

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
TXI Operations, LP

AUTHORIZING THE OPERATION OF
Midlothian Cement Plant
Cement

LOCATED AT
Ellis County, Texas
Latitude 32° 27' 47" Longitude 97° 1' 28"
Regulated Entity Number: RN100217199

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No: 01077 Issuance Date: _____

For the Commission

Table of Contents

Section	Page
General Terms and Conditions	1
Special Terms and Conditions:	1
Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting.....	1
Additional Monitoring Requirements	9
New Source Review Authorization Requirements.....	9
Compliance Requirements	10
Protection of Stratospheric Ozone	12
Alternative Requirements.....	12
Permit Location.....	12
Permit Shield (30 TAC § 122.148)	12
Attachments.....	13
Applicable Requirements Summary.....	14
Additional Monitoring Requirements	34
Permit Shield	40
New Source Review Authorization References	42
Alternative Requirement.....	54
Appendix A	59
Acronym List	60
Appendix B	61

General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
 - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
 - E. Emission units subject to 40 CFR Part 63, Subpart LLL as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.690 which incorporates the 40 CFR Part 63 Subpart by reference.
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed either before or after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not exceed 20% opacity averaged over a six minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

- (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
- (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
 - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
 - (3) Records of all observations shall be maintained.
 - (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer’s eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

- (5) Compliance Certification:
- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
 - (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
- (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

- (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the

air emission source or enclosed facility is not operating for the entire quarter.

- (2) Records of all observations shall be maintained.
- (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader

- C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
- (iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
 - (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
 - (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the

source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
 - E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
 - F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
4. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:
- A. When filling stationary gasoline storage vessels (Stage I) for motor vehicle fuel dispensing facilities specified in 30 TAC Chapter 115, Subchapter C, the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 115.221 (relating to Emission Specifications)
 - (ii) Title 30 TAC § 115.222 (relating to Control Requirements)
 - (iii) Title 30 TAC § 115.223 (relating to Alternate Control Requirements)
 - (iv) Title 30 TAC § 115.224 (relating to Inspection Requirements)
 - (v) Title 30 TAC § 115.225 (relating to Testing Requirements)
 - (vi) Title 30 TAC § 115.226 (relating to Recordkeeping Requirements)
 - B. When filling stationary gasoline storage vessels (Stage I) for motor vehicle fuel dispensing facilities, constructed prior to November 15, 1992, with transfers to stationary storage tanks located at a facility which has dispensed no more than 10,000 gallons of gasoline in any calendar month after January 1, 1991, the

permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:

- (i) Title 30 TAC § 115.222(3) (relating to Control Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
 - (ii) Title 30 TAC § 115.222(6) (relating to Control Requirements)
 - (iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
 - (iv) Title 30 TAC § 115.226(2)(B) (relating to Recordkeeping Requirements)
5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
- A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
6. For open storage piles; including equipment used in loading, unloading, and conveying operations; constructed, reconstructed, or modified after May 27, 2009, the permit holder shall comply with the following requirements of 40 CFR Part 60, Subpart Y for control of fugitive coal dust emissions:
- A. Title 40 CFR § 60.254(c) and (c)(1) (relating to Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles), for preparation of and operation in accordance with a fugitive coal dust emissions control plan
 - B. Title 40 CFR § 60.254(c)(2) and (c)(6) (relating to Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles), for control measures for open coal storage piles
 - C. Title 40 CFR § 60.254(c)(3) and (c)(3)(i) - (iv) (relating to Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles), for alternative control measures
 - D. Title 40 CFR § 60.254(c)(4), (c)(4)(i) - (ii), and (c)(5)(ii) (relating to Standards for coal processing and conveying equipment, coal storage systems, transfer and

loading systems, and open storage piles) for submittal of the fugitive coal dust emissions control plan

- E. Title 40 CFR § 60.258(a) and (a)(6) (relating to Reporting and recordkeeping)
7. For the nonmetallic mineral processing operations specified in 40 CFR Part 60, Subpart OOO, the permit holder shall comply with the following requirements:
- A. Title 40 CFR § 60.670(f) (relating to Applicability and Designation of Affected Facility), for Table 1 for Subpart A
 - B. Title 40 CFR § 60.673(a) - (b) (relating to Reconstruction)
 - C. Title 40 CFR § 60.676(h) (relating to Reporting and Recordkeeping)
8. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

Additional Monitoring Requirements

9. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

10. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
- A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
11. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

12. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

13. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
14. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
 - A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:
 - (i) For sources in the Dallas-Fort Worth Eight-Hour Nonattainment area, 30 TAC § 117.9030
 - B. The permit holder shall comply with the Initial Control Plan unit identification requirements in 30 TAC § 117.450(a) and (a)(1).
 - C. The permit holder shall comply with the requirements of 30 TAC § 117.454 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.456 for Revision of Final Control Plan.
 - D. The permit holder shall comply with the compliance schedule as required in 30 TAC § 117.9320 for cement kilns.
15. Use of Emission Credits to comply with applicable requirements:
 - A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117

- (iii) Offsets for Title 30 TAC Chapter 116
 - B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)(2)
 - (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1
 - (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)(2)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122
 - (v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)
16. Use of Discrete Emission Credits to comply with the applicable requirements:
- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
 - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
 - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

- (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Protection of Stratospheric Ozone

- 17. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.
 - B. The permit holder shall comply with 40 CFR Part 82, Subpart H related to Halon Emissions Reduction requirements as specified in 40 CFR § 82.250 - § 82.270 and the applicable Part 82 Appendices.

Alternative Requirements

- 18. The permit holder shall comply with the approved alternative means of control (AMOC); alternative monitoring, recordkeeping, or reporting requirements; or requirements determined to be equivalent to an otherwise applicable requirement contained in the Alternative Requirements attachment of this permit until January 1, 2018. Units complying with an approved alternative requirement have reference to the approval in the Applicable Requirements summary listing for the unit. The permit holder shall maintain the original documentation, from the EPA Administrator, demonstrating the method or limitation utilized. Documentation shall be maintained and made available in accordance with 30 TAC § 122.144. No later than January 1, 2018, the permit holder shall submit a revision application to codify the requirements in the permit.

Permit Location

- 19. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

- 20. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Alternative Requirement

Applicable Requirements Summary

Unit Summary..... 15

Applicable Requirements Summary 20

Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
E1-23B	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
E1-29	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
E2-22	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
E2-22	DRYER/KILN/OVEN	N/A	117E-1	30 TAC Chapter 117, Cement Kilns	No changing attributes.
E2-22	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
E2-9	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
E3-14	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
E3-21	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
E3-55	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
FLTC-P-1	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRP-ALTM	NON-METALLIC MINERAL PROCESSING PLANTS	ALTM-1, ALTM-2	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRP-ALTSF	NON-METALLIC MINERAL PROCESSING PLANTS	ALTF-1, ALTF-2, ALTF-3, ALTF-4, ALTF-5, ALTF-6, ALTF-7, ALTF-8	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPBAG	NON-METALLIC MINERAL PROCESSING PLANTS	E4-19, E4-20, E4-25	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPBELT	NON-METALLIC MINERAL PROCESSING PLANTS	E1-25, E1-26, E1- 28, E1-33, E1-34	60000-1	40 CFR Part 60, Subpart OOO	No changing attributes.
GRPCLINK	NON-METALLIC MINERAL PROCESSING PLANTS	E3-1, E3-3, E3-4, E3-5	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPCOAL1	COAL PREPARATION PLANTS	E6-10, E6-15, E6-9	60Y	40 CFR Part 60, Subpart Y	No changing attributes.
GRPCOAL1	NON-METALLIC MINERAL PROCESSING PLANTS	E6-10, E6-15, E6-9	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPCOAL2	COAL PREPARATION PLANTS	E6-1, E6-18, E6-2, E6-7	60Y	40 CFR Part 60, Subpart Y	No changing attributes.
GRPCOAL2	NON-METALLIC MINERAL PROCESSING PLANTS	E6-1, E6-18, E6-2, E6-4A, E6-7	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPCOAL3	COAL PREPARATION PLANTS	E6-27, E6-28, E6-31	60Y	40 CFR Part 60, Subpart Y	No changing attributes.
GRPCOAL3	NON-METALLIC MINERAL PROCESSING PLANTS	E6-27, E6-28, E6-31	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPCRSHR	NON-METALLIC MINERAL PROCESSING PLANTS	E1-24, E1-27	60000-1	40 CFR Part 60, Subpart OOO	No changing attributes.
GRPFNBIN	NON-METALLIC MINERAL PROCESSING PLANTS	E3-25-5, E3-9	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPFNHANDL	NON-METALLIC MINERAL PROCESSING PLANTS	E3-13D, E3-20, E3- 22, E3-50, E3-51, E4-12	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPFNMILLS	NON-METALLIC MINERAL	E3-16, E3-17, E3-	63 LLL	40 CFR Part 63, Subpart	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	PROCESSING PLANTS	18, E3-19		LLL	
GRPFNSTOR	NON-METALLIC MINERAL PROCESSING PLANTS	E4-11A, E4-23, E4-3, E4-4, E4-5, E4-6, E4-7, E4-8	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPFNSTOR1	NON-METALLIC MINERAL PROCESSING PLANTS	E4-1, E4-2	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPLOAD	NON-METALLIC MINERAL PROCESSING PLANTS	E4-10, E4-16, E4-17, E4-18, E4-21	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPLOAD1	NON-METALLIC MINERAL PROCESSING PLANTS	E4-11, E4-13, E4-22, E4-9	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPMTHANDL	NON-METALLIC MINERAL PROCESSING PLANTS	E1-10, E1-11, E1-7, E1-8, E1-9, E3-13, E3-13A, E3-13B, E3-13C, E3-13E, E3-17A, E3-17B, E3-17C, E3-2, E3-31, E3-32, E3-43, E3-43A, E3-45	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPMTTRANS	NON-METALLIC MINERAL PROCESSING PLANTS	E1-16, E1-23, E2-13A, E3-10, E3-11, E3-12, E3-15, E3-23, E3-24, E3-33, E3-34, E3-35, E3-37, E3-38, E3-41, E3-42, E3-6, E4-27A, E4-27B, E4-28A	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPMTTRANS1	NON-METALLIC MINERAL PROCESSING PLANTS	E1-23D, E1-30, E1-30A, E1-31, E1-	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
		31A, E1-32, E1-32A, E1-32B, E2-10C, E2-10D, E2-10F, E2-10G, E2-11A, E2-11B, E2-14A, E2-17, E2-7, E2-7A, E2-7B, E3-25, E3-33A, E3-33B, E3-33C, E3-33D, E3-52, E3-52A, E3-53, E3-54, E3-57, E4-24, E4-26, E4-27, E4-28			
GRP-P-1	NON-METALLIC MINERAL PROCESSING PLANTS	BIO-P-1, CAT-P-1	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPSYNGYP	NON-METALLIC MINERAL PROCESSING PLANTS	E3-51A, E3-51B, E3-51C, E3-55A, E3-55B, E3-55C, E3-55D, E3-55E, E3-55F	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPTANK	LOADING/UNLOADING OPERATIONS	P-10, P-13, P-20, P-21, P-23, P-30, P-31, P-32, P-40, P-41, P-42, P-43, P-5, P-9	R5211	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
IRN-P-1	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
PC5-1	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
PC5-2	NON-METALLIC MINERAL	N/A	63 LLL	40 CFR Part 63, Subpart	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	PROCESSING PLANTS			LLL	
PC5-4	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
PC5-4	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
PC5-5	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
PC5-5	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
WB-P-1	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
WB-P-2	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63 LLL	40 CFR Part 63, Subpart LLL	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
E1-23B	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
E1-29	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
E2-22	EP	R111	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an Opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	§ 111.111(a)(1)(D) [G]§ 111.111(a)(1)(F)	§ 111.111(a)(1)(C) § 111.111(a)(1)(D)	None
E2-22	EU	117E-1	NOX	30 TAC Chapter 117, Cement Kilns	§ 117.3100 The permit holder shall comply with the applicable limitation, standard and/or equipment specification	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 117, Cement Kilns	The permit holder shall comply with the applicable monitoring and testing requirements of 30 TAC Chapter 117,	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 117, Cement Kilns	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 117, Cement Kilns

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					requirements of 30 TAC Chapter 117, Cement Kilns		Cement Kilns		
E2-22	EU	63LLL	PM, PM (OPACITY), D/F, THC, Hg	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL. ** See Alternative Requirement	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
E2-9	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
E3-14	EU	63LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
E3-21	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder	The permit holder shall comply with the	The permit holder shall comply with	The permit holder shall comply with the	The permit holder shall comply with the

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	applicable requirements of 40 CFR Part 63, Subpart LLL	the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	applicable reporting requirements of 40 CFR Part 63, Subpart LLL
E3-55	EU	63LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
FLTC-P-1	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
GRP-ALTM	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					CFR Part 63, Subpart LLL				
GRP-ALTSF	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
GRPBAG	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
GRPBELT	EU	60000 -1	PM	40 CFR Part 60, Subpart OOO	§ 60.672 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart OOO	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart OOO	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart OOO	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart OOO	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart OOO
GRPCLINK	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with	The permit holder shall comply with the applicable	The permit holder shall comply with the applicable	The permit holder shall comply with the applicable	The permit holder shall comply with the applicable reporting

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	requirements of 40 CFR Part 63, Subpart LLL	monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	recordkeeping requirements of 40 CFR Part 63, Subpart LLL	requirements of 40 CFR Part 63, Subpart LLL
GRPCOAL1	EU	60Y	PM (OPACITY)	40 CFR Part 60, Subpart Y	§ 60.254(a) § 60.257(a)	On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.	§ 60.255(a) § 60.257(a) [G]§ 60.257(a)(1) [G]§ 60.257(a)(3) ** See Periodic Monitoring Summary	None	None
GRPCOAL1	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					specification requirements of 40 CFR Part 63, Subpart LLL		CFR Part 63, Subpart LLL	LLL	
GRPCOAL2	EU	60Y	PM (OPACITY)	40 CFR Part 60, Subpart Y	§ 60.254(a) § 60.257(a)	On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.	§ 60.255(a) § 60.257(a) [G]§ 60.257(a)(1) [G]§ 60.257(a)(3) ** See Periodic Monitoring Summary	None	None
GRPCOAL2	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63,	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					Subpart LLL				
GRPCOAL3	EU	60Y	PM (OPACITY)	40 CFR Part 60, Subpart Y	§ 60.254(a) § 60.257(a)	On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.	§ 60.255(a) § 60.257(a) [G]§ 60.257(a)(1) [G]§ 60.257(a)(3) ** See Periodic Monitoring Summary	None	None
GRPCOAL3	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL.	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
GRPCRSHR	EU	60000	PM	40 CFR Part 60,	§ 60.672	The permit holder shall	The permit holder	The permit holder	The permit holder

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		-1		Subpart 000	The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart 000	comply with the applicable requirements of 40 CFR Part 60, Subpart 000	shall comply with the applicable monitoring and testing requirements of 40 CFR Part 60, Subpart 000	shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart 000	shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart 000
GRPFNBIN	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
GRPFNHANDL	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
GRPFNMILLS	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63,	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					requirements of 40 CFR Part 63, Subpart LLL		Subpart LLL		
GRPFNSTOR	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
GRPFNSTOR1	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
GRPLOAD	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
GRPLOAD1	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder	The permit holder shall comply with the	The permit holder shall comply with	The permit holder shall comply with the	The permit holder shall comply with the

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	applicable requirements of 40 CFR Part 63, Subpart LLL	the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	applicable reporting requirements of 40 CFR Part 63, Subpart LLL
GRPMTHANDL	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
GRPMTTRANS	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
GRPMTTRANS1	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					CFR Part 63, Subpart LLL				
GRP-P-1	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
GRPSYNGYP	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
GRPTANK	EU	R5211	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
IRN-P-1	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with	The permit holder shall comply with the applicable	The permit holder shall comply with the applicable	The permit holder shall comply with the applicable	The permit holder shall comply with the applicable reporting

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	requirements of 40 CFR Part 63, Subpart LLL	monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	recordkeeping requirements of 40 CFR Part 63, Subpart LLL	requirements of 40 CFR Part 63, Subpart LLL
PC5-1	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
PC5-2	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
PC5-4	EP	R1111	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PC5-4	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
PC5-5	EP	R1111	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(B) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
PC5-5	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL
WB-P-1	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63,	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					requirements of 40 CFR Part 63, Subpart LLL		Subpart LLL		
WB-P-2	EU	63 LLL	PM, PM (OPACITY)	40 CFR Part 63, Subpart LLL	§ 63.1340 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart LLL	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart LLL

Additional Monitoring Requirements

Periodic Monitoring Summary 35

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPCOAL1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Y	SOP Index No.: 60Y
Pollutant: PM (OPACITY)	Main Standard: § 60.254(a)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per calendar quarter	
Averaging Period: Six-minutes	
Deviation Limit: Maximum Opacity = 10%	
<p>Periodic Monitoring Text: Opacity shall be monitored, by a certified observer, for at least one, six-minute period in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPCOAL2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Y	SOP Index No.: 60Y
Pollutant: PM (OPACITY)	Main Standard: § 60.254(a)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per calendar quarter	
Averaging Period: Six-minutes	
Deviation Limit: Maximum Opacity = 10%	
<p>Periodic Monitoring Text: Opacity shall be monitored, by a certified observer, for at least one, six-minute period in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPCOAL3	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Y	SOP Index No.: 60Y
Pollutant: PM (OPACITY)	Main Standard: § 60.254(a)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per calendar quarter	
Averaging Period: Six-minutes	
Deviation Limit: Maximum Opacity = 10%	
<p>Periodic Monitoring Text: Opacity shall be monitored, by a certified observer, for at least one, six-minute period in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PC5-4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per calendar quarter	
Averaging Period: Six-minutes	
Deviation Limit: Maximum Opacity = 10%	
<p>Periodic Monitoring Text: Opacity shall be monitored, by a certified observer, for at least one, six-minute period in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PC5-5	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per calendar quarter	
Averaging Period: Six-minutes	
Deviation Limit: Maximum Opacity = 10%	
<p>Periodic Monitoring Text: Opacity shall be monitored, by a certified observer, for at least one, six-minute period in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Permit Shield

Permit Shield 41

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
ME-0042	N/A	40 CFR Part 63, Subpart ZZZZ	Existing emergency stationary RICE with a site rating of more than 500 brake horsepower located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

New Source Review Authorization References

New Source Review Authorization References..... 43

New Source Review Authorization References by Emission Unit..... 44

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX632M1	Issuance Date: 12/07/2015
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 1360A	Issuance Date: 12/07/2015
Authorization No.: 56271	Issuance Date: 01/21/2014
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.478	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
ALTF-1	ALT. SOLID FUELS TRUCK DROP TO HOPPER	1360A, PSDTX632M1
ALTF-2	ALT. SOLID FUELS SCREW DROP TO ALT FUEL BELT 1	1360A PSDTX632M1
ALTF-3	ALT. SOLID FUELS BELT 1 DROP TO BELT 2	1360A, PSDTX632M1
ALTF-4	ALT SOLID FUELS BELT 2 DROP TO BELT 3	1360A, PSDTX632M1
ALTF-5	ALT. SOLID FUELS BELT 3 DROP TO TOWER HOPPER SCREW	1360A, PSDTX632M1
ALTF-6	ALT. SOLID FUELS HOPPER SCREWS TO BELT 4	1360A, PSDTX632M1
ALTF-7	ALT. SOLID FUELS BELT 4 DROP TO BELT 5	1360A, PSDTX632M1
ALTF-8	ALT. SOLID FUELS BELT 5 DROP TO FEED SCREW	1360A, PSDTX632M1
ALTM-1	ALT. RAW MATERIAL LOADER DROP TO HOPPER	1360A, PSDTX632M1
ALTM-2	ALT. RAW MATERIAL HOPPER DROP TO BELT 5	1360A, PSDTX632M1
BIO-P-1	ALT. SOLID FUELS-BIOMASS PILE, WINDBLOWN FUGITIVE	1360A, PSDTX632M1
CAT-P-1	ALT. MATERIALS-CATALYST PILE, WINDBLOWN FUGITIVES	1360A, PSDTX632M1
E1-10	MILL SCALE PILE, DROP FUGITIVE	106.261/11/01/2003
E1-11	SAND PILE, DROP FUGITIVE	106.261/11/01/2003
E1-16	LIMESTONE BELT TRANSFER DROP	1360A, PSDTX632M1
E1-23B	RAW MILL #2	106.261/11/01/2003
E1-23D	KILN FEED DROP TO RAW MILL 2 FEED	106.261/11/01/2003
E1-23	RAW MATERIAL DROP TO STORAGE AREA	1360A, PSDTX632M1
E1-24	PRIMARY CRUSHER	1360A, PSDTX632M1

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E1-25	TRANSFER POINT #1	1360A, PSDTX632M1
E1-26	TRANSFER POINT #2	1360A, PSDTX632M1
E1-27	SECONDARY CRUSHER	1360A, PSDTX632M1
E1-28	OVERLAND CONVEYOR DIVERTER DROP	1360A, PSDTX632M1
E1-29	LIMESTONE STORAGE DOME DROPS	1360A, PSDTX632M1
E1-30A	BELT TRANSFER TO OVERLAND CONVEYOR	1360A, PSDTX632M1
E1-30	UNDERGROUND BELT BAGHOUSE	1360A, PSDTX632M1
E1-31A	LIMESTONE TRANSFER BAGHOUSE	1360A, PSDTX632M1
E1-31	RAW BINS BAGHOUSE	1360A, PSDTX632M1
E1-32A	SAND HOPPER DROP TO BELT	1360A, PSDTX632M1
E1-32B	IRON/SAND WEIGH FEEDER DROP	106.261/11/01/2003
E1-32	SAND, DROP TO HOPPER	1360A, PSDTX632M1
E1-33	OVERLAND CONVEYOR TANSFER #3	1360A, PSDTX632M1
E1-34	OVERLAND CONVEYOR TRANSFER #4	1360A, PSDTX632M1
E1-7	GYP SUM PILE, DROP FUGITIVE	106.261/11/01/2003
E1-8	AHYDRITE PILE, DROP FUGITIVE	106.261/11/01/2003
E1-9	IRON ORE PILE, DROP FUGITIVE	106.261/11/01/2003
E2-10C	CKD BIN BAGHOUSE	1360A, PSDTX632M1
E2-10D	KILN DUST TO SCRUBBER BAGHOUSE	1360A, PSDTX632M1

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E2-10F	BYPASS DUST TRUCK LOADOUT FUGITIVE	1360A, PSDTX632M1
E2-10G	CKD PUG MILL	106.261/11/01/2003
E2-11A	DUST BIN BAGHOUSE	1360A, PSDTX632M1
E2-11B	LIME SILO BAGHOUSE	1360A, PSDTX632M1
E2-13A	LOADER DROP TO GRIZZLY SCREEN	1360A, PSDTX632M1
E2-14A	STEEL SLAG GRIZZLY SCREEN	106.261/11/01/2003
E2-17	KILN 5 IRON FEED SYSTEM BAGHOUSE	1360A, PSDTX632M1
E2-22	MAIN KILN EXHAUST/SCRUBBER	1360A, PSDTX632M1
E2-7A	BLENDING SILO DISCHARGE BAGHOUSE	1360A, PSDTX632M1
E2-7	BLENDING SILO BAGHOUSE	1360A, PSDTX632M1
E2-7B	PREHEATER TOWER PNEUMATIC FEED BAGHOUSE	1360A, PSDTX632M1
E2-9	CKD DUST TANK BAGHOUSE	1360A, PSDTX632M1
E3-1	#4 CLINKER ELEVATOR BAGHOUSE	1360A, PSDTX632M1
E3-10	CLINKER SILOS 15-18	1360A, PSDTX632M1
E3-11	BELT TRANSFER 707 TAIL PULLEY	1360A, PSDTX632M1
E3-12	BELT TRANSFER HEAD WHEEL 703, 704, 721	1360A, PSDTX632M1
E3-13A	RESERVE CLINKER PILE	106.261/11/01/2003
E3-13B	CLINKER RECLAIM SYSTEM	1360A, PSDTX632M1
E3-13C	CLINKER RECLAIM SYSTEM	1360A, PSDTX632M1

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E3-13D	CLINKER RECLAIM SYSTEM	1360A, PSDTX632M1
E3-13E	CLINKER RECLAIM SYSTEM	1360A, PSDTX632M1
E3-13	NORTH CLINKER PILE, DROP FUGITIVE	106.261/11/01/2003
E3-14	FLYASH TANK BAGHOUSE	1360A, PSDTX632M1
E3-15	TRANSFER HEAD PULLEY 702 PAN; 748 DRAG	1360A, PSDTX632M1
E3-16	FINISH MILL #1 BAGHOUSE	1360A, PSDTX632M1
E3-17A	CLINKER RECLAIM SYSTEM	1360A, PSDTX632M1
E3-17B	CLINKER RECLAIM SYSTEM	1360A, PSDTX632M1
E3-17C	CLINKER RECLAIM SYSTEM	1360A, PSDTX632M1
E3-17	FINISH MILL #2 BAGHOUSE	1360A, PSDTX632M1
E3-18	FINISH MILL #3 BAGHOUSE	1360A, PSDTX632M1
E3-19	FINISH MILL #4 BAGHOUSE	1360A, PSDTX632M1
E3-2	#3 TUNNEL BAGHOUSE	1360A, PSDTX632M1
E3-20	FINISH MILL NO. 5 FEED BAGHOUSE	1360A, PSDTX632M1
E3-21	FINISH MILL NO. 5 BAGHOUSE STACK	1360A, PSDTX632M1
E3-22	TANK SWEEP #5 BAGHOUSE	1360A, PSDTX632M1
E3-23	LOWER RECLAIM BELT BAGHOUSE	1360A, PSDTX632M1
E3-24	BELT TRANSFER 707, 708, 780	1360A, PSDTX632M1
E3-25-5	FM #5 FRINGE BIN BAGHOUSE	1360A, PSDTX632M1

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E3-25	FM#6 TRNSFER TOWER BAGHOUSE	1360A, PSDTX632M1
E3-3	#2 TUNNEL BAGHOUSE	1360A, PSDTX632M1
E3-31	FINISH TUNNEL #4 BAGHOUSE	1360A, PSDTX632M1
E3-32	FINISH TUNNEL #4 BAGHOUSE	1360A, PSDTX632M1
E3-33A	CLINKER OUTHAUL TO #6 FINISH	1360A, PSDTX632M1
E3-33B	MATERIAL TRANSFER SYSTEM	106.261/11/01/2003
E3-33	CLINKER BARN WEST BAGHOUSE	1360A, PSDTX632M1
E3-33C	MATERIAL TRANSFER SYSTEM	106.261/11/01/2003
E3-33D	MATERIAL TRANSFER SYSTEM	106.261/11/01/2003
E3-34	SURGE BIN TRANSFER 713, 715, 717, 718	1360A, PSDTX632M1
E3-35	706 DRAG CONVEYOR	1360A, PSDTX632M1
E3-37	TRANSFER 700, 704, 701	1360A, PSDTX632M1
E3-38	712 TUNNEL AT CLINKER BUILDING	1360A, PSDTX632M1
E3-41	EAST CLINKER DOOR BAGHOUSE	1360A, PSDTX632M1
E3-42	WEST CLINKER DOOR BAGHOUSE	1360A, PSDTX632M1
E3-43	#4 FEEDER BAGHOUSE	1360A, PSDTX632M1
E3-43A	#4 FEEDER BAGHOUSE	56271
E3-45	L.T. AGGREGATE DROP PILE, DROP FUGITIVES	1360A, PSDTX632M1
E3-4	N. CLINKER GROUP4 BAGHOUSE	1360A, PSDTX632M1

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E3-5	#1 TUNNEL BAGHOUSE	1360A, PSDTX632M1
E3-50	MILL ADDITIVE DROP TO RAIL HOPPER	1360A, PSDTX632M1
E3-51A	SYNGYP MATERIAL TRANSFER SYSTEM	106.261/11/01/2003
E3-51B	SYNGYP MATERIAL TRANSFER SYSTEM	106.261/11/01/2003
E3-51C	SYNGYP MATERIAL TRANSFER SYSTEM	106.261/11/01/2003
E3-51	HOPPER DROP TO BELT	1360A, PSDTX632M1
E3-52A	CLINKER DISCHARGE BAGHOUSE	1360A, PSDTX632M1
E3-52	PAN CONVEYOR BAGHOUSE	1360A, PSDTX632M1
E3-53	CLINKER BELT TRANSFER BAGHOUSE	1360A, PSDTX632M1
E3-54	FM#6 BIN BAGHOUSE	1360A, PSDTX632M1
E3-55A	LOADER DROP TO GYPSUM HOPPER	106.261/11/01/2003
E3-55B	HOPPER DROP TO CONVEYER	106.261/11/01/2003
E3-55C	CONVEYOR DROP TO BIN FEED CONVEYOR	106.261/11/01/2003
E3-55D	DIN FEED CONVEYOR DROP TO BIN	106.261/11/01/2003
E3-55E	STORAGE BIN DROP TO MILL FEED CONVEYOR	106.261/11/01/2003
E3-55	FINSIH MILL STACK	1360A, PSDTX632M1
E3-55F	MILL FEED CONVEYOR DROP TO MILL FEED BELT	106.261/11/01/2003
E3-57	FM#6 CEMENT BAGHOUSE	1360A, PSDTX632M1
E3-6	700 AND 703 PAN FROM SURGE BIN	1360A, PSDTX632M1

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E3-9	FM #1,2 AND 3 FRINGE BIN BAGHOUSE	106.261/11/01/2003
E4-10	RAIL SYSTEM BAGHOUSE	1360A, PSDTX632M1
E4-11A	AIRSLIDE BAGHOUSE	56271
E4-11	RAIL LOADING #3 BAGHOUSE	1360A, PSDTX632M1
E4-12	FM #6 TRANSFER BAGHOUSE	1360A, PSDTX632M1
E4-13	TRUCK LOAD-OUT BAGHOUSE	1360A, PSDTX632M1
E4-16	TRUCK LOAD-OUT #2 BAGHOUSE	1360A, PSDTX632M1
E4-17	TRUCK LOADOUT #1 BAGHOUSE	1360A, PSDTX632M1
E4-18	TRUCK LOADING BAGHOUSE	1360A, PSDTX632M1
E4-19	PACKHOUSE ELEVATOR BAGHOUSE	1360A, PSDTX632M1
E4-1	FINISH SILO GROUP 3 BAGHOUSE	1360A, PSDTX632M1
E4-20	BAGGING MACHINE BAGHOUSE	1360A, PSDTX632M1
E4-21	MASONRY RAIL LOADING BAGHOUSE	1360A, PSDTX632M1
E4-22	TRUCK LOAD-OUT BAGHOUSE	1360A, PSDTX632M1
E4-23	FINISH SILO GROUP 3 BAGHOUSE	56271
E4-24	#5 BIN BAGHOUSE	1360A, PSDTX632M1
E4-25	MASONRY BAGGING BAGHOUSE	1360A, PSDTX632M1
E4-26	#6 BIN BAGHOUSE	1360A, PSDTX632M1
E4-27A	LOADER DROP TO CLINKER HOPPER	1360A, PSDTX632M1

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E4-27B	CLINKER SHIPPED, DROP TO BELT	1360A, PSDTX632M1
E4-27	TRAVELING RAIL LOADOUT BAGHOUSE	1360A, PSDTX632M1
E4-28	#3 LOAD SPOUT BAGHOUSE	1360A, PSDTX632M1
E4-28A	CLINKER SHIPPED, DROP TO RAILCAR	1360A, PSDTX632M1
E4-2	FINISH SILO GROUP 3 BAGHOUSE	1360A, PSDTX632M1
E4-3	FINISH SILO GROUP 4 BAGHOUSE	1360A, PSDTX632M1
E4-4	SILO GROUP 3 BAGHOUSE	56271
E4-5	FINISH SILO GROUP 2 BAGHOUSE	1360A, PSDTX632M1
E4-6	FINISH SILO GROUP 1 BAGHOUSE	1360A, PSDTX632M1
E4-7	FINISH SILO GROUP 1 BAGHOUSE	1360A, PSDTX632M1
E4-8	FINISH SILO GROUP 1 BAGHOUSE	1360A, PSDTX632M1
E4-9	RAIL LOADING BAGHOUSE	1360A, PSDTX632M1
E6-10	COAL CRUSHER	1360A, PSDTX632M1
E6-15	SOLID FUEL DROP TO BELT	1360A, PSDTX632M1
E6-18	SOLID FUEL DROP TO STACKER BELT	1360A, PSDTX632M1
E6-1	COAL DROP FROM RAILCAR	1360A, PSDTX632M1
E6-27	SOLID FUEL CONVEYOR DIVERTER BAGHOUSE	1360A, PSDTX632M1
E6-28	SOLID FUEL MILL BIN BAGHOUSE	1360A, PSDTX632M1
E6-2	SOLID FUEL, RAIL HOPPER DROP TO BELT	1360A, PSDTX632M1

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
E6-31	COAL FINES BIN BAGHOUSE	1360A, PSDTX632M1
E6-4A	RESERVE COAL PILE	1360A, PSDTX632M1
E6-7	SOLID FUEL, LOADOUT TO COVERED STORAGE	1360A, PSDTX632M1
E6-9	SOLID FUEL LOADER DROP TO HOPPER	1360A, PSDTX632M1
FLTC-P-1	ALT. MATERIALS-FILTER CAKE PILE, WINDBLOWN FUGITIV	1360A, PSDTX632M1
IRN-P-1	ALT. MATERIALS-IRON PILE, WINDBLOWN FUGITIVES	1360A, PSDTX632M1
ME-0042	CATERPILLAR DIESEL GENERATOR (587 HP)	1360A, PSDTX632M1
P-10	6,000 GALLON DIESEL STORAGE TANK	106.478/09/04/2000
P-13	1,000 GALLON SALVASOL STORAGE TANK	106.478/09/04/2000
P-20	9,500 GALLON DIESEL STORAGE TANK	106.478/09/04/2000
P-21	10,000 GALLON DIESEL STORAGE TANK	106.478/09/04/2000
P-23	MOTOR OIL TANK	106.478/09/04/2000
P-30	ANTI FREEZE TANK	106.478/09/04/2000
P-31	KEROSENE TANK	106.478/09/04/2000
P-32	OIL TANK	106.478/09/04/2000
P-40	DIESEL TANK	106.478/09/04/2000
P-41	DIESEL TANK	106.478/09/04/2000
P-42	DIESEL TANK	106.478/09/04/2000
P-43	DIESEL TANK	106.478/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
P-5	DIESEL STORAGE TANK	106.478/09/04/2000
P-9	9,000 GALLON DIESEL STORAGE TANK	106.478/09/04/2000
PC5-1	PETROLEUM COKE FRONT END LOADER DROP TO HOPPER	1360A, PSDTX632M1
PC5-2	PETROLEUM COKE FUEL PILE WINDBLOWN FUGITIVE	1360A, PSDTX632M1
PC5-4	PET COKE MILL FEED BIN BAGHOUSE	1360A, PSDTX632M1
PC5-5	PET COKE BIN BAGHOUSE	1360A, PSDTX632M1
WB-P-1	ALT. MATERIALS-WALLBOARD PILE, WINDBLOWN FUGITIVES	1360A, PSDTX632M1
WB-P-2	ALT. SOLID FUELS-WOOD PRODUCTS PILE, WINDBLOWN FUG	1360A, PSDTX632M1

Alternative Requirement

Alternative Requirement..... 55



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

JUN 28 2016

6 Pages

Mr. Michael Schon
Vice President and Counsel, Government Affairs
Portland Cement Association
1150 Connecticut Avenue NW, Suite 500
Washington, DC 20036-4104

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

Dear Mr. Schon:

This letter is in response to your letter dated May 6, 2016, requesting approval of an alternative method for cement kiln owners and operators to use in calibration of mercury (Hg) continuous emissions monitoring systems (CEMS) that have been installed to demonstrate compliance with mercury emission limits under 40 CFR 63, Subpart LLL, National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (Subpart LLL). In particular, you request an alternative test method that entails suspension of the requirements of 40 CFR 63.1350(k)(2)(ii) and (iii) until 12 months following an EPA determination and announcement that certified National Institute of Standards and Technology (NIST)-traceable high-level elemental mercury gas generators are widely available. You also request that the 12-month date be no sooner than September 9, 2017.

Section 63.1350(k)(2) of Subpart LLL sets forth the requirements for conducting 'above span' calibration of Hg CEMS when the concentration of the exhaust gas stream being measured exceeds the span value for greater than 2 hours; this 'above span' calibration serves to quality assure the 'above span' measurements from these time periods. You state that suspension of the §63.1350(k)(2) requirements is necessary because the high-level elemental mercury gas generators with NIST-traceable certifications at mercury concentrations above $40 \mu\text{g}/\text{m}^3$, which are needed to meet the requirements of §63.1350(k)(2), are not currently widely available to Hg CEMS users. You contend that additional time is needed for NIST, Hg CEMS vendors, and affected Hg CEMS users to complete the necessary activities to acquire and put into place the certified NIST-traceable high-level elemental mercury gas generators needed to meet the §63.1350(k)(2) 'above span' calibration requirements. You point out that virtually all of the Hg CEMS now installed for use under Subpart LLL are dilution extractive systems and include analyzers with a broad measurement range going beyond the range which will be used under Subpart LLL, and that the analyzers have been demonstrated to be highly linear over these ranges. You also note that during the time period until NIST-traceable high-level elemental mercury gas generators are widely available, (1) the installed Hg CEMS will still be subject to the Hg CEMS certification requirements of Performance Specification 12A (40 CFR 60,

Appendix A), the on-going quality assurance requirements of Procedure 5 (40 CFR 60, Appendix A), and daily calibrations within the span range; and (2) your proposed alternative would not affect the averaging period of the emission standard nor any of the procedures to calculate the 30-day rolling averages used to demonstrate compliance under Subpart LLL.

We understand your, as well as your constituents', concern that additional time is needed for NIST, the Hg CEMS vendors, and affected Hg CEMS users to complete the activities underlying the acquisition and placement of the certified NIST-traceable high-level elemental mercury gas generators needed to meet the §63.1350(k)(2) 'above span' calibration requirements. This will entail NIST-certification of the 'Vendor Prime' high-level elemental mercury gas generators¹ that Hg CEMS vendors use to certify the 'User' high-level elemental mercury gas generators that are installed at the affected facilities in the field, purchase of those 'User' high-level generators, and installation/integration of the 'User' high-level generators into the existing Hg CEMS. We estimate this overall process could take 10 to 18 months. In the interim, while this process is occurring, we are approving your request to suspend the 'above span' calibrations requirements of §63.1350(k)(2). However, as an alternative to these requirements, the affected facilities must conduct an alternative, higher level calibration of each Hg CEMS to demonstrate linearity beyond span and, thus, qualify data measured above span during that time period as set forth below:

- Conduct the alternative calibration at least weekly or within 24 hours of any time two consecutive 1-hour average measured concentrations of Hg exceeds the span value.
- **High-Level System Calibration Check** - Conduct a high level system calibration check by injecting a NIST-traceable mercury calibration gas¹ from an elemental mercury gas generator at the sample probe upstream of the particulate matter filter at a level of ≥ 35 $\mu\text{g}/\text{m}^3$. The value measured by the Hg CEMS must be within 10.0 percent of the certified value of the reference gas. If the Hg CEMS response is not acceptable, the operator shall take corrective action and repeat the high-level system calibration check until acceptable response is obtained. If your elemental mercury gas generator is not certified for a NIST-traceable elemental mercury calibration gas at a level of ≥ 35 $\mu\text{g}/\text{m}^3$, you may use one of the following three approaches:
 - **High-Level System Calibration Check Using Gas Cylinder** - Conduct a high-level system calibration check by injecting a NIST-traceable mercury calibration

¹ "Interim Traceability Protocol for Qualification and Certification of Elemental Mercury Gas Generators," July 01, 2009; see: <https://www3.epa.gov/ttn/emc/metals.html>.

gas from a compressed gas cylinder^{2,3} at the sample probe upstream of the particulate matter filter at a level of $\geq 35 \mu\text{g}/\text{m}^3$. The value measured by the Hg CEMS must be within 10.0 percent of the certified value of the reference gas. If the Hg CEMS response is not acceptable, the operator shall take corrective action and repeat the high-level calibration check until acceptable response is obtained.

- **Direct Analyzer Calibration Check** - For dilution extractive Hg CEMS, conduct the direct analyzer calibration check by injecting a NIST-traceable mercury calibration gas from an elemental mercury gas generator¹ or compressed gas cylinder² at a Hg CEMS probe dilution level equivalent to direct (undiluted) emissions effluent Hg concentrations $\geq 120 \mu\text{g}/\text{m}^3$ at least weekly. (For example, a direct analyzer calibration at $5 \mu\text{g}/\text{m}^3$ for a CEMS probe 30:1 dilution ratio is equivalent to an undiluted effluent concentration of $150 \mu\text{g}/\text{m}^3$.) The analyzer response must be within 10.0 percent of the certified value of the reference gas. You must also verify that the Hg CEMS meets the daily zero and upscale system calibration check requirements. If the Hg CEMS response is not acceptable, the operator shall take corrective action and repeat the direct analyzer calibration check and daily system calibration checks until acceptable responses are obtained.
 - **High-Level System Calibration Check Using a Predetermined Reference Gas Value** - Conduct this high-level system calibration check by injecting a mercury reference gas from an elemental mercury gas generator, with the reference gas concentration value predetermined by the operator, at the sample probe upstream of the particulate matter filter at a level of $\geq 35 \mu\text{g}/\text{m}^3$. The reference gas value for this check is established for this Hg CEMS as the initial observed stable response for the introduction of the specific gas level $\geq 35 \mu\text{g}/\text{m}^3$ following a successful elemental Hg Measurement Error Test conducted according to Performance Specification 12A (40 CFR 60, Appendix B). The value measured by the Hg CEMS during each subsequent high-level calibration check must be within 10.0 percent of the value established for the reference gas. If the Hg CEMS response is not acceptable, the operator shall take corrective action and repeat the high-level calibration check until acceptable response is obtained.
- This alternative method approval will be effective from the date of this letter until January 1, 2018. This time period will provide ample time for affected Hg CEMS users to acquire and put in place NIST-traceable high-level elemental mercury gas generators or secure Hg compressed gas cylinders in appropriate concentrations.

² EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards, U.S. Environmental Protection Agency, Office of Research and Development, EPA/600/R-12/531, May 2012. Robert S. Wright, Air Pollution Prevention and Control Division, National Risk Management Research Laboratory, Research Triangle Park, NC 27711, EPA/600/R-12/531, May 2012.

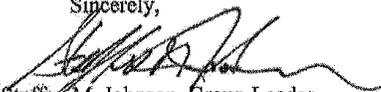
³ Letter from Mr. Steffan M. Johnson, EPA/OAQPS to Mr. Doug King, Airgas Specialty Gases, dated May 24, 2016. (see www3.epa.gov/ttn/emc/approal/alt118.pdf).

- Affected facilities using this alternative must notify their respective enforcement authority (1) prior to its use including identification of the calibration check approach which will be applied, and (2) at such time that the facility discontinues use of the alternative if prior to January 1, 2018.

Because we believe that this alternative is appropriate for broad application under 40 CFR 63, Subpart LLL, we will announce it on the EPA's website as ALT-120 at <http://www3.epa.gov/ttn/emc/approalt.html>.

If you have any questions regarding this approval or need further assistance, please contact Robin Segall at (919) 541-0893 or segall.rob@epa.gov.

Sincerely,



Steffan M. Johnson, Group Leader
Measurement Technology Group

cc: Keith Barnett, OAQPS/SPPD
Greg Fried, OECA/OE
Steven Fruh, OAQPS/SPPD
Robert Lischinsky, OECA/OC
Sharon Nizich, OAQPS/SPPD
Jeff Ryan, ORD/APPCD
Peter Tsigotis, OAQPS/SPPD
Richard Wayland, OAQPS/AQAD
Patrick Yellin, OECA/OC
EPA Regional Testing Contacts

Appendix A

Acronym List 60

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
COMS	continuous opacity monitoring system
CVS	closed-vent system
D/FW	Dallas/Fort Worth (nonattainment area)
DR	Designated Representative
EIP	El Paso (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
GF	grandfathered
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MMBtu/hr	Million British thermal units per hour
MRRT	monitoring, recordkeeping, reporting, and testing
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NO _x	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PM	particulate matter
ppmv	parts per million by volume
PSD	prevention of significant deterioration
RO	Responsible Official
SO ₂	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound

Appendix B

Major NSR Summary Table 62

Major NSR Summary Table

Permit Number: 1360A/PSDTX632M1			Issuance Date: December 7, 2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hour	TPY(5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
E1-1	Raw Material Delivery, Road Dust (6)	PM	-	3.64	2, 9	2, 22	2
		PM10	-	1.39			
E1-2	Cement Trucks, Road Dust (6)	PM	1.34	2.78	2, 9	2, 22	2
		PM10	0.49	1.02			
E1-7	Gypsum Pile, Wind Erosion (6)	PM	0.08	0.07	2, 11	2, 22	2
		PM10	0.04	0.03			
E1-8	Anhydrite Pile, Wind Erosion (6)	PM	0.08	0.05	2, 11	2, 22	2
		PM10	0.04	0.02			
E1-11	Sand Pile, Wind Erosion (6)	PM	0.03	0.02	2, 11	2, 22	2
		PM10	0.02	0.01			
E1-12	Quarry Dozing Operations (6)	PM	4.82	12.93	2, 11	2, 22	2
		PM10	3.56	9.42			
E1-13	Quarry Loader, Road Dust (6)	PM	0.87	4.18	2, 9	2, 22	2
		PM10	0.40	1.88			
E1-16	Limestone Belt Transfer Drop	PM	0.13	0.10	2, 11	2, 22	2
		PM10	0.06	0.05			
E1-20	Pile Material Loader, Road Dust (6)	PM	0.53	0.64	2, 9	2, 22	2
		PM10	0.24	0.29			
E1-21	Sand Delivery Truck, Road Dust (6)	PM	22.20	13.88	2, 9	2, 22	2
		PM10	9.03	5.53			
E1-22	CKD Truck, Road Dust (6)	PM	3.23	3.02	2, 9	2, 22	2
		PM10	0.98	0.78			
E1-23	Raw Material Drops to Storage Area (6)	PM	0.13	0.10	2, 11	2, 22	2
		PM10	0.06	0.05			
E1-24	Primary Crusher (6)	PM	0.01	0.02	2, 11	2, 11, 22	2, 11
		PM10	<0.01	0.01			

Major NSR Summary Table

Permit Number: 1360A/PSDTX632M1			Issuance Date: December 7, 2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hour	TPY(5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
E1-25	Transfer Point No. 1 (6)	PM	0.08	0.14	2, 11	2, 22	2
		PM10	0.04	0.07			
E1-26	Transfer Point No. 2 (6)	PM	0.08	0.14	2, 11	2, 22	2
		PM10	0.04	0.07			
E1-27	Secondary Crusher (6)	PM	0.39	0.72	2, 11	2, 11, 22	2, 11
		PM10	0.15	0.27			
E1-28	Overland Conveyor Diverter Drop (6)	PM	0.08	0.14	2, 11	2, 22	2
		PM10	0.04	0.07			
E1-29	Limestone Storage Dome Drops (6)	PM	0.08	0.14	2, 11	2, 22	2
		PM10	0.04	0.07			
E1-30	Underground Belt Feeder Drop (6)	PM	0.26	1.13	2, 11	2, 11, 22	2
		PM10	0.26	1.13			
E1-30A	Raw Bins to Overland Conveyor (6)	PM	0.08	0.05	2, 11	2, 11, 22	2
		PM10	0.04	0.03			
E1-31	Raw Bins Baghouse (11)	PM	0.79	3.47	2, 13	2, 13, 22	2
		PM10	0.79	3.47			
E1-31A	Limestone Transfer Baghouse	PM	1.20	5.26	2, 13	2, 13, 22	2
		PM10	1.20	5.26			
E1-31B	Raw Materials Circulation Baghouse	PM	0.75	3.30	2, 13	2, 13, 22	2
		PM10	0.75	3.30			
E1-32	Sand, Drop to Hopper (6)	PM	0.02	0.02	2, 11	2, 11, 22	2
		PM10	0.01	0.01			
E1-32a	Sand Belt Transfer (6)	PM	0.01	0.01	2, 11	2, 11, 22	2
		PM10	<0.01	<0.01			
E1-32b	Iron/Sand Belt Weigh Feeder Drop (6)	PM	0.01	0.01	2, 11	2, 11, 22	2
		PM10	<0.01	<0.01			

Major NSR Summary Table

Permit Number: 1360A/PSDTX632M1			Issuance Date: December 7, 2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hour	TPY(5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
E1-33	Overland Conveyor Transfer No. 3 (6)	PM	0.08	0.14	2, 11	2, 11, 22	2
		PM10	0.04	0.07			
E1-34	Overland Conveyor Transfer No. 4 (6)	PM	0.08	0.14	2, 11	2, 11, 22	2
		PM10	0.04	0.07			
E2-7	Blending Silo Baghouse (11)	PM	1.02	4.47	2, 13	2, 13, 22	2
		PM10	1.02	4.47			
E2-7A	Blending Silo Discharge Baghouse	PM	0.63	2.74	2, 13	2, 13, 22	2
		PM10	0.63	2.74			
E2-7B	Preheater Tower Pneumatic Feed Baghouse (11)	PM	0.99	4.32	2, 13	2, 13, 22	,2
		PM10	0.99	4.32			
E2-10a	CKD Drop From Truck (6)	PM	<0.01	0.01	2, 11	2, 11, 22	2
		PM10	<0.01	<0.01			
E2-10b	Quarry CKD Bin Baghouse	PM	0.06	0.14	2, 13	2, 13, 22	2
		PM10	0.06	0.14			
E2-10C	CKD Bin Baghouse	PM	0.43	0.94	2, 13	2, 13, 22	2
		PM10	0.43	0.94			
E2-10D	Kiln Dust to Scrubber Baghouse	PM	0.17	0.73	2, 13	2, 13, 22	2
		PM10	0.17	0.73			
E2-10F	CKD Drop to Truck (6)	PM	0.01	0.01	2, 11	2, 11, 22	2
		PM10	<0.01	0.01			
E2-11	Lime Delivery Truck, Road Dust (6)	PM	5.69	0.47	2, 9	2, 22	2
		PM10	0.59	0.05			
E2-11A	Dust Bin Baghouse	PM	0.60	2.68	2, 13	2, 13, 22	2
		PM10	0.60	2.68			
E2-11B	Lime Silo Baghouse	PM	0.25	0.27	2, 13	2, 13, 22	2
		PM10	0.25	0.27			

Major NSR Summary Table

Permit Number: 1360A/PSDTX632M1			Issuance Date: December 7, 2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hour	TPY(5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
E2-12	Iron Additive Truck, Road Dust (6)	PM	17.67	8.84	2, 9	2, 22	2
		PM10	5.99	2.99			
E2-13A	Loader Drop to Grizzly Screen (6)	PM	0.12	0.34	2, 11	2, 11, 22	2
		PM10	0.06	0.17			
E2-13P	Slag Pile, Wind Erosion (6)	PM	0.01	<0.01	2, 11	2, 11, 22	2
		PM10	0.01	<0.01			
E2-14	Iron Component Loader, Road Dust (6)	PM	9.17	5.68	2, 9	2, 22	2
		PM10	4.13	2.55			
E2-14a	Steel Slag Grizzly Screen (6)	PM	0.18	0.09	2, 11	2, 11, 22	2
		PM10	0.09	0.05			
E2-17	Iron Feed System Hopper (6)	PM	0.08	0.06	2, 11	2, 11, 22	2
		PM10	0.04	0.03			
E2-17a	Clinker Reclaim Drop to Hopper (6)	PM	<0.01	<0.01	2, 12	2, 12, 22	2
		PM10	<0.01	<0.01			
E2-17b	Clinker Reclaim Hopper Drop to Belt (6)	PM	<0.01	<0.01	2, 12	2, 12, 22	2
		PM10	<0.01	<0.01			
E2-17c	Clinker Reclaim Belt to Belt Drop (6)	PM	<0.01	<0.01	2, 12	2, 12, 22	2
		PM10	<0.01	<0.01			
E2-18P	East Slag Pile, Wind Erosion (6)	PM	0.01	<0.01	2, 11	2, 11, 22	2
		PM10	0.01	<0.01			
E2-22	Kiln No. 5 Main Stack	NOx (13)	681.25	2725	1, 2, 14, 16, 20	2, 8, 14, 16, 20, 22	2, 14, 16, 20, 23
		SO2	332.25	1329			
		CO	500	1020.10			
		PM, Total	69.24	267.77			
		PM, Filterable	29.24	107.77			
		PM10, Total	69.24	267.77			

Major NSR Summary Table

Permit Number: 1360A/PSDTX632M1			Issuance Date: December 7, 2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hour	TPY(5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		PM10, Filterable	29.24	107.77			
		PM2.5	53.67	225.41			
		HCL	27.39	107.97			
		H2SO4	33.23	103.68			
		VOC/THC	19.06	67.10			
		TRS (incl.H2S)	2.26	9.9			
		Hg	0.13	0.51			
		Pb	0.01	0.04			
E3-1	No. 4 Clinker Elevator Baghouse (11)	PM	0.21	0.94	2, 12	2, 12, 22	2
		PM10	0.21	0.94			
E3-2	No. 3 Tunnel Baghouse (11)	PM	0.21	0.94	2, 12	2, 12, 22	2
		PM10	0.21	0.94			
E3-3	No. 2 Tunnel Baghouse	PM	0.43	1.88	2, 12	2, 12, 22	2
		PM10	0.43	1.88			
E3-5	No. 1 Tunnel Baghouse	PM	0.43	1.88	2, 12	2, 12, 22	2
		PM10	0.43	1.88			
E3-6	700 Pan Conveyor Baghouse (11)	PM	0.43	0.94	2, 12	2, 12, 22	2
		PM10	0.43	0.94			
E3-9	Fringe Bins No. 1-3 FM Baghouse	PM	0.17	0.75	2, 12	2, 12, 22	2
		PM10	0.17	0.75			
E3-10	Additive Silos Conveyor Drop(6)	PM	0.43	1.88	2, 12	2, 12, 22	2
		PM10	0.43	1.88			
E3-11	No. 708 Drag Conveyor Baghouse (11)	PM	0.32	0.70	2, 12	2, 12, 22	2
		PM10	0.32	0.70			
E3-12	Reclaim Belt Baghouse (6)	PM	0.26	0.56	2, 12	2, 12, 22	2
		PM10	0.26	0.56			

Major NSR Summary Table

Permit Number: 1360A/PSDTX632M1			Issuance Date: December 7, 2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hour	TPY(5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
E3-13A	Reserve Clinker Pile, Wind Erosion (6)	PM	0.23	0.99	2, 12	2, 12, 22	2
		PM10	0.11	0.50			
E3-13B	Reserve Clinker Drop to Hopper (6)	PM	<0.01	0.01	2, 12	2, 12, 22	2
		PM10	<0.01	<0.01			
E3-13C	Reserve Clinker Hopper Drop to Belt (6)	PM	<0.01	0.01	2, 12	2, 12, 22	2
		PM10	<0.01	<0.01			
E3-13D	Reserve Clinker, Portable Screen (6)	PM	0.01	0.03	2, 12	2, 12, 22	2
		PM10	<0.01	0.01			
E3-13E	Reserve Clinker Pile 2, Wind Erosion (6)	PM	0.11	0.50	2, 12	2, 12, 22	2
		PM10	0.06	0.25			
E3-14	Fly Ash Silo Baghouse	PM	0.15	0.68	2, 13	2, 13, 22	2
		PM10	0.15	0.68			
E3-15	South Clinker Group No. 4 Baghouse	PM	0.43	0.94	2, 12	2, 12, 22	2
		PM10	0.43	0.94			
E3-20	Finish Mill No. 5 Feed Baghouse	PM	-	-	2, 12	2, 12, 22	2
		PM10	0.21	0.83			
E3-21	Finish Mill No. 5 Baghouse	PM	-	-	2, 12	2, 12, 22	2
		PM10	0.86	3.33			
E3-22	780 Head Pulley Baghouse	PM	-	-	2, 12	2, 12, 22	2
		PM10	0.21	0.83			
E3-23	Lower Reclaim Belt Baghouse	PM	0.26	0.38	2, 12	2, 12, 22	2
		PM10	0.26	0.38			
E3-24	Stacker Belt Sec. 2 Baghouse	PM	0.43	0.94	2, 12	2, 12, 22	2
		PM10	0.43	0.94			
E3-25	FM No.6 Transfer Tower Baghouse (11)	PM	0.31	1.35	2, 12	2, 12, 22	2
		PM10	0.31	1.35			

Major NSR Summary Table

Permit Number: 1360A/PSDTX632M1			Issuance Date: December 7, 2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hour	TPY(5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
E3-33	Clinker Barn West Baghouse (11)	PM	0.32	1.41	2, 12	2, 12, 22	2
		PM10	0.32	1.41			
E3-33A	Clinker Outhaul to FM No.6 Baghouse (11)	PM	0.29	1.28	2, 12	2, 12, 22	2
		PM10	0.29	1.28			
E3-33b	Clinker Drop From Loader to Hopper (6)	PM	6.51	3.25	2, 12	2, 12, 22	2
		PM10	3.08	1.54			
E3-33c	Hopper Clinker Drop to Belt 712T (6)	PM	0.74	3.25	2, 12	2, 12, 22	2
		PM10	0.35	1.54			
E3-33d	Belt 712T Clinker Drop to Belt 713 (6)	PM	0.74	3.25	2, 12	2, 12, 22	2
		PM10	0.35	1.54			
E3-34	Surge Collector Baghouse	PM	0.64	0.84	2, 12	2, 12, 22	2
		PM10	0.64	0.84			
E3-35	Gypsum/Anhydrite Storage Bin Baghouse	PM	0.09	0.19	2, 12	2, 12, 22	2
		PM10	0.09	0.19			
E3-37	Nos. 9-10 Clinker Silo Baghouse	PM	0.86	3.75	2, 12	2, 12, 22	2
		PM10	0.86	3.75			
E3-38	Clinker Barn East Tunnel Baghouse	PM	0.64	1.41	2, 12	2, 12, 22	2
		PM10	0.64	1.41			
E3-41	East Clinker Door Baghouse	PM	0.64	2.82	2, 12	2, 12, 22	2
		PM10	0.64	2.82			
E3-42	West Clinker Door Baghouse	PM	0.64	2.82	2, 12	2, 12, 22	2
		PM10	0.64	2.82			
E3-50	Additive Hopper, Drop Fugitive (6)	PM	0.04	0.03	2, 12	2, 12, 22	2
		PM10	0.02	0.02			
E3-51	Additive Hopper, Drop to Belt	PM	0.04	0.03	2, 12	2, 12, 22	2
		PM10	0.02	0.02			

Major NSR Summary Table

Permit Number: 1360A/PSDTX632M1			Issuance Date: December 7, 2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hour	TPY(5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
E3-51a	Additive Drop to Hopper (6)	PM	0.52	0.26	2, 12	2, 12, 22	2
		PM10	0.25	0.12			
E3-51b	Additive Hopper Drop to Belt (6)	PM	0.02	0.08	2, 12	2, 12, 22	2
		PM10	0.01	0.04			
E3-51c	Additive Hopper, Belt to Belt Drop (6)	PM	0.02	0.08	2, 12	2, 12, 22	2
		PM10	0.01	0.04			
E3-52	Pan Conveyor Baghouse	PM	0.63	2.74	2, 12	2, 12, 22	2
		PM10	0.63	2.74			
E3-52a	Clinker Discharge Baghouse	PM	0.37	1.61	2, 12	2, 12, 22	2
		PM10	0.37	1.61			
E3-53	Clinker Belt Transfer Baghouse	PM	0.58	2.55	2, 12	2, 12, 22	2
		PM10	0.58	2.55			
E3-54	FM No. 6 Bins Baghouse	PM	1.79	7.85	2, 12	2, 12, 22	2
		PM10	1.79	7.85			
E3-55	FM No.6 Baghouse	PM	5.76	25.23	2, 12	2, 12, 22	2
		PM10	2.88	12.61			
E3-57	FM No.6 Cement Baghouse	PM	0.12	0.53	2, 12	2,12, 22	2
		PM10	0.12	0.53			
E4-1	Finish Silo Group N0.4 Baghouse (11)	PM	0.77	3.38	2, 12	2, 12, 22	2
		PM10	0.77	3.38			
E4-2	Finish Silo Group No.3 Baghouse (11)	PM	0.77	3.38	2, 12	2, 12, 22	2
		PM10	0.77	3.38			
E4-3	Finish Silo Group No.4 Baghouse (11)	PM	0.21	0.94	2, 12	2, 12, 22	2
		PM10	0.21	0.94			
E4-5	Finish Silo Group No.2 Baghouse	PM	0.51	2.25	2, 12	2, 12, 22	2
		PM10	0.51	2.25			
E4-6	Finish Silo Group No.1	PM	0.13	0.56	2, 12	2, 12, 22	2

Major NSR Summary Table

Permit Number: 1360A/PSDTX632M1			Issuance Date: December 7, 2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hour	TPY(5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
	Baghouse	PM10	0.13	0.56			
E4-7	Finish Silo Group No. 1 Baghouse	PM	0.13	0.56	2, 12	2, 12, 22	2
		PM10	0.13	0.56			
E4-8	Finish Silo Group No. 1 Baghouse	PM	0.08	0.34	2, 12	2, 12, 22	2
		PM10	0.08	0.34			
E4-9	Rail Loading Baghouse (7)	PM	0.04	0.17	2, 12	2, 12, 22	2
		PM10	0.04	0.17			
E4-10	Rail System Baghouse (7) (9) (11)	PM	0.45	0.67	2, 12	2, 12, 22	2
		PM10	0.45	0.67			
E4-11	Rail Loading No. 3 Baghouse (7)	PM	0.14	0.62	2, 12	2, 12, 22	2
		PM10	0.14	0.62			
E4-12	FM No. 6 Transfer Baghouse (11)	PM	0.54	2.35	2, 12	2, 12, 22	2
		PM10	0.54	2.35			
E4-13	Truck Loadout Baghouse (7) (9)	PM	0.06	0.09	2, 12	2, 12, 22	2
		PM10	0.06	0.09			
E4-16	Truck Loadout No. 2 Baghouse (11)	PM	0.36	1.60	2, 12	2, 12, 22	2
		PM10	0.36	1.60			
E4-17	Truck Loadout No. 1 Baghouse (11)	PM	0.36	1.60	2, 12	2, 12, 22	2
		PM10	0.36	1.60			
E4-18	Truck Loading Baghouse	PM	0.36	1.60	2, 12	2, 12, 22	2
		PM10	0.36	1.60			
E4-19	Packhouse Elevator Baghouse (7)	PM	0.19	0.83	2, 12	2, 12, 22	2
		PM10	0.19	0.83			
E4-20	Bagging Machine Baghouse (7)	PM	0.69	3.0	2, 12	2, 12, 22	2
		PM10	0.69	3.0			
E4-21	Masonry Rail Loadout Baghouse (7) (9) (11)	PM	0.04	0.17	2, 12	2, 12, 22	2
		PM10	0.04	0.17			

Major NSR Summary Table

Permit Number: 1360A/PSDTX632M1			Issuance Date: December 7, 2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hour	TPY(5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
E4-22	Truck Loadout Baghouse	PM	0.32	1.41	2, 12	2, 12, 22	2
		PM10	0.32	1.41			
E4-24	No. 5 Bin Baghouse	PM	0.30	1.31	2, 12	2, 12, 22	2
		PM10	0.30	1.31			
E4-25	Masonry Bagging Baghouse (7) (10)	PM	0.21	0.19	2, 12	2, 12, 22	2
		PM10	0.21	0.19			
E4-26	No. 6 Bin Baghouse	PM	0.30	1.31	2, 12	2, 12, 22	2
		PM10	0.30	1.31			
E4-27	Traveling Rail Loadout Baghouse	PM	0.21	0.94	2, 12	2, 12, 22	2
		PM10	0.21	0.94			
E4-28	No. 3 Load Spout Baghouse	PM	0.21	0.94	2, 12	2, 12, 22	2
		PM10	0.21	0.94			
E6-1	Coal Drop From Railcar to Rail Hopper (6)	PM	0.12	0.11	2	2, 10, 22	2
		PM10	0.06	0.06			
E6-2	Coal Drop From Rail Hopper to Belt (6)	PM	0.12	0.11	2	2, 10, 22	2
		PM10	0.06	0.06			
E6-4	Coal Pile, Wind Erosion (6)	PM	0.01	0.05	2	2, 10, 22	2
		PM10	0.01	0.03			
E6-4A	Coal Pile, Wind Erosion (6)	PM	0.13	0.55	2	2, 10, 22	2
		PM10	0.06	0.28			
E6-5	Coal Delivery Truck, Road Dust (6) (8)	PM	1.14	1.06	2, 9	2, 10, 22	2
		PM10	0.51	0.48			
E6-6	Coal Loader, Road Dust (6)	PM	0.50	0.35	2, 9	2, 10, 22	2
		PM10	0.23	0.16			
E6-7	Coal Loadout to Covered Storage (6)	PM	0.10	0.11	2	2, 10, 22	2
		PM10	0.05	0.06			
E6-9	Coal Loader Drop to Hopper (6)	PM	0.07	0.11	2	2, 10, 22	2
		PM10	0.04	0.06			

Major NSR Summary Table

Permit Number: 1360A/PSDTX632M1			Issuance Date: December 7, 2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hour	TPY(5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
E6-10	Coal Crusher (6)	PM	0.02	0.02	2	2, 10, 22	2
		PM10	0.01	0.01			
E6-18	Coal Belt to Stacker Belt (6)	PM	0.05	0.04	2	2, 10, 22	2
		PM10	0.03	0.02			
E6-27	Solid Fuel Conveyor Diverter Baghouse	PM	0.52	2.29	2	2, 10, 22	2
		PM10	0.52	2.29			
E6-28	Solid Fuel Mill Bin Baghouse	PM	0.13	0.56	2	2, 10, 22	2
		PM10	0.13	0.56			
E6-29	Solid Fuel Bin Drop to Weigh Feeder (6)	PM	0.01	0.04	2	2, 10, 22	2
		PM10	<0.01	0.02			
E6-30	Coal Mill Baghouse Exhaust (11) (12)	PM	2.34	10.23	2	2, 10, 22	2
		PM10	2.34	10.23			
E6-31	Coal Fines Bin Baghouse	PM	0.02	0.07	2	2, 10, 22	2
		PM10	0.02	0.07			
ALTF-1	Alt Solid Fuels Truck Drop to Hopper (6)	PM	0.01	0.05	2	2, 22	2
		PM10	0.01	0.02			
		PM2.5	<0.01	<0.01			
ALTF-2	Alt Solid Fuels Screw Drop to Alt Fuel Belt 1 (6)	PM	<0.01	0.02	2	2, 22	2
		PM10	<0.01	0.01			
		PM2.5	<0.01	<0.01			
ALTF-3	Alt Solid Fuels Belt 1 Drop to Belt 2 (6)	PM	<0.01	0.02	2	2, 22	2
		PM10	<0.01	0.01			
		PM2.5	<0.01	<0.01			
ALTF-4	Alt Solid Fuels Belt 2 Drop to Belt 3 (6)	PM	<0.01	0.02	2	2, 22	2
		PM10	<0.01	0.01			
		PM2.5	<0.01	<0.01			
ALTF-5	Alt Solid Fuels Belt 3 Drop to Tower Hopper Screws (6)	PM	<0.01	0.02	2	2, 22	2
		PM10	<0.01	0.01			

Major NSR Summary Table

Permit Number: 1360A/PSDTX632M1			Issuance Date: December 7, 2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hour	TPY(5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		PM2.5	<0.01	<0.01			
ALTF-6	Alt Solid Fuels Hopper Screws to Belt 4 (6)	PM	<0.01	0.02	2	2, 22	2
		PM10	<0.01	0.01			
		PM2.5	<0.01	<0.01			
ALTF-7	Alt Solid Fuels Belt 4 Drop Belt to Drop 5 (6)	PM	<0.01	0.02	2	2, 22	2
		PM10	<0.01	0.01			
		PM2.5	<0.01	<0.01			
ALTF-8	Alt Solid Fuels Belt 5 Drop to Feed Screw (6)	PM	<0.01	0.02	2	2, 22	2
		PM10	<0.01	0.01			
		PM2.5	<0.01	<0.01			
ALTM-1	Alternate Raw Material Loader Drop to Hopper (6)	PM	0.05	0.03	2, 11	2, 11, 22	2
		PM10	0.03	0.01			
		PM2.5	<0.01	<0.01			
ALTM-2	Alternate Raw Material Hopper Drop to Belt (6)	PM	0.03	0.01	2, 11	2, 11, 22	2
		PM10	0.01	0.01			
		PM2.5	<0.01	<0.01			
BIO-P-1	Alt Solid Fuels -Biomass Pile, Wind Erosion (6)	PM	0.04	0.18	2	2, 22	2
		PM10	0.02	0.09			
		PM2.5	0.01	0.04			
CAT-P-1	Alt Materials - Catalyst Pile, Wind Erosion (6)	PM	0.04	0.18	2, 11	2, 11, 22	2
		PM10	0.02	0.09			
		PM2.5	0.01	0.04			
CKDL-1	CKD Landfill Dozer Dust Emissions (6)	PM	0.17	0.04	2, 11	2, 11, 22	2
		PM10	0.07	0.02			
CKDL-2	CKD Pile, Wind Erosion (6)	PM	-	0.10	2, 11	2, 11, 22	2
		PM10	-	0.05			
FLTC-P-1	Alt Materials- Filter Cake Pile, Wind Erosion (6)	PM	0.04	0.18	2, 11	2, 11, 22	2
		PM10	0.02	0.09			
		PM2.5	0.01	0.04			

Major NSR Summary Table

Permit Number: 1360A/PSDTX632M1			Issuance Date: December 7, 2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hour	TPY(5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
IRN-P-1	Alt Materials - Iron Pile, Wind Erosion (6)	PM	0.04	0.18	2, 11	2, 11, 22	2
		PM10	0.02	0.09			
		PM2.5	0.01	0.04			
PC5-1	Petroleum Coke Front End Loader Drop to Hopper (6)	PM	0.39	0.28	2	2, 22	2
		PM10	0.18	0.13			
		PM2.5	0.03	0.02			
PC5-2	Petroleum Coke Fuel Pile, Wind Erosion (6)	PM	0.33	1.45	2	2, 22	2
		PM10	0.17	0.72			
		PM2.5	0.03	0.11			
PC5-4	Pet Coke Mill Feed Bin Baghouse	PM	0.03	0.14	2	2, 22	2
		PM10	0.03	0.14			
		PM2.5	0.01	0.02			
PC5-5	Pet Coke Bin Baghouse	PM	0.03	0.14	2	2, 22	2
		PM10	0.03	0.14			
		PM2.5	0.02	0.01			
WB-P-1	Alt Materials- Wallboard Pile, Wind Erosion (6)	PM	0.04	0.18	2, 11	2, 11, 22	2
		PM10	0.02	0.09			
		PM2.5	0.01	0.04			
WD-P-1	Alt Solid Fuels - Wood Products Pile, Wind Erosion (6)	PM	0.04	0.18	2	2, 22	2
		PM10	0.02	0.09			
		PM2.5	0.01	0.04			
MSSFUG	Inherently Low-Emitting Planned Maintenance Activities (6)	PM	1.47	1.25	2, 11, 20	2, 11, 19, 20, 22	2
		PM10	0.90	0.92			
		PM2.5	0.31	0.36			
		NOx	0.02	<0.01			
		CO	0.50	<0.01			

Major NSR Summary Table

Permit Number: 1360A/PSDTX632M1			Issuance Date: December 7, 2015				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hour	TPY(5)	Spec. Cond.	Spec. Cond.	Spec. Cond.
		SO2	0.01	0.01			
		VOC	1.45	<0.01			

Footnotes:

- (1) Emission point identification - either specific equipment designation or emission point number (EPN) 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 (30 TAC § 101.1)
- NOx - total oxides of nitrogen
- SO2 - sulfur dioxide
- PM - particulate matter, suspended in the atmosphere, including PM10 and PM2.5
- PM10 - PM equal to or less than 10 microns in diameter. Where PM is not listed it shall be assumed that no PM greater than 10 microns is emitted.
- PM2.5 - particulate matter of 2.5 microns and smaller
- CO - carbon monoxide
- THC - total hydrocarbons
- HCl - hydrogen chloride
- HF - hydrogen fluoride
- H2S - hydrogen sulfide
- H2SO4 - sulfuric mist
- TRS - total reduced sulfur
- Cl2 - chlorine
- Hg - mercury
- Pb - lead
- (4) Planned maintenance, startup and shutdown (MSS) emissions are included
- (5) Compliance with annual emission limits is based on a 12-month rolling period
- (6) Fugitive emission rates are an estimate and are enforceable through compliance with the applicable special conditions and permit application representations.
- (7) Annual emission rates are based on daily operation limits as follows:
 - A. EPNs E4-9, 10, 11, 13, 21, and 25 shall not operate between 8 p.m. and 4 a.m.
 - B. EPNs E4-19 and E4-20 shall not operate between midnight and 8 a.m.
- (8) EPN E6-5 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.

- (9) Annual emissions are based on and the facilities are limited to a maximum annual operating schedule of 2,978 hours per year.
- (10) EPN E4-25 annual emission rates are based on and the facilities are limited to a maximum annual operating schedule 1,752 hours per year.
- (11) These emission points are required to use polytetrafluoroethylene (PTFE) membrane-lined, high-efficiency bags.
- (12) The exhaust from the coal mill baghouse vent, EPN E6-30, must be rerouted to the inlet or upstream side of the roller (raw) mill before the startup of the new clinker cooler, as described in the August 2010 permit amendment application.
- (13) Kiln 5 hourly NOx emission limit is based on a 30-day rolling average.



**Texas Commission on Environmental Quality
Air Quality Permit**

A Permit Is Hereby Issued To
TXI Operations, LP
Authorizing the Construction and Operation of a
Portland Cement Plant
Located at **Midlothian, Ellis County, Texas**
Latitude 32° 27' 47" *Longitude* 97° 01' 28"

Permits: 1360A and PSDTX632M1

Alteration Date: December 7, 2015

Expiration Date: April 20, 2019

A handwritten signature in black ink, appearing to read "R. A. Hyle".

For the Commission

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 (TAC) Section 116.116 (30 TAC § 116.116)]¹
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 least 10 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]
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 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 in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in 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)]¹
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 in accordance with 30 TAC §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 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 not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **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)]
13. **Emissions** from this facility must not cause or contribute to “air pollution” as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. 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.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.¹

¹ Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Special Conditions

Permit Numbers 1360A and PSDTX632M1

General Requirements and Federal Applicability

1. General Requirements

- 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.
- 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 attached 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. In addition to the emissions from routine operations, this permit authorizes emissions from planned maintenance, startup, and shutdown (MSS) activities, and those emissions shall comply with the limits specified in the Maximum Allowable Emission Rate Table (MAERT). 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. **(3/15)**
- D. Acceptance of a permit by a permit applicant constitutes an acknowledgment and agreement that the permittee 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.
- 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 permittee 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.

- F. Upon request by the Executive Director of the TCEQ or local agency, the permittee 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 five-year period.
- H. 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 Assessment Section of the TCEQ.
 - (2) The emission point numbers (EPNs) as listed on the attached MAERT.
- I. At the request of the Executive Director of the TCEQ or designated representative, the permittee shall provide an analysis of any fuel listed in Special Condition No. 4 or alternative raw material listed in Special Condition No. 5. The permittee shall allow the Executive Director of the TCEQ or designated representative to obtain samples of these materials for analysis upon request. **(6/11)**

2. Federal Applicability

- A. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations in 40 Code of Federal Regulations (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 storage and unloading area. **(6/11)**
 - (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) Kiln No. 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. **(6/11)**
- (2) 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.
- C. (1) Prior to the initial start-up of Kiln No. 5, the permittee will retrofit the baghouses that control particulate matter (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 polytetrafluoroethylene (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 grain per dry standard cubic foot (gr/dscf). **(6/11)**
- (2) 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.
- D. The permit amendment issued June 30, 2011 is conditioned on the permanent shutdown and rendering inoperable of Cement Kilns/Clinker Coolers No. 1 through 4. **(6/11)**
- E. Kiln No. 5 shall comply with all applicable requirements of 30 TAC Chapter 117, Subchapter E, Division 2 (Cement Kilns). **(6/11)**

Kiln Emission Standards, Fuel and Raw Material Specifications

- 3. Stack emissions shall not exceed the following: **(6/11)**
 - A. Kiln 5 stack -
 - (1) Nitrogen oxides (NO_x) - 1.95 lbs/ton clinker, 30-day rolling average;

- (2) SO₂ - 1.33 lbs/ton clinker, 30-day rolling average;
 - (3) CO - 1.6 lb/ton clinker, 30-day rolling average;
 - (4) total hydrocarbons (THC)/volatile organic compounds (VOC) - 0.06 lb/ton clinker, 30-day rolling average; and
 - (5) filterable PM - 0.006 gr/dscf.
 - (6) The limits in (1) - (4) do not apply during initial and planned maintenance activities. Planned maintenance activities include scheduled events that occur after the completion of initial construction, major repairs, and other similar circumstances. During these periods, the facility shall comply with the emissions limits in the MAERT.
 - (7) The limits in (1) - (4) do not apply during periods of startup or shutdown activities, as defined in Special Condition No. 18. During these periods, the facility shall comply with the emissions limits in the MAERT.
- B. Finish Mill No. 6, identified as EPN 3-55, filterable PM - 0.00137 grain/actual cubic foot (gr/acf).
4. Fuels fired in the main burner and precalciner of Kiln No. 5 are authorized as follows:
- A. Pipeline-quality, sweet natural gas containing no more than 5.0 grains of sulfur per 100 dscf;
 - B. Coal containing no more than 3.5 percent (%) sulfur by weight;
 - C. Petroleum coke containing no more than 7 % sulfur by weight; **(6/11)**
 - D. Tire-derived fuel, either whole tires or tire chips; **(6/11)**
 - E. Alternative fuels, subject to Special Condition No. 6, as follows. **(6/11)**
 - (1) Solid fuels, as described in Section 2.3.3 of the August, 2010 permit amendment application and Section 1.2 of the May, 2013 permit amendment application for creosoted wood; including: **(10/13)**
 - (a) process engineered fuels;
 - (b) wood by-products, including creosoted wood; **(10/13)**
 - (c) biomass;
 - (d) oil filter fluff; and

- (e) metal shredder fluff that does not contain PCBs, as documented by certification obtained from the supplier that the fluff was obtained solely from products manufactured after July 2, 1979.
 - (2) Liquid fuels, as described in Section 2.3.4 of the August, 2010 permit amendment application.
 - (3) Gaseous fuels, as described in Section 2.3.5 of the August, 2010 permit amendment application.
 - (F) No hazardous waste, as defined by the Resource Conservation and Recovery Act (RCRA) and the rules implementing that Act, may be fired in the kiln or precalciner.
- 5. Alternate raw ingredients, as described in Section 2.4 of the August, 2010 permit amendment application, subject to Special Condition No. 6, are authorized as follows.
 - A. Aluminum-containing materials, including spent catalysts and filter materials.
 - B. Calcium-containing materials, including lime and limestone based filter cakes.
 - C. Gypsum-containing materials, including wallboard.
 - D. Iron-containing materials, including rusts and scales.
 - E. No hazardous waste, as defined by the RCRA and the rules implementing that Act, may be used as an alternate raw ingredient in the manufacture of Portland cement.
- 6. The alternate fuels listed in Special Condition No. 4 and the alternate raw ingredients listed in Special Condition No. 5 must meet the following conditions: **(06/11)**
 - A. The alternate fuel or ingredients shall serve the same basic function as the fuel or ingredient replaced, and the emissions shall be emitted from the same location as the replaced fuel or material emissions.
 - B. The maximum kiln system input rate and stack emission rate for each trace metal shall not exceed the rates identified in the August, 2010 permit amendment application, as updated June 29, 2011 on the table titled, "100% Worst Case Theoretical Fuels Combination with Worst Case Alternate Materials."
 - C. The use of any alternate fuel or ingredient shall not result in an increase in total emissions or an increase in toxicity from any emission point covered by Special Condition No. 1.C. over those set forth in the August 2010 permit amendment application, as updated.

- D. The use of any alternate fuel or ingredient containing trace metals not represented or not evaluated as part of the August 2010 permit amendment application will require an amendment to this permit.
- 7. Opacity of emissions from Kiln No. 5 during normal operations must not exceed 10% and during MSS activities 20%, averaged over a six-minute period. Compliance with these limits is determined by using the methods identified in Special Condition No. 16.E. **(3/15)**
- 8. The clinker production rate of Kiln No. 5 shall not exceed 2,800,000 tons of clinker per year.

Fugitive Dust Sources

- 9. 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.
- 10. 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.
 - 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.

11. 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.
- B. Opacity of emissions from any transfer point on belt conveyors must not exceed 5% 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% 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.
- 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.

12. Clinker and Finished Product Handling

- A. The cement distribution system to the main truck and rail car loading process shall not exceed 300 tons per hour per load spout.
- B. Opacity of emissions from clinker handling facilities, finish mills, storage silos and loadouts must not exceed 5% 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.

13. 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 EPA Test 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 m²) and be covered as necessary to minimize fugitive emissions.

Initial Determination of Compliance

- 14. A. Sampling ports and platform(s) shall be incorporated into the design of the Kiln No. 5 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.
- B. Within 180 days of start-up of Kiln No. 5, the permittee shall perform stack sampling and other required testing to establish the actual pattern and quantities of NO_x, carbon monoxide (CO), SO₂, sulfuric acid mist (H₂SO₄), total hydrocarbons, and front- and back-half PM and PM equal to or less than 10 microns in diameter. The sampling must be performed within 10% of the maximum proposed production rate with the raw mill operating.

Additionally, sampling within 10% of the maximum production rate shall be performed for SO₂ and H₂SO₄ with the raw mill down. Sampling must be conducted in accordance with appropriate procedures of the TCEQ Sampling Procedures

Manual and in accordance with EPA Test Methods. The permittee is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at its expense.

- (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:
 - (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.

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.

- (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) 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.

15. Any Authorized Unit Covered by this Permit and Listed on the MAERT.

- A. If sampling of stacks or process vents is required, the permittee shall contact the TCEQ Air Permits Division prior to sampling to obtain the proper data forms and procedures. The permittee 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.

- 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.
- C. It shall be the responsibility of the permittee 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

16. A. The permittee shall install, calibrate, operate, and maintain a COMS for opacity (except as provided in Special Condition No. 16.E.) and a continuous emissions

monitoring system (CEMS) to monitor the in-stack concentrations of SO₂, NO_x, THC, and CO from the Kiln No. 5 stack. The permittee shall install, calibrate, and maintain a continuous flow rate sensor to measure and record the exhaust flow rate in the kiln stack.

- (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.
- (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% 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)
 - (a) 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.
 - (b) Data recorded during periods of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the computed data averages.
 - (c) The CEMS data shall also be reduced to units of the permit allowable emission rate in lbs/hr.

- (d) 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 cylinder gas audit (CGA) required by Appendix F in order to provide the TCEQ staff the opportunity to observe the testing.
 - (6) The SO₂, NO_x, THC, and CO CEMS and the continuous flow rate sensor shall be used as a continuous emission rate monitoring system (CERMS) for SO₂, NO_x, THC, and CO to demonstrate continuous compliance with this permit.
 - (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 October 2005 permit amendment to reduce operation of the regenerative thermal oxidizer.
- B. For purposes of demonstrating compliance with the SO₂ emission limits of Special Condition No. 3.A. and the MAERT, the permittee shall monitor the wet scrubber as follows:
- (1) Uptime (in hours) as a percentage of kiln operating hours.
 - (2) Scrubbing liquid pH, density, and the power draw in kilowatts of the four scrubber recirculation pumps, recorded at least once per hour. During periods that the SO₂ CERMS is unable to provide a valid hourly emission rate, operating parameters must be maintained at levels that were previously shown by the CERMS to maintain compliance. **(3/15)**
- C. Within 90 days of start-up of Kiln No. 5, 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 permittee 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.

- (2) The THC CEMS requirements of this permit are applicable at all times Kiln 5 is in operation.

- E. After September 9, 2015, a PM continuous parametric monitoring system (CPMS) that has passed the initial certification requirements of 40 CFR Part 63, Subpart LLL may be used instead of a COMS. During the CPMS certification testing, opacity measurements shall be taken to establish a level of CPMS output that reliably corresponds to opacity below 10%. Compliance with such a CPMS level will be considered to demonstrate compliance with the opacity limit; however, the TCEQ may use EPA Test Method 9 to determine opacity at any time. **(3/15)**

Planned Maintenance, Startup, and Shutdown (3/15)

- 17. The holder of this permit shall minimize emissions during planned MSS activities by operating the facility and associated air pollution control equipment in accordance with good air pollution control practices, safe operating practices, and protection of the facility.

- 18. Planned startup and shutdown activities associated with the kiln shall comply with the following definitions and requirements to minimize emissions:
 - A. A planned startup of the kiln is defined as the period starting when the kiln's induced draft fan is turned on and fuel is fired in the main burner and ending when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 290 tons per hour, whichever occurs first.

 - B. A planned shutdown of the kiln is defined as the period starting when feed to the kiln is halted and ending when continuous kiln rotation ceases. A planned shutdown of the kiln is limited to 48 hours.

- 19. Compliance with the emissions limits for ILE planned maintenance activities identified in Attachment A of this permit shall be demonstrated as follows.
 - A. The total emissions from all ILE planned maintenance activities shall be considered to be no more than the estimated potential to emit for those activities that are represented in the MSS permit amendment application and subsequent associated submittals.

 - B. The permit holder shall annually confirm the continued validity of the estimated potential to emit as represented in the MSS permit amendment application and subsequent associated submittals. This confirmation is based on assessing whether there have been changes to maintenance activities during the previous year that may have increased the emissions resulting from such activities.

20. Emissions from planned startup and shutdown activities authorized by this permit shall be determined by the use of an appropriate method, including but not limited to any of following methods:
 - A. Use of a CEMS. If emission concentrations measured by the CEMS during MSS activities exceed the maximum value of the range over which the CEMS is certified, additional information must be provided to justify the use of the CEMS data in the emission determination. The additional information may include use of default values that are shown to conservatively estimate the actual emissions.
 - B. Use of emission factors including but not limited to, facility-specific parameters, manufacturer's emission factors, and/or engineering knowledge of the facility's operations.
 - C. Use of emissions data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at or on an identical or similar facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.
 - D. Use of emissions testing data collected during a planned maintenance activity occurring at or on the facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.

Recordkeeping

21. 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. Additional recordkeeping requirements may be specified in special conditions of this permit. Information in the file shall be retained for at least five years on a rolling retention basis following the date that the information or data is obtained. **(6/11)**
22. The following records shall be made, maintained on-site on a rolling five-year retention basis, and made available upon request to the TCEQ or any air pollution control program having jurisdiction. **(6/11)**
 - A. Clinker production rates, in tons per hour, tons per day, daily summed on a 30-day rolling basis, and monthly summed on a 12-month rolling basis. Hourly and daily clinker production rates may be based on the previous months' feed-to-clinker ratio multiplied by the measured hourly/daily kiln feed rate, as specified in 40 CFR Subpart F, § 60.63(b).

- B. Daily fuel consumption of coal, petroleum coke, tires, natural gas, and specific alternate fuels. Fuel consumption records shall be summed monthly.
- C. Written analyses for all coal and petroleum coke from each supplier to show compliance with the sulfur concentration limits of this permit and the petroleum coke metals content representations of the August, 2010 permit amendment application. Sulfur and trace metal content may be verified by vendor-provided, on-site, or third-party analysis. 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 input to the kiln reported by type and in pounds per hour or tons per hour.
- F. Written analyses for all alternate fuels and raw materials from each supplier to show compliance with the trace metals maximum total input representations of the August, 2010 permit amendment application, as updated June 29, 2011. Trace metal content may be verified by vendor-provided, on-site, or third-party analysis. Records need only be updated if the supplier is changed.
- G. Malfunctions of any air pollution abatement systems.
- H. Documentation of air pollution control equipment maintenance and repair.
- I. Continuous emission monitoring data for opacity, flow rate, CO, NO_x, SO₂, and THC from the CEMS to demonstrate compliance with the emission rates listed in the MAERT and performance standards listed in this permit. Data retention at intervals less than one hour is not required. Records should identify the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, maintenance and malfunction, along with the justification for excluding data. Records should also identify factors used in calculations that are used to demonstrate compliance with emissions limits and performance standards. Recordkeeping in units of daily lbs of pollutant per ton of clinker produced shall commence within 90 days of the permit amendment authorizing alternate fuels.
- J. Raw Material Handling
 - (1) Daily and annual throughput records for limestone, shale, anhydrite, iron components, and any other clinker ingredients

- (2) Preventative maintenance, scheduled maintenance, and repair maintenance performed, showing compliance with 30 TAC § 101.211.
 - (3) Malfunctions in the process or any air pollution abatement equipment.
 - (4) Documentation demonstrating 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 is being met and a sample of each record sheet required to be maintained by any condition.
- K. Clinker and Cement Handling System
- (1) Daily tons of clinker, gypsum, anhydrite, or other materials milled or blended to produce finished cement.
 - (2) Daily tons of finished cement stored or shipped out of the plant, including time of day stored or shipped, in order to show compliance with the annual emission limits for EPNs E4-9, 10, 11, 13, 21, and 25; and EPNs E4-19 and E4-20.
 - (3) Preventative maintenance, scheduled maintenance, and repair maintenance performed, showing compliance with 30 TAC § 101.211.
 - (4) Malfunctions in the process or any air pollution abatement equipment.
 - (5) Documentation demonstrating 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 and a sample of each record sheet required to be maintained by any condition.
- L. Records of MSS, including the following, to demonstrate compliance with Special Condition Nos. 17-20 and the MAERT. Any additional recordkeeping to comply with this requirement does not need to begin until 180 days after issuance of the amendment that added this condition. **(3/15)**
- (1) Records of startup and shutdown of the kiln, including the date, time, duration, and estimated emissions associated with those activities.
 - (2) Records of ILE planned maintenance activities and annual validations.

Reporting

23. In addition to applicable NSPS reporting requirements, the permittee 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:

- A. The date and duration of time from the commencement to the completion of an event which resulted in excess emissions of any pollutant.
- B. The date and time of the commencement and completion of each specific time period of excess emissions within that event.
- C. The total time duration of excess emissions.
- D. 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.
- E. The nature and cause of any malfunction resulting in excess emissions and the corrective action taken and/or preventative measures adopted.
- F. 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.
- G. 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.
- H. The total tons of SO₂, 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.
- I. 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.
- J. The reporting of excess emissions required by this condition does not relieve the permittee 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.
- K. Quarterly CGA reports and RATA pursuant to Appendix F of 40 CFR Part 60.

Additional Authorizations at the Site

24. The table below lists the maintenance-related sources or activities that are authorized by permits by rule (PBR) under 30 TAC Chapter 106, or as de minimis sources under 30 TAC § 116.119 and are listed here for reference purposes only. This list is not intended to be all-inclusive and can be altered at the site without modifications to this permit. **(3/15)**

Source or Activity	Authorization
Application of aqueous detergents, surfactants, and other cleaning solutions containing not more than one percent of any organic compound by weight or containing not more than five percent of any organic compound with a vapor pressure less than 0.002 pounds per square inch absolute	De minimis
Lab sampling and analysis	De minimis

Source or Activity	Authorization
Manual applications of cleaning or stripping solutions or coatings for maintenance, including applications using brushes, cloth pads, sponges, droppers, tube dispensing equipment, or spray bottles and pump-up sprayers without aerosol propellants	De minimis
Office cleaning activities	De minimis
Yard work and landscaping	De minimis
Pesticides, insecticides, and fumigation	De minimis
Inorganic chemical usage	De minimis
Application of aerosol-propelled organic liquids using hand-held devices for maintaining equipment and other facilities where usage is no more than four aerosol cans or 64 ounces per day on a 12-month rolling average basis	De minimis
Application of lubricants (including greases and oils) without aerosol propellants	De minimis
Blast cleaning equipment using only water as the cleaning media	De minimis
Comfort air conditioning systems or comfort ventilation systems	De minimis
Refrigeration system repair	De minimis
Brazing, soldering, and welding	PBR § 106.227
Maintenance painting	PBR § 106.263
Enclosed and outdoor dry abrasive blasting	PBR § 106.263
Hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of ceramic art work, ceramic precision parts, leather, metals, plastics, fiber board, masonry, carbon, glass, graphite, or wood	PBR § 106.265
Solvent cleaning, parts degreaser	PBR § 106.454
Emergency engines and portable small engines, over 12 months on site, including startup and shutdown	PBR § 106.511
Sludge management	PBR § 106.532
Organic chemical usage for water treatment	PBR § 106.532

25. The table below lists production-related facilities or operations that are authorized by PBR under 30 TAC Chapter 106 or by Standard Permit (SP) under 30 TAC Chapter 116 and are listed here for reference purposes only. This list is not intended to be all inclusive and can be altered at the site without modifications to this permit.

Source or Operation	Authorization	Registration No.
Portable Crusher	PBR § 106.142	41046
Grandfathered Piles and Drops	PBR § 106.261	49617
Material Handling Equipment	PBR § 106.261	50056
Gypsum Handling	PBR § 106.261	50701
Clinker Loadout	PBR § 106.261	51232
Airslide in Silo Group 3	PBR § 106.261	51234
Secondary Combustion of Tires	SP § 116.617	53424
Raw Material Transfers	PBR § 106.261	81823
Raw Material Transfers	PBR § 106.261	83073
Reserve Clinker Pile	PBR § 106.261	83128

Date: March 13, 2015

Attachment A

Permit Numbers 1360A and PSDTX632M1

Inherently Low Emitting Maintenance Activities

Planned Maintenance Activity	VOC	NO_x	CO	PM	SO₂
Vacuum truck solids loading				X	
Vacuum truck solids unloading				X	
Material handling system maintenance				X	
Material handling system maintenance (air guns)				X	
CEMS calibration		X	X		X
Lube oil maintenance	X				
Refractory maintenance operations				X	
Deslagging/descaling maintenance operations		X	X	X	
Gaseous fuel venting	X				
Miscellaneous particulate filter maintenance				X	
Kiln particulate filter maintenance				X	
Gasoline tank vessel maintenance					

Date: March 13, 2015

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 1360A and PSDTX632M1

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, sources, and related activities. 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 (4)	
			lbs/hour	TPY (5)
E1-1	Raw Material Delivery, Road Dust (6)	PM	--	3.64
		PM ₁₀	--	1.39
E1-2	Cement Trucks, Road Dust (6)	PM	1.34	2.78
		PM ₁₀	0.49	1.02
E1-7	Gypsum Pile, Wind Erosion (6)	PM	0.08	0.07
		PM ₁₀	0.04	0.03
E1-8	Anhydrite Pile, Wind Erosion (6)	PM	0.08	0.05
		PM ₁₀	0.04	0.02
E1-11	Sand Pile, Wind Erosion (6)	PM	0.03	0.02
		PM ₁₀	0.02	0.01
E1-12	Quarry Dozing Operations (6)	PM	4.82	12.93
		PM ₁₀	3.56	9.42
E1-13	Quarry Loader, Road Dust (6)	PM	0.87	4.18
		PM ₁₀	0.40	1.88
E1-16	Limestone Belt Transfer Drop	PM	0.13	0.10
		PM ₁₀	0.06	0.05
E1-20	Pile Material Loader, Road Dust (6)	PM	0.53	0.64
		PM ₁₀	0.24	0.29
E1-21	Sand Delivery Truck, Road Dust (6)	PM	22.20	13.88
		PM ₁₀	9.03	5.53

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
E1-22	CKD Truck, Road Dust (6)	PM	3.23	3.02
		PM ₁₀	0.98	0.78
E1-23	Raw Material Drops to Storage Area (6)	PM	0.13	0.10
		PM ₁₀	0.06	0.05
E1-24	Primary Crusher (6)	PM	0.01	0.02
		PM ₁₀	<0.01	0.01
E1-25	Transfer Point No. 1 (6)	PM	0.08	0.14
		PM ₁₀	0.04	0.07
E1-26	Transfer Point No. 2 (6)	PM	0.08	0.14
		PM ₁₀	0.04	0.07
E1-27	Secondary Crusher (6)	PM	0.39	0.72
		PM ₁₀	0.15	0.27
E1-28	Overland Conveyor Diverter Drop (6)	PM	0.08	0.14
		PM ₁₀	0.04	0.07
E1-29	Limestone Storage Dome Drops (6)	PM	0.08	0.14
		PM ₁₀	0.04	0.07
E1-30	Underground Belt Feeder Drop (6)	PM	0.26	1.13
		PM ₁₀	0.26	1.13
E1-30A	Raw Bins to Overland Conveyor (6)	PM	0.08	0.05
		PM ₁₀	0.04	0.03
E1-31	Raw Bins Baghouse (11)	PM	0.79	3.47
		PM ₁₀	0.79	3.47

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
E1-31A	Limestone Transfer Baghouse	PM	1.20	5.26
		PM ₁₀	1.20	5.26
E1-31B	Raw Materials Circulation Baghouse	PM	0.75	3.30
		PM ₁₀	0.75	3.30
E1-32	Sand, Drop to Hopper (6)	PM	0.02	0.02
		PM ₁₀	0.01	0.01
E1-32a	Sand Belt Transfer (6)	PM	0.01	0.01
		PM ₁₀	<0.01	<0.01
E1-32b	Iron/Sand Belt Weigh Feeder Drop (6)	PM	0.01	0.01
		PM ₁₀	<0.01	<0.01
E1-33	Overland Conveyor Transfer No. 3 (6)	PM	0.08	0.14
		PM ₁₀	0.04	0.07
E1-34	Overland Conveyor Transfer No. 4 (6)	PM	0.08	0.14
		PM ₁₀	0.04	0.07
E2-7	Blending Silo Baghouse (11)	PM	1.02	4.47
		PM ₁₀	1.02	4.47
E2-7A	Blending Silo Discharge Baghouse	PM	0.63	2.74
		PM ₁₀	0.63	2.74
E2-7B	Preheater Tower Pneumatic Feed Baghouse (11)	PM	0.99	4.32
		PM ₁₀	0.99	4.32
E2-10a	CKD Drop from Truck (6)	PM	<0.01	0.01
		PM ₁₀	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
E2-10b	Quarry CKD Bin Baghouse	PM	0.06	0.14
		PM ₁₀	0.06	0.14
E2-10C	CKD Bin Baghouse	PM	0.43	0.94
		PM ₁₀	0.43	0.94
E2-10D	Kiln Dust to Scrubber Baghouse	PM	0.17	0.73
		PM ₁₀	0.17	0.73
E2-10F	CKD Drop to Truck (6)	PM	0.01	0.01
		PM ₁₀	<0.01	0.01
E2-11	Lime Delivery Truck, Road Dust (6)	PM	5.69	0.47
		PM ₁₀	0.59	0.05
E2-11A	Dust Bin Baghouse	PM	0.60	2.68
		PM ₁₀	0.60	2.68
E2-11B	Lime Silo Baghouse	PM	0.25	0.27
		PM ₁₀	0.25	0.27
E2-12	Iron Additive Truck, Road Dust (6)	PM	17.67	8.84
		PM ₁₀	5.99	2.99
E2-13A	Loader Drop to Grizzly Screen (6)	PM	0.12	0.34
		PM ₁₀	0.06	0.17
E2-13P	Slag Pile, Wind Erosion (6)	PM	0.01	<0.01
		PM ₁₀	0.01	<0.01
E2-14	Iron Component Loader, Road Dust (6)	PM	9.17	5.68
		PM ₁₀	4.13	2.55

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
E2-14a	Steel Slag Grizzly Screen (6)	PM	0.18	0.09
		PM ₁₀	0.09	0.05
E2-17	Iron Feed System Hopper (6)	PM	0.08	0.06
		PM ₁₀	0.04	0.03
<p>The following three sources are permit by rule (PBR) sources incorporated by reference. They remain authorized by PBR 30 TAC § 106.261, reviewed under Registration No. 91551, issued January 8, 2010.</p>				
E2-17a	Clinker Reclaim Drop to Hopper (6)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
E2-17b	Clinker Reclaim Hopper Drop to Belt (6)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
E2-17c	Clinker Reclaim Belt to Belt Drop (6)	PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
E2-18P	East Slag Pile, Wind Erosion (6)	PM	0.01	<0.01
		PM ₁₀	0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
E2-22	Kiln No. 5 Main Stack	NO _x (13)	681.25	2,725
		SO ₂	332.25	1,329
		CO	500	1,020.1
		PM, total	69.24	267.77
		PM, filterable	29.24	107.77
		PM ₁₀ , total	69.24	267.77
		PM ₁₀ , filterable	29.24	107.77
		PM _{2.5}	53.67	225.41
		HCl	27.39	107.97
		H ₂ SO ₄	33.23	103.68
		VOC/THC	19.06	67.1
		TRS (incl. H ₂ S)	2.26	9.9
		Hg	0.13	0.51
		Pb	0.01	0.04
E3-1	No. 4 Clinker Elevator Baghouse (11)	PM	0.21	0.94
		PM ₁₀	0.21	0.94
E3-2	No. 3 Tunnel Baghouse (11)	PM	0.21	0.94
		PM ₁₀	0.21	0.94
E3-3	No. 2 Tunnel Baghouse	PM	0.43	1.88
		PM ₁₀	0.43	1.88
E3-5	No. 1 Tunnel Baghouse	PM	0.43	1.88
		PM ₁₀	0.43	1.88

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
E3-6	700 Pan Conveyor Baghouse (11)	PM	0.43	0.94
		PM ₁₀	0.43	0.94
E3-9	Fringe Bins Nos. 1 - 3 FM Baghouse	PM	0.17	0.75
		PM ₁₀	0.17	0.75
E3-10	Additive Silos Conveyor Drop (6)	PM	0.43	1.88
		PM ₁₀	0.43	1.88
E3-11	No. 708 Drag Conveyor Baghouse (11)	PM	0.32	0.70
		PM ₁₀	0.32	0.70
E3-12	Reclaim Belt Baghouse (6)	PM	0.26	0.56
		PM ₁₀	0.26	0.56
The following source is a permit by rule (PBR) source incorporated by reference. It remains authorized by PBR 30 TAC § 106.261, reviewed under Registration No. 83128, issued October 25, 2007.				
E3-13A	Reserve Clinker Pile, Wind Erosion (6)	PM	0.23	0.99
		PM ₁₀	0.11	0.50
The following four sources are permit by rule (PBR) sources incorporated by reference. They remain authorized by PBR 30 TAC § 106.261, reviewed under Registration No. 91551, issued January 8, 2010.				
E3-13B	Reserve Clinker Drop to Hopper (6)	PM	<0.01	0.01
		PM ₁₀	<0.01	<0.01
E3-13C	Reserve Clinker Hopper Drop to Belt (6)	PM	<0.01	0.01
		PM ₁₀	<0.01	<0.01
E3-13D	Reserve Clinker, Portable Screen (6)	PM	0.01	0.03
		PM ₁₀	<0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
E3-13E	Reserve Clinker Pile 2, Wind Erosion (6)	PM	0.11	0.50
		PM ₁₀	0.06	0.25
E3-14	Fly Ash Silo Baghouse	PM	0.15	0.68
		PM ₁₀	0.15	0.68
E3-15	South Clinker Group No. 4 Baghouse	PM	0.43	0.94
		PM ₁₀	0.43	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
E3-23	Lower Reclaim Belt Baghouse	PM	0.26	0.38
		PM ₁₀	0.26	0.38
E3-24	Stacker Belt Sec. 2 Baghouse	PM	0.43	0.94
		PM ₁₀	0.43	0.94
E3-25	FM No. 6 Transfer Tower Baghouse (11)	PM	0.31	1.35
		PM ₁₀	0.31	1.35
E3-33	Clinker Barn West Baghouse (11)	PM	0.32	1.41
		PM ₁₀	0.32	1.41
E3-33A	Clinker Outhaul to FM No. 6 Baghouse (11)	PM	0.29	1.28
		PM ₁₀	0.29	1.28

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
The following three sources are permit by rule (PBR) sources incorporated by reference. They remain authorized by PBR 30 TAC § 106.261, reviewed under Registration No. 81823, issued June 5, 2007.				
E3-33b	Clinker Drop from Loader to Hopper (6)	PM	6.51	3.25
		PM ₁₀	3.08	1.54
E3-33c	Hopper Clinker Drop to Belt 712T (6)	PM	0.74	3.25
		PM ₁₀	0.35	1.54
E3-33d	Belt 712T Clinker Drop to Belt 713 (6)	PM	0.74	3.25
		PM ₁₀	0.35	1.54
E3-34	Surge Collector Baghouse	PM	0.64	0.84
		PM ₁₀	0.64	0.84
E3-35	Gypsum/Anhydrite Storage Bin Baghouse	PM	0.09	0.19
		PM ₁₀	0.09	0.19
E3-37	Nos. 9-10 Clinker Silo Baghouse	PM	0.86	3.75
		PM ₁₀	0.86	3.75
E3-38	Clinker Barn East Tunnel Baghouse	PM	0.64	1.41
		PM ₁₀	0.64	1.41
E3-41	East Clinker Door Baghouse	PM	0.64	2.82
		PM ₁₀	0.64	2.82
E3-42	West Clinker Door Baghouse	PM	0.64	2.82
		PM ₁₀	0.64	2.82
E3-50	Additive Hopper, Drop Fugitive (6)	PM	0.04	0.03
		PM ₁₀	0.02	0.02

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
E3-51	Additive Hopper, Drop to Belt (6)	PM	0.04	0.03
		PM ₁₀	0.02	0.02
The following three sources are permit by rule (PBR) sources incorporated by reference. They remain authorized by PBR 30 TAC § 106.261, reviewed under Registration No. 83073, issued October 5, 2007.				
E3-51a	Additive Drop to Hopper (6)	PM	0.52	0.26
		PM ₁₀	0.25	0.12
E3-51b	Additive Hopper, Drop to Belt (6)	PM	0.02	0.08
		PM ₁₀	0.01	0.04
E3-51c	Additive Hopper, Belt to Belt Drop (6)	PM	0.02	0.08
		PM ₁₀	0.01	0.04
E3-52	Pan Conveyor Baghouse	PM	0.63	2.74
		PM ₁₀	0.63	2.74
E3-52A	Clinker Discharge Baghouse	PM	0.37	1.61
		PM ₁₀	0.37	1.61
E3-53	Clinker Belt Transfer Baghouse	PM	0.58	2.55
		PM ₁₀	0.58	2.55
E3-54	FM No. 6 Bins Baghouse	PM	1.79	7.85
		PM ₁₀	1.79	7.85
E3-55	Finish Mill No. 6 Baghouse	PM	5.76	25.23
		PM ₁₀	2.88	12.61
E3-57	Finish Mill No. 6 Cement Baghouse	PM	0.12	0.53
		PM ₁₀	0.12	0.53

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
E4-1	Finish Silo Group No. 4 Baghouse (11)	PM	0.77	3.38
		PM ₁₀	0.77	3.38
E4-2	Finish Silo Group No. 3 Baghouse (11)	PM	0.77	3.38
		PM ₁₀	0.77	3.38
E4-3	Finish Silo Group No. 4 Baghouse (11)	PM	0.21	0.94
		PM ₁₀	0.21	0.94
E4-5	Finish Silo Group No. 2 Baghouse	PM	0.51	2.25
		PM ₁₀	0.51	2.25
E4-6	Finish Silo Group No. 1 Baghouse	PM	0.13	0.56
		PM ₁₀	0.13	0.56
E4-7	Finish Silo Group No. 1 Baghouse	PM	0.13	0.56
		PM ₁₀	0.13	0.56
E4-8	Finish Silo Group No. 1 Baghouse	PM	0.08	0.34
		PM ₁₀	0.08	0.34
E4-9	Rail Loading Baghouse (7)	PM	0.04	0.17
		PM ₁₀	0.04	0.17
E4-10	Rail System Baghouse (7) (9) (11)	PM	0.45	0.67
		PM ₁₀	0.45	0.67
E4-11	Rail Loading No. 3 Baghouse (7)	PM	0.14	0.62
		PM ₁₀	0.14	0.62
E4-12	FM No. 6 Transfer Baghouse (11)	PM	0.54	2.35
		PM ₁₀	0.54	2.35

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
E4-13	Truck Loadout Baghouse (7) (9)	PM	0.06	0.09
		PM ₁₀	0.06	0.09
E4-16	Truck Loadout No.2 Baghouse (11)	PM	0.36	1.6
		PM ₁₀	0.36	1.6
E4-17	Truck Loadout No.1 Baghouse (11)	PM	0.36	1.6
		PM ₁₀	0.36	1.6
E4-18	Truck Loading Baghouse	PM	0.36	1.6
		PM ₁₀	0.36	1.6
E4-19	Packhouse Elevator Baghouse (7)	PM	0.19	0.83
		PM ₁₀	0.19	0.83
E4-20	Bagging Machine Baghouse (7)	PM	0.69	3.0
		PM ₁₀	0.69	3.0
E4-21	Masonry Rail Loadout Baghouse (7) (9) (11)	PM	0.04	0.17
		PM ₁₀	0.04	0.17
E4-22	Truck Loadout Baghouse	PM	0.32	1.41
		PM ₁₀	0.32	1.41
E4-24	No. 5 Bin Baghouse	PM	0.30	1.31
		PM ₁₀	0.30	1.31
E4-25	Masonry Bagging Baghouse (7) (10)	PM	0.21	0.19
		PM ₁₀	0.21	0.19
E4-26	No. 6 Bin Baghouse	PM	0.30	1.31
		PM ₁₀	0.30	1.31

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
E4-27	Traveling Rail Loadout Baghouse	PM	0.21	0.94
		PM ₁₀	0.21	0.94
E4-28	No. 3 Load Spout Baghouse	PM	0.21	0.94
		PM ₁₀	0.21	0.94
E6-1	Coal Drop from Railcar to Rail Hopper (6)	PM	0.12	0.11
		PM ₁₀	0.06	0.06
E6-2	Coal Drop from Rail Hopper to Belt (6)	PM	0.12	0.11
		PM ₁₀	0.06	0.06
E6-4	Coal Pile, Wind Erosion (6)	PM	0.01	0.05
		PM ₁₀	0.01	0.03
The following source is a permit by rule (PBR) source incorporated by reference. It remains authorized by PBR 30 TAC § 106.261, reviewed under Registration No. 88314, issued May 26, 2009.				
E6-4A	Coal Pile, Wind Erosion (6)	PM	0.13	0.55
		PM ₁₀	0.06	0.28
E6-5	Coal Delivery Truck, Road Dust (6) (8)	PM	1.14	1.06
		PM ₁₀	0.51	0.48
E6-6	Coal Loader, Road Dust (6)	PM	0.50	0.35
		PM ₁₀	0.23	0.16
E6-7	Coal Loadout to Covered Storage (6)	PM	0.10	0.11
		PM ₁₀	0.05	0.06
E6-9	Coal Loader Drop to Hopper (6)	PM	0.07	0.11
		PM ₁₀	0.04	0.06

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
E6-10	Coal Crusher (6)	PM	0.02	0.02
		PM ₁₀	0.01	0.01
E6-18	Coal Drop to Stacker Belt (6)	PM	0.05	0.04
		PM ₁₀	0.03	0.02
E6-27	Solid Fuel Conveyor Diverter Baghouse	PM	0.52	2.29
		PM ₁₀	0.52	2.29
E6-28	Solid Fuel Mill Bin Baghouse	PM	0.13	0.56
		PM ₁₀	0.13	0.56
E6-29	Solid Fuel Drop from Bin to Weigh Feeder (6)	PM	0.01	0.04
		PM ₁₀	<0.01	0.02
E6-30	Coal Mill Baghouse Exhaust (11) (12)	PM	2.34	10.23
		PM ₁₀	2.34	10.23
E6-31	Coal Fines Bin Baghouse	PM	0.02	0.07
		PM ₁₀	0.02	0.07
ALTF-1	Alt. Solid Fuels Truck Drop to Hopper (6)	PM	0.01	0.05
		PM ₁₀	0.01	0.02
		PM _{2.5}	<0.01	<0.01
ALTF-2	Alt. Solid Fuels Screw Drop to Alt Fuel Belt 1 (6)	PM	<0.01	0.02
		PM ₁₀	<0.01	0.01
		PM _{2.5}	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
ALTF-3	Alt. Solid Fuels Belt 1 Drop to Belt 2 (6)	PM	<0.01	0.02
		PM ₁₀	<0.01	0.01
		PM _{2.5}	<0.01	<0.01
ALTF-4	Alt. Solid Fuels Belt 2 Drop to Belt 3 (6)	PM	<0.01	0.02
		PM ₁₀	<0.01	0.01
		PM _{2.5}	<0.01	<0.01
ALTF-5	Alt. Solid Fuels Belt 3 Drop to Tower Hopper Screws (6)	PM	<0.01	0.02
		PM ₁₀	<0.01	0.01
		PM _{2.5}	<0.01	<0.01
ALTF-6	Alt. Solid Fuels Hopper Screws to Belt 4 (6)	PM	<0.01	0.02
		PM ₁₀	<0.01	0.01
		PM _{2.5}	<0.01	<0.01
ALTF-7	Alt. Solid Fuels Belt 4 Drop to Belt 5 (6)	PM	<0.01	0.02
		PM ₁₀	<0.01	0.01
		PM _{2.5}	<0.01	<0.01
ALTF-8	Alt. Solid Fuels Belt 5 Drop to Feed Screw (6)	PM	<0.01	0.02
		PM ₁₀	<0.01	0.01
		PM _{2.5}	<0.01	<0.01
ALTM-1	Alternate Raw Material Loader Drop to Hopper (6)	PM	0.05	0.03
		PM ₁₀	0.03	0.01
		PM _{2.5}	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
ALTM-2	Alternate Raw Material Hopper Drop to Belt (6)	PM	0.03	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	<0.01	<0.01
BIO-P-1	Alt. Solid Fuels – Biomass Pile, Wind Erosion (6)	PM	0.04	0.18
		PM ₁₀	0.02	0.09
		PM _{2.5}	0.01	0.04
CAT-P-1	Alt. Materials - Catalyst Pile, Wind Erosion (6)	PM	0.04	0.18
		PM ₁₀	0.02	0.09
		PM _{2.5}	0.01	0.04
CKDL-1	CKD Landfill Dozer Dust Emissions (6)	PM	0.17	0.04
		PM ₁₀	0.07	0.02
CKDL-2	CKD Pile, Wind Erosion (6)	PM	--	0.10
		PM ₁₀	--	0.05
E-A-1	Manifold Small Tanks (6)	VOC	0.05	0.24
E-A-2	Manifold Large Tanks (6)	VOC	0.02	0.10
E-F-1	Small Storage Equipment (6)	VOC	0.05	0.21
E-F-2	Large Storage Equipment (6)	VOC	0.07	0.31
E-F-3	Pump Pit Fuel Component (6)	VOC	0.07	0.30
E-F-4	Fuel Island Fuel Lines (6)	VOC	0.08	0.34
E-F-5	Burner Floor Fuel Lines (6)	VOC	0.02	0.10
E-Q-1	Fuel Island Quench Lines (6)	VOC	<0.01	0.02
E-Q-2	Quench Tank Equipment (6)	VOC	<0.01	0.04

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
E-Q-3	Pump Pit Quench Water Components (6)	VOC	<0.01	0.01
E-Q-4	Burner Floor Quench Lines (6)	VOC	0.03	0.11
FLTC-P-1	Alt. Materials - Filter Cake Pile, Wind Erosion (6)	PM	0.04	0.18
		PM ₁₀	0.02	0.09
		PM _{2.5}	0.01	0.04
IRN-P-1	Alt. Materials - Iron Pile, Wind Erosion (6)	PM	0.04	0.18
		PM ₁₀	0.02	0.09
		PM _{2.5}	0.01	0.04
PC5-1	Petroleum Coke Front End Loader Drop to Hopper (6)	PM	0.39	0.28
		PM ₁₀	0.18	0.13
		PM _{2.5}	0.03	0.02
PC5-2	Petroleum Coke Fuel Pile, Wind Erosion (6)	PM	0.33	1.45
		PM ₁₀	0.17	0.72
		PM _{2.5}	0.03	0.11
PC5-4	Pet Coke Mill Feed Bin Baghouse	PM	0.03	0.14
		PM ₁₀	0.03	0.14
		PM _{2.5}	0.01	0.02
PC5-5	Pet Coke Bin Baghouse	PM	0.03	0.14
		PM ₁₀	0.03	0.14
		PM _{2.5}	0.02	0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
WB-P-1	Alt. Materials - Wallboard Pile, Wind Erosion (6)	PM	0.04	0.18
		PM ₁₀	0.02	0.09
		PM _{2.5}	0.01	0.04
WD-P-1	Alt. Solid Fuels – Wood Products Pile, Wind Erosion (6)	PM	0.04	0.18
		PM ₁₀	0.02	0.09
		PM _{2.5}	0.01	0.04
MSSFUG	Inherently Low-Emitting Planned Maintenance Activities (6)	PM	1.47	1.25
		PM ₁₀	0.90	0.92
		PM _{2.5}	0.31	0.36
		NO _x	0.02	<0.01
		CO	0.5	<0.01
		SO ₂	0.01	0.01
		VOC	1.45	<0.01

- (1) Emission point identification - either specific equipment designation or emission point number (EPN) 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 (30 TAC § 101.1)
- NO_x - total oxides of nitrogen
- SO₂ - sulfur dioxide
- PM - particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
- PM₁₀ - PM equal to or less than 10 microns in diameter. Where PM is not listed it shall be assumed that no PM greater than 10 microns is emitted.
- PM_{2.5} - particulate matter of 2.5 microns and smaller
- CO - carbon monoxide
- THC - total hydrocarbons
- HCl - hydrogen chloride
- HF - hydrogen fluoride

Emission Sources - Maximum Allowable Emission Rates

H₂S - hydrogen sulfide
H₂SO₄ - sulfuric mist
TRS - total reduced sulfur
Cl₂ - chlorine
Hg - mercury
Pb - lead

- (4) Planned maintenance, startup, and shutdown (MSS) emissions are included.
- (5) Compliance with annual emission limits is based on a 12-month rolling period.
- (6) Fugitive emission rates are an estimate and are enforceable through compliance with the applicable special conditions and permit application representations.
- (7) Annual emission rates are based on daily operation limits as follows:
 - A. EPNs E4-9, 10, 11, 13, 21, and 25 shall not operate between 8 p.m. and 4 a.m.
 - B. EPNs E4-19 and E4-20 shall not operate between midnight and 8 a.m.
- (8) EPN E6-5 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.
- (9) Annual emissions are based on and the facilities are limited to a maximum annual operating schedule of 2,978 hours per year.
- (10) EPN E4-25 annual emission rates are based on and the facilities are limited to a maximum annual operating schedule of 1,752 hour per year.
- (11) These emission points are required to use polytetrafluoroethylene (PTFE) membrane-lined, high-efficiency bags.
- (12) The exhaust from the coal mill baghouse vent, EPN E6-30, must be rerouted to the inlet or upstream side of the roller (raw) mill before the startup of the new clinker cooler, as described in the August, 2010 permit amendment application.
- (13) Kiln 5 hourly NO_x emission limit is based on a 30-day rolling average.

Date: December 7, 2015