

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Lehigh Cement Company LLC

AUTHORIZING THE OPERATION OF
Lehigh Cement Waco Plant
White Cement Plant
Cement

LOCATED AT
McLennan County, Texas
Latitude 31° 28' 52" Longitude 97° 14' 39"
Regulated Entity Number: RN100218254

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: O1035 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	8
New Source Review Authorization Requirements	9
Compliance Requirements.....	10
Protection of Stratospheric Ozone.....	11
Permit Location.....	12
Permit Shield (30 TAC § 122.148).....	12
Attachments	13
Applicable Requirements Summary	14
Additional Monitoring Requirements	24
Permit Shield.....	49
New Source Review Authorization References.....	52
Appendix A	61
Acronym List	62
Appendix B	63

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. 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.
- D. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

- E. 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 containers with a nominal capacity less than or equal to 1,000 gallons at a Stage I motor vehicle fuel dispensing facility, 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

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. 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

7. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached “CAM Summary” upon issuance of the permit. In addition, the permit holder shall comply with the following:
 - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
 - B. The permit holder shall report, consistent with the averaging time identified in the “CAM Summary,” deviations as defined by the deviation limit in the “CAM Summary.” Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
 - C. 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 “CAM 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 in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).

- D. The permit holder shall operate the monitoring, identified in the attached “CAM Summary,” in accordance with the provisions of 40 CFR § 64.7.
 - E. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.
8. 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

- 9. 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
- 10. 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.

11. 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).
12. The permit holder shall comply with the following requirements for Air Quality Standard Permits:
 - A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit
 - B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit
 - C. Applicable requirements of 30 TAC § 116.617 for Pollution Control Projects based on the information contained in the registration application.

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.
 - A. The permit holder shall comply with the compliance schedule as required in 30 TAC § 117.9320 for cement kilns.
14. 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

15. 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. Any on site servicing, maintenance, and repair of fleet vehicle air conditioning using ozone-depleting refrigerants shall be conducted in accordance with 40 CFR Part 82, Subpart B. Permit holders shall ensure that repairs or refrigerant removal are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart B.

Permit Location

16. 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)

17. 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

Applicable Requirements Summary

Unit Summary15

Applicable Requirements Summary 18

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 (§ 122.144), Reporting Terms and Conditions (§ 122.145), and Compliance Certification Terms and Conditions (§ 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
39WP-K	DRYER/KILN/OVEN	N/A	R7-117	30 TAC Chapter 117, Cement Kilns	No changing attributes.
GRPCCNV	NON-METALLIC MINERAL PROCESSING PLANTS	65, CBC1-3	60F	40 CFR Part 60, Subpart F	No changing attributes.
GRPCCS	NON-METALLIC MINERAL PROCESSING PLANTS	60WP, CC-1, CDC-1	60F	40 CFR Part 60, Subpart F	No changing attributes.
OUTCLK	NON-METALLIC MINERAL PROCESSING PLANTS	N/A	63LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPCS	NON-METALLIC MINERAL PROCESSING PLANTS	01012, F-62	60F	40 CFR Part 60, Subpart F	No changing attributes.
GRPCSS	NON-METALLIC MINERAL PROCESSING PLANTS	77, CDC-3, CDC-4, CDC-4 VENT, CSB-1, FCS-1, FCS-2	60F	40 CFR Part 60, Subpart F	No changing attributes.
GRPCSV	NON-METALLIC MINERAL PROCESSING PLANTS	61WP, AH-1, CDC-2, CM-1, CWF-1	60F	40 CFR Part 60, Subpart F	No changing attributes.
GRPESP1	NON-METALLIC MINERAL PROCESSING PLANTS	51, Q-DRYER	63LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPKILN1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	39WP-K, KBH	R1151	30 TAC Chapter 111, Nonagricultural Processes	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPKILN1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	39WP-K, KBH	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRPKILN1	PROCESS HEATERS/FURNACES	39WP-K, KBH, KILN-1	R200	30 TAC Chapter 112, Sulfur Compounds	No changing attributes.
GRPKILN1	DRYER/KILN/OVEN	KILN-1	R7-117	30 TAC Chapter 117, Cement Kilns	No changing attributes.
GRPKILN1	NON-METALLIC MINERAL PROCESSING PLANTS	39WP-K, KBH, KILN-1, KPH-1, KPH- 1 VENT	63LLL	40 CFR Part 63, Subpart LLL	No changing attributes.
GRPKILNCNV2	NON-METALLIC MINERAL PROCESSING PLANTS	70, KDC-4, KDS	60F	40 CFR Part 60, Subpart F	No changing attributes.
GRPWCG2	NON-METALLIC MINERAL PROCESSING PLANTS	27, FCC-1, FDC-1A, SEP-1	60F	40 CFR Part 60, Subpart F	No changing attributes.
GRPWCGCNV2	NON-METALLIC MINERAL PROCESSING PLANTS	FDC-3, FDC-3 VENT, FDC-4, FDC-4 VENT	60F	40 CFR Part 60, Subpart F	No changing attributes.
GRPWCP2	NON-METALLIC MINERAL PROCESSING PLANTS	PACKER, PACKERVENT, PDC- 2	60F	40 CFR Part 60, Subpart F	No changing attributes.
GRPWCS2	NON-METALLIC MINERAL PROCESSING PLANTS	ICS, ICU, IDC-1, IDC- 1 VENT, IDC-3, IDC- 3 VENT	60F	40 CFR Part 60, Subpart F	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPWSCNV2	NON-METALLIC MINERAL PROCESSING PLANTS	033 VENT, 057 VENT, RDC-1, RDC-2	60F	40 CFR Part 60, Subpart F	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)
39WP-K	EU	R7-117	NO _x	30 TAC Chapter 117, Cement Kilns	§ 117.3100 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 117, Cement Kilns	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, Cement Kilns	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
GRPCCNV	EU	60F	PM, Opacity	40 CFR Part 60, Subpart F	§ 60.60 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart F	** See Periodic Monitoring Summary	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart F
GRPCCS	EU	60F	PM, Opacity	40 CFR Part 60, Subpart F	§ 60.60 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart F	** See Periodic Monitoring Summary	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart F

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)
OUTCLK	EU	63LLL	PM	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
GRPCS	EU	60F	PM, Opacity	40 CFR Part 60, Subpart F	§ 60.60 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart F	** See Periodic Monitoring Summary	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart F
GRPCSS	EU	60F	PM, Opacity	40 CFR Part 60, Subpart F	§ 60.60 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart F	** See Periodic Monitoring Summary	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart F

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)
GRPCSV	EU	60F	PM, Opacity	40 CFR Part 60, Subpart F	§ 60.60 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart F	** See Periodic Monitoring Summary	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart F
GRPESP1	EU	63LLL	THC, D/F	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
GRPKILN1	EP	R1151	PM	30 TAC Chapter 111, Nonagricultural Processes	§ 111.151(a) § 111.151(c)	No person may cause, suffer, allow, or permit emissions of particulate matter from any source to exceed the allowable rates specified in Table 1 as follows, except as provided by §111.153 of this title (relating to Emissions Limits for Steam Generators).	** See CAM 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)
GRPKILN1	EP	R1111	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
GRPKILN1	EU	R200	SO2	30 TAC Chapter 112, Sulfur Compounds	§ 112.9(a)	No person may cause, suffer, allow, or permit emissions of SO2 from any liquid fuel-fired steam generator, furnace, or heater to exceed 440 ppmv at actual stack conditions and averaged over 3-hours.	§ 112.2(a) ** See Periodic Monitoring Summary	§ 112.2(c)	§ 112.2(b)
GRPKILN1	EU	R7-117	NOx	30 TAC Chapter 117, Cement Kilns	§ 117.3100 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 117, Cement Kilns	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, Cement Kilns	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
GRPKILN1	EU	63LLL	THC, D/F	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

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)
GRPKILNC NV2	EU	60F	PM, Opacity	40 CFR Part 60, Subpart F	§ 60.60 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart F	** See Periodic Monitoring Summary	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart F
GRPWCG2	EU	60F	PM, Opacity	40 CFR Part 60, Subpart F	§ 60.60 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart F	** See Periodic Monitoring Summary	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart F
GRPWCGCN V2	EU	60F	PM, Opacity	40 CFR Part 60, Subpart F	§ 60.60 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart F	** See Periodic Monitoring Summary	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart F

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)
GRPWCP2	EU	60F	PM, Opacity	40 CFR Part 60, Subpart F	§ 60.60 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart F	** See Periodic Monitoring Summary	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart F
GRPWCS2	EU	60F	PM, Opacity	40 CFR Part 60, Subpart F	§ 60.60 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart F	** See Periodic Monitoring Summary	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart F
GRPWSCNV 2	EU	60F	PM, Opacity	40 CFR Part 60, Subpart F	§ 60.60 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable requirements of 40 CFR Part 60, Subpart F	** See Periodic Monitoring Summary	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 60, Subpart F	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart F

Additional Monitoring Requirements

Compliance Assurance Monitoring Summary 25

Periodic Monitoring Summary..... 26

CAM Summary

Unit/Group/Process Information	
ID No.: GRPKILN1	
Control Device ID No.: KBH	Control Device Type: Fabric Filter
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: Site-specific parametric operating limit which demonstrates compliance with a particulate matter limit equal to or less than 0.07 lb/ton of clinker produced.	
Minimum Frequency: four times per hour	
Averaging Period: 30 days	
Deviation Limit: The maximum signal is currently established as 4.192 mA. This maximum signal value is subject to change with each compliance test conducted (minimum annually) and in accordance with the requirements of 40 CFR 60.63(c) and 40 CFR Part 63.1349(b).	
CAM Text: Each monitoring device shall be installed, operated, calibrated, and maintained in a manner consistent with 40 CFR Part 60, Appendix F, procedure 2 (P2) to insure their accuracy. A daily systems optics check will be conducted once every 24 hours to ensure the system has not been altered by the conditions of optical components, such as fogging of the lens and performance of light monitoring devices. The PM CPMS shall also be checked daily for indication that the system is responding pursuant to 40 CFR §63.8(c)(6) in conjunction with the daily systems optics check. A quarterly Absolute Correlation Audit (ACA) shall be conducted whereby the PM CPMS is challenged with audit standards (3) non-consecutive times at each measurement point. An Operating Limit Reassessment and Adjustment shall be conducted annually whereby the PM CPMS site-specific operating limit is reassessed and adjusted and accurately correlates to the PM emissions data collected using an EPA test method.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPCCNV	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart F	SOP Index No.: 60F
Pollutant: PM/Opacity	Main Standard: 60.60
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Monthly	
Averaging Period: 10 minutes	
Deviation Limit: Greater than 10% opacity	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded, in accordance with Method 22 of Appendix A to Part 60. If no visible emissions are observed in six consecutive monthly tests for any affected source, the permit holder may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If no visible emissions are observed during the semi-annual test for any affected source, the permit holder may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If visible emissions are observed during any Method 22 performance test, the permit holder shall conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A to Part 60. The Method 9 performance test shall begin within 1 hour of any observation of visible emissions.</p> <p>Any totally enclosed conveying system transfer point, regardless of the location of the transfer point, is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permit holder shall conduct a Method 22 performance test, as described above as related to monitoring for each such conveying system transfer point located within the building. If visible emissions from a building are monitored, as described above related to monitoring frequency of the</p>	

building, the permit holder shall also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

For a raw mill or finish mill, the permit holder shall monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices of these affected sources in accordance with the procedures of Method 22. The duration of the Method 22 performance test shall be 6 minutes. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the permit holder shall conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. If visible emissions are observed during the follow-up Method 22 performance test from any stack from which visible emissions were observed during the previous Method 22 performance test, permit holder shall then conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9. The duration of the Method 9 test shall be 30 minutes.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPCCS	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart F	SOP Index No.: 60F
Pollutant: PM/Opacity	Main Standard: 60.60
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Monthly	
Averaging Period: 10 minutes	
Deviation Limit: Greater than 10% opacity	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded, in accordance with Method 22 of Appendix A to Part 60. If no visible emissions are observed in six consecutive monthly tests for any affected source, the permit holder may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If no visible emissions are observed during the semi-annual test for any affected source, the permit holder may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If visible emissions are observed during any Method 22 performance test, the permit holder shall conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A to Part 60. The Method 9 performance test shall begin within 1 hour of any observation of visible emissions.</p> <p>Any totally enclosed conveying system transfer point, regardless of the location of the transfer point, is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permit holder shall conduct a Method 22 performance test, as described above as related to monitoring for each such conveying system transfer point located within the building. If visible emissions from a building are monitored, as described above related to monitoring frequency of the</p>	

building, the permit holder shall also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

For a raw mill or finish mill, the permit holder shall monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices of these affected sources in accordance with the procedures of Method 22. The duration of the Method 22 performance test shall be 6 minutes. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the permit holder shall conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. If visible emissions are observed during the follow-up Method 22 performance test from any stack from which visible emissions were observed during the previous Method 22 performance test, permit holder shall then conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9. The duration of the Method 9 test shall be 30 minutes.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPCS	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart F	SOP Index No.: 60F
Pollutant: PM/Opacity	Main Standard: 60.60
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Monthly	
Averaging Period: 10 minutes	
Deviation Limit: Greater than 10% opacity	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded, in accordance with Method 22 of Appendix A to Part 60. If no visible emissions are observed in six consecutive monthly tests for any affected source, the permit holder may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If no visible emissions are observed during the semi-annual test for any affected source, the permit holder may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If visible emissions are observed during any Method 22 performance test, the permit holder shall conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A to Part 60. The Method 9 performance test shall begin within 1 hour of any observation of visible emissions.</p> <p>Any totally enclosed conveying system transfer point, regardless of the location of the transfer point, is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permit holder shall conduct a Method 22 performance test, as described above as related to monitoring for each such conveying system transfer point located within the building. If visible emissions from a building are monitored, as described above related to monitoring frequency of the</p>	

building, the permit holder shall also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

For a raw mill or finish mill, the permit holder shall monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices of these affected sources in accordance with the procedures of Method 22. The duration of the Method 22 performance test shall be 6 minutes. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the permit holder shall conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. If visible emissions are observed during the follow-up Method 22 performance test from any stack from which visible emissions were observed during the previous Method 22 performance test, permit holder shall then conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9. The duration of the Method 9 test shall be 30 minutes.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPCSS	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart F	SOP Index No.: 60F
Pollutant: PM/Opacity	Main Standard: 60.60
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Monthly	
Averaging Period: 10 minutes	
Deviation Limit: Greater than 10% opacity	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded, in accordance with Method 22 of Appendix A to Part 60. If no visible emissions are observed in six consecutive monthly tests for any affected source, the permit holder may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If no visible emissions are observed during the semi-annual test for any affected source, the permit holder may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If visible emissions are observed during any Method 22 performance test, the permit holder shall conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A to Part 60. The Method 9 performance test shall begin within 1 hour of any observation of visible emissions.</p> <p>Any totally enclosed conveying system transfer point, regardless of the location of the transfer point, is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permit holder shall conduct a Method 22 performance test, as described above as related to monitoring for each such conveying system transfer point located within the building. If visible emissions from a building are monitored, as described above related to monitoring frequency of the</p>	

building, the permit holder shall also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

For a raw mill or finish mill, the permit holder shall monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices of these affected sources in accordance with the procedures of Method 22. The duration of the Method 22 performance test shall be 6 minutes. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the permit holder shall conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. If visible emissions are observed during the follow-up Method 22 performance test from any stack from which visible emissions were observed during the previous Method 22 performance test, permit holder shall then conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9. The duration of the Method 9 test shall be 30 minutes.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPCSV	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart F	SOP Index No.: 60F
Pollutant: PM/Opacity	Main Standard: 60.60
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Monthly	
Averaging Period: 10 minutes	
Deviation Limit: Greater than 10% opacity	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded, in accordance with Method 22 of Appendix A to Part 60. If no visible emissions are observed in six consecutive monthly tests for any affected source, the permit holder may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If no visible emissions are observed during the semi-annual test for any affected source, the permit holder may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If visible emissions are observed during any Method 22 performance test, the permit holder shall conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A to Part 60. The Method 9 performance test shall begin within 1 hour of any observation of visible emissions.</p> <p>Any totally enclosed conveying system transfer point, regardless of the location of the transfer point, is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permit holder shall conduct a Method 22 performance test, as described above as related to monitoring for each such conveying system transfer point located within the building. If visible emissions from a building are monitored, as described above related to monitoring frequency of the</p>	

building, the permit holder shall also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

For a raw mill or finish mill, the permit holder shall monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices of these affected sources in accordance with the procedures of Method 22. The duration of the Method 22 performance test shall be 6 minutes. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the permit holder shall conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. If visible emissions are observed during the follow-up Method 22 performance test from any stack from which visible emissions were observed during the previous Method 22 performance test, permit holder shall then conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9. The duration of the Method 9 test shall be 30 minutes.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPKILN1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R200
Pollutant: SO ₂	Main Standard: § 112.9(a)
Monitoring Information	
Indicator: SO ₂ Concentration	
Minimum Frequency: Four times per hour	
Averaging Period: Hourly	
Deviation Limit: When burning liquid fuel, emissions from sulfur dioxide shall not exceed 440 ppmv at stack conditions and averaged over a three-hour period.	
<p>Periodic Monitoring Text: Measure and record the concentration of SO₂ in the exhaust stream of the control device with a continuous emission monitoring system (CEMS). In addition, measure and record the oxygen or carbon dioxide content of the flue gas with a CEMS. The CEMS shall be operated in accordance with 40 CFR § 60.13 and the Performance Specifications of 40 CFR Part 60, Appendix B. The maximum sulfur dioxide concentration (specified in units of the underlying applicable requirement) is the corresponding sulfur dioxide limit associated with the emission limitation in the underlying applicable requirement. Any monitoring data above the maximum limit shall be considered and reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPKILNCNV2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart F	SOP Index No.: 60F
Pollutant: PM/Opacity	Main Standard: 60.60
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Monthly	
Averaging Period: 10 minutes	
Deviation Limit: Greater than 10% opacity	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded, in accordance with Method 22 of Appendix A to Part 60. If no visible emissions are observed in six consecutive monthly tests for any affected source, the permit holder may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If no visible emissions are observed during the semi-annual test for any affected source, the permit holder may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If visible emissions are observed during any Method 22 performance test, the permit holder shall conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A to Part 60. The Method 9 performance test shall begin within 1 hour of any observation of visible emissions.</p> <p>Any totally enclosed conveying system transfer point, regardless of the location of the transfer point, is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permit holder shall conduct a Method 22 performance test, as described above as related to monitoring for each such conveying system transfer point located within the building. If visible emissions from a building are monitored, as described above related to monitoring frequency of the</p>	

building, the permit holder shall also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

For a raw mill or finish mill, the permit holder shall monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices of these affected sources in accordance with the procedures of Method 22. The duration of the Method 22 performance test shall be 6 minutes. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the permit holder shall conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. If visible emissions are observed during the follow-up Method 22 performance test from any stack from which visible emissions were observed during the previous Method 22 performance test, permit holder shall then conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9. The duration of the Method 9 test shall be 30 minutes.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPWCG2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart F	SOP Index No.: 60F
Pollutant: PM/Opacity	Main Standard: 60.60
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Monthly	
Averaging Period: 10 minutes	
Deviation Limit: Greater than 10% opacity	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded, in accordance with Method 22 of Appendix A to Part 60. If no visible emissions are observed in six consecutive monthly tests for any affected source, the permit holder may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If no visible emissions are observed during the semi-annual test for any affected source, the permit holder may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If visible emissions are observed during any Method 22 performance test, the permit holder shall conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A to Part 60. The Method 9 performance test shall begin within 1 hour of any observation of visible emissions.</p> <p>Any totally enclosed conveying system transfer point, regardless of the location of the transfer point, is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permit holder shall conduct a Method 22 performance test, as described above as related to monitoring for each such conveying system transfer point located within the building. If visible emissions from a building are monitored, as described above related to monitoring frequency of the</p>	

building, the permit holder shall also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

For a raw mill or finish mill, the permit holder shall monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices of these affected sources in accordance with the procedures of Method 22. The duration of the Method 22 performance test shall be 6 minutes. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the permit holder shall conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. If visible emissions are observed during the follow-up Method 22 performance test from any stack from which visible emissions were observed during the previous Method 22 performance test, permit holder shall then conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9. The duration of the Method 9 test shall be 30 minutes.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPWCGCNV2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart F	SOP Index No.: 60F
Pollutant: PM/Opacity	Main Standard: 60.60
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Monthly	
Averaging Period: 10 minutes	
Deviation Limit: Greater than 10% opacity	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded, in accordance with Method 22 of Appendix A to Part 60. If no visible emissions are observed in six consecutive monthly tests for any affected source, the permit holder may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If no visible emissions are observed during the semi-annual test for any affected source, the permit holder may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If visible emissions are observed during any Method 22 performance test, the permit holder shall conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A to Part 60. The Method 9 performance test shall begin within 1 hour of any observation of visible emissions.</p> <p>Any totally enclosed conveying system transfer point, regardless of the location of the transfer point, is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permit holder shall conduct a Method 22 performance test, as described above as related to monitoring for each such conveying system transfer point located within the building. If visible emissions from a building are monitored, as described above related to monitoring frequency of the</p>	

building, the permit holder shall also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

For a raw mill or finish mill, the permit holder shall monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices of these affected sources in accordance with the procedures of Method 22. The duration of the Method 22 performance test shall be 6 minutes. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the permit holder shall conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. If visible emissions are observed during the follow-up Method 22 performance test from any stack from which visible emissions were observed during the previous Method 22 performance test, permit holder shall then conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9. The duration of the Method 9 test shall be 30 minutes.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPWCP2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart F	SOP Index No.: 60F
Pollutant: PM/Opacity	Main Standard: 60.60
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Monthly	
Averaging Period: 10 minutes	
Deviation Limit: Greater than 10% opacity	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded, in accordance with Method 22 of Appendix A to Part 60. If no visible emissions are observed in six consecutive monthly tests for any affected source, the permit holder may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If no visible emissions are observed during the semi-annual test for any affected source, the permit holder may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If visible emissions are observed during any Method 22 performance test, the permit holder shall conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A to Part 60. The Method 9 performance test shall begin within 1 hour of any observation of visible emissions.</p> <p>Any totally enclosed conveying system transfer point, regardless of the location of the transfer point, is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permit holder shall conduct a Method 22 performance test, as described above as related to monitoring for each such conveying system transfer point located within the building. If visible emissions from a building are monitored, as described above related to monitoring frequency of the</p>	

building, the permit holder shall also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

For a raw mill or finish mill, the permit holder shall monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices of these affected sources in accordance with the procedures of Method 22. The duration of the Method 22 performance test shall be 6 minutes. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the permit holder shall conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. If visible emissions are observed during the follow-up Method 22 performance test from any stack from which visible emissions were observed during the previous Method 22 performance test, permit holder shall then conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9. The duration of the Method 9 test shall be 30 minutes.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPWCS2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart F	SOP Index No.: 60F
Pollutant: PM/Opacity	Main Standard: 60.60
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Monthly	
Averaging Period: 10 minutes	
Deviation Limit: Greater than 10% opacity	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded, in accordance with Method 22 of Appendix A to Part 60. If no visible emissions are observed in six consecutive monthly tests for any affected source, the permit holder may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If no visible emissions are observed during the semi-annual test for any affected source, the permit holder may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If visible emissions are observed during any Method 22 performance test, the permit holder shall conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A to Part 60. The Method 9 performance test shall begin within 1 hour of any observation of visible emissions.</p> <p>Any totally enclosed conveying system transfer point, regardless of the location of the transfer point, is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permit holder shall conduct a Method 22 performance test, as described above as related to monitoring for each such conveying system transfer point located within the building. If visible emissions from a building are monitored, as described above related to monitoring frequency of the</p>	

building, the permit holder shall also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

For a raw mill or finish mill, the permit holder shall monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices of these affected sources in accordance with the procedures of Method 22. The duration of the Method 22 performance test shall be 6 minutes. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the permit holder shall conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. If visible emissions are observed during the follow-up Method 22 performance test from any stack from which visible emissions were observed during the previous Method 22 performance test, permit holder shall then conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9. The duration of the Method 9 test shall be 30 minutes.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPWSCNV2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart F	SOP Index No.: 60F
Pollutant: PM/Opacity	Main Standard: 60.60
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Monthly	
Averaging Period: 10 minutes	
Deviation Limit: Greater than 10% opacity	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded, in accordance with Method 22 of Appendix A to Part 60. If no visible emissions are observed in six consecutive monthly tests for any affected source, the permit holder may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If no visible emissions are observed during the semi-annual test for any affected source, the permit holder may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the permit holder shall resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. If visible emissions are observed during any Method 22 performance test, the permit holder shall conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A to Part 60. The Method 9 performance test shall begin within 1 hour of any observation of visible emissions.</p> <p>Any totally enclosed conveying system transfer point, regardless of the location of the transfer point, is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the permit holder shall conduct a Method 22 performance test, as described above as related to monitoring for each such conveying system transfer point located within the building. If visible emissions from a building are monitored, as described above related to monitoring frequency of the</p>	

building, the permit holder shall also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

For a raw mill or finish mill, the permit holder shall monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices of these affected sources in accordance with the procedures of Method 22. The duration of the Method 22 performance test shall be 6 minutes. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the permit holder shall conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. If visible emissions are observed during the follow-up Method 22 performance test from any stack from which visible emissions were observed during the previous Method 22 performance test, permit holder shall then conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9. The duration of the Method 9 test shall be 30 minutes.

Permit Shield

Permit Shield50

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		
GRPCCNV	65, CBC 1-3	40 CFR Part 60, Subpart Y	Facility does not handle coal.
GRPCCS	60WP, CC-1, CDC-1	40 CFR Part 60, Subpart Y	Facility does not handle coal.
GRPCS	01012, F-62	40 CFR Part 60, Subpart Y	Facility does not handle coal.
GRPCSS	77, CDC-3, CDC-4, CDC-4 VENT, CSB-1, FCS-1, FCS-2	40 CFR Part 60, Subpart Y	Facility does not handle coal.
GRPCSV	61WP, AH-1, CDC-2, CM-1, CWF-1	40 CFR Part 60, Subpart Y	Facility does not handle coal.
GRPFOST	AMMONTK, DIESELTK, TANK-1, TANK-1 VENT, UOILTK	40 CFR Part 60, Subpart K	Constructed before 06/11/1973
GRPFOST1	GASTNK, TANK-2, TANK-2 VENT	40 CFR Part 60, Subpart K	Constructed before 06/11/1973
GRPFOST2	TANK-3, TANK-3 VENT	40 CFR Part 60, Subpart K	Constructed before 06/11/1973
GRPKILNCNV	69, KBE-1, KBE-4, KCD-1, KCD-2	40 CFR Part 60, Subpart F	Facility constructed before 08/17/1971
GRPWCBL	34, 37, BLT 1-4, RAILCARS, SCP-1, SDC-3, SDC-4, TRUCKS	40 CFR Part 60, Subpart F	Facility constructed before 08/17/1971
GRPWCG	28, F-45, FBM-1, FDC-2, FHM-1	40 CFR Part 60, Subpart F	Facility constructed before 08/17/1971

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		
GRPWPCNV	31, BSB 1,2, PBE 1,2, PDC-1, SS 5,6,9,10	40 CFR Part 60, Subpart F	Facility constructed before 08/17/1971
GRPWCS	32, 33, 38, CS 2-16, FDC-6, FFS-19, SDC-1, SDC-2	40 CFR Part 60, Subpart F	Facility constructed before 08/17/1971
GRPWCSCNV	FPP-1, SSC 1-4	40 CFR Part 60, Subpart F	Facility constructed before 08/17/1971
GRPWCSS	36, CS 20-24	40 CFR Part 60, Subpart F	Facility constructed before 08/17/1971
GRPWSCNV	F-41, LBC-4, LBC-5, LLH-1, LLH-2, MBC-1, MBC-2, RSC-1	40 CFR Part 60, Subpart F	Facility constructed before 08/17/1971
GRPWSG	CWM, CWM-1, F-42, RBM-1	40 CFR Part 60, Subpart F	Facility constructed before 08/17/1971
GRPWSS	F-47, P-62	40 CFR Part 60, Subpart F	Facility constructed before 08/17/1971
GRPWVT	F-48, P-91	40 CFR Part 60, Subpart F	Facility constructed before 08/17/1971

New Source Review Authorization References

New Source Review Authorization References 53

New Source Review Authorization References by Emission Unit..... 54

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.: PSDTX624	Issuance Date: 08/12/2014
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.: 103476	Issuance Date: 07/02/2012
Authorization No.: 49057	Issuance Date: 08/12/2014
Authorization No.: 87611	Issuance Date: 03/30/2009
Authorization No.: 9399	Issuance Date: 08/12/2014
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.144	Version No./Date: 09/04/2000
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.532	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
01012	COKE STORAGE STOCKPILE AREAS	9399, PSDTX624
01013	COOLING TOWER	49057
033 VENT	DUST COLLECTOR RDC-1 VENT	106.261/11/01/2003
057 VENT	DUST COLLECTOR RDC-2 VENT	106.261/11/01/2003
27	AIR SEPARATOR EXHAUST VENT	106.261/11/01/2003
28	HERCULES MILL DUST COLLECTOR VENT	49057
31	PACKHOUSE CEMENT TRANSFER SYSTEM DUST COLLECTOR VE	49057
32	SILOS SOUTH DUST COLLECTOR VENT	49057
33	SILOS NORTH DUST COLLECTOR VENT	49057
34	BULK TANK TOP DUST COLLECTOR VENT	49057
36	CLINKER STORAGE SILOS VENT	49057
37	BULK TANK BOTTOM DUST COLLECTOR VENT	49057
38	FRINGE BIN DUST COLLECTOR VENT	49057
39WP-K	KILN STACK	9399, PSDTX624
39WP-K	KILN STACK	9399, PSDTX624
51	CLINKER COOLER ESP STACK	9399, PSDTX624
60WP	COKER CRUSHER DUST COLLECTOR VENT	9399, PSDTX624

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
61WP	COKE SURGE BIN AND FEEDER DUST COLLECTOR VENT	9399, PSDTX624
65	COKE CONVEYOR SYSTEM TRANSFER POINTS VENT	9399, PSDTX624
69	CLINKER CONVEYOR SYSTEM VENT	49057
70	KILN DUST RETURN SCREW CONVEYOR DUST COLLECTOR VENT	106.261/11/01/2003
77	FLEXICOKE SILO DUST COLLECTOR VENT	9399, PSDTX624
AH-1	PETROLEUM COKE MILL AIR HEATER	9399, PSDTX624
AMMONTK	AMMONIA TANK VESSEL MAINTENANCE	9399, PSDTX624
BLT 1-4	RAIL/TRUCK LOADOUT BIN SYSTEM	49057
BSB 1,2	SURGE BIN FOR ROTARY PACKER SYSTEM	49057
CBC 1-3	COKE CONVEYOR SYSTEM	9399, PSDTX624
CC-1	PRIMARY COKE CRUSHER SYSTEM	9399, PSDTX624
CDC-1	COKE CRUSHER DUST COLLECTOR	9399, PSDTX624
CDC-2	COKE SURGE BIN AND FEEDER DUST COLLECTOR	9399, PSDTX624
CDC-3	FLEXICOKE SILO DUST COLLECTOR	9399, PSDTX624
CDC-4 VENT	C-SILO FLEXICOKE STORAGE #2 DUST COLLECTOR VENT	106.261/11/01/2003
CDC-4	C-SILO FLEXICOKE STORAGE #2 DUST COLLECTOR	106.261/11/01/2003
CM-1	PETROLEUM COKE MILL	9399, PSDTX624

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
CS 20-24	CLINKER STORAGE SILO SYSTEM	49057
CS 2-16	CEMENT STORAGE SILO SYSTEM	49057
CSB-1	COKE STORAGE SURGE BIN	9399, PSDTX624
CWF-1	COKE WEIGH FEEDER	9399, PSDTX624
CWM-1	CLAY WASH MILL	49057
CWM	CLAY WASH MILL EMISSIONS	49057
DIESELTK	DIESEL TANK VESSEL MAINTENANCE	9399, PSDTX624
F-41	MATERIAL HANDLING CONVEYOR FUGITIVE EMISSIONS	49057
F-42	RAW MATERIAL BUILDING VENTS	49057
F-45	FINISH MILL ROOF VENTS	49057
F-47	RAW MATERIAL HANDLING FUGITIVE EMISSIONS	49057
F-48	WHITE VEHICLE TRAFFIC	49057
F-62	COKE STORAGE STOCKPILE FUGITIVES	9399, PSDTX624
FBM-1	BALL MILL	49057
FCC-1	FINISH MILL CEMENT COOLER	49057
FCS-1	FLEXICOKE STORAGE SILO	9399
FCS-2	C-SILO FLEXICOKE STORAGE #2	106.261/11/01/2003
FDC-1A	AIR SEPARATOR EXHAUST DUST COLLECTOR	106.261/11/01/2003

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
FDC-2	HERCULES MILL DUST COLLECTOR	49057
FDC-3 VENT	DUST COLLECOTR FDC-3 VENT	106.261/11/01/2003
FDC-3	CLINKER TRANSFER CONVEYORS DUST COLLECOR	106.261/11/01/2003
FDC-4 VENT	DUST COLLECTOR FDC-4 VENT	106.261/11/01/2003
FDC-4	CLINKER TRANSFER CONVEYORS DUST COLLECTOR	106.261/11/01/2003
FDC-6	FRINGE BIN DUST COLLECTOR	49057
FFS-19	CEMENT SILOS FRINGE BIN	49057
FHM-1	HERCULES MILL	49057
FPP-1	CEMENT TRANSFER PNEUMATIC CONVEYOR SYSTEM	49057
GASTNK	GASOLINE TANK VESSEL MAINTENANCE	9399, PSDTX624
ICS	IMPORT CEMENT STORAGE SILO	106.144/09/04/2000
ICU	IMPORT CEMENT UNLOADING SYSTEM	106.144/09/04/2000
IDC-1 VENT	IMPORT CEMENT UNLOADING SYSTEM DUST COLLECTOR VENT	106.144/09/04/2000
IDC-1	IMPORT CEMENT UNLOADING SYSTEM DUST COLLECTOR	106.144/09/04/2000
IDC-3 VENT	IMPORT CEMENT STORAGE SILO DUST COLLECTOR VENT	106.144/09/04/2000
IDC-3	IMPORT CEMENT STORAGE SILO DUST COLLECTOR	106.144/09/04/2000
KBE-1	CLINKER BUCKET ELEVATOR 1	49057

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
KBE-4	CLINKER BUCKET ELEVATOR 4	49057
KBH	HIGH EFFICIENCY DUST COLLECTOR	9399, PSDTX624
KCD-1	CLINKER BELT CONVEYOR 1	49057
KCD-2	CLINKER BELT CONVEYOR 2	49057
KDC-4	KILN DUST RETURN SCREW CONVEYOR DUST COLLECTOR	106.261/11/01/2003
KDS	KILN DUST RETURN SCREW CONVEYOR	106.261/11/01/2003
KILN-1	WHITE KILN BURNER	9399, PSDTX624
KPH-1 VENT	KILN AIR PREHEATER VENT	49057
KPH-1	KILN AIR PREHEATER	49057
LBC-4	RAW MATERIAL CONVEYOR LBC-4	49057
LBC-5	RAW MATERIAL CONVEYOR LBC-5	49057
LLH-1	RAW MATERIAL CONVEYOR FEED HOPPER LLH-1	49057
LLH-2	RAW MATERIAL CONVEYOR FEED HOPPER LLH-2	49057
MBC-1	RAW MATERIAL BELT CONVEYOR 1	49057
MBC-2	RAW MATERIAL BELT CONVEYOR 2	49057
OUTCLK	OUTSIDE OFF SPEC CLINKER STORAGE	9399, PSDTX624
P-62	RAW MATERIAL OPEN SOTRAGE PILE AREAS	49057
P-91	WHITE VEHICLE TRAFFIC	49057

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
PACKER	ROTARY PACKER	106.261/09/04/2000
PACKERVENT	PACKER DUCT COLLECTOR VENT	106.261/09/04/2000
PBE 1,2	CEMENT TRANSFER BUCK ELEVATOR SYSTEM	49057
PDC-1	PACKHOUSE CEMENT TRANSFER SYSTEM DUST COLLECTOR	49057
PDC-2	PACKER DUST COLLECTOR	106.261/09/04/2000
Q-DRYER	WHITE KILN CLINKER QUENCHER DRYER	9399, PSDTX624
RAILCARS	RAILCAR LOADOUT SYSTEM	49057
RBM-1	BALL MILL FOR TAW MATERIAL GRINDING	49057
RDC-1	RAW MATERIAL CONVEYORS DUST COLLECTOR	106.261/11/01/2003
RDC-2	RAW MATERIAL CONVEYORS DUST COLLECTOR	106.261/11/01/2003
RSC-1	RAW MATERIAL FED BELT CONVEYOR	49057
SCP-1	BULK CEMENT LOADING PNEUMATIC TRANSFER SYSTEM	49057
SDC-1	SILOS SOUTH DUST COLLECTOR	49057
SDC-2	SILOS NORTH DUST COLLECTOR	49057
SDC-3	BULK TANK TOP DUST COLLECTOR	49057
SDC-4	BULK TANK BOTTOM DUST COLLECTOR	49057
SEP-1	FINISH MILL AIR SEPARATOR	106.261/11/01/2003
SS 5,6,9,10	CEMENT TRANSFER SCREW CONVEYOR SYSTEM	49057

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
SSC 1-4	CEMENT TRANSFER SCREW CONVEYOR SYSTEM	49057
TANK-1 VENT	GASOLINE STORAGE TANK VENT	49057
TANK-1	GASOLINE STORAGE TANK	49057
TANK-2 VENT	DIESEL OIL STORAGE TANK VENT	49057
TANK-2	DIESEL OIL STORAGE TANK	49057
TANK-3 VENT	FUEL OIL STORAGE TANK VENT	49057
TANK-3	FUEL OIL STORAGE TANK	49057
TRUCKS	BULK TRUCK LOADOUT SYSTEM	49057
UOILTK	USED OIL TANK VESSEL MAINTENANCE	9399, PSDTX624

Appendix A

Acronym List 62

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
ELP	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..... 64

Major NSR Summary Table

Permit Number: 9399/PSDTX624			Issuance Date: August 12, 2014				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
39WP-K	Kiln	PM	57.0	226.0	16, 19	16, 19, 20, 22, 23, 24, 25, 26	16
		PM ₁₀	51.3	220.0	16, 19	16, 19, 20, 22, 23, 24, 25, 26	16
		VOC	9.0	38.0	16, 19	16, 19, 20, 22, 23, 24, 25, 26	16
		NO _x (6)	135.3	592.6	16, 17, 19	16, 17, 19, 20, 22, 23, 24, 25, 26	16, 17, 21
		SO ₂	645.0	1700.0	16, 17, 19	16, 17, 19, 20, 22, 23, 24, 25, 26	16, 17, 21
		CO	75.0	329.0	16, 19	16, 19, 20, 22, 23, 24, 25, 26	16
		HCl	2.27	9.95	16, 19	16, 19, 20, 22, 23, 24, 25, 26	16
		H ₂ SO ₄	25.0	110.0	16, 19	16, 19, 20, 22, 23, 24, 25, 26	16
60WP-CCT	Coke Conveyor Dust Collector Vent	PM	0.16	0.71	3	16, 3	
		PM ₁₀	0.16	0.71	3	16, 3	
61WP-CSV	Coke Silo Dust Collector Vent	PM	0.1	0.44	3	16, 3	
		PM ₁₀	0.1	0.44	3	16, 3	
77	Flexi-Coke Silo Vent	PM	0.2	0.8	3	16, 3	
		PM ₁₀	0.1	0.4	3	16, 3	
51WP-CC	Clinker Cooler ESP Stack	PM	4.2	16.6	3	16, 3	
		PM ₁₀	2.1	8.3	3	3	
F-62	Coke Storage Areas (7)	PM	--	4.3	3	3, 16	

Permit Number: 9399/PSDTX624			Issuance Date: August 12, 2014				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
MSSFUG1	Inherently Low Emitting (ILE) Sitewide Planned Maintenance Activities	NO _x	<0.01	<0.01		13, 16	
		CO	0.12	<0.01		13, 16	
		SO ₂	<0.01	<0.01		13, 16	
		PM	0.79	0.66		13, 16	
		PM ₁₀	0.44	0.39		13, 16	
		PM _{2.5}	0.13	0.11		13, 16	
		VOC	0.05	<0.01		13, 16	

Footnotes:

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
HCl - hydrogen chloride
H₂SO₄ - sulfuric acid
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Planned maintenance, startup, and shutdown emissions are included.
- (6) Compliance will be based on a 30-day rolling average.
- (7) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AIR QUALITY PERMIT



A Permit Is Hereby Issued To
Lehigh Cement Company LLC
Authorizing the Construction and Operation of
White Portland Cement Plant
Located at **Waco, McLennan County, Texas**
Latitude 31° 28' 55" Longitude 97° 14' 30"

Permits: 9399 and PSDTX624

Revision Date : August 12, 2014

Renewal Date: April 15, 2024

For the Commission

- Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code 116.116 (30 TAC 116.116)]
- 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(a), (b) and (c)]
- 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)]
- 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)(iii)]
- Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC 116.115(b)(2)(C)]

6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with 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, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC 116.115(b)(2)(H)]
11. **This** permit may 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 a condition of "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.

Special Conditions

Permit Numbers 9399 and PSDTX624

Emission Standards and Operational Limitations

1. This permit covers only the emission sources and individual emission limits listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits specified in that 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 MAERT. Attachment A identifies the inherently low emitting (ILE) planned maintenance activities that are authorized by this permit. **(3/14)**
2. This permit authorizes the following facilities: kiln, coke conveyors, coke silos, clinker cooler, and coke storage areas.
3. The holder of this permit shall demonstrate that all hooding, duct, and collection systems are effective in capturing emissions from this equipment and preventing fugitive emissions from buildings.
4. Material collected by all air pollution abatement equipment that is not returned to the process shall be disposed of in such a manner that will prevent it from becoming airborne.
5. Water and/or dust suppressants shall be used on material storage and transfer operations, as necessary, to minimize dust emissions.
6. Clinker and coke transfer conveyors shall be at least partially enclosed and dust collectors shall be used at all transfer points to minimize dust emissions. The first transfer point of the petroleum coke conveyor system and the last transfer point of the clinker conveyor shall be enclosed, but not routed to a dust collector.
7. Railroad cars and trucks used in transporting cement, clinker, and coke shall be cleaned and maintained as necessary to minimize material loss.
8. Plant roads shall be paved and cleaned, and all unpaved roads shall be sprayed with water and/or chemical dust suppressants to minimize dust emissions.
9. Fuels fired in the kiln system shall be limited to the following:
 - A. Natural Gas: Natural gas shall contain no more than 0.25 grain hydrogen sulfide and 5 grains total sulfur per 100 dry standard cubic feet.
 - B. Petroleum Coke or "Flexicoke:" Petroleum coke or Flexicoke shall have a minimum heat of combustion of 10,000 Btu/lb, a maximum sulfur content of 6 percent by weight, and a maximum chlorine content of 500 mg/kg as fed to the kiln burner.
 - C. Liquid Fuels:
 - (1) Fuel Oil

(2) Used Oil **(12/06)**

The liquid fuels shall have a minimum heat of combustion of 5,000 British thermal units per pound (Btu/lb), a maximum sulfur content of 6 percent by weight, and a maximum chlorine content of 1,000 milligrams per kilogram (mg/kg). Liquid fuels may contribute up to a maximum of 25 percent of the total design maximum heat input rate of the kiln burner.

The liquid fuels shall meet all requirements specified in 40 CFR Part 279.1, Standards for the Management of Used Oil, and not contain more than the indicated amounts of the substances listed below in parts per million by weight (ppm):

Table 1: Liquid fuel concentration limits

Substance	Concentration
Arsenic	5
Cadmium	2
Chromium	10
Lead	100
Total Halogen	4,000

D. Alternative Solid Fuels:

- (1) Waste Plastics - Waste plastics shall have a minimum heat of combustion of 8,000 Btu/lb.
- (2) Wood Chips - Wood chips shall have a minimum heat of combustion of 5,000 Btu/lb.
- (3) Tire Fluff - Tire fluff shall have a minimum heat of combustion of 10,000 Btu/lb.

Alternative solid fuels shall have a maximum sulfur content of 3.5 lb/MMBtu and a maximum chlorine content of 0.05 lb/MMBtu. The combined alternative solid fuels may contribute up to a maximum of 25 percent of the total design maximum heat input rate of the kiln burner.

All fuels shall additionally meet the specifications represented in the permit applications dated February 2006, as amended in October 2006. **(12/06)**

10. Exhaust gases from the kiln shall be routed to a fabric filter system designed to achieve a minimum 98 percent capture efficiency of particulate matter. **(3/06)**

Planned Maintenance, Startup, and Shutdown

11. 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.
(3/14)

12. Emissions during planned startup and shutdown activities of the kiln shall be minimized as follows: **(3/14)**
 - 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 17 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.

13. Compliance with the emissions limits for ILE planned maintenance activities identified in this permit (Attachment A) shall be demonstrated as follows. **(3/14)**
 - 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.

14. Emissions from planned MSS activities authorized by this permit shall be determined by the use of an appropriate method, including but not limited to any of following methods: **(3/14)**
 - A. Use of a continuous emission monitoring systems (CEMS). The CEMS shall be certified to measure the pollutant's emission over the entire range of a planned maintenance activity.
 - 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, 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, temperature, fuel input, and fuel sulfur content.

Sampling Requirements

15. Sampling ports and platform(s) shall be incorporated into the design of the stack according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the Texas Commission on Environmental Quality (TCEQ) Regional Director.
16. At the request of the TCEQ Executive Director, or designated representative, the holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from this facility. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.
 - A. The TCEQ Waco 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:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) 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 data forms for recording pertinent data, and to review the format procedures for submitting the test reports.

A written proposed description of any deviation from sampling procedures specified in permit conditions or the TCEQ or the U.S. Environmental Protection Agency (EPA) sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures.

Requests to waive testing for any pollutant specified in B of this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate or equivalent procedure proposals for New Source Performance Standards (NSPS) testing which must have EPA approval shall be submitted to the EPA and copied to the TCEQ Air Permits Division in Austin.

- B. Air contaminants emitted from the kiln to be tested for include (but are not limited to) total suspended particulate, particulate matter less than or equal to 10 microns, volatile organic compounds, nitrogen oxides (NO_x), sulfur dioxide (SO₂), sulfuric acid, dioxin/furan, hydrogen chloride (HCl), and carbon monoxide. The holder shall use the EPA Reference Methods, or appropriate alternate methods specified in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A.

- C. Sampling shall occur within 90 days after the request for sampling is received from the Executive Director of the TCEQ. Requests for additional time to perform sampling shall be submitted to the TCEQ Regional Office. Additional time to comply with the applicable requirements of 40 CFR Part 60 and 40 CFR Part 61 requires the EPA approval, and requests shall be submitted to the TCEQ Air Permits Division in Austin.
- D. The kiln shall operate at maximum production rates during stack emission testing. Primary operating parameters that enable determination of production rate shall be monitored and recorded during the stack test. These parameters are to be determined at the pretest meeting. If the kiln is unable to operate at maximum rates during testing, then future kiln production rates may be limited to the rates established during testing. Additional stack testing may be required when higher production rates are achieved.
- E. Two copies of the final sampling report shall be forwarded to the TCEQ within 60 days after sampling is completed. Sampling reports shall comply with the enclosed provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:
 - (1) One copy to the TCEQ Waco Regional Office.
 - (2) One copy to the TCEQ Air Permits Division in Austin.
- F. Additional sampling may be requested at the discretion of the TCEQ Executive Director.

Continuous Demonstration of Compliance

- 17. The holder of this permit shall install, calibrate, and maintain a CEMS or predictive emission monitoring system (PEMS) to determine the in-stack concentration of NO_x and SO₂ from the Kiln (Emission Point No. 39W-K).
 - A. CEMS
 - (1) The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air, Air Permits Division in Austin for requirements to be met.
 - (2) The system shall be zeroed and spanned daily and corrective action taken when the 24 hour span drift exceeds two times the amounts specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B. Zero and span are not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days.

Each monitor shall be quality-assured at least quarterly using Cylinder Gas Audits (CGA) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2, with the following exception: a relative accuracy test audit (RATA) is not required once every four quarters (i.e., four successive quarterly CGA may be conducted) unless the continuous emission monitor is subject to the requirements of 40 CFR Part 60 (NSPS). An equivalent quality assurance method approved by the TCEQ may also be used. Successive quarterly audits shall occur no closer than two months.

All CGA exceedances of ± 15 percent accuracy and any CEMS downtime in excess of 5 percent shall be reported to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.

- (3) The monitoring data shall be reduced to hourly average concentrations at least once every day, using a minimum of four equally-spaced data points from each one hour period. The individual average concentrations shall be reduced to units of the permit allowable emission rate in pound per hour at least once every week.
- (4) All monitoring data and quality-assurance data shall be maintained by the source for a period of two years and shall be made available to the TCEQ Executive Director or designated representative upon request. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit. The CEMS shall meet the design and performance specifications, testing requirements and data analysis, and reporting requirements of 40 CFR Part 60, Appendix B, unless alternative requirements are approved by the TCEQ for non-NSPS sources.

B. PEMS

- (1) The PEMS must be based on measured parameters including (but not limited to) fuel flow, excess combustion air quantity, and/or other data that provides an accurate prediction of emissions that the TCEQ Regional Office approves.
- (2) The PEMS output as pounds of NO_x per hour will be averaged for each calendar hour and for the operating day. These results shall be recorded and maintained.
- (3) The PEMS shall meet the requirements specified in Title 30 Texas Administrative Code § 117.213(f) [30 TAC § 117.213(f)] as applicable to the monitoring of NO_x emissions. For the purposes of compliance with the quarterly RATA specified in 30 TAC § 117.213(f), and for the purposes of this permit only, if operating time during a calendar quarter is less than 60 days, the owner or operator may delay the RATA until the next calendar quarter; however, the RATA must be performed within 90 facility operating days after the previous RATA was completed. A quarterly RATA may be omitted if the facility is inoperative for 90 or more successive days immediately preceding the report due date.

- (4) The PEMS downtime summaries shall be submitted to the appropriate TCEQ Regional Director once each calendar quarter. If no downtime periods occur in excess of 5 percent, this shall be so stated in the quarterly summary. Necessary corrective action shall be taken for each PEMS downtime occurrence.
 - (5) Within 60 days after the PEMS is installed, a RATA shall be performed. Results of testing shall be submitted to the appropriate TCEQ Regional Office within 60 days after completion of the RATA. A results summary of all criteria testing performed pursuant to 30 TAC Chapter 117 shall be submitted within 60 days after completion of such tests.
 - (6) Following the three successive RATA referenced in paragraph (3) above, a RATA must be performed every six months pursuant to 40 CFR Part 60, Appendix B, Performance Specification 2, Subsection 4.3 (pertaining to NO_x). The RATA may be performed every 12 months if the relative accuracy during the previous audit for the NO_x monitor is less than or equal to 7.5 percent of the mean value of the reference method test data. Any RATA exceeding 20 percent or statistical test exceeding the applicable standard shall be reported to the appropriate TCEQ Regional Director. A single RATA may be performed when any required quarterly or semiannual or annual RATA occur concurrently.
 - C. For the demonstration of PEMS performance, the appropriate TCEQ Regional Office shall be notified at least 15 days prior to each RATA in order to provide them the opportunity to observe testing.
 - D. The holder of this permit shall perform automatic sensor validation at least daily on any PEMS installed under authority of this permit. The permittee shall develop and implement plans that will ensure proper functioning of the monitoring systems, ensure proper accuracy and calibration of all operational parameters that affect emissions and serve as input to the PEMS, and ensure continuous operation within the certified operating range.
 - E. A PEMS is required to provide valid emission predictions at least 95 percent of the time that the kiln being monitored is in operation.
 - F. The reporting requirements of 30 TAC § 117.219 may be substituted for the reporting requirements previously stated in this permit condition if the CEMS or PEMS is not subject to the requirements of 40 CFR Part 60 (NSPS).
18. The CEMS or PEMS required per Special Condition No. 17 shall be installed by December 31, 2003.
 19. Each alternate solid (waste plastics, wood chips, and tire fluff) fuel shall undergo initial testing to verify that it meets the prescribed fuel specifications detailed in Special Condition No. 9 and the representations made in the permit application prior to introducing the fuel into the kiln. The fuel shall be re-tested each time it is purchased from a new supplier. **(12/06)**

20. Annual documentation from an approved independent testing laboratory that lists the concentrations of the ingredients of the fuel specified in Special Condition No. 9C2 shall be kept on-site at all times when a used oil is used. **(12/06)**

Recordkeeping and Reporting

21. The holder of this permit shall submit CEMS excess emission reports quarterly in accordance with the conditions of 40 CFR Part 60.7(c) or semiannually under 30 TAC § 117.219(d) if there is no applicable NSPS subpart. The excess emissions reports shall include all the information specified in 40 CFR § 60.7(c) or 30 TAC § 117.219 along with facility operation time, operating time based on usage of each fuel authorized by this permit, and a summary of all excess emissions by cause and monitor downtimes in excess of 5 percent. Actual emissions whose rates are in excess of the limitations specified in the maximum allowable emission rates table shall be considered excess emissions.
22. The holder of this permit shall keep records of operating hours, raw mix feed rate and water content, fuel type and usage rates, fuel sulfur content, clinker production rate and sampling and monitoring data, as necessary, to determine the hourly and annual emission rates. These emissions rates shall be based on stack testing and CEMS and PEMS data. The hourly emission rates shall be maintained on a quarterly basis and shall be made available to TCEQ representatives upon request. These records will be used to determine compliance with the emission limits specified in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates." These records shall be kept current and maintained on a rolling five-year basis.
23. The holder of this permit shall keep records of the results of the fuels testing required by Special Condition No. 19, and shall additionally retain a copy of each fuel analysis provided by each fuel supplier. These records shall be maintained in a form suitable for inspection for a period of five years after collection and shall be made immediately available upon request to representatives of the TCEQ or any air pollution control agency with jurisdiction. **(3/06)**
24. The holder of this permit shall keep records of the report from the used oil supplier identifying total sulfur and content of other constituents to demonstrate compliance with Special Condition No. 20. These records shall be maintained in a form suitable for inspection for a period of five years after collection and shall be made immediately available upon request to representatives of the TCEQ or any air pollution control agency with jurisdiction. **(12/06)**
25. The holder of this permit shall maintain for the life of the permit a copy of the fuel specifications represented in the application dated February 2006, as amended October 2006. **(12/06)**
26. The holder of this permit shall maintain the following records at the plant site in a form suitable for inspection for a period of five years after collection and shall be made

immediately available upon request to representatives of the TCEQ or any air pollution control agency with jurisdiction. **(3/14)**

- A. Records of planned startup and shutdown of the kilns to demonstrate compliance with Special Condition No. 12 and the MAERT, including the date, time, duration, and emissions associated with those activities.
 - B. Records of ILE planned maintenance activities and validations to demonstrate compliance with Special Condition No. 13.
27. The table below lists the sources or activities that are authorized by Air Quality Standard Permit, by permits by rule (PBR) under Title 30 Texas Administrative Code (30 TAC) Chapter 106, or as De Minimis sources under 30 TAC 116.119. This list is not intended to be all inclusive and can be altered at the site without modifications to this permit. **(3/14)**

Table 2: Standard Permit, PBR, and De Minimis authorization references

Source or Activity	Authorization
Applications of aqueous detergents, surfactants, and other cleaning solutions	De Minimis
Lab sampling and analysis	De Minimis
Manual applications of cleaning or stripping solutions or coatings	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	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
Brazing, soldering, and welding	PBR 106.227
Maintenance painting	PBR 106.263
Enclosed and outdoor dry abrasive blasting	PBR 106.263
Hand-held and equipment used for buffing, polishing, cutting, drilling, sanding, sawing, etc.	PBR 106.265
Solvent cleaning, parts degreaser	PBR 106.454

Special Conditions
Permit Numbers 9399 and PSDTX624
Page 10

Emergency engines and portable small engines	PBR 106.511
Sludge management	PBR 106.532
Organic chemical usage for water treatment	PBR 106.532
Storage silos for pet coke, including flexicoke, and conveyance system	PBR Registration No. 83329
Pollution Control Project Standard Permit - SNCR	Standard Permit Registration No. 87611
Pollution Control Project Standard Permit - baghouse replacement	Standard Permit Registration No. 103476

Date: August 12, 2014

Attachment A

Permit Numbers 9399 and PSDTX624

Inherently Low Emitting Maintenance Activities

Planned Maintenance Activity	VOC	NO_x	CO	PM	SO₂
Vacuum truck solids loading (pack house, street sweeper, separator, pack house sweepers)				X	
Vacuum truck solids unloading				X	
Material handling system maintenance				X	
Material handling system maintenance (air gun)				X	
Analyzer and CEMS calibration		X	X		X
Lube oil maintenance	X				
Refractory maintenance operations				X	
Deslagging/descaling maintenance operations		X	X	X	
Miscellaneous particulate filter maintenance				X	
Kiln particulate filter maintenance				X	

Date: August 12, 2014

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 9399 and PSDTX624

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 (5)	
			lb/hour	TPY (4)
39WP-K	Kiln	PM	57.0	226.0
		PM ₁₀	51.3	220.0
		VOC	9.0	38.0
		NO _x (6)	135.3	592.6
		SO ₂	645.0	1700.0
		CO	75.0	329.0
		HCl	2.27	9.95
		H ₂ SO ₄	25.0	110.0
60WP-CCT	Coke Conveyor Dust Collector Vent	PM	0.16	0.71
		PM ₁₀	0.16	0.71
61WP-CSV	Coke Silo Dust Collector Vent	PM	0.1	0.44
		PM ₁₀	0.1	0.44
77	Flexi-Coke Silo Vent	PM	0.2	0.8
		PM ₁₀	0.1	0.4
51WP-CC	Clinker Cooler ESP Stack	PM	4.2	16.6
		PM ₁₀	2.1	8.3
F-62	Coke Storage Areas (7)	PM	--	4.3
MSSFUG1	Inherently Low Emitting (ILE) Sitewide Planned Maintenance Activities	NO _x	<0.01	<0.01
		CO	0.12	<0.01
		SO ₂	<0.01	<0.01
		PM	0.79	0.66
		PM ₁₀	0.44	0.39
		PM _{2.5}	0.13	0.11
		VOC	0.05	<0.01

Emission Sources - Maximum Allowable Emission Rates

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
- NO_x - total oxides of nitrogen
- SO₂ - sulfur dioxide
- PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
- PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
- PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
- CO - carbon monoxide
- HCl - hydrogen chloride
- H₂SO₄ - sulfuric acid
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Planned maintenance, startup, and shutdown emissions are included.
- (6) Compliance will be based on a 30-day rolling average.
- (7) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: August 12, 2014