Viol. Classification: Moderate
Rqmt Prov: PERMIT HW-50316-001 - See Description

Description: Piping system at the Facility was changed without modifying the Permit.

Viol. Classification: Moderate
Rqmt Prov: PERMIT HW-50316-001 Section I.F.11

Description: Piping system at the Facility was changed without modifying the Permit.

Viol. Classification: Moderate
Citation: 30 TAC Chapter 101, SubChapter F 101.201(a)

Rqmt Prov: PERMIT 1360A SP 1.C., 22.C.11.A.3, 2.B.

Description: Facility employees have vented vapors from the vent back system on a number of occasions to relieve pressure increases within the Facility's tank system.

Viol. Classification: Minor
Rqmt Prov: PERMIT HW-05316-001 Section II.F.

Description: The audit identified a number of occasions on which records of repairs and maintenance are inconsistent with the Daily Inspection Forms.

Viol. Classification: Minor
Rqmt Prov: PERMIT HW-50316-001 Section II.R.

Description: Failure to maintain Facility.

Viol. Classification: Moderate
Rqmt Prov: PERMIT HW50316-001 Sections II.F and I.I.5

Description: Daily and weekly inspection sheets used in the Facility did not contain the required information found in the inspection schedule.

G. Type of environmental management systems (EMSs).

N/A

H. Voluntary on-site compliance assessment dates.

N/A

I. Participation in a voluntary pollution reduction program.

N/A

J. Early compliance.

N/A

Sites Outside of Texas

N/A

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

MR RANDY WALSER
PLANT MANAGER
TXI OPERATIONS LP
245 WARD RD
MIDLOTHIAN TX 76065

Re: Permit Renewal
Permit Numbers: 1360A and PSD -TX-632M1
Cement Manufacturing Plant
Midlothian, Ellis County
Regulated Entity Number: RN100217199
Customer Reference Number: CN600125157
Account Number: ED-0066-B

Dear Mr. Walser:

This is in response to your application Form PI-1R (General Application for Air Permit Renewals) concerning the proposed renewal of Permit Number 1360A.

As indicated in Title 30 Texas Administrative Code § 116.314(a) [30 TAC § 116.314(a)], and based on our review, your permit is hereby renewed. Enclosed is a permit for your facility. Also enclosed are new special conditions and a maximum allowable emission rates table. We appreciate your careful review of the special conditions of the permit and assuring that all requirements are consistently met. This permit will be in effect for ten years from the date of approval (Commission's final decision). If this permit is appealed and the permittee does not commence any action authorized by this permit during judicial review, the term will not begin until judicial review is concluded.

As of July 1, 2008, all analytical data generated by a mobile or stationary laboratory in support of compliance with air permits must be obtained from a NELAC (National Environmental Laboratory Accreditation Conference) accredited laboratory under the Texas Laboratory Accreditation Program or meet one of several exemptions. Specific information concerning which laboratories must be accredited and which are exempt may be found in 30 TAC §§ 25.4 and 25.6.

Re: Permit Numbers 1360A and PSD-TX-632M1

For additional information regarding the laboratory accreditation program and a list of accredited laboratories and their fields of accreditation, please see the following Website:

http://www.tceq.state.tx.us/compliance/compliance_support/qa/env_lab_accreditation.html

For questions regarding the accreditation program, you may contact the Texas Laboratory Accreditation Program at (512) 239-3754 or by e-mail at labprgms@tceq.state.tx.us.

Thank you for your cooperation in sending us the information necessary to evaluate your operations and for your commitment to air pollution control. If you need further information or have any questions, please contact Ms. Ruth Alvirez at (512) 239-5220 or write to the Texas Commission on Environmental Quality, Office of Permitting and Registration, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,

LaDonna Castañuela

LaDonna Castañuela
For the Commission
Office of the Chief Clerk
Texas Commission on Environmental Quality

LDC/RA/sj

Enclosure

cc: Air Section Manager, Region 4 - Fort Worth

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AIR QUALITY PERMIT

A PERMIT IS HEREBY ISSUED TO
TXI Operations, LP
AUTHORIZING THE CONTINUED OPERATION OF
Cement Manufacturing Plant
LOCATED AT **Midlothian, Ellis County, Texas**
LATITUDE 32° 27′ 47″ LONGITUDE 097° 01′ 28″

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code § 116.116 (30 TAC § 116.116)]

2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least10 percent of the estimated total cost of the project up to a maximum of $5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120(a), (b) and (c)]

3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]

4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify to the Office of Permitting and Registration the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]

5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]

6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]

7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]

9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with §§ 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC § 116.115(b)(2)(G)]

10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]

11. This permit may be appealed pursuant to 30 TAC § 50.139.

12. This permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]

13. There may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]

14. **Emissions** from this facility must not cause or contribute to a condition of "air pollution" as defined in TCAA § 382.003(3) or violate TCAA § 382.085, as codified in the Texas Health and Safety Code. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.

PERMITS 1360A and PSD-TX-632M1

Date: _____

_____
For the Commission

SPECIAL CONDITIONS

Permit Numbers 1360A and PSD-TX-632M1

GENERAL REQUIREMENTS AND FEDERAL APPLICABILITY

1. General Requirements **(3/09)**

A. This facility shall be constructed and operated in accordance with and subject to the Texas Clean Air Act (TCAA) as amended, the Texas Health and Safety Code, Chapter 382, (Vernon 1992) and all applicable rules, regulations, and orders of the Texas Commission on Environmental Quality (TCEQ) in effect at the time of issuance. Said construction and operation is subject to any additional or amended rules, regulations, and orders of the TCEQ adopted pursuant to the TCAA. **(3/01)**

B. A copy of this permit, the August 7, 1995, renewal application, the March 10, 1998 amendment application, and all subsequent submittals pursuant to each application's technical review shall be kept at the plant site and made available at the request of personnel from the TCEQ or any air pollution control agency with jurisdiction.

C. This permit covers only those sources of emissions listed in the enclosed table entitled "Emission Sources - Maximum Allowable Emission Rates;" as those sources are limited to the emission limits and other conditions specified in that attached table. If one emission rate limitation is more stringent than another emission rate limitation, then the more stringent limitation shall govern and be the standard by which compliance will be demonstrated. The annual rates are based on a rolling 12-month period.

D. Acceptance of a permit by a permit applicant constitutes an acknowledgment and agreement that the holder will comply with all rules, regulations, and orders of the Commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, then the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of Commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. **(3/01)**

E. The facilities covered by the permit shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. This facility shall not produce a nuisance that may cause or contribute to a condition of "air pollution" as defined in Title 30 Texas Administrative Code § 101.4 (30 TAC § 101.4).

If the TCEQ Executive Director determines that such a condition or violation does occur, the holder of this permit shall implement additional abatement measures as necessary to control or prevent the condition or violation. This facility shall provide notification of a major upset and maintenance to the TCEQ Regional Office as required in 30 TAC §§ 101.201 and 101.211. **(9/05)**

F. Upon request by the Executive Director of the TCEQ or local agency, the holder of this permit shall perform ambient air monitoring or other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere.

G. Records required by this permit shall be recorded in a form suitable for inspection and made available upon request by the TCEQ and any local air pollution control programs. Scheduled and unscheduled maintenance performed shall comply with 30 TAC §§ 101.201 and 101.211, and these records shall be made available for inspection by the TCEQ and any local air pollution program having jurisdiction. Records shall be maintained on-site, at minimum, for a rolling two-year period. **(9/05)**

H. The facilities covered by this permit shall be constructed and operated as specified in this permit application and the Part B application required under Title 40 Code of Federal Regulations § 270.10 (40 CFR § 270.10). **(3/01)**

I. To the extent practicable, the permittee shall physically identify and mark in a conspicuous location all equipment that has the potential of emitting air contaminants as follows:

(1) The facility identification numbers as submitted to the Emissions Inventory Section of the TCEQ.

(2) The emission point numbers (EPNs) as listed on the maximum allowable emission rates table (MAERT).

J. At the request of the Executive Director of the TCEQ or designated representative, the holder of this permit shall provide an analysis of any fuel listed in Special Condition Nos. 8 and 9 or any available batch of waste-derived fuel or clinker quench wastewater received from a generator or supplier. The holder of this permit shall allow the Executive Director of the TCEQ or designated representative to obtain samples of these materials for analysis upon request. **(3/01)**

2. Federal Applicability

A. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations in 40 CFR Part 60, Subpart A on Standards of Performance for New Stationary Sources and the following:

(1) Subpart F - Portland Cement Plants; includes Kiln No. 5 (E2-22), Finish Mill No. 6, raw material and clinker storage, roller mills, and clinker cooler.

(2) Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels; includes storage tanks in the hazardous waste storage and unloading area.

(3) Subpart Y - Coal Preparation Plants; includes the coal processing and conveying equipment (including breaker and/or crusher), coal storage systems, and coal transfer and loading systems

(4) Subpart OOO - Nonmetallic Mineral Processing Plants; includes the overland conveyor system and handling of all raw materials from the quarry operations to entry of the kiln system.

B. (1) Facilities involved with the treatment, storage, or disposal of hazardous waste, including Kilns No. 1 through 4 and the hazardous waste storage and unloading area, shall comply with all applicable requirements of the EPA regulations in 40 CFR Part 61, Subparts A, J, and FF on National Emission Standards for Hazardous Air Pollutants (NESHAPS) promulgated pursuant to authority granted under the Federal Clean Air Act, Section 112 as amended and contained.

These facility units shall also be operated in compliance with all applicable requirements relating to air quality in the Resource Conservation and Recovery Act (RCRA) and the rules promulgated there under, and in 30 TAC Chapter 335, Subchapter F (relating to Permitting Standards for Owners and Operators of Hazardous Waste Storage, Processing, and Disposal Facilities) promulgated by the TCEQ pursuant to the Solid Waste Disposal Act, Chapter 361 of the Texas Health and Safety Code (Vernon 1992).

(2) These facilities, including Kiln Nos. 1 through 5, shall be operated in compliance with all applicable requirements of the EPA regulations in 40 CFR Part 63, Subparts A and LLL, the NESHAPS for the Portland Cement Manufacturing Industry. **(9/05)**

(3) These facilities, including Kiln Nos. 1 through 4, shall be operated in compliance with all applicable requirements of the EPA regulations in 40 CFR Part 63, Subparts A and EEE, the NESHAPS for the Portland Cement Manufacturing Industry. **(3/09)**

C. Prior to the initial start-up of Kiln No. 5 (E2-22), the permittee will: **(1/01) (3/09)**

(1) Retrofit the baghouses of the existing Clinker Coolers No. 1 and 4 (EPNs E2-101 and E2-107) with high efficiency singed nomex membrane lined bags, or equivalent, such that they will achieve an outlet grain loading of particulate matter (PM) of no more than 0.005 grain per dry standard cubic feet (gr/dscf). The baghouses of the existing Clinker Coolers Nos. 2 and/or 3 shall be retrofitted as described in this condition, if operated as specified in Special Condition No. 2D. **(1/01)**

(2) Retrofit the baghouses that control PM from the sources which formerly emitted from EPNs E3-21, E4-5, E4-6, E4-7, E4-8, E4-9, E4-10, E4-11, E4-12, E4-13, E4-16, E4-17, E4-18, E4-19, E4-20, E4-21, E4-22, E4-25 with PTFE membrane lined high efficiency bags, or equivalent, such that each will achieve an outlet grain loading of PM of no more than 0.005 gr/dscf.

D. Wet kiln operation is limited as follows: **(12/07)**

(1) Only two of the four wet kilns may operate while Kiln No. 5 operates. For purposes of this condition, a kiln is in operation if fuel is being fired in the kiln.

(2) The clinker cooler baghouse associated with any wet kiln that operates while Kiln No. 5 operates must have been upgraded with high efficiency bags as described in Special Condition No. 2.C.(1). The TCEQ Dallas/Fort Worth Regional Office shall be contacted at least five days prior to first operating a wet kiln following startup of Kiln No. 5 to provide an opportunity to confirm that the applicable clinker cooler baghouse has been upgraded with high efficiency bags. **(3/09)**

(3) At least three of the four clinker cooler baghouses shall be operated with high efficiency bags at any time that all four wet kilns are in operation. **(12/07)**

E. The facilities proposed for construction in the March 10, 1998, permit application have been reviewed for maximum achievable control technology (MACT) in accordance with 30 TAC Chapter 116, Subchapter E. The conditions of this permit and MACT requirements support the determination of compliance with the MACT requirements.

If the EPA subsequently promulgates a MACT standard applicable to these facilities which is less stringent than the determination made during the review of this permit, the requirements of this permit shall apply.

F. The following EPNs have relied upon reduced emissions as a result of retrofitting fabric filter baghouses with (PTFE) membrane lined high efficiency bags: EPNs E1-31, E2-7, E2-7B, E3-1, E3-2, E3-6, E3-11, E3-26, E3-33, E4-1, E4-2, E4-3, and E6-30. **(1/01)**

G. Kiln Nos. 1 through 4 (EPNs E2-2, E2-4, E2-6 E2-8) and Kiln No. 5 (E-2-22) shall comply with all applicable requirements of 30 TAC 117, Subchapter E, Division 2 (Cement Kilns). **(9/05) (3/09)**

FUGITIVE DUST SOURCES

3. Paved and Unpaved Roads

A. The roadways of this facility shall comply with 30 TAC § 111.147.

B. A street sweeper and other mobile equipment shall pick up debris from the plant roads and dump inside an enclosed structure. A front-end loader shall pick up the dust and debris from this structure and load it onto trucks for disposal. The contents of the truck shall be controlled as necessary to prevent emissions during transit.

C. Plant roads shall be controlled as represented in Tables 4.2 and 4.3 of the March 10,1998, permit application. Current copies of these tables shall be kept with this permit. All roads shall be paved and either water sprinkled or swept, and quarry roads shall be sprinkled with water and treated with dust suppressant chemicals to control the emission of dust.

4. Solid Fuel Handling

A. Solid fuel (including coal and petroleum coke) stockpiles shall be sprayed with water and/or chemicals as necessary to control fugitive dust emissions to minimize fugitive dust emissions.

B. Compliance with MAERT emission limits from solid fuel crushing (EPNs 6 through 10) is based on a maximum of 150 tons per hour and 490,000 tons per year of coal crushed. **(12/07)**

C. Water spray systems, reduced fall, full enclosures, and/or other abatement devices, as represented in Tables No. 4.1 and No. 4.4 and Appendix E of the March 10, 1998, permit application shall be operated, as necessary, to minimize fugitive dust emissions at the coal crusher, rail dump hopper, coal bin, weigh feeder, surge bin, coal mill, and all subsequent material transfer and drop points. Current copies of these tables shall be kept with the permit.

5. Raw Material Handling

A. Compliance with MAERT emission limits is based on a maximum of 1,600 tons per hour and 6,000,000 tons per year of limestone and shale crushed. **(12/07)**

B. Opacity of emissions from any transfer point on belt conveyors must not exceed 5 percent averaged over a six-minute period except for those periods described in 30 TAC § 111.111(a)(1)(E).

C. Opacity of emissions from the Primary and Secondary Crushers (EPNs E1-24 and E1-27) must not exceed 5 percent averaged over a six-minute period except for those periods described in 30 TAC § 101.201 and 101.211.

D. Sprays of foamable wetting agents shall be installed at the grizzly feeder that precedes the crusher inlet at the outlet of the crusher, and at all conveyor drop points except the final conveyor drop point which empties into the raw material storage and blending building. These sprays of wetting agents at the grizzly feeder and at the crusher outlet shall be operated at all times while the crusher is operating. The sprays of wetting agent installed at material transfer points shall be operated as necessary to achieve maximum control of dust emissions. **(9/99)**

E. Fixed conveyors shall be covered and transfer/drop points shall be enclosed.

F. Water spray systems, reduced fall, full enclosures, and/or other abatement devices, as represented in Tables No. 4.1 and No. 4.4 and Appendix E of the March 10, 1998 permit application shall be operated, as necessary, to minimize fugitive dust emissions associated with handling limestone, shale, sand, and iron component raw materials. Current copies of these tables shall be kept with the permit.

G. Outside storage piles of raw materials, including limestone, shale, sand, and iron components, shall be watered and/or treated with dust suppressant chemicals to achieve maximum control of dust emissions. **(9/99)**

6. Clinker and Finished Product Handling **(1/01)**

   A. The cement distribution system to the main truck and rail car loading process shall not exceed 300 tons per hour per load spout. **(1/01)**

   B. Opacity of emissions from clinker handling facilities, finish mills, storage silos and loadouts must not exceed 5 percent averaged over a six-minute period except for those periods described in 30 TAC § 101.201 and 101.211.

   C. The top of all conveyor belts shall be covered. All conveyor belt transfer points shall be enclosed. To the extent necessary to achieve compliance with opacity limits, these transfer points will either be vented to a dust collector or equipped with a water spray. The dust collectors or water sprays shall be operated as necessary to achieve compliance with the opacity limits.

   D. Outgoing railroad cars and trucks used in transporting cement and clinkers shall be cleaned and maintained as necessary to minimize fugitive emissions. Dust emissions from cement loading into trucks or railcars shall be controlled with a self-sealing shroud at the loading point and venting of the displaced air to the fabric filter.

7. Miscellaneous Fugitive Requirements

   A. Material collected by air pollution abatement equipment which is not returned to the process shall be disposed of on-site in a manner that minimizes any emissions in transit and prevents any emissions after disposal. A water sprinkler system or water truck shall be used to control dust emissions from any baghouse dust disposed of in on-site landfills.

   B. All hoods, ducts, and collection systems shall be effective in preventing fugitive emissions. Compliance with this condition shall be determined by the EPA-Reference Method 22 with no visible emissions persisting for more than one six-minute period in a half-hour.

   C. As determined by a trained observer, no visible emissions shall leave the plant site. If this condition is violated, further controls shall be installed and/or implemented as required to limit visible emissions.

   D. The active portion of the CKD landfill (CKDL-2) shall not exceed a size of 1.0 acre (4,050 m^2) and be covered as necessary to minimize fugitive emissions. **(9/99)**

CEMENT KILN EMISSION STANDARDS AND FUEL SPECIFICATIONS

8. Kiln Nos. 1 through No. 4 (EPNs E2-2, E2-4, E2-6, and E2-8)

A. The maximum sulfur content of fuels fired in the Kilns (EPNs E2-2, E2-4, E2-6, and E2-8) shall not exceed the following:

(1) Pipeline-quality natural gas - 0.25 grain hydrogen sulfide and 5.0 grains total sulfur per 100 dscf.

(2) Fuel oil - 1.5 percent by weight.

(3) Coal or coke - 3.5 percent by weight.

(4) Waste-derived fuel - 1.0 percent by weight.

B. Emissions from the cement kiln exhaust stacks shall not exceed 30 percent opacity (except at times when the only fuel burned in a kiln is fuel oil in which case the opacity limit is 20 percent opacity averaged over a six-minute period) as determined by the EPA Reference Method 9 or by the continuous opacity monitoring systems (COMS) required pursuant to Special Condition No. 13A. Also, while firing pumpable hazardous waste, emissions from any stack shall not exceed 20 percent opacity on a six-minute average, except for uncombined water, other than for those periods described in 30 TAC § 111.111.

C. Wet kiln clinker production shall not exceed 375,000 tons per year from each kiln. Clinker production is also limited by Special Condition No. 2.D. **(12/07)**

D. The average oxygen (O_2) content measured at the kiln exit of Kilns No. 1 through 4 shall be maintained at/or above 0.75 percent by volume on a five-minute average. Monitoring of the kiln exit average O_2 content will be in accordance with Special Condition No. 13A.

E. Pursuant to 30 TAC § 111.124(2), hydrogen chloride (HCl) emissions from each kiln stack greater than 4.0 lbs/hr shall be controlled with a minimum removal efficiency of 95.0 percent. At no time shall the emissions exceed the MAERT limits for HCl.

9. Kiln No. 5 (EPN E2-22)

A. Fuels fired in the main burner and precalciner of Kiln No. 5 (EPN E2-22) shall be limited as follows:

(1) Pipeline-quality, sweet natural gas containing no more than 5.0 grains of sulfur per 100 dscf.

(2) Coal containing no more than 3.5 percent sulfur by weight. **(1/02)**

No hazardous waste, as defined by the RCRA and the rules implementing that Act, may be fired in the dry process kiln or precalciner.

B. Opacity of emissions from the Kiln No. 5 (EPN E2-22) must not exceed 10 percent as determined by the EPA Reference Method 9 or by COMS, averaged over a six-minute period, except for those periods described in 30 TAC § 111.111 or as otherwise allowed by law.

C. The clinker production rate of Kiln No. 5 (E2-22) shall not exceed 2,800,000 tons of clinker per year. **(9/05)**

INITIAL DETERMINATION OF COMPLIANCE

10. Kiln Nos. 1 Through No. 4 (EPNs E2-2, E2-4, E2-6, E2-8) - Compliance Testing Required by this Permit Was Conducted for Kiln Nos. 1 Through No. 4 in May 1988, July 1990, and April 1991.

11. Kiln No. 5 (E2-22)

A. Sampling ports and platform(s) shall be incorporated into the design of the kiln stack according to the specifications set forth in "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director. **(3/09)**

B. The holder of this permit shall, within 180 days of start-up of Kiln No. 5, perform stack sampling and other testing, as required, to establish the actual pattern and quantities of oxides of nitrogen (NO_x), carbon monoxide (CO), sulfur dioxide (SO_2), sulfuric acid mist (H_2SO_4), total hydrocarbons, front and back-half PM and PM equal to or less than 10 microns in diameter within 10 percent of the maximum proposed production rate with the raw mill operating.

Additionally, sampling within 10 percent of the maximum production rate shall be performed for SO_2, and H_2SO_4 with the raw mill down. Sampling must be conducted in accordance with appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the EPA Reference Methods. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at its expense. **(1/02)**

(1) The TCEQ Dallas/Fort Worth Regional Office shall be contacted as soon as testing is scheduled, but not less than 45 days prior to sampling to schedule a pretest meeting. The notice shall include: **(3/09)**

(a) Date for pretest meeting.
(b) Date sampling will occur.
(c) Name of firm conducting sampling.
(d) Type of sampling equipment to be used.
(e) Method or procedure to be used in sampling.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper forms for recording pertinent data, and to review the format and procedures for submitting the test reports.

A written proposed description of any deviation from sampling procedures specified in permit conditions or the TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Dallas/Fort Worth Regional Office Director shall approve or disapprove of any deviation from specified sampling procedures. **(3/09)**

Test waivers and alternate/equivalent procedure proposals for New Source Performance Standards (NSPS) testing which must have the EPA approval shall be submitted to the TCEQ Austin Air Permits Division. **(3/09)**

(2) The deadlines for the sampling specified above may be extended. Requests for additional time to perform sampling shall be submitted to the TCEQ Dallas/Fort Worth Regional Office. Additional time to comply with the applicable requirements of 40 CFR Part 60 requires the EPA approval, and requests shall be submitted to the TCEQ Austin Air Permits Division. **(3/09)**

(3) Primary operating parameters that enable determination of production rate shall be monitored and recorded during the stack test. These parameters are to be recorded, at a minimum, once every 15 minutes and shall be reported on an hourly average basis. In addition, operating parameters for the abatement equipment shall be recorded during each testing scenario. Parameters include the outlet temperature of the regenerative thermal oxidizer and corresponding stack exit temperature; the pH and density of the scrubber liquid; the recirculation, concentration, and absorbent flow rates to the scrubber; and pressure differential across the main and alkali bypass baghouses and their respective cleaning cycles.

(4) Copies of each sampling report shall be forwarded to the TCEQ within 90 days after sampling is completed unless an extension is granted by the TCEQ Regional Office. Sampling reports shall comply with the enclosed provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TCEQ Dallas/Fort Worth Regional Office
One copy to the EPA Region 6 Office, Dallas, Texas **(3/09)**

12. Any Authorized Unit Covered by this Permit and Listed on the MAERT. **(9/05)**

A. If sampling of stacks or process vents is required, the permit holder shall contact the TCEQ Air Permits Division prior to sampling to obtain the proper data forms and procedures. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. All sampling and testing procedures must be approved by the Executive Director of the TCEQ and coordinated with the regional representatives of the Commission.

The TCEQ Dallas/Fort Worth Regional Office shall be notified at least 45 days prior to the initial start-up of new or modified facility units authorized by this permit and prior to any required monitoring or sampling in such a manner that a representative of the TCEQ may be present at the time of the initial start-up, monitoring, or sampling. **(3/09)**

B. Upon request by the Executive Director of the TCEQ, the permittee shall conduct sufficient sampling or other tests to prove satisfactory equipment performance. All calibration, sampling, and testing procedures shall be approved by the Executive Director of the TCEQ and coordinated with the TCEQ Dallas/Fort Worth Regional Office representatives. **(3/09)**

C. It shall be the responsibility of the permit holder to demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of this permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the TCEQ Executive Director prior to their use in fulfilling any requirements of the permit.

CONTINUOUS DETERMINATION OF COMPLIANCE

13. Kiln Nos. 1 through 4 (EPNs E2-2, E2-4, E2-6, E2-8):

A. The holder of this permit shall operate, calibrate, and maintain continuous emission monitoring systems (CEMS) to measure and record the concentrations of NO_x, SO_2, O_2, and opacity in the kiln stacks and kiln O_2 at the kiln exits of each cement kiln. The holder of this permit shall operate, calibrate, and maintain continuous flow rate sensors to measure and record the exhaust flow rate in each kiln stack. **(3/01)**

(1) Each CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis, and reporting requirements specified in the applicable Performance Specifications in 40 CFR Part 60, Appendix B (or equivalent procedures specified by the TCEQ Air Permits Division for kiln exit O_2 CEMS). Each flow rate sensor shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 6. (The SO_2 and opacity CEMS performance test results were approved by the TCEQ in August, 1986).

Performance tests for the NO_x and O_2 CEMS, flow rate sensors, and if required by the TCEQ, kiln exit O_2 CEMS shall be conducted during the sampling completed in Special Condition No. 10. Written copies of the results shall be submitted within 60 days of completion of the tests to the TCEQ Dallas/Fort Worth Regional Office. **(3/09)**

(2) Each CEMS shall be zeroed and spanned daily and corrective action taken when the 24-hour span drift exceeds two times the amount specified in 40 CFR Part 60, Appendix B for opacity, SO_2, O_2, and NO_x stack analyzers, or the amount specified by the TCEQ Austin Air Permits Division for kiln exit O_2 analyzers.

Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days, unless the monitor is required by a subpart of NSPS or NESHAPS, in which case zero and span shall be done daily without exception. **(3/09)**

(3) Each SO_2 and NO_x CEMS shall complete a minimum of one cycle of sampling, analyzing, and data recording for each successive 15-minute period. One-hour averages shall be computed from normally at least four, and a minimum of two, data points equally spaced over each one-hour period.

Data recorded during periods of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the computed data averages. A minimum of 23 hourly averages shall be generated per day. Three-hour rolling SO_2 averages shall be computed for each kiln. The three-hour rolling average shall consider each clock hour and the two preceding clock hours.

A 30-day rolling NO_x average shall be computed for each kiln. A 30-day rolling average is generated for each day as the average of all the day's hourly NO_x emission data and the preceding 29 days of hourly emission data (representing only hours of kiln operation). The gaseous monitoring data shall be reduced to units of the permit allowable emission rate in pounds per hour (lbs/hr), calculated as a three-hour rolling average for SO_2, and a 30-day rolling average for NO_x at least once every week.

(4) The opacity monitor shall complete a minimum of one cycle of data recording for each successive ten-second period and one cycle of data recording for each successive six-minute period.

(5) The kiln exit and stack O_2 monitor shall complete a minimum of one cycle of data recording for each successive 10-second period and one cycle of date recording for each successive 5-minute period. The kiln exit O_2 monitoring data shall be reduced to five-minute average concentrations using normally at least 20 equally-spaced data points from each five-minute period. **(3/01)**

(6) Each SO_2 and opacity CEMS shall be operated in accordance with the quality-assurance/quality control (QA/QC) plan approved by the TCEQ Regional Director. Each NO_x CEMS shall be quality-assured at least quarterly using cylinder gas audits (CGA). The CGA method to be used is contained in 40 CFR Part 60, Appendix F, Procedure 1, Section 5.1.2.

The kiln exit O_2 CEMS shall be operated in accordance with a QA/QC plan approved by the TCEQ Regional Director. The QA/QC plan for O_2 CEMS shall be submitted within 60 days of completion of the tests completed in Special Condition No. 10 to the TCEQ Dallas/Fort Worth Regional Office. **(3/09)**

(7) All CGA exceedances of greater than ±15 percent accuracy and any CEMS downtime shall be reported to the TCEQ Dallas/Fort Worth Regional Director, and necessary corrective action shall be taken. The TCEQ Regional Director shall be notified as soon as possible after discovery of any CEMS malfunction which is expected to result in more than 24 hours of lost data.

Supplemental stack concentration measurements may be required at the discretion of the TCEQ Regional Director. **(3/09)**

(8) For NSPS sources subject to Appendix F, the TCEQ Dallas/Fort Worth Regional Office shall be notified at least 30 days prior to each annual relative accuracy testing audit (RATA) in order to provide the TCEQ staff the opportunity to observe the testing. **(3/09)**

After the required demonstrations of initial compliance for these facilities, the CEMS and plans required in this condition shall be used to determine continuous compliance with the conditions of this permit and the rules and regulations of the TCEQ. Compliance with the emission limitations may also be determined by any TCEQ compliance sampling method.

(9) The CEMS for each kiln will not be inoperable in excess of 100 hours out of any calendar month.

14. Kiln No. 5 (E2-22)

A. The holder of this permit shall install, calibrate, operate, and maintain a COMS for opacity and a CEMS to monitor the in-stack concentrations of SO_2, NO_x, total hydrocarbons (THC), and CO from the Kiln No. 5 Stack (EPN E2-22). The holder of this permit shall install, calibrate, and maintain a continuous flow rate sensor to measure and record the exhaust flow rate in the dry kiln stack. **(9/05)**

(1) The CEMS, COMS, and flow rate sensor shall meet the design and performance specifications, pass the field tests, and meet the installation requirements, the data analysis, and reporting requirements specified in the applicable Performance Specifications (No. 2, No. 4 and No. 8A for the CEMS, No. 1 for the COMS, and No. 6 for the flow rate sensor) of 40 CFR Part 60, Appendix B. **(9/05)**

(2) The CEMS, COMS, and flow rate sensor shall be zeroed and spanned daily and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B.

Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days, unless the monitor is required by a subpart of NSPS or NESHAPS, in which case zero and span shall be done daily without exception.

Each CEMS, COMS, and flow rate sensor shall be quality-assured at least quarterly in accordance with 40 CFR Part 60, Appendix F. At a minimum, Data Assessment Reports and any downtime shall be reported to the appropriate TCEQ Regional Director on a quarterly basis. Necessary corrective action shall be taken if the downtime exceeds 5 percent of the kiln operating hours in a quarter. Failure to complete any corrective action as directed by the TCEQ Dallas/Fort Worth Regional Office may be deemed a violation of the permit. For non-NSPS sources, an equivalent method approved by the TCEQ may be used. **(3/09)**

(3) Each CEMS and flow rate sensor shall complete a minimum of one cycle of sampling, analyzing, and data recording for each successive 15-minute period. One-hour averages shall be computed from normally at least four, and a minimum of two, data points equally-spaced over each one-hour period.

Data recorded during periods of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the computed data averages.

The CEMS data shall also be reduced to units of the permit allowable emission rate in lbs/hr.

The COMS shall complete a minimum of one cycle of data recording for each successive ten-second period. Six-minute averages shall be computed from normally at least 36 and a minimum of 18 data points equally spaced over each six-minute period. Data recorded during periods of COMS breakdowns, repairs, calibration checks, and zero, and span adjustments shall not be included in the computed data averages.

(4) The TCEQ Regional Director shall be notified as soon as possible after the discovery of any COMS or CEMS malfunction, which is expected to result in more than 24-hours of lost data. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director in case of extended COMS or CEMS downtime.

(5) The TCEQ Dallas/Fort Worth Regional Office shall be notified at least seven days prior to the quarterly CGA required by Appendix F in order to provide the TCEQ staff the opportunity to observe the testing. **(3/09)**

(6) The SO_2, NO_x, THC, and CO CEMS and the continuous flow rate sensor shall be used as a continuous emission rate monitoring system for SO_2, NO_x, THC, and CO to demonstrate continuous compliance with this permit. **(9/05)**

(7) The THC CEMS shall be installed and the requirements specified in paragraph (1) of this condition shall be completed within six months after issuance of the permit amendment to reduce operation of the regenerative thermal oxidizer. **(9/05)**

B. For purposes of demonstrating compliance with the Special Condition No. 1C the holder of this permit shall monitor the wet scrubber as follows:

(1) Uptime (in hours) as a percentage of kiln operating hours.

(2) Scrubbing liquid pH, density, and flow rate recorded at least once per hour.

C. Within 90 days of start-up of Kiln No. 5 (E2-22), the permittee will submit revised tables for all new and affected facilities which accurately represent the as-built specifications of the equipment proposed.

D. (1) The holder of this permit must control THC emissions in the Kiln 5 gas stream to the levels identified in the MAERT by operating the existing regenerative thermal oxidizer when Kiln 5 is in operation. THC compliance will be based on a 30-day rolling average. **(9/05)**

(2) The holder of this permit shall install, calibrate, operate, and maintain a continuous emissions monitoring system (CEMS) to measure and record the concentration of THC in the Kiln 5 exhaust stack. The CEMS shall adhere to the conditions for CEMs listed for Kiln 5 under Special Condition 14 of this permit. **(9/05)**

(3) The THC CEMS requirements of this permit are applicable at all times Kiln 5 is in operation. **(9/05)**

REPORTING

15. Kiln Nos. 1-No. 4 (EPNs E2-2, E2-4, E2-6, and E2-8)

A. The holder of this permit shall submit to the TCEQ Dallas/Fort Worth Regional Office quarterly CEMS reports. Such reports are required for each kiln which is required to be monitored pursuant to Special Condition No. 13. All such reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the following information for each monitor: **(3/09)**

(1) The magnitude of excess emissions and the date and time of commencement and completion of each time period of excess emissions.

(2) For each period of excess emissions, the nature and cause of any malfunction (if known), the corrective action taken, or preventive measures adopted.

(3) The date and time identifying each period during which the CEMS was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments which occurred during the downtime.

(4) When no excess emissions have occurred or the CEMS has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(5) The reporting of excess emissions required by this condition does not relieve the holder of this permit from the notification requirements for emission events or scheduled maintenance as required by 30 TAC §§ 101.201 and 101.211. **(9/05)**

(6) All NO_x CEMS data from the first quarter of monitoring following the NO_x CEMS performance test shall be submitted to the TCEQ Dallas/Fort Worth Regional Office with the first quarterly report following the test. **(3/09)**

B. For the purposes of reporting pursuant to Special Condition No. 15A, non-complying emissions are defined as follows:

(1) Non-complying emissions of SO_2 are each rolling three-hour average period of operation during which the average hourly emissions of SO_2, as measured and recorded by the CEMS, exceed the emission limitations of the MAERT.

(2) Non-complying emissions of NO_x are each rolling 30-day average period of operation during which the average hourly emissions of NO_x, as measured and recorded by the CEMS, exceed the emission limitations of the MAERT.

(3) Non-complying emissions of opacity are each six-minute period of operation during which the average opacity, as measured and recorded by the CEMS, exceeds the emission limitation of Special Condition No. 8B.

(4) Non-complying kiln stack emissions of organic compounds, HCl, hydrogen fluoride, or metals are each period during which the laboratory, and/or stack sampling concentrations and feed rate calculations predict an exceedance of the emission limitations of Special Condition No. 1C.

16. Kiln No. 5 (E2-22)

A. In addition to applicable NSPS reporting requirements, the holder of this permit shall submit one copy of quarterly CEMS and COMS reports to the TCEQ Dallas/Fort Worth Regional Office in a format deemed acceptable by the TCEQ Regional Office. All reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the following information for each monitor: **(3/09)**

(1) The date and duration of time from the commencement to the completion of an event which resulted in excess emissions of any pollutant.

(2) The date and time of the commencement and completion of each specific time period of excess emissions within that event.

(3) The total time duration of excess emissions.

(4) The magnitude of the emissions, including the highest emission rate, and the average emission rate. All excess emissions shall be converted into the units of the permit. All conversion factors and equations shall be included.

(5) The nature and cause of any malfunction resulting in excess emissions and the corrective action taken and/or preventative measures adopted.

(6) The date and time identifying each period during which a CEMS or COMS was inoperative, except for zero span checks, and the nature of the system repairs and/or adjustments which occurred during the downtime.

(7) When no excess emissions have occurred or the CEMS or COMS have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(8) The total tons of SO_2, NO_x, THC, and CO emitted during the quarter and the total hours of kiln operation during the quarter shall be reported; and the total hours of raw mill operation during the quarter shall be maintained on-site and in a form suitable for inspection. **(9/05)**

(9) In addition to the other information required in this special condition, a summary of the excess emissions shall be reported as required by Subpart A of 40 CFR Part 60.

(10) The reporting of excess emissions required by this condition does not relieve the holder of this permit from notification requirements of emission events as required by 30 TAC § 101.201 or notification of scheduled maintenance as required by 30 TAC § 101.211. **(9/05)**

(11) Quarterly CGA reports and RATA pursuant to Appendix F of 40 CFR Part 60.

B. For the purposes of reporting pursuant to Special Condition No. 16A, excess emissions are defined as follows: **(3/01)**

(1) Excess emissions of SO_2 are each rolling averaging period of operation specified in the MAERT during which the hourly average emissions of SO_2 as measured and recorded by the CEMS, exceed the emission limitations of the MAERT.

(2) Excess emissions of NO_x are each period of operation during which the 30-day rolling average of emission of NO_x as measured and recorded by the CEMS, exceed the emission limitations of the MAERT. **(3/01)**

(3) Excess emissions of CO are each one-hour average period of operation during which the hourly average emissions of CO, as measured and recorded by the CEMS, exceed the emission limitations of the MAERT.

(4) Excess periods of opacity are each six-minute period of operation during which the average opacity, as measured and recorded by the COMS, exceed the emission limitations of Special Condition No. 9B.

(5) Excess emissions of THC are each daily period of operation during which the 30-day rolling average emission of THC as measured and recorded by the CEMS, exceed the emission limitations of the MAERT. **(9/05)**

RECORDKEEPING

17. A copy of the permit along with information and data sufficient to demonstrate compliance with the permit shall be maintained in a file at the plant site and made available at the request of personnel from the TCEQ or any air pollution control program having jurisdiction. For facilities that normally operate unattended, this information shall be maintained at the nearest staffed location within Texas specified by the permit holder in the Part B permit application. this information shall include, but is not limited to, production records and operating hours. Additional recordkeeping requirements may be specified in special conditions of this permit. Information in the file shall be retained for at least two years on a rolling retention basis following the date that the information or data is obtained. **(3/01)**

18. Kilns No. 1 through 4 (EPNs E2-2, E2-4, E2-6, and E2-8)

    A. The CEMS Records Pursuant to Special Condition No. 13A

        (1) Average hourly NO_x, SO_2, and O_2 concentrations, and six-minute average opacities which are monitored pursuant to Special Condition No. 13A; and

        (2) The holder of this permit shall maintain a raw data file of all measurements (including continuous monitoring systems, monitoring device, and performance testing measurements), all continuous monitoring device calibration checks and adjustments, and maintenance performed on these systems or devices. The file shall be kept in a permanent form suitable for inspection.

        (3) The records required in this condition shall be maintained at the plant site on a rolling two-year retention basis following the date of such measurements, maintenance, reports, or records and shall be made available to the TCEQ or any local air pollution agency having jurisdiction, upon request.

19. Kiln No. 5 (E2-22)

    The following records shall be kept and made available upon request to the TCEQ or any air pollution control program having jurisdiction. Records shall be maintained on-site on a rolling two-year retention basis.

    A. Daily clinker production rates reported in tons per hour and summed on an annual basis.

    B. Daily fuel consumption of coal and natural gas. Fuel consumption records shall be summed monthly.

    C. Fuel sulfur content for coal shall be obtained with each fuel contract and recorded as a percent weight. Sulfur content may be verified by a vendor statement, on-site analysis or third-party analysis. Fuel sulfur records for coal need only be updated if the supplier is changed.

    D. Fuel sulfur content for natural gas in grains per 100 dscf. A single vendor statement verifying compliance with the natural gas sulfur limits of this permit shall suffice in complying with this requirement. Fuel sulfur records for natural gas need only be updated if the supplier is changed.

    E. Daily amounts of raw material inputs to the kilns reported by type and in lbs/hr.

    F. Malfunctions of any air pollution abatement systems.

G. Documentation of air pollution control equipment maintenance and repair.

H. Continuous monitoring and recording of opacity shall be performed for EPN E2-22 as detailed in Special Condition No. 14A(3).

20. Raw Material Handling

A. Daily and annual throughput records for limestone, shale, anhydrite, iron components, and records of maintenance and malfunction of pollution abatement equipment shall be kept on-site for a rolling two-year period and made available at the request of TCEQ and local air pollution control programs.

B. The permittee shall maintain documentation which demonstrates that the overland conveyor system is achieving compliance with all conditions of the permit. This documentation shall consist of a statement explaining how each requirement in a condition is being met. It will also include a sample of each record sheet required to be maintained by any condition.

21. Clinker Handling System

A. Daily production records shall be recorded and made available for inspection by the TCEQ and any local air pollution control programs. Preventative maintenance, scheduled maintenance, and repair maintenance performed shall comply with the 30 TAC § 101.211, and these records shall be made available for inspection by the TCEQ and any local air pollution program having jurisdiction. Records shall include daily cement production and malfunctions in the process; daily raw material processing and handling; and malfunctions of any air pollution abatement device system(s). These records shall be summed monthly and shall be maintained on-site for a rolling two-year period. **(9/05)**

B. The permittee shall maintain documentation which demonstrates that the clinker handling system is achieving compliance with all conditions of this permit. This documentation shall consist of a statement explaining how each requirement in a condition is being met. It will include a sample of each record sheet required to be maintained by any condition.

WASTE-DERIVED FUEL AND CLINKER QUENCH WASTEWATER CONDITIONS

22. Kiln Nos. 1 through 4 (EPNs E2-2, E2-4, E2-6, and E2-8)

A. The waste-derived fuel shall contain no more than 1.5 percent by weight of the following compounds: creosote, creosols, cresylic acid, and coal tars.

B. The clinker quench wastewater, as received at the facility, shall not contain Chlorofluorocarbon.

C. The holder of this permit shall comply with these requirements for all equipment items which contact waste-derived fuel or clinker quench wastewater, except relief valves and sump pumps.

(1) These conditions shall not apply (1) where the volatile organic compound (VOC) have an aggregate partial pressure or vapor pressure of less than 0.05 psia at 20°C(2) to piping and valves two inches nominal size and smaller, or (3) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list to be made available upon request.

(2) Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute, American Petroleum Institute, American Society of Mechanical Engineers, or equivalent codes.

(3) New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical.

(4) To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Non-accessible valves shall be identified in a list to be made available upon request.

(5) New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. No later than the next scheduled quarterly monitoring after initial installation or replacement, all new or reworked connections shall be gas-tested or hydraulically-tested at no less than normal operating pressure and adjustments made, as necessary, to obtain leak-free performance. Flanges shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve.

(6) Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program. Seal-less/leak-less valves (including, but not limited to, bellows and diaphragm valves) and relief valves equipped with a rupture disc or venting to a control device are not required to be monitored.

For valves equipped with rupture discs, a pressure gauge shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity, but no later than the next process shutdown.

A directed maintenance program shall consist of the repair and maintenance of components assisted simultaneously by the use of an approved gas analyzer such that a minimum concentration of leaking VOC is obtained for each component being maintained.

(7) All new and replacement pumps and compressors shall be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. These seal systems need not be monitored and may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or seal-less pumps (including, but not limited to, diaphragm, canned, or magnetic driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.

All other pump and compressor seals emitting VOC shall be monitored with an approved gas analyzer at least quarterly.

(8) Damaged or leaking valves, flanges, compressor seals, and pump seals found to be emitting VOC in excess of 500 ppmv or found by visual inspection to be leaking (e.g., dripping liquids) shall be tagged and replaced or repaired. Every reasonable effort shall be made to repair a leaking component, as specified in this paragraph, within 15 days after the leak is found. If the repair of a component would require a unit shutdown, the repair may be delayed until the next scheduled shutdown.

All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. The TCEQ Executive Director, at her discretion, may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown.

(9) The results of the required fugitive monitoring and maintenance program shall be made available to the TCEQ Executive Director or her designated representative upon request. Records shall indicate appropriate dates, test methods, instrument readings, repair results, and corrective actions taken. Records of flange inspections are not required unless a leak is detected.

(10) Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable NSPS, or an applicable NESHAPS and does not constitute approval of alternative standards for these regulations.

(11) Audio, olfactory, and/or visual checks for any piping, valves, pumps, agitator seals or other components in hazardous waste service within the operating area shall be made at least weekly. **(3/01)**

a. Immediately, but no later than one hour upon detection of a leak, plant personnel shall take the following actions: **(3/01)**

(i) Isolate the leak.

(ii) Use a leak collection or containment system to prevent the leak until repair or replacement can be made if immediate is not possible. Date and time of each inspection shall be noted in the operator's log or equivalent. Records shall be maintained at the plant site of all repairs and replacements made due to leaks. These records shall be made available to representatives of the TCEQ or any other local program with jurisdiction upon request.

(iii) The facility must maintain a closed vapor vent back/vapor balance system on all tanks in Hazardous Waste Service. **(3/01)**

(iv) The holder of this permit shall clean up any spills of VOC or inorganic compounds as expeditiously as possible. All colleted liquids and spills shall be stored and disposed of in a vapor-tight container such that no detectable emissions to the atmosphere will result.

Records of all spills (date of spill, time of spill, and corrective action taken) shall be maintained on-site for a two year rolling retention basis following the date of recorded information and made available to the TCEQ or any other local program with jurisdiction. **(3/01)**

(v) Operation without visible liquid leaks or spills shall be maintained at the storage and unloading facility, regardless of vapor pressure. This does not apply to momentary dripping associated with the initial connection or disconnection of fittings.

Any liquid spills that occur during unloading shall be reported pursuant to 30 TAC §§ 101.201 and 101.211, and shall be cleaned up immediately, to minimize air emissions. **(9/05)**

(vi) The holder of this permit shall make and maintain records of the following on a two-year rolling retention basis:

a. Kiln Fuels:

(1) The received percent sulfur for the kiln fuels; and

(2) The percent sulfur of the fuels as burned.

b. Clinker Quench Wastewater: quantity of wastewater accepted. **(3/01)**

c. Waste-Derived Fuel: quantity of waste-derived fuel accepted. **(3/01)**

d. Monitoring and Maintenance Records Pursuant to Special Condition No. 22C:

(1) A list of all components affected by this condition.

(2) Checklists indicating that the daily inspections are being performed.

(3) Checklists indicating the hydrocarbon analyzer inspections are being performed.

(4) Summaries including date, time, equipment identification, and monitoring results for all leaking items.

(5) Summaries including date, time, equipment identification, and corrective actions for all isolations, replacements, and/or repairs performed, including monitoring results immediately after repairs.

(6) Records of the calibration of the portable monitoring instruments.

The records required in this condition shall be maintained at the plant site on a rolling two-year retention basis following the date of such measurements, maintenance, reports, or records and shall be made available to the TCEQ or any local air pollution agency having jurisdiction, upon request.

(7) After the required demonstrations of initial compliance for these facilities, the CEMS and QA/QC plans required in Special Condition No. 13A shall be used to determine continuous compliance with the conditions of this permit and the rules and regulations of the TCEQ. Compliance with the emission limitations may also be determined by any TCEQ compliance sampling method.

(8) Information and data concerning the date, type, and quantity of wastes managed, waste analyses, facility inspections, operating hours, sampling, and monitoring data shall be maintained in the operating record at the plant site in a form suitable for inspection and made available at the request of personnel from the TCEQ, or any local government having jurisdiction under the Texas Clean Air Act. **(3/01)**

23. The following operations are authorized through PBR and Standard Permits under Title 30 Texas Administrative Code (30 TAC) are here for reference purposes only:

Source	PBR	Registration
Portable Crusher	30 TAC § 106.142	41046
Grandfathered Piles and Drops	30 TAC § 106.261	49617
Material Handling Equipment	30 TAC § 106.261	50056
Gypsum Handling	30 TAC § 106.261	50701
Clinker Loadout	30 TAC § 106.261	51232
Airslide in Silo Group 3	30 TAC § 106.261	51234
Secondary Combustion of Tires	30 TAC § 116.617	53424
Raw Material Transfers	30 TAC § 106.261	81823
Raw Material Transfers	30 TAC § 106.261	83073
Reserve Clinker Pile	30 TAC § 106.261	83128

Dated

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 1360A and PSD-TX-632M1

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
E1-1 (4)	Raw Material Delivery, Road Emission	PM PM_{10}	- -	3.64 1.39
E1-2 (4)	Cement Truck, Road Emissions	PM PM_{10}	1.34 0.49	2.78 1.02
E1-7 (4)	Gypsum Pile, Wind Blown Fugitive	PM PM_{10}	0.08 0.04	0.07 0.03
E1-8 (4)	Anhydrite Pile, Wind Blown Fugitive	PM PM_{10}	0.08 0.04	0.05 0.02
E1-11 (4)	Sand Pile, Wind Blown Fugitive	PM PM_{10}	0.03 0.02	0.02 0.01
E1-12 (4)	Quarry Dozing Operations	PM PM_{10}	4.82 3.56	12.93 9.42
E1-13 (4)	Quarry Loader, Road Emissions	PM PM_{10}	0.87 0.40	4.18 1.88
E1-16	Limestone Belt Transfer Drop	PM PM_{10}	0.13 0.06	0.10 0.05
E1-20 (4)	Pile Material Loader, Road Emissions	PM PM_{10}	0.53 0.24	0.64 0.29
E1-21 (4)	Sand Delivery Truck, Road Emissions	PM PM_{10}	22.20 9.03	13.88 5.53
E1-22 (4)	CKD Truck,	PM	3.23	3.02

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
	Road Emissions	PM_{10}	0.98	0.78
E1-23 (4)	Raw Materials Drops to Storage Area	PM PM_{10}	0.13 0.06	0.10 0.05
E1-24 (4)	Primary Crusher	PM PM_{10}	0.01 <0.01	0.02 0.01
E1-25 (4)	Transfer Point No. 1	PM PM_{10}	0.08 0.04	0.14 0.07
E1-26 (4)	Transfer Point No. 2	PM PM_{10}	0.08 0.04	0.14 0.07
E1-27 (4)	Secondary Crusher	PM PM_{10}	0.39 0.15	0.72 0.27
E1-28 (4)	Overland Conveyor Diverter Drop	PM PM_{10}	0.08 0.04	0.14 0.07
E1-29 (4)	Limestone Storage Dome Drops	PM PM_{10}	0.08 0.04	0.14 0.07
E1-30 (4)	Underground Belt Feeder Drop	PM PM_{10}	0.26 0.26	1.13 1.13
E1-30A (4)	Raw Bins to Overland Conveyor	PM PM_{10}	0.08 0.04	0.05 0.03
E1-31 (10)	Raw Bins Baghouse	PM PM_{10}	0.79 0.79	3.47 3.47
E1-31A	Limestone Transfer Baghouse	PM PM_{10}	1.20 1.20	5.26 5.26
E1-31B	Raw Materials Circulation Baghouse	PM PM_{10}	0.75 0.75	3.30 3.30

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	Emission Rates * TPY**
E1-32 (4)	Sand, Drop to Hopper	PM PM_{10}	0.02 0.01	0.02 0.01
E1-32a (4)	Sand Belt Transfer	PM PM_{10}	0.01 <0.01	0.01 <0.01
E1-32b (4)	Iron/Sand Belt Weigh Feeder Drop	PM PM_{10}	0.01 <0.01	0.01 <0.01
E1-33 (4)	Overland Conveyor Transfer No. 3	PM PM_{10}	0.08 0.04	0.14 0.07
E1-34 (4)	Overland Conveyor Transfer Point No. 4	PM PM_{10}	0.08 0.04	0.14 0.07
E2-2	Kiln No. 1	PM (5) PM_{10} NO_x CO THC HCl	77.70 66.05 500.00 213.00 7.73 9.30	340.00 289.30 2190.00 933.00 33.86 38.60
E2-4	Kiln No. 2	PM (5) PM_{10} NO_x CO THC HCl	77.70 66.05 500.00 213.00 7.73 9.30	340.00 289.30 2190.00 933.00 33.86 38.60
E2-6	Kiln No. 3	PM (5) PM_{10} NO_x CO THC HCl	77.70 66.05 500.00 213.00 7.73 9.30	340.00 289.30 2190.00 933.00 33.86 38.60
E2-8	Kiln No. 4	PM (5)	77.70	340.00

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	Emission Rates * TPY**
		PM_{10}	66.05	289.30
		NO_x	500.00	2190.00
		CO	213.00	933.00
		THC	7.73	33.86
		HCl	9.30	38.60
E2-2 E2-4 E2-6 E2-8	Bubble Limit Kilns Nos. 1-4	SO_2	3080.00	13490.40
E2-2 E2-8	Bubble Limit Any two of the wet kilns (Kiln No. 1-4)	SO_2	1540.00	6745.20
E2-2 E2-4 E2-6 E2-8	Individual Emission Limits for Kilns Nos. 1-4	PM (front half)	15.4	67.5
		HCl	7.3	32.0
		HF (11)	0.83	0.73
		Cl_2	3.5E-01	1.5
		As	3.8E-03	1.6E-02
		Ag	6.5E-02	2.8E-01
		Ba	2.7E-01	1.2
		Be	1.8E-03	7.9E-03
		Cd	1.3E-03	5.7E-03
		Cr III	6.6E-01	2.9
		Cr VI	4.0E-04	1.8E-03
		Hg	9.7E-03	4.3E-02
		Ni	1.3E-01	5.8E-01
		Pb	2.8E-02	1.2E-01
		Sb	1.4E-02	6.0E-02
		Se	1.7	7.5
		Tl	7.7E-03	3.4E-02
		Zn (11)	0.13	0.57
E2-2 E2-4	Combined Total Emission Limits for Kilns Nos. 1-4	PM (front half)	61.6	270.0
		HCl	29.0	128.0

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	Emission Rates * TPY**
E2-6 E2-8		HF (11) Cl_2 As Ag Ba Be Cd Cr III Cr VI Hg Ni Pb Sb Se Tl Zn (11)	3.30 1.4 1.5E-02 2.6E-01 1.1 7.0E-03 5.2E-03 2.6 1.6E-03 3.9E-02 5.2E-01 1.1E-01 5.5E-02 6.9 3.1E-02 0.52	2.90 6.0 6.0E-02 1.1 4.8 3.2E-02 2.3E-02 12.0 7.0E-03 1.7E-01 2.3 4.8E-01 2.4E-01 30.0 1.4E-01 2.28
E2-7 (10)	Blending Silo Baghouse	PM PM_{10}	1.02 1.02	4.47 4.47
E2-7A	Blending Silo Discharge Baghouse	PM PM_{10}	0.63 0.63	2.74 2.74
E2-7B (10)	Preheater Tower Pneumatic Feed Baghouse	PM PM_{10}	0.99 0.99	4.32 4.32
E2-10a (4)	CKD Drop from Truck	PM PM_{10}	<0.01 <0.01	0.01 <0.01
E2-10b	Quarry CKD Bin Baghouse	PM PM_{10}	0.06 0.06	0.14 0.14
E2-10C	CKD Bin Baghouse	PM PM_{10}	0.43 0.43	0.94 0.94
E2-10D	Kiln Dust to Scrubber	PM	0.17	0.73

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
	Baghouse	PM_{10}	0.17	0.73
E2-10E	CKD Mixer Wet Collector	PM PM_{10}	0.69 0.69	1.50 1.50
E2-10F (4)	CKD Drop to Truck	PM PM_{10}	0.01 <0.01	0.01 0.01
E2-11 (4)	Lime Delivery Truck, Road Emissions	PM PM_{10}	5.69 0.59	0.47 0.05
E2-11A	Dust Bin Baghouse	PM PM_{10}	0.60 0.60	2.68 2.68
E2-11B	Lime Silo Baghouse	PM PM_{10}	0.25 0.25	0.27 0.27
E2-12 (4)	Iron Additive Truck Road Emission	PM PM_{10}	17.67 5.99	8.84 2.99
E2-13 (4)	Iron Additive Drop to Piles	PM PM_{10}	0.18 0.09	0.09 0.04
E2-13A (4)	Loader Drop to Grizzly Screen	PM PM_{10}	0.12 0.06	0.34 0.17
E2-13P (4)	Slag Pile, Windblown Emissions	PM PM_{10}	0.01 0.01	<0.01 <0.01
E2-14 (4)	Iron Component Loader, Road Emissions	PM PM_{10}	9.17 4.13	5.68 2.55
E2-14a (4)	Steel Slag Grizzly Screen	PM PM_{10}	0.18 0.09	0.09 0.05
E2-15 (4)	Slag Drop from Loader to Hopper	PM PM_{10}	0.08 0.04	0.05 0.02

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	Emission Rates * TPY**
E2-16	Slag Baghouse	PM PM_{10}	0.26 0.26	1.13 1.13
E2-17 (4)	Kiln 5 Iron Feed System Hopper	PM PM_{10}	0.08 0.04	0.06 0.03
E2-18 (4)	Iron Additive Drop to Pile	PM PM_{10}	0.36 0.17	0.18 0.09
E2-18P (4)	East Slag Pile, Windblown Emissions	PM PM_{10}	0.01 0.01	<0.01 <0.01
E2-22	Kiln No. 5 Main Stack	PM/PM_{10} total PM/PM_{10} (front half) PM/PM_{10} (back half) NO_x SO_2 CO H_2SO_4 TRS (including H_2S) THC	69.24 29.24 40.00 681.25 332.25 500.00 33.23 2.26 19.06	288.10 128.10 160.00 2725.00 1329.00 2190.00 103.68 9.90 83.48
E2-101	No. 1 Cooler Baghouse	PM PM_{10}	2.35 1.79	10.29 7.84
E2-103	No. 2 Cooler Baghoue	PM PM_{10}	8.78 6.67	38.46 29.23
E2-105	No. 3 Cooler Baghoue	PM PM_{10}	8.78 6.67	38.46 29.23
E2-107	No. 4 Cooler Baghoue	PM PM_{10}	2.35 1.79	10.29 7.84
E3-1 (10)	No. 4 Clinker Elevator Baghouse	PM PM_{10}	0.21 0.21	0.94 0.94

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
E3-2 (10)	No. 3 Tunnel Baghouse	PM PM_{10}	0.21 0.21	0.94 0.94
E3-3	No. 2 Tunnel Baghouse	PM PM_{10}	0.43 0.43	1.88 1.88
E3-5	No. 1 Tunnel Baghouse	PM PM_{10}	0.43 0.43	1.88 1.88
E3-6 (10)	700 Pan Conveyor Baghouse	PM PM_{10}	0.43 0.43	0.94 0.94
E3-9	Fringe Bins Nos. 1 -3 FM Baghouse	PM PM_{10}	0.17 0.17	0.75 0.75
E3-10 (4)	Additive Silos Conveyor Drop	PM PM_{10}	0.43 0.43	1.88 1.88
E3-11 (10)	No. 708 Drag Conveyor Baghouse	PM PM_{10}	0.32 0.32	0.70 0.70
E3-12 (4)	Reclaim Belt Baghouse	PM PM_{10}	0.26 0.26	0.56 0.56
E3-14	Fly Ash Silo Baghouse	PM PM_{10}	0.15 0.15	0.68 0.68
E3-15 (4)	South Clinker Group No. 4 Baghouse	PM PM_{10}	0.43 0.43	0.94 0.94
E3-20	Finish Mill No. 5 Feed Baghouse	PM_{10}	0.21	0.83
E3-21	Finish Mill No. 5 Baghouse	PM_{10}	0.86	3.33
E3-22	780 Head Pulley Baghouse	PM_{10}	0.21	0.83

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
E3-23	Lower Reclaim Belt baghouse	PM PM_{10}	0.26 0.26	0.38 0.38
E3-24 (4)	Stacker Belt Sec. 2 Baghouse	PM PM_{10}	0.43 0.43	0.94 0.94
E3-25 (10)	FM No. 6 Transfer Tower Baghouse	PM PM_{10}	0.31 0.31	1.35 1.35
E3-26 (10)	703 Pan Conveyor Baghouse	PM PM_{10}	0.32 0.32	1.41 1.41
E3-29	Kiln Tunnel No. 2 Baghouse	PM PM_{10}	0.27 0.27	1.20 1.20
E3-30	Kiln Tunnel No. 1 Baghouse	PM PM_{10}	0.27 0.27	1.20 1.20
E3-33 (10)	Clinker Barn West Baghouse	PM PM_{10}	0.32 0.32	1.41 1.41
E3-33A (10)	Clinker Outhaul to No. 6 Finish Mill Baghouse	PM PM_{10}	0.29 0.29	1.28 1.28
E3-34	Surge Collector Baghouse	PM PM_{10}	0.64 0.64	0.84 0.84
E3-35	Gypsum/Anhydrite Storage Bin Baghouse	PM PM_{10}	0.09 0.09	0.19 0.19
E3-37	Nos. 9-10 Clinker Silo Baghouse	PM PM_{10}	0.86 0.86	3.75 3.75
E3-38	Clinker Barn East Tunnel Baghouse	PM PM_{10}	0.64 0.64	1.41 1.41
E3-41	East Clinker Door Baghouse	PM PM_{10}	0.64 0.64	2.82 2.82

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
E3-42	West Clinker Door Baghouse	PM PM_{10}	0.64 0.64	2.82 2.82
E3-50 (4)	Additive Hopper, Drop Fugitive	PM PM_{10}	0.04 0.02	0.03 0.02
E3-51 (4)	Additive Hopper, Drop to Belt	PM PM_{10}	0.04 0.02	0.03 0.02
E3-52	Pan Conveyor Baghouse	PM PM_{10}	0.63 0.63	2.74 2.74
E3-52A	Clinker Discharge Baghouse	PM PM_{10}	0.37 0.37	1.61 1.61
E3-53	Clinker Belt Transfer Baghouse	PM PM_{10}	0.58 0.58	2.55 2.55
E3-54	FM No. 6 Bins Baghouse	PM PM_{10}	1.79 1.79	7.85 7.85
E3-55	Finish Mill No. 6 Baghouse	PM PM_{10}	5.76 2.88	25.23 12.61
E3-57	Finish Mill No. 6 Cement Baghouse	PM PM_{10}	0.12 0.12	0.53 0.53
E4-1 (10)	Finish Silo Group No. 4 Baghouse	PM PM_{10}	0.77 0.77	3.38 3.38
E4-2 (10)	Finish Silo Group No. 3 Baghouse	PM PM_{10}	0.77 0.77	3.38 3.38
E4-3 (10)	Finish Silo Group No. 4 Baghouse	PM PM_{10}	0.21 0.21	0.94 0.94
E4-5	Finish Silo Group No. 2 Baghouse	PM PM_{10}	0.51 0.51	2.25 2.25

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
E4-6	Finish Silo Group No. 1 Baghouse	PM PM_{10}	0.13 0.13	0.56 0.56
E4-7	Finish Silo Group No. 1 Baghouse	PM PM_{10}	0.13 0.13	0.56 0.56
E4-8	Finish Silo Group No. 1 Baghouse	PM PM_{10}	0.08 0.08	0.34 0.34
E4-9 (6)	Rail Loading Baghouse	PM PM_{10}	0.04 0.04	0.17 0.17
E4-10 (6, 8, 10)	Rail System Baghouse	PM PM_{10}	0.45 0.45	0.67 0.67
E4-11 (6)	Rail Loading No. 3 Baghouse	PM PM_{10}	0.14 0.14	0.62 0.62
E4-12 (10)	FM No. 6 Transfer Baghouse	PM PM_{10}	0.54 0.54	2.35 2.35
E4-13 (6, 8)	Truck Loadout Baghouse	PM PM_{10}	0.06 0.06	0.09 0.09
E4-16 (10)	Truck Loadout No.2 Baghouse	PM PM_{10}	0.36 0.36	1.60 1.60
E4-17 (10)	Truck Loadout No.1 Baghouse	PM PM_{10}	0.36 0.36	1.60 1.60
E4-18	Truck Loading Baghouse	PM PM_{10}	0.36 0.36	1.60 1.60
E4-19 (6)	Packhouse Elevator Baghouse	PM PM_{10}	0.19 0.19	0.83 0.83
E4-20 (6)	Bagging Machine Baghouse	PM PM_{10}	0.69 0.69	3.00 3.00

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
E4-21 (6, 8, 10)	Masonry Rail Loadout Baghouse	PM PM_{10}	0.04 0.04	0.17 0.17
E4-22	Truck Loadout Baghouse	PM PM_{10}	0.32 0.32	1.41 1.41
E4-24	No. 5 Bin Baghouse	PM PM_{10}	0.30 0.30	1.31 1.31
E4-25 (6, 9)	Masonry Bagging Baghouse	PM PM_{10}	0.21 0.21	0.19 0.19
E4-26	No. 6 Bin Baghouse	PM PM_{10}	0.30 0.30	1.31 1.31
E4-27	Traveling Rail Loadout Baghouse	PM PM_{10}	0.21 0.21	0.94 0.94
E4-28	No. 3 Load Spout Baghouse	PM PM_{10}	0.21 0.21	0.94 0.94
E6-1 (4)	Coal, Drop from Railcar	PM PM_{10}	0.12 0.06	0.11 0.06
E6-2 (4)	Coal, Rail Hopper to Drop to Belt	PM PM_{10}	0.12 0.06	0.11 0.06
E6-3 (4)	Coal, Belt Drop to Piles	PM PM_{10}	0.12 0.06	0.11 0.06
E6-4 (4)	Coal Pile, Wind Blown Emissions	PM PM_{10}	0.01 0.01	0.05 0.03
E6-5 (4, 7)	Coal, Delivery Truck Road Emissions	PM PM_{10}	1.14 0.51	1.06 0.48
E6-6 (4)	Coal Loader Road Emissions	PM PM_{10}	0.50 0.23	0.35 0.16

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
E6-7 (4)	Coal, Loadout to Covered Storage	PM PM_{10}	0.10 0.05	0.11 0.06
E6-8 (4)	Coal, Truck Drops to Pile	PM PM_{10}	1.05 0.50	0.16 0.08
E6-9 (4)	Coal, Loader Drop to Hopper	PM PM_{10}	0.07 0.04	0.11 0.06
E6-10 (4)	Coal Crusher	PM PM_{10}	0.02 0.01	0.02 0.01
E6-11 (4)	Coal Belt to No. 4 Coal Bin	PM PM_{10}	0.04 0.02	0.04 0.02
E6-12 (4)	Coal Belt to No. 3 Coal Bin	PM PM_{10}	0.03 0.01	0.03 0.01
E6-13 (4)	Coal Belt to No. 2 Coal Bin	PM PM_{10}	0.02 0.01	0.02 0.01
E6-14 (4)	Coal Belt to No. 1 Coal Bin	PM PM_{10}	0.01 <0.01	0.01 <0.01
E6-15 (4)	Coal, Belt Transfer Drop	PM PM_{10}	0.03 0.02	0.05 0.02
E6-18 (4)	Coal, Drop to Stacker Belt	PM PM_{10}	0.05 0.03	0.04 0.02
E6-19 (4)	Coal Bin No. 4 to Conveyor	PM PM_{10}	<0.01 <0.01	0.01 <0.01
E6-20 (4)	Coal Bin No. 3 to Conveyor	PM PM_{10}	<0.01 <0.01	0.01 <0.01
E6-21 (4)	Coal Bin No. 2 to Conveyor	PM PM_{10}	<0.01 <0.01	0.01 <0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
E6-22 (4)	Coal Bin No. 1 to Conveyor	PM PM_{10}	<0.01 <0.01	0.01 <0.01
E6-23 (4)	No. 4 Conveyor to Coal Mill	PM PM_{10}	<0.01 <0.01	0.01 <0.01
E6-24 (4)	No. 3 Conveyor to Coal Mill	PM PM_{10}	<0.01 <0.01	0.01 <0.01
E6-25 (4)	No. 2 Conveyor to Coal Mill	PM PM_{10}	<0.01 <0.01	0.01 <0.01
E6-26 (4)	No. 1 Conveyor to Coal Mill	PM PM_{10}	<0.01 <0.01	0.01 <0.01
E6-27	Solid Fuel, Conveyor Diverter Baghouse	PM PM_{10}	0.52 0.52	2.29 2.29
E6-28	Solid Fuel Mill Bin Baghouse	PM PM_{10}	0.13 0.13	0.56 0.56
E6-29 (4)	Solid Fuel Bin, Drop to Weigh Feeder	PM PM_{10}	0.01 <0.01	0.04 0.02
E6-30 (10)	Coal Mill Baghouse Exhaust	PM PM_{10}	2.34 2.34	10.23 10.23
E6-31	Coal Fines Bin Baghouse	PM PM_{10}	0.02 0.02	0.07 0.07
CKDL-1 (4)	CKD Landfill Dozer Emissions	PM PM_{10}	0.17 0.07	0.04 0.02
CKDL-2 (4)	CKD Pile Windblown Emissions	PM PM_{10}	-- --	0.10 0.05
E-A-1 (4)	Manifold Small Tanks	VOC	0.05	0.24

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
E-A-2 (4)	Manifold Large Tanks	VOC	0.02	0.10
E-F-1 (4)	Small Storage Equipment	VOC	0.05	0.21
E-F-2 (4)	Large Storage Equipment	VOC	0.07	0.31
E-F-3 (4)	Pump Pit Fuel Component	VOC	0.07	0.30
E-F-4 (4)	Fuel Island Fuel Lines	VOC	0.08	0.34
E-F-5 (4)	Burner Floor Fuel Lines	VOC	0.02	0.10
E-Q-1 (4)	Fuel Island Quench Lines	VOC	<0.01	0.02
E-Q-2 (4)	Quench Tank Equipment	VOC	<0.01	0.04
E-Q-3 (4)	Pump Pit Quench Water Components	VOC	<0.01	0.01
E-Q-4 (4)	Burner Floor Quench Lines	VOC	0.03	0.11

(1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
(2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed it shall be assumed that no particulate matter greater than 10 microns is emitted.
CO - carbon monoxide
THC - total hydrocarbons
HCl - hydrogen chloride
HF - hydrogen fluoride
H_2S - hydrogen sulfide
H_2SO_4 - sulfuric mist
TRS - total reduced sulfur

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

As	-	arsenic
Ag	-	silver
Ba	-	barium
Be	-	beryllium
Cd	-	cadmium
Cl_2	-	chlorine
Cr III	-	chromium III
Cr VI	-	chromium VI
Hg	-	mercury
Ni	-	nickel
Pb	-	lead
Se	-	selenium
Sb	-	antimony
Tl	-	thallium
Zn	-	zinc

(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

(5) PM allowable includes front and back-half catch and is based on the Title 30 Texas Administrative Code Chapter 101 allowable and a stack flow of 150,000 acfm.

(6) Emission rates are based on a limited annual basis with compliance demonstrated by records of cement stored or shipped through these facilities. Operation limits are as follows:
A. Operation of EPNs E4-9, 10, 11, 13, 21 and 25 are limited to the hours between 4 am and 8pm.
B. Operation of EPNs 4-19 and E4-20 are limited to the hours between 8 am and midnight.

(7) EPN 6-5 is vehicle traffic emissions from E6-5A through E6-5S2 as listed in Table 6.1 on page 11 of the February 1999 amendment application to this permit.

(8) Annual emission rates are based on and the facilities are limited to a maximum annual operating schedule of 2,978 hours per year.

(9) Annual emission rates are based on and the facilities are limited to a maximum annual operating schedule of 1,752 hour per year.

(10) These emission points are required to use a PTFE (polytetrafluoroethylene) membrane lined high efficiency bags.

(11) Contribution from waste-derived fuels and clinker quench wastewater.

* Emission rates are based on and the facilities are limited by the following maximum operating schedule except as noted:
Clinker production from Kiln No. 5 shall not exceed 2,800,000 tons of clinker per year.
24 Hrs/day 7 Days/week 52 Weeks/year or 8760 Hrs/year

** Compliance with annual emission limits is based on a rolling 12-month period.

Dated