FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Lhoist North America of Texas, LLC

AUTHORIZING THE OPERATION OF
Clifton Lime Plant
Lime Manufacturing

LOCATED AT
Bosque County, Texas
Latitude 31° 42′ 44″ Longitude 97° 35′ 8″
Regulated Entity Number: RN100219856

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: O1108 Issuance Date: September 11, 2024

For the Commission

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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 ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 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 after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

(i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(1)(E)

(iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

(iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive

ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity

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

(c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

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

(i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)

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

(1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to

condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

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

(i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)

(iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's

eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

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

F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

(i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

(ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)

(iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

G. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:

(i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)

(ii) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)

(iii) Title 30 TAC § 111.209 (relating to Exception for Disposal Fires)

(iv) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)

(v) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)

4. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:

A. 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. For the nonmetallic mineral processing operations specified in 40 CFR Part 60, Subpart OOO, the permit holder shall comply with the following requirements:

A. Title 40 CFR § 60.670(f) (relating to Applicability and Designation of Affected Facility), for Table 1 for Subpart A

B. Title 40 CFR § 60.673(a) - (b) (relating to Reconstruction)

C. Title 40 CFR § 60.676(h) (relating to Reporting and Recordkeeping)

7. 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.

8. For each gasoline dispensing facility, with a throughput of less than 10,000 gallons per month as specified in 40 CFR Part 63, Subpart CCCCCC, the permit holder shall comply with the following requirements (Title 30 TAC, Subchapter C, § 113.1380 incorporated by reference):

   A. Title 40 CFR § 63.11111(e), for records of monthly throughput

   B. Title 40 CFR § 63.11111(i), for compliance due to increase of throughput

   C. Title 40 CFR § 63.11111(j), for dispensing from fixed tank into portable tank for on-site delivery

   D. Title 40 CFR § 63.11113(c), for compliance due to increase of throughput

   E. Title 40 CFR § 63.11115(a), for operation of the source

   F. Title 40 CFR § 63.11116(a) and (a)(1) - (4), for work practices

   G. Title 40 CFR § 63.11116(b), for records availability

   H. Title 40 CFR § 63.11116(d), for portable gasoline containers

9. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

Additional Monitoring Requirements

10. 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 or minimum frequency 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 either of the following requirements for any particulate matter capture system associated with the control device subject to CAM. If the results of the following inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective action:

(i) Once per year the permit holder shall inspect any fan for proper operation and inspect the capture system used in compliance of CAM for cracks, holes, tears, and other defects; or

(ii) Once per year, the permit holder shall inspect for fugitive emissions escaping from the capture system in compliance of CAM by performing a visible emissions observation for a period of at least six minutes in accordance with 40 CFR Part 60, Appendix A, Test Method 22.

F. 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.

11. 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 or minimum frequency 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

12. 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 (including the terms, conditions, monitoring, recordkeeping, and reporting identified in registered PBRs and permits by rule identified in the PBR Supplemental Tables dated November 2, 2023 in the application for project 35929), 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

13. 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.

14. 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).

15. 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. Requirements of the non-rule Air Quality Standard Permit for Pollution Control Projects

Compliance Requirements

16. 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.

17. 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

18. 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.

Temporary Fuel Shortages (30 TAC § 112.15)

19. The permit holder shall comply with the following 30 TAC Chapter 112 requirements:

A. Title 30 TAC § 112.15 (relating to Temporary Fuel Shortage Plan Filing Requirements)

B. Title 30 TAC § 112.16(a), (a)(1), and (a)(2)(B) - (C) (relating to Temporary Fuel Shortage Plan Operating Requirements)

C. Title 30 TAC § 112.17 (relating to Temporary Fuel Shortage Plan Notification Procedures)

D. Title 30 TAC § 112.18 (relating to Temporary Fuel Shortage Plan Reporting Requirements)

Permit Location

20. 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)

21. 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

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

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
1214	COAL PREPARATION PLANT	N/A	60Y-001	40 CFR Part 60, Subpart Y	No changing attributes.
ENG-1	SRIC ENGINES	N/A	63ZZZZ-003	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
ENG-2	SRIC ENGINES	N/A	60IIII-001	40 CFR Part 60, Subpart IIII	No changing attributes.
ENG-2	SRIC ENGINES	N/A	63ZZZZ-004	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GASLOAD	LOADING/UNLOADING OPERATIONS	N/A	115-LD0001	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
GRPCOALSYS	COAL PREPARATION PLANT	1101, 1202, 1203, 1206, 1209, 1222, 1223, 1238, 1239, 1242, 900-1, 900-2, 901	60Y-005	40 CFR Part 60, Subpart Y	No changing attributes.
GRPNEWBC	MINERAL PROCESSING PLANT	1309, 401, 401-1	60OOO-572	40 CFR Part 60, Subpart OOO	No changing attributes.
GRPUGBC	MINERAL PROCESSING PLANT	1319-0, 1319-1, 1319-2, 1319-3, 400-1, 400-2, 400-3, 400-4, 400-5, 400-6	60OOO-477	40 CFR Part 60, Subpart OOO	No changing attributes.
KILN-1	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R151-1	30 TAC Chapter 111, Nonagricultural Processes	No changing attributes.
KILN-2	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R151-1	30 TAC Chapter 111, Nonagricultural Processes	No changing attributes.
KILN-2	EMISSION POINTS/STATIONARY	N/A	111-VENT00003	30 TAC Chapter 111, Visible Emissions	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	VENTS/PROCESS VENTS				
KILN-2	MINERAL PROCESSING PLANT	N/A	60HH-0004	40 CFR Part 60, Subpart HH	No changing attributes.
KILN-3	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R151-1	30 TAC Chapter 111, Nonagricultural Processes	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)
1214	EU	60Y-001	PM	40 CFR Part 60, Subpart Y	§ 60.252(a)(1) § 60.252(a) § 60.256(a)	An owner or operator of a thermal dryer constructed, reconstructed, or modified on or before April 28, 2008 shall not cause to be discharged into the atmosphere from the thermal dryer any gases which contain PM in excess of 0.070 g/dscm (0.031 grains per dry standard cubic feet (gr/dscf)).	§ 60.255(a) § 60.256(a) § 60.256(a)(1) § 60.256(a)(1)(i) § 60.256(a)(2) § 60.257(b) § 60.257(b)(1) § 60.257(b)(2) § 60.257(b)(3) § 60.257(b)(4) [G]§ 60.257(b)(5) ** See Periodic Monitoring Summary	None	None
1214	EU	60Y-001	PM (Opacity)	40 CFR Part 60, Subpart Y	§ 60.252(a)(2) § 60.252(a) § 60.256(a) § 60.257(a)	An owner or operator of a thermal dryer constructed, reconstructed, or modified on or before April 28, 2008 shall not cause to be discharged into the atmosphere from the thermal dryer any gases which exhibit 20 percent opacity or greater.	§ 60.255(a) § 60.256(a) § 60.256(a)(1) § 60.256(a)(1)(i) § 60.256(a)(2) § 60.257(a) [G]§ 60.257(a)(1) [G]§ 60.257(a)(2) [G]§ 60.257(a)(3) ** See Periodic Monitoring Summary	None	None
ENG-1	EU	63ZZZZ-003	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table 2d.1 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i)	For each existing non-emergency, non-black start CI stationary RICE with a site rating less than or equal to 300 HP, located at an area source, you must comply with the requirements as specified in Table 2d.1.a-c.	§ 63.6625(i) § 63.6640(a) § 63.6640(a)-Table 6.9.a.i § 63.6640(a)-Table 6.9.a.ii	§ 63.6625(i) § 63.6655(e) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(f)
ENG-2	EU	60IIII-001	CO	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 1039.102 § 60.4201(a)	Owners and operators of non-emergency stationary CI ICE with a maximum	None	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)
					§ 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218	engine power greater than or equal to 37 KW and less than 130 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 5.0 g/KW-hr as stated in 40 CFR 60.4201(a) and 40 CFR 1039-Appendix I and 40 CFR 1039.102 and 40 CFR 1039.101.			
ENG-2	EU	60IIII-001	NMHC and NO_X	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 1039.102 § 60.4201(a) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 37 KW but less than 56 KW and a displacement of less than 10 liters per cylinder and is a 2008 model year and later must comply with an NMHC+NOx emission limit of 4.7 g/KW-hr as stated in 40 CFR 60.4201(a) and 40 CFR 1039-Appendix I and 40 CFR 1039.102 and 40 CFR 1039.101.	None	None	None
ENG-2	EU	60IIII-001	PM	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 1039.102 § 60.4201(a) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a maximum engine power greater than or equal to 19 KW and less than 56 KW and a displacement of less than 10 liters per cylinder and is a 2008 - 2012 model year	None	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)
						must comply with a PM emission limit of 0.30 g/KW-hr as stated in 40 CFR 60.4201(a) and 40 CFR 1039.102.			
ENG-2	EU	60IIII-001	PM (Opacity)	40 CFR Part 60, Subpart IIII	§ 60.4204(b) § 1039.105(b)(1) § 1039.105(b)(2) § 1039.105(b)(3) § 60.4201(a) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) § 60.4218	Owners and operators of non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder and is not a constant-speed engine and is a 2007 model year and later must comply with the following opacity emission limits: 20% during the acceleration mode, 15% during the lugging mode, and 50% during the peaks in either the acceleration or lugging modes as stated in 40 CFR 60.4201(a)-(c) and 40 CFR 1039.105(b)(1)-(3).	None	None	None
ENG-2	EU	63ZZZZ-004	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such	None	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)
						engines under this part.			
GASLOAD	EU	115-LD0001	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(3)(A) § 115.212(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Plants, excluding gasoline bulk plants, which load less than 20,000 gallons of VOC into transport vessels per day with a true vapor pressure greater than or equal to 1.5 psia is exempt from the division, except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B) § 115.216(3)(D)	None
GRPCOALSYS	EU	60Y-005	PM (Opacity)	40 CFR Part 60, Subpart Y	§ 60.254(a) § 60.257(a)	On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.	§ 60.255(a) § 60.257(a) [G]§ 60.257(a)(1) [G]§ 60.257(a)(2) [G]§ 60.257(a)(3) ** See Periodic Monitoring Summary	None	§ 60.258(c) § 60.258(d)
GRPNEWBC	EU	60OOO-572	PM (Opacity)	40 CFR Part 60, Subpart OOO	§ 60.672(b)-Table 3 § 60.672(b)	The owner or operator must meet a fugitive emission limit of 10 percent opacity for grinding mills, screening operations, bucket elevators, transfer operator points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or	§ 60.675(a) § 60.675(c)(1) § 60.675(c)(1)(i) § 60.675(c)(1)(ii) § 60.675(c)(3) [G]§ 60.675(e)(2) § 60.675(g) ** See Periodic Monitoring Summary	None	§ 60.675(g) § 60.676(f) [G]§ 60.676(g) [G]§ 60.676(i) § 60.676(k)

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)
						from any other affected facility (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008.			
GRPUGBC	EU	60OOO-477	PM (Opacity)	40 CFR Part 60, Subpart OOO	§ 60.672(b)-Table 3 § 60.672(b)	The owner or operator must meet a fugitive emission limit of 10 percent opacity for grinding mills, screening operations, bucket elevators, transfer operator points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008.	§ 60.675(a) § 60.675(c)(1) § 60.675(c)(1)(i) § 60.675(c)(1)(ii) § 60.675(c)(3) [G]§ 60.675(e)(1) [G]§ 60.675(e)(2) § 60.675(g) ** See Periodic Monitoring Summary	None	§ 60.675(g) § 60.676(f) [G]§ 60.676(g) [G]§ 60.676(i) § 60.676(k)
KILN-1	EP	R151-1	PM	30 TAC Chapter 111, Nonagricultural Processes	§ 111.151(a) § 111.151(b) § 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
KILN-2	EP	R151-1	PM	30 TAC Chapter 111,	§ 111.151(a) § 111.151(b)	No person may cause, suffer, allow, or permit	** 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)
				Nonagricultural Processes	§ 111.151(c)	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).			
KILN-2	EP	111-VENT00003	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
KILN-2	EU	60HH-0004	PM	40 CFR Part 60, Subpart HH	§ 60.342(a)(1)	The owner or operator shall not allow the discharge of any gases which contain particulate matter in excess of 0.30 kilogram per megagram (0.60 lb/ton) of stone feed.	§ 60.343(d) § 60.344(a) § 60.344(b) § 60.344(b)(1) § 60.344(b)(2) § 60.344(b)(3)	None	None
KILN-2	EU	60HH-0004	PM (Opacity)	40 CFR Part 60, Subpart HH	§ 60.342(a)(2)	The owner or operator shall not allow the discharge of any gases which exhibit greater than 15 percent opacity when exiting from a dry emission control device.	§ 60.343(a) § 60.343(e) § 60.344(a) § 60.344(b)(4)	§ 60.343(a)	§ 60.343(e)
KILN-3	EP	R151-1	PM	30 TAC Chapter 111, Nonagricultural Processes	§ 111.151(a) § 111.151(b) § 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	** 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)
						(relating to Emissions Limits for Steam Generators).			

Additional Monitoring Requirements

CAM Summary

Unit/Group/Process Information	
ID No.: KILN-1	
Control Device ID No.: SCRUB-1	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R151-1
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: Scrubbing liquid supply pressure / Gas pressure drop	
Minimum Frequency: 4 times/hour	
Averaging Period: Daily	
Deviation Limit: Pressure at spray nozzle >95 psig; Gas pressure drop across scrubber < 70% of 7.57 in of H2O	
CAM Text: As specified in NSPS HH, scrubbing liquid supply pressure will be measured with an accuracy of +/- 5% of the design scrubbing liquid supply pressure and the gas pressure drop across the scrubber will be measures with an accuracy of +/- 1 in. H2O. The measuring equipment will be calibrated and maintained in general accordance with the manufacturer's recommendations. Prior to the first measurements, the permit holder will verify the measurement equipment in general accordance with the manufacturer's recommended installation, calibration and start-up procedures. Measurement devices will be located and installed such that representative data is obtained.	

CAM Summary

Unit/Group/Process Information	
ID No.: KILN-2	
Control Device ID No.: DC-2	Control Device Type: Fabric filter
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R151-1
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Minimum pressure drop = 1 in. H2O, Maximum pressure drop = 8 in. H2O	
CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 0.5 inches water gauge pressure (± 125 pascals); or ± 0.5% of span.	

CAM Summary

Unit/Group/Process Information	
ID No.: KILN-3	
Control Device ID No.: BH-3	Control Device Type: Fabric filter
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R151-1
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Minimum pressure drop = 1 in. H2O, Maximum pressure drop = 8 in. H2O	
CAM Text: Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following: ± 0.5 inches water gauge pressure (± 125 pascals); or ± 0.5% of span.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: 1214	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Y	SOP Index No.: 60Y-001
Pollutant: PM	Main Standard: § 60.252(a)(1)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: N/A	
Deviation Limit: 20% Opacity	

Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. 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.

If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: 1214	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Y	SOP Index No.: 60Y-001
Pollutant: PM (Opacity)	Main Standard: § 60.252(a)(2)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per week	
Averaging Period: N/A	
Deviation Limit: 20% Opacity	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. 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. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPCOALSYS	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Y	SOP Index No.: 60Y-005
Pollutant: PM (Opacity)	Main Standard: § 60.254(a)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per week	
Averaging Period: N/A	
Deviation Limit: 20% Opacity	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. 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. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPNEWBC	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart OOO	SOP Index No.: 60OOO-572
Pollutant: PM (Opacity)	Main Standard: § 60.672(b)-Table 3
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per week	
Averaging Period: N/A	
Deviation Limit: 10% opacity	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. 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. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPUGBC	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart OOO	SOP Index No.: 60OOO-477
Pollutant: PM (Opacity)	Main Standard: § 60.672(b)-Table 3
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per week	
Averaging Period: N/A	
Deviation Limit: 10% Opacity	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. 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. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.	

Permit Shield

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 ID No.	Group / Inclusive Units	Regulation	Basis of Determination
GRPTANK	TANK-1, TANK-2	40 CFR Part 60, Subpart Kb	Storage capacity less than 19,812 gallons.
OTHLOAD	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	All loading and unloading of VOC other than gasoline (to or from transport vessels) is exempt.

New Source Review Authorization References

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.: PSDTX31M1	Issuance Date: 08/13/2021
PSD Permit No.: PSDTX441M2	Issuance Date: 09/14/2021
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.: 4335A	Issuance Date: 08/13/2021
Authorization No.: 8434	Issuance Date: 09/14/2021
Authorization No.: 144646	Issuance Date: 02/09/2017
Authorization No.: 165968	Issuance Date: 08/06/2021
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 51	Version No./Date: 09/12/1989
Number: 51	Version No./Date: 07/20/1992
Number: 53	Version No./Date: 09/12/1989
Number: 106.144	Version No./Date: 09/04/2000
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.511	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**
1101	BELT TO COAL BIN 2	8434, PSDTX441M2
1202	BELT TO COAL BIN 3	8434, PSDTX441M2
1203	COAL BIN 3/DUST COLLECTOR	8434, PSDTX441M2
1206	BELT WEIGH FEEDER 3	8434, PSDTX441M2
1209	COAL MILL 3/DUST COLLECTOR	8434, PSDTX441M2
1214	COAL MILL 3 HEATER/DUST COLLECTOR	8434, PSDTX441M2
1222	COAL DUST SILO 3/DUST COLLECTOR	8434, PSDTX441M2
1223	WEIGH HOPPER 3	8434, PSDTX441M2
1238	BELT TO COAL BIN 3-1	8434, PSDTX441M2
1239	COAL BIN 3-1	8434, PSDTX441M2
1242	BELT WEIGH FEEDER 3-1	8434, PSDTX441M2
1309	FIXED STACKING CONVEYOR	8434, PSDTX441M2
1319-0	UNDERGROUND FEEDER BELT	8434, PSDTX441M2
1319-1	UNDERGROUND FEEDER BELT	8434, PSDTX441M2
1319-2	UNDERGROUND FEEDER BELT	8434, PSDTX441M2
1319-3	UNDERGROUND FEEDER BELT	8434, PSDTX441M2
400-1	UNDERGROUND TUNNEL FEEDER BELT	4335A, PSDTX31M1
400-2	UNDERGROUND TUNNEL FEEDER BELT	4335A, PSDTX31M1
400-3	UNDERGROUND TUNNEL FEEDER BELT	4335A, PSDTX31M1
400-4	UNDERGROUND TUNNEL FEEDER BELT	4335A, PSDTX31M1
400-5	UNDERGROUND TUNNEL FEEDER BELT	4335A, PSDTX31M1

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**
400-6	UNDERGROUND TUNNEL FEEDER BELT	4335A, PSDTX31M1
401	MAIN TUNNEL BELT	4335A, PSDTX31M1
401-1	BELT CONVEYOR 401-1	4335A, PSDTX31M1
900-1	BELT COAL HOPPER	8434, PSDTX441M2
900-2	BELT COKE HOPPER	8434, PSDTX441M2
901	BELT TO COAL BIN 1	8434, PSDTX441M2
ENG-1	KILN 1 ROTATION ENGINE	106.511/09/04/2000
ENG-2	KILN 2 ROTATION ENGINE	106.511/09/04/2000
GASLOAD	GAS LOAD	53/09/12/1989
KILN-1	LIME KILN NO. 1	4335A, PSDTX31M1
KILN-2	LIME KILN NO. 2	4335A, PSDTX31M1
KILN-3	LIME KILN NO. 3	8434, PSDTX441M2
OTHLOAD	OTH LOAD	106.472/09/04/2000
TANK-1	12,000 GAL DIESEL TANK	51/09/12/1989
TANK-2	15,000 GAL DIESEL TANK	51/07/20/1992

**This column may include Permit by Rule (PBR) numbers and version dates, PBR Registration numbers in brackets, Standard Permit Registration numbers, Minor NSR permit numbers, and Major NSR permit numbers.

Appendix A

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
CEMS ..... continuous emissions monitoring system
CFR ..... Code of Federal Regulations
COMS ..... continuous opacity monitoring system
CVS ..... closed vent system
D/FW ..... Dallas/Fort Worth (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
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MACT ..... Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr ..... Million British thermal units per hour
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NESHAP ..... National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
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
PEMS ..... predictive emissions monitoring system
PM ..... particulate matter
ppmv ..... parts per million by volume
PRO ..... process unit
PSD ..... prevention of significant deterioration
psia ..... pounds per square inch absolute
SIP ..... state implementation plan
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

Permit Numbers 4335A and PSDTX31M1					Issuance Date: August 13, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
LK-1	Kiln No. 1 Scrubber Stack	PM	27.92	122.00	5, 6, 11, 12, 15, 19, 20	5, 6, 12, 15, 19, 20, 27	
		PM_{10}	27.92	122.00			
		$PM_{2.5}$	10.65	46.51			
		VOC	0.29	1.28			
		NO_x	100.00	438.00			
		SO_2	58.30	255.00			
		CO	25.00	109.50			
		H_2SO_4	0.64	2.80			
		HCl	0.81	3.50			
		Dioxins/furans	2.86E-09	1.25E-08			
		Pb	5.58E-04	2.44E-03			
		Hg	1.88E-04	8.23E-04			
		Ni	1.26E-02	5.49E-02			
		V_2O_5	3.35E-02	1.46E-01			

Major NSR Summary Table

Permit Numbers 4335A and PSDTX31M1					Issuance Date: August 13, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
LK-2	Kiln No. 2 Stack Kilns No. 1 and 2 Annual Cap	PM	8.77	38.42	3, 4, 11, 12, 15, 16, 17, 21, 22, 23, 29	3, 4, 5, 12, 15, 17, 21, 22, 23, 26, 27, 29	3, 17, 21, 29
		PM_{10}	8.77	38.42			
		$PM_{2.5}$	4.31	18.86			
		VOC	0.58	2.56			
		NO_x	125.00	547.5			
		SO_2 (6)	320.00	1100.00			
		SO_2	450.00				
		CO	50.00	219.00			
		H_2SO_4	0.87	3.83			
		HCl	10.00	6.12			
		Dioxins/furans	5.73E-09	2.51E-08			
		Pb	5.88E-04	2.58E-03			
		Hg	3.75E-04	1.64E-03			
		V_2O_5	0.1142	0.5002			

Major NSR Summary Table

Permit Numbers 4335A and PSDTX31M1					Issuance Date: August 13, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		Cr	0.0010	0.0044			
		NiO	0.0127	0.0556			
		HCl	---	6.12			
702	Hydrator Baghouse Stack	PM	0.56	2.45	11, 12	12	
		PM_{10}	0.56	2.45			
		$PM_{2.5}$	0.29	1.27			
		VOC	0.01	0.05			
		NO_x	0.22	0.95			
		SO_2	0.03	0.11			
		CO	0.18	0.80			
DC-8	1617 Crusher and Conveyor Baghouse Stack	PM	0.21	0.94	11		
		PM_{10}	0.21	0.94			
		$PM_{2.5}$	0.11	0.46			
DC-9	1627 Screening and	PM	0.21	0.94			

Major NSR Summary Table

Permit Numbers 4335A and PSDTX31M1					Issuance Date: August 13, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
	Conveying Baghouse Stack	PM_{10}	0.21	0.94	11		
		$PM_{2.5}$	0.11	0.46			
DC-10	Quicklime Loadout Baghouse Stack	PM	0.60	1.75	11		
		PM_{10}	0.60	1.75			
		$PM_{2.5}$	0.29	0.86			
DC-11	Quicklime Silos Baghouse Stack	PM	0.13	0.57	11		
		PM_{10}	0.13	0.57			
		$PM_{2.5}$	0.06	0.28			
DC-12	515 Crusher Baghouse Stack	PM	0.21	0.94	11		
		PM_{10}	0.21	0.94			
		$PM_{2.5}$	0.11	0.46			
DC-13	Blending / Crusher / Truck Loadout Baghouse Stack	PM	1.71	4.99	11		
		PM_{10}	1.71	4.99			
		$PM_{2.5}$	0.84	2.40			

Major NSR Summary Table

Permit Numbers 4335A and PSDTX31M1					Issuance Date: August 13, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
DC-15	720 Hydrator Air Separator Baghouse	PM	1.30	1.30	11		
		PM_{10}	1.30	1.30			
		$PM_{2.5}$	0.64	0.64			
DC-16	Hydration Silo Vent Baghouse Stack	PM	0.09	0.09	11		
		PM_{10}	0.09	0.09			
		$PM_{2.5}$	0.04	0.04			
DC-17	Silo Bin Vent Baghouse Stack	PM	0.04	0.04	11		
		PM_{10}	0.04	0.04			
		$PM_{2.5}$	0.02	0.02			
DC-18	Hydrated Lime Truck Loadout Baghouse Stack	PM	0.02	0.01	11		
		PM_{10}	0.02	0.01			
		$PM_{2.5}$	0.01	< 0.01			
DC-21	Cycal Loadout Baghouse Stack	PM	0.09	0.22	11		
		PM_{10}	0.09	0.22			

Major NSR Summary Table

Permit Numbers 4335A and PSDTX31M1					Issuance Date: August 13, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		$PM_{2.5}$	0.04	0.11			
DC-22	Cycal Loadout Baghouse Stack	PM	0.12	0.11	11		
		PM_{10}	0.12	0.11			
		$PM_{2.5}$	0.06	0.05			
DC-23	Railcar Loading Baghouse Stack	PM	0.21	0.86	11		
		PM_{10}	0.21	0.86			
		$PM_{2.5}$	0.11	0.42			
DC-24	Railcar Loading Baghouse Stack	PM	0.04	0.17	11		
		PM_{10}	0.04	0.17			
		$PM_{2.5}$	0.02	0.08			
DC-29	Cycal Loadout baghouse Stack	PM	0.12	0.11	11		
		PM_{10}	0.12	0.11			
		$PM_{2.5}$	0.06	0.05			
DC-30	Kiln Dust Bin	PM	0.12	0.53			

Major NSR Summary Table

Permit Numbers 4335A and PSDTX31M1					Issuance Date: August 13, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM_{10}	0.12	0.53	11		
		$PM_{2.5}$	0.06	0.26			
DC-31	Primary Truck Loadout	PM	0.19	0.83	11		
		PM_{10}	0.19	0.83			
		$PM_{2.5}$	0.09	0.41			
DC-32	Secondary Truck Loadout	PM	0.19	0.83	11		
		PM_{10}	0.19	0.83			
		$PM_{2.5}$	0.09	0.41			
DC-33	Hydrate Loadout Silo	PM	0.01	0.01	11		
		PM_{10}	0.01	0.01			
		$PM_{2.5}$	0.01	< 0.01			
DC-643	Dust Collector 643 Stack	PM	0.21	0.94	11		
		PM_{10}	0.21	0.94			
		$PM_{2.5}$	0.11	0.46			

Major NSR Summary Table

Permit Numbers 4335A and PSDTX31M1					Issuance Date: August 13, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
DC-646	Dust Collector 646 Stack	PM	0.21	0.94	11		
		PM_{10}	0.21	0.94			
		$PM_{2.5}$	0.11	0.46			
REJSILO	Reject Stone Silo Baghouse Stack	PM	0.17	0.75	11		
		PM_{10}	0.17	0.75			
		$PM_{2.5}$	0.08	0.37			
REJECT1	Reject Stone Stockpile (7)	PM	0.04	0.15	11		
		PM_{10}	0.02	0.08			
		$PM_{2.5}$	0.01	< 0.01			
REJECT3	Reject Stone Stockpile (7)	PM	0.31	1.40	11		
		PM_{10}	0.16	0.69			
		$PM_{2.5}$	0.02	0.10			
REJECT4	Reject Stone Stockpile (7)	PM	0.08	0.36	11		
		PM_{10}	0.04	0.18			

Major NSR Summary Table

Permit Numbers 4335A and PSDTX31M1					Issuance Date: August 13, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		$PM_{2.5}$	0.01	0.03			
STOCK1	Stone Stockpile (7)	PM	0.19	0.82			
		PM_{10}	0.09	0.41			
		$PM_{2.5}$	0.01	0.06			
STOCK2	Stone Stockpile (7)	PM	0.12	0.53	11		
		PM_{10}	0.06	0.26			
		$PM_{2.5}$	0.01	0.04			
CRUSH1	Primary Crusher (7)	PM	0.84	1.09	11	27	
		PM_{10}	0.41	0.54			
		$PM_{2.5}$	0.08	0.10			
SCREEN1	Primary Screen (7)	PM	0.19	0.24	11		
		PM_{10}	0.09	0.12			
		$PM_{2.5}$	0.01	0.01			
CRUSH2	Secondary Crusher	PM	0.26	0.21	11	27	

Major NSR Summary Table

Permit Numbers 4335A and PSDTX31M1					Issuance Date: August 13, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
	(7)	PM_{10}	0.13	0.10			
		$PM_{2.5}$	0.01	0.01			
SCREEN2	Secondary Screen	PM	0.45	1.61	11		
		PM_{10}	0.21	0.76			
		$PM_{2.5}$	0.01	0.05			
SCREEN3	Tertiary Screen	PM	0.45	1.61	11		
		PM_{10}	0.21	0.76			
		$PM_{2.5}$	0.01	0.05			
Fug-1	Limestone Handling (7)	PM	0.17	0.33	2, 11	2	2
		PM_{10}	0.07	0.15			
		$PM_{2.5}$	0.02	0.04			
Cyc-1	Cycal Handling (7)	PM	0.01	0.01	11		
		PM_{10}	0.01	0.01			
		$PM_{2.5}$	< 0.01	< 0.01			

Major NSR Summary Table

Permit Numbers 4335A and PSDTX31M1					Issuance Date: August 13, 2021		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
CC-1	Coke Crusher (7)	PM	0.02	< 0.01	11		
		PM_{10}	0.01	< 0.01			
		$PM_{2.5}$	< 0.01	< 0.01			
Fug-2, Fug-3	Coal/Coke Handling (7)	PM	0.70	0.46	11		
		PM_{10}	0.33	0.22			
		$PM_{2.5}$	0.05	0.03			
Fug-2A, Fug-3A	Coal/Coke Stockpile (Rail and Plant Areas) (7)	PM	0.56	2.47	11		
		PM_{10}	0.28	1.24			
		$PM_{2.5}$	0.04	0.19			
RCLSLOAD	Limestone Railcar Loading (7)	PM	0.68	2.67	11		
		PM_{10}	0.34	1.33			
		$PM_{2.5}$	0.05	0.20			

(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

SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - 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
H_2SO_4 - sulfuric acid
HCl - hydrochloric acid
Pb - lead
Hg - mercury
Ni - nickel
V_2O_5 - vanadium pentoxide
Cr - chromium
NiO - nickel oxide

(4) Planned startup and shutdown emissions are included.
(5) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(6) Compliance with the lb/hr emission rates for SO_2 is based on a 30 operating day rolling average.
(7) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Major NSR Summary Table

Permit Numbers 8434 and PSDTX441M2					Issuance Date: September 14, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
LK-3	Lime Kiln No. 3 Baghouse Stack	NO_x (6)	75.00	328.50	2, 3, 4, 5, 6, 7, 8, 10, 11, 15	3, 4, 5, 6, 7, 8, 10, 11, 14	6
		CO (6)	87.37	382.68			
		PM (6)	4.37	19.14			
		PM_{10} (6)	4.37	19.14			
		$PM_{2.5}$ (6)	2.14	9.38			
		SO_2 (6)	39.13	171.37			
		H_2SO_4	0.86	3.77			
		VOC	5.60	24.53			
		HCl	0.88	3.85			
STOCK3	Kiln No. 3 Stone Stockpile (7)	PM	0.97	4.26	3, 7	3, 7, 14	3
		PM_{10}	0.49	2.13			
		$PM_{2.5}$	0.07	0.32			
REJECT2	Kiln No. 3 Reject Stockpile (7)	PM	0.01	0.06	7	7, 14	
		PM_{10}	<0.01	0.03			

Major NSR Summary Table

Permit Numbers 8434 and PSDTX441M2					Issuance Date: September 14, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		$PM_{2.5}$	<0.01	<0.01			
CC-1	Coke Crusher (7), (8)	PM	0.02	<0.01	7	7, 14	
		PM_{10}	0.01	<0.01			
		$PM_{2.5}$	<0.01	<0.01			
FUG-2	Fuel Handling (7), (8)	PM	0.16	0.09	7	7, 14	
		PM_{10}	0.07	0.04			
		$PM_{2.5}$	0.01	<0.01			
FUG-2	Fuel Stockpile (7), (8)	PM	0.09	0.39	7	7, 14	
		PM_{10}	0.04	0.19			
		$PM_{2.5}$	<0.01	0.03			
FUG-3	Fuel Handling (7), (8)	PM	0.05	0.05	7	7, 14	
		PM_{10}	0.02	0.02			
		$PM_{2.5}$	<0.01	<0.01			
FUG-3	Fuel Stockpile (7), (8)	PM	0.12	0.52	7	7, 14	

Major NSR Summary Table

Permit Numbers 8434 and PSDTX441M2					Issuance Date: September 14, 2021		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
		PM_{10}	0.06	0.26			
		$PM_{2.5}$	<0.01	0.04			
DC-5	1513 Feeder Baghouse	PM	0.13	0.57	5, 7, 9	5, 7, 9, 14	
		PM_{10}	0.13	0.57			
		$PM_{2.5}$	0.06	0.28			
DC-6	1604 and 1615	PM	0.13	0.57	5, 7, 9	5, 7, 9, 14	
		PM_{10}	0.13	0.57			
		$PM_{2.5}$	0.06	0.28			
DC-19	1217 Solid Fuel Mill Fan Baghouse	NO_x	0.34	1.50	2, 5, 7, 9	5, 7, 9, 14	
		CO	0.29	1.26			
		PM	0.50	2.17			
		PM_{10}	0.50	2.17			
		$PM_{2.5}$	0.24	1.06			
		VOC	0.02	0.08			

Major NSR Summary Table

Permit Numbers 8434 and PSDTX441M2					Issuance Date: September 14, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		SO_2	0.26	1.13			
DC-20	Pulverized Solid Fuel Bin Baghouse	PM	0.07	0.31	5, 7, 9	5, 7, 9, 14	
		PM_{10}	0.07	0.31			
		$PM_{2.5}$	0.03	0.15			
DC-26	Limestone Hopper Baghouse	PM	0.09	0.38	5, 7, 9	5, 7, 9, 14	
		PM_{10}	0.09	0.38			
		$PM_{2.5}$	0.04	0.18			
DC-27	Raw Solid Fuel Bins Baghouse	PM	0.08	0.34	5, 7, 9	5, 7, 9, 14	
		PM_{10}	0.08	0.34			
		$PM_{2.5}$	0.04	0.17			
DC-28	Trommel Screen Baghouse	PM	0.17	0.76	5, 7, 9	5, 7, 9, 14	
		PM_{10}	0.17	0.76			
		$PM_{2.5}$	0.08	0.37			

(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
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - 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
H_2SO_4 - sulfuric acid mist

(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) These emissions are permitted under Prevention of Significant Deterioration (PSD) and State.

(7) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

(8) These EPNs are included in Permit Number 23214 and Permit Numbers 4335A and PSDTX31; the emission rates listed here are for emissions allocated to the Kiln No. 3 (EPN LK-3) operation.

Texas Commission on Environmental Quality
Air Quality Permit

A Permit Is Hereby Issued To
Lhoist North America Of Texas, LLC
Authorizing the Construction and Operation of
Lime Manufacturing Plant
Located at **Clifton, Bosque County, Texas**
Latitude 31° 42′ 30″ Longitude −97° 35′ 50″

Permit: 4335A and PSDTX31M1

Revision Date: August 13, 2021

Expiration Date: May 26, 2027

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] [1]
2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of $5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and

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

8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] [1]
9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. [1]

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

Common Acronyms in Air Permits

°C = Temperature in degrees Celsius
°F = Temperature in degrees Fahrenheit
°K = Temperature in degrees Kelvin
µg = microgram
$\mu g/m^3$ = microgram per cubic meter
acfm = actual cubic feet per minute
AMOC = alternate means of control
AOS = alternative operating scenario
AP-42 = Air Pollutant Emission Factors, 5th edition
APD = Air Permits Division
API = American Petroleum Institute
APWL = air pollutant watch list
BPA = Beaumont/ Port Arthur
BACT = best available control technology
BAE = baseline actual emissions
bbl = barrel
bbl/day = barrel per day
bhp = brake horsepower
BMP = best management practices
Btu = British thermal unit
Btu/scf = British thermal unit per standard cubic foot or feet
CAA = Clean Air Act
CAM = compliance-assurance monitoring
CEMS = continuous emissions monitoring systems
cfm = cubic feet (per) minute
CFR = Code of Federal Regulations
CN = customer ID number
CNG = compressed natural gas
CO = carbon monoxide
COMS = continuous opacity monitoring system
CPMS = continuous parametric monitoring system
DFW = Dallas/ Fort Worth (Metroplex)
DE = destruction efficiency
DRE = destruction and removal efficiency
dscf = dry standard cubic foot or feet
dscfm = dry standard cubic foot or feet per minute
ED = (TCEQ) Executive Director
EF = emissions factor
EFR = external floating roof tank
EGU = electric generating unit
EI = Emissions Inventory
ELP = El Paso
EPA = (United States) Environmental Protection Agency
EPN = emission point number
ESL = effects screening level
ESP = electrostatic precipitator
FCAA = Federal Clean Air Act
FCCU = fluid catalytic cracking unit
FID = flame ionization detector
FIN = facility identification number
ft = foot or feet
ft/sec = foot or feet per second
g = gram
gal/wk = gallon per week
gal/yr = gallon per year
GLC = ground level concentration
GLC_{max} = maximum (predicted) ground-level concentration
gpm = gallon per minute
gr/1000scf = grain per 1000 standard cubic feet
gr/dscf = grain per dry standard cubic feet
H_2CO = formaldehyde
H_2S = hydrogen sulfide
H_2SO_4 = sulfuric acid
HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
HC = hydrocarbons
HCl = hydrochloric acid, hydrogen chloride
Hg = mercury
HGB = Houston/Galveston/Brazoria
hp = horsepower
hr = hour
IFR = internal floating roof tank
in H_2O = inches of water
in Hg = inches of mercury
IR = infrared
ISC3 = Industrial Source Complex, a dispersion model
ISCST3 = Industrial Source Complex Short-Term, a dispersion model
K = Kelvin; extension of the degree Celsius scaled-down to absolute zero
LACT = lease automatic custody transfer
LAER = lowest achievable emission rate
lb = pound
hp = horsepower
hr = hour lb/day = pound per day
lb/hr = pound per hour
lb/MMBtu = pound per million British thermal units
LDAR = Leak Detection and Repair (Requirements)
LNG = liquefied natural gas
LPG = liquefied petroleum gas
LT/D = long ton per day
m = meter
m^3 = cubic meter
m/sec = meters per second
MACT = maximum achievable control technology
MAERT = Maximum Allowable Emission Rate Table
MERA = Modeling and Effects Review Applicability
mg = milligram
mg/g = milligram per gram
mL = milliliter
MMBtu = million British thermal units
MMBtu/hr = million British thermal units per hour
MSDS = material safety data sheet
MSS = maintenance, startup, and shutdown
MW = megawatt
NAAQS = National Ambient Air Quality Standards
NESHAP = National Emission Standards for Hazardous Air Pollutants
NGL = natural gas liquids
NNSR = nonattainment new source review
NO_x = total oxides of nitrogen

NSPS = New Source Performance Standards
PAL = plant-wide applicability limit
PBR = Permit(s) by Rule
PCP = pollution control project
PEMS = predictive emission monitoring system
PID = photo ionization detector
PM = periodic monitoring
PM = total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
$PM_{2.5}$ = particulate matter equal to or less than 2.5 microns in diameter
PM_{10} = total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
POC = products of combustion
ppb = parts per billion
ppm = parts per million
ppmv = parts per million (by) volume
psia = pounds (per) square inch, absolute
psig = pounds (per) square inch, gage
PTE = potential to emit
RA = relative accuracy
RATA = relative accuracy test audit
RM = reference method
RVP = Reid vapor pressure
scf = standard cubic foot or feet
scfm = standard cubic foot or feet (per) minute
SCR = selective catalytic reduction
SIL = significant impact levels
SNCR = selective non-catalytic reduction
SO_2 = sulfur dioxide
SOCMI = synthetic organic chemical manufacturing industry
SRU = sulfur recovery unit
TAC = Texas Administrative Code
TCAA = Texas Clean Air Act
TCEQ = Texas Commission on Environmental Quality
TD = Toxicology Division
TLV = threshold limit value
TMDL = total maximum daily load
tpd = tons per day
tpy = tons per year
TVP = true vapor pressure
VOC = volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
VRU = vapor recovery unit or system

Special Conditions

Permit Numbers 4335A and PSDTX31M1

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT), and those sources are limited to the emission limits and other conditions specified in the attached table. In addition to the emissions from routine operations, this permit authorizes emissions from planned startup and shutdown activities, and those emissions shall comply with the limits specified in the MAERT.

Federal Applicability

2. This lime manufacturing plant shall comply with the applicable portions of U.S. Environmental Protection Agency (EPA) Standards of Performance for New Stationary Sources (NSPS) in Title 40 Code of Federal Regulations Part 60 (40 CFR 60):

   A. Subpart A: General Provisions; and

   B. Subpart OOO: Standards of Performance for Nonmetallic Mineral Processing Plants.

3. Kiln No. 2 (EPN LK-2) shall also comply with the applicable portions of EPA Standards of Performance for NSPS in 40 CFR 60:

   A. Subpart A: General Provisions; and

   B. Subpart HH: Standards of Performance for Lime Manufacturing Plants.

Emission Standards

4. This permit authorizes two kilns: EPNs LK-1 and LK-2. Kiln 2 (EPN LK-2) shall meet the following limits

Contaminant	Limit	Other Conditions
SO_2	12.8 pounds per ton (lb/ton) lime or lb/hr limits in the MAERT	30 operating day rolling average excluding periods of startup / shutdown (SU/SD) as defined in Special Condition No. 15
Particulate Matter (PM) filterable ($PM/PM_{10}/PM_{2.5}$)	0.01 grains per dry standard cubic feet	Outlet grain loading
Hydrogen Chloride (HCl)	0.08 lb/ton high calcium lime 0.4 lb/ton dolomitic lime or lb/hr limits in the MAERT	Compliance shown via Initial stack test per Special Condition No. 17.

   A. Emissions from startup and shutdown periods (as defined in Special Condition No. 15) are excluded from the limits above.

   B. Emissions from maintenance activities are excluded from the limits above.

5. In order to demonstrate compliance with the Kilns No. 1 and No. 2 emissions cap of 6.12 TPY for HCl, the following formula shall be used: **(8/21)**

(0.064 * LK-1)/2,000 + (0.034 * LK-2 Hi-Cal)/2,000 + (0.4 * LK-2 Dol)/2,000 <= 6.12

where:

LK-1 = tons of lime produced in Kiln No. 1 during the previous 12-month rolling period. This 12-month rolling calculation shall begin no earlier than January 1, 2021, using production data from January 1, 2020 to December 31, 2020.

LK-2 Hi-Cal = tons of high calcium lime produced in Kiln No. 2 during the previous 12-month rolling period. This 12-month rolling calculation shall begin no earlier than January 1, 2021, using production data from January 1, 2020 to December 31, 2020.

LK-2 Dol = tons of dolomitic lime produced in Kiln No. 2 during the previous 12-month rolling period. This 12-month rolling calculation shall begin no earlier than January 1, 2021, using production data from January 1, 2020 to December 31, 2020.

Fuel Specifications

6. Fuel fired in Kiln No. 1 shall be limited to coal, a mixture of coal and coke, and natural gas. The coal and coke fuel feed rate shall be such that the maximum sulfur content in the fuel mixture does not exceed 292 pounds per hour.

7. Fuel used in Kiln No. 2 shall be limited to coal, coke, and natural gas.

Opacity/Visible Emission Limitations

8. Opacity of emissions from any transfer point on belt conveyors, the crusher and the crusher screen baghouses, the bulk storage silo fabric filter baghouses or any fabric filter baghouse must not exceed 10 percent averaged over a six minute period. Truck dumping of limestone into any screening operation, feed hopper, or crusher is exempt from the requirements of this condition.

9. Opacity of emissions from the wet scrubber for Kiln No. 1 must not exceed 20 percent, when adjusted for uncombined water vapor, averaged over a six-minute period, except for those periods described in EPA document 40 CFR 60, Subpart A, Section 60.11(c).

10. Opacity of emissions from the baghouse stack for Kiln No. 2 shall not exceed 7 percent, when adjusted for uncombined water vapor, averaged over a six minute period, except for those periods described in EPA document 40 CFR 60, Subpart A, Section 60.11(c).

11. No visible emissions shall leave the plant property boundary. Visible emissions shall be determined by a standard of no visible emissions exceeding 30 seconds in duration in any six minute period as determined using EPA Test Method 22 or equivalent. If this condition is violated, additional controls or process changes may be required to limit visible particulate matter (PM) emissions.

Operational Limitations, Work Practices, and Plant Design

12. As represented by the applicant, to comply with Texas Commission on Environmental Quality (TCEQ) rules and regulations, the following apply:

A. Plant production is limited to the following:

Table 1: Kiln feed rate and production limits

Material	Kiln No. 1, tons/ hour	Kiln No. 1, tons/year	Kiln No. 2, tons/hour	Kiln No. 2, tons/year	Combined Kiln Nos. 1 and 2, tons/hour	Combined Kiln Nos. 1 and 2, tons/year
Stone feed rate limit	25	--	50	--	--	--
Lime production limit	12.5	109,500	25	219,000	--	--
Hydrated lime production limit	--	--	--	--	15	131,400

B. All permanent in-plant roads shall be paved and cleaned, as necessary, to achieve maximum control of dust emissions. Other areas on the property subject to vehicle traffic, including the railcar loadout receiving area, shall be watered, treated with dust suppressant chemicals, oiled, or paved and cleaned, as necessary, to achieve maximum control of dust emissions.

C. All quarry roads shall be sprinkled with water and/or chemicals, as necessary, to control dust emissions.

D. Primary and secondary limestone crushing operating hours shall be between 5 a.m. and 9 p.m.

E. Water sprays will be operated for dust control during material handling and crushing of limestone, as necessary.

F. All exposed stockpiles shall be sprinkled with water and/or dust suppressant chemicals, as necessary, to achieve maximum control of dust emissions.

G. Spillage of any solid fuel, raw material or product shall be immediately cleaned up and contained or dampened such that dust emissions from wind erosion, vehicle traffic, and other fugitive dust emissions are minimized.

H. Outgoing trucks used in transporting lime will be cleaned and maintained to control fugitive dust, as necessary.

13. Kiln 1 emissions shall be controlled through a wet scrubber, subject to continuous monitoring as required by Special Condition Nos. 19 and 20.

Planned Startup and Shutdown

14. The holder of this permit shall minimize emissions during planned startup and shutdown 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.

15. Emissions during planned startup and shutdown activities of the kilns shall be minimized as follows:

    A. Kiln No. 1: 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 240 minutes or when the feed rate exceeds 15 tons per hour, whichever occurs first.

    B. Kiln No. 2: 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 240 minutes or when the feed rate exceeds 30 tons per hour, whichever occurs first.

    C. Kiln Nos. 1 and 2: 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.

Initial Demonstration of Compliance

16. Sampling ports and platforms shall be incorporated into the design of the Kiln 2 Stack according to the specifications set forth in "Chapter 2, Guidelines for Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director.

17. 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 the Kiln 2 Stack Baghouse (EPN LK-2). Sampling results performed since June 9, 2014 can satisfy this condition if determined acceptable to the TCEQ and the TCEQ Regional Office waives subsequent testing. Sampling shall be conducted in accordance with appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with EPA Test Methods (TMs). Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling.

    The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at its expense.

    A. The TCEQ Regional Office shall be contacted as soon as testing is scheduled, but not less than 30 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.

(6) Procedure used to determine kiln production rates during and after the sampling period.

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

A written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or 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 air contaminant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division (APD). Test waivers and alternate or equivalent procedure proposals for NSPS testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

B. Air contaminants and diluents emitted from Kiln 2 (EPN LK-2) to be sampled and analyzed include (but are not limited to) PM, PM_{10} (front-half and back-half), SO_2, HCl, and opacity.

C. Kiln 2 shall be tested while operating at or above 90 percent of maximum production (as referenced in Special Condition No. 12). Primary operating parameters that enable determination of production rate shall be monitored and recorded during each test run and entered in the final sampling report. These parameters are to be determined at the pretest meeting. If the plant is unable to operate at or above 90 percent of maximum production rate during testing, additional stack testing may be required when higher rates are achieved.

D. Sampling as required by this condition shall occur within 180 days of issuance of this permit amendment. Additional sampling shall occur as may be required by the TCEQ or EPA.

E. SO_2 CEMS data as specified in Special Condition Nos. 21 and 22 may be used to demonstrate initial compliance for SO_2 emissions.

F. Within 60 days after the completion of the testing and sampling required herein, two copies of the sampling reports shall be distributed as follows:

(1) One copy to the TCEQ Waco Regional Office.

(2) One copy to the TCEQ Austin Office of Air, Air Permits Division.

Continuous Determination of Compliance

18. Upon request by the Executive Director of the TCEQ, the holder of this permit shall perform stack testing and/or high volume air sampling tests. The tests shall be performed during normal operation of the facilities. All testing shall be performed in accordance with the TCEQ Sampling Procedures Manual.

Continuous Monitoring for Kiln 1

19. Continuous monitoring for Kiln 1:

A. In order to maintain adequate particulate matter and sulfur dioxide control for Kiln 1, the scrubber system shall be operated to meet the following specifications at all times that emissions are routed to the scrubber:

(1) Scrubbing liquid supply pressure (maximum): 95 pounds per square inch, gauge (psig)

(2) Scrubber pressure drop (minimum): 70 percent of baseline pressure drop

B. Each monitoring device shall be calibrated at a frequency in general accordance with the manufacturer's recommendations, and shall be accurate to within the following:

(1) Scrubbing liquid supply pressure: ± 5 pounds per square inch (psi)

(2) Scrubber pressure drop: ± 1 inch water (H_2O)

C. The scrubbing liquid supply pressure and gas pressure drop must be measured and recorded at least 4 times per hour. Daily averages of the data shall be used to determine compliance with the allowable limits. Immediate corrective action should be taken if the daily average values of either the liquid supply pressure or the gas pressure drop are outside of their respective limits.

D. The required monitoring equipment shall be installed, tested, undergo final verification and begin collecting data within 180 days after issuance of renewed Federal Operating Permit Number O1108. A baseline scrubber pressure drop shall be determined, and a written alteration request to incorporate the baseline pressure drop shall be submitted, within 60 days of final verification of the monitoring equipment.

E. As represented by the permit holder, the following are the baseline scrubber gas pressure drop and deviation:

(1) Baseline scrubber gas pressure drop: 7.57 inches H_2O

(2) Minimum scrubber pressure drop: 5.30 inches H_2O

20. The permit holder shall conduct a once a month visual, audible, and/or olfactory inspection of the capture system used to control emissions from Kiln 1. If the results of the inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective actions.

Continuous Monitoring for Kiln 2

21. The holder of this permit shall install, calibrate, operate, and maintain CEMS to measure and record the SO_2 concentration and continuous flow rate sensors to measure and record the exhaust flow rate from Kiln 2. The SO_2 CEMS and the continuous flow rate sensor shall be used as a continuous emission rate monitoring system (CERMS) for SO_2.

A. The systems 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 portions of 40 CFR Part 60, Appendix B,

(1) Performance Specification Nos. 2 through 4, for the CEMS; and

(2) Performance Specification No. 6 for the flow rate sensors.

B. Each CEMS shall be zeroed and spanned daily and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days, unless the monitor is required by a subpart of NSPS or NESHAPS, in which case zero and span shall be done daily without exception.

C. Each CEMS shall be quality-assured at least quarterly in accordance with 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2. All cylinder gas audit results and any CEMS downtime shall be reported quarterly to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken if the downtime exceeds 10 percent of the kiln operating hours in the quarter. Failure to complete any corrective action as directed by the TCEQ Regional Office may be deemed a violation of the permit. For non-NSPS sources, an equivalent method approved by the TCEQ may be used.

22. Each CEMS shall complete a minimum of one cycle of sampling, analyzing, and data recording for each successive 15-minute period. One-hour average concentrations and pounds of pollutant per hour shall be computed from normally at least four, and a minimum of two, data points equally-spaced over each one-hour period. Data recorded during periods of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the computed data averages.

23. Kiln No. 2 shall be controlled with a baghouse to control particulate emissions.

A. Filter bags shall achieve 0.01 grain/dry standard cubic feet outlet particulate loading. Disposal of particulate collected in the baghouses must be accomplished in such a manner which will prevent particulate matter from becoming airborne.

B. The permit holder shall install, calibrate, and maintain a device to monitor pressure drop across the baghouse. The pressure drop shall be maintained between 1 to 8 inches water column. The monitoring device shall be calibrated at least annually in accordance with the manufacturer's specifications and shall be accurate to ± 0.5 inch water gauge pressure (± 125 pascals) or a span of ± 0.5 percent. Pressure drop readings shall be recorded at least four times per hour that the system is operated and hourly averages of the data shall be used to determine compliance with the allowable limit. Torn or leaking filter bags shall be replaced whenever the pressure drop across the filter bags no longer meets the range specified above. Records of maintenance performed, including dates of filter replacements, shall be maintained. If the filter system operating performance parameters are outside the above water column limits, the affected facility shall not be in operation until the abatement equipment is repaired.

C. The capture system's duct work shall be operated under negative pressure and the pressure shall be checked monthly. The permit holder shall conduct a once a month visual, audible, and/or olfactory inspection of the capture system's duct work to check for leaking components and to verify that there are no holes, cracks, and/or other conditions that would reduce the collection efficiency of the Kiln 2 emission capture systems. If the results of the inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective actions as expeditiously as possible, but no later than one week after the discovery indicating that the capture system was not working properly.

D. An inspection and maintenance log shall be kept for the baghouse whereby the log shall note the date of each inspection, the name of the inspector, and any repairs and/or maintenance work performed.

Recordkeeping Requirements

24. A copy of this permit shall be kept at the plant site and made available to TCEQ personnel upon request.

25. The permit amendment application dated April 8, 2015 and subsequent representations shall be kept at the plant for the life of the permit and shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction.

26. A complete copy of the testing reports and records of the initial performance testing and initial determination of compliance completed pursuant to Special Condition No. 17 to demonstrate initial compliance.

27. In conjunction with General Condition No. 7, the following records shall be kept and maintained for a rolling 60-month period and made available for inspection by the TCEQ and local air pollution control programs having jurisdiction:

A. Summarized daily, the amount of lime production from each kiln for the previous 30 days;

B. Summarized daily, the number of actual hours of kiln operation, for each kiln, for the previous 30 days;

C. Average hourly lime production based on 30 days of lime production (from item A of this Special Condition), divided by the number of hours of kiln operation over 30 days (from item B of this Special Condition);

D. Monthly lime production rates compiled from the daily lime production rates;

E. The current lot total sulfur content (pounds/hour) of the coke and coal mixture being fed to the kiln;

F. Operating hours of crushing operations;

G. Summarized daily, limestone feed rate for each kiln;

H. Monthly amount of coal, coke and natural gas consumption for each kiln;

I. Records required by 40 CFR 60, Subparts A, HH, and OOO.

J. Records required by 40 CFR 63, Subpart AAAAA.

K. Records of startup and shutdown of the kilns to demonstrate compliance with Special Condition No. 15 and the MAERT, including the date, time, duration, and emissions associated with those activities.

L. Records of CO, SO_2, and diluent gases (O_2 or CO_2) CEMS emissions data, as applicable, and continuous flow rate monitoring data to demonstrate compliance with the emission rates listed in the MAERT.

M. Raw data files of all CEMS data including calibration checks and adjustments and maintenance performed on these systems.

N. All monitoring data and quality-assurance data. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.

O. Records to demonstrate compliance with limits for PM, SO_2, and HCl as specified in Special Condition No. 4.

P. For Kiln 2, records of baghouse pressure drop readings, calibrations, filter bag replacements, and filter bag performance specifications.

Q. Kilns No. 1 and No. 2 HCl emissions as specified in Special Condition No. 5. **(6/20)**

28. The table below lists the sources or activities that are authorized by permits by rule (PBR) under Title 30 Texas Administrative Code (30 TAC) Chapter 106. This list is not intended to be all inclusive and can be altered at the site without modifications to this permit.

Table 2: PBR authorization references

Source or Activity	Authorization
Vacuum truck solids loading	PBR 106.263
Vacuum truck solids unloading	PBR 106.263
Material handling system maintenance	PBR 106.263
Dry abrasive blasting	PBR 106.263
CEMS calibration	PBR 106.263
Organic chemical usage	PBR 106.263
Lube oil maintenance	PBR 106.263
Refractory maintenance operations	PBR 106.263
Deslagging/descaling maintenance operations	PBR 106.263
Miscellaneous particulate filter maintenance	PBR 106.263
Kiln particulate filter maintenance	PBR 106.263
Storage vessel emptying	PBR 106.263
Management of sludge from pits, ponds, sumps, and water conveyances	PBR 106.263
Gaseous fuel venting	PBR 106.263
Solid material transfers using shovels, skid-steer loaders, dumpsters, etc. for housekeeping purposes	PBR 106.263

Permit Representations

29. If within 2 years after the initial demonstration of compliance as required by Special Condition No. 17 (through collection of SO_2 CEMS data), observed hourly emissions of SO_2 from Kiln 2 (EPN LK-2) on a 30-day operating day rolling average basis are 80 percent or less of the permitted hourly emissions rate for SO_2 on a 30-day operating day rolling average basis for at least two consecutive, non-overlapping 30 operating day periods, then the holder of this permit shall submit a permit alteration request to reduce the hourly SO_2 emissions rate on a 30-day operating day rolling average basis from Kiln 2 allowed in the MAERT. The adjustment shall consider the results of the compliance demonstration and the potential for data variability.

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 4335A and PSDTX31M1

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

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
LK-1	Kiln No. 1 Scrubber Stack	PM	27.92	122.00
		PM_{10}	27.92	122.00
		$PM_{2.5}$	10.65	46.51
		VOC	0.29	1.28
		NO_x	100.00	438.00
		SO_2	58.30	255.00
		CO	25.00	109.50
		H_2SO_4	0.64	2.80
		HCl	0.81	3.50
		Dioxins/furans	2.86E-09	1.25E-08
		Pb	5.58E-04	2.44E-03
		Hg	1.88E-04	8.23E-04
		Ni	1.26E-02	5.49E-02
		V_2O_5	3.35E-02	1.46E-01
LK-2	Kiln No. 2 Stack	PM	8.77	38.42
		PM_{10}	8.77	38.42
		$PM_{2.5}$	4.31	18.86
		VOC	0.58	2.56
		NO_x	125.00	547.5
		SO_2 (6)	320.00	1100.00
		SO_2	450.00	
		CO	50.00	219.00
		H_2SO_4	0.87	3.83
		HCl	10.00	6.12

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
		Dioxins/furans	5.73E-09	2.51E-08
		Pb	5.88E-04	2.58E-03
		Hg	3.75E-04	1.64E-03
		V_2O_5	0.1142	0.5002
		Cr	0.0010	0.0044
		NiO	0.0127	0.0556
	Kilns No. 1 and 2 Annual Cap	HCl	---	6.12
702	Hydrator Baghouse Stack	PM	0.56	2.45
		PM_{10}	0.56	2.45
		$PM_{2.5}$	0.29	1.27
		VOC	0.01	0.05
		NO_x	0.22	0.95
		SO_2	0.03	0.11
		CO	0.18	0.80
DC-8	1617 Crusher and Conveyor Baghouse Stack	PM	0.21	0.94
		PM_{10}	0.21	0.94
		$PM_{2.5}$	0.11	0.46
DC-9	1627 Screening and Conveying Baghouse Stack	PM	0.21	0.94
		PM_{10}	0.21	0.94
		$PM_{2.5}$	0.11	0.46
DC-10	Quicklime Loadout Baghouse Stack	PM	0.60	1.75
		PM_{10}	0.60	1.75
		$PM_{2.5}$	0.29	0.86
DC-11	Quicklime Silos Baghouse Stack	PM	0.13	0.57
		PM_{10}	0.13	0.57
		$PM_{2.5}$	0.06	0.28
DC-12		PM	0.21	0.94

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
	515 Crusher Baghouse Stack	PM_{10}	0.21	0.94
		$PM_{2.5}$	0.11	0.46
DC-13	Blending / Crusher / Truck Loadout Baghouse Stack	PM	1.71	4.99
		PM_{10}	1.71	4.99
		$PM_{2.5}$	0.84	2.40
DC-15	720 Hydrator Air Separator Baghouse	PM	1.30	1.30
		PM_{10}	1.30	1.30
		$PM_{2.5}$	0.64	0.64
DC-16	Hydration Silo Vent Baghouse Stack	PM	0.09	0.09
		PM_{10}	0.09	0.09
		$PM_{2.5}$	0.04	0.04
DC-17	Silo Bin Vent Baghouse Stack	PM	0.04	0.04
		PM_{10}	0.04	0.04
		$PM_{2.5}$	0.02	0.02
DC-18	Hydrated Lime Truck Loadout Baghouse Stack	PM	0.02	0.01
		PM_{10}	0.02	0.01
		$PM_{2.5}$	0.01	< 0.01
DC-21	Cycal Loadout Baghouse Stack	PM	0.09	0.22
		PM_{10}	0.09	0.22
		$PM_{2.5}$	0.04	0.11
DC-22	Cycal Loadout Baghouse Stack	PM	0.12	0.11
		PM_{10}	0.12	0.11
		$PM_{2.5}$	0.06	0.05
DC-23	Railcar Loading Baghouse Stack	PM	0.21	0.86
		PM_{10}	0.21	0.86
		$PM_{2.5}$	0.11	0.42
DC-24		PM	0.04	0.17

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
	Railcar Loading Baghouse Stack	PM_{10}	0.04	0.17
		$PM_{2.5}$	0.02	0.08
DC-29	Cycal Loadout baghouse Stack	PM	0.12	0.11
		PM_{10}	0.12	0.11
		$PM_{2.5}$	0.06	0.05
DC-30	Kiln Dust Bin	PM	0.12	0.53
		PM_{10}	0.12	0.53
		$PM_{2.5}$	0.06	0.26
DC-31	Primary Truck Loadout	PM	0.19	0.83
		PM_{10}	0.19	0.83
		$PM_{2.5}$	0.09	0.41
DC-32	Secondary Truck Loadout	PM	0.19	0.83
		PM_{10}	0.19	0.83
		$PM_{2.5}$	0.09	0.41
DC-33	Hydrate Loadout Silo	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	< 0.01
DC-643	Dust Collector 643 Stack	PM	0.21	0.94
		PM_{10}	0.21	0.94
		$PM_{2.5}$	0.11	0.46
DC-646	Dust Collector 646 Stack	PM	0.21	0.94
		PM_{10}	0.21	0.94
		$PM_{2.5}$	0.11	0.46
REJSILO	Reject Stone Silo Baghouse Stack	PM	0.17	0.75
		PM_{10}	0.17	0.75
		$PM_{2.5}$	0.08	0.37
REJECT1		PM	0.04	0.15

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
	Reject Stone Stockpile (7)	PM_{10}	0.02	0.08
		$PM_{2.5}$	0.01	< 0.01
REJECT3	Reject Stone Stockpile (7)	PM	0.31	1.40
		PM_{10}	0.16	0.69
		$PM_{2.5}$	0.02	0.10
REJECT4	Reject Stone Stockpile (7)	PM	0.08	0.36
		PM_{10}	0.04	0.18
		$PM_{2.5}$	0.01	0.03
STOCK1	Stone Stockpile (7)	PM	0.19	0.82
		PM_{10}	0.09	0.41
		$PM_{2.5}$	0.01	0.06
STOCK2	Stone Stockpile (7)	PM	0.12	0.53
		PM_{10}	0.06	0.26
		$PM_{2.5}$	0.01	0.04
CRUSH1	Primary Crusher (7)	PM	0.84	1.09
		PM_{10}	0.41	0.54
		$PM_{2.5}$	0.08	0.10
SCREEN1	Primary Screen (7)	PM	0.19	0.24
		PM_{10}	0.09	0.12
		$PM_{2.5}$	0.01	0.01
CRUSH2	Secondary Crusher (7)	PM	0.26	0.21
		PM_{10}	0.13	0.10
		$PM_{2.5}$	0.01	0.01
SCREEN2	Secondary Screen	PM	0.45	1.61
		PM_{10}	0.21	0.76
		$PM_{2.5}$	0.01	0.05
SCREEN3	Tertiary Screen	PM	0.45	1.61

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)	
			lbs/hour	TPY (5)
		PM_{10}	0.21	0.76
		$PM_{2.5}$	0.01	0.05
Fug-1	Limestone Handling (7)	PM	0.17	0.33
		PM_{10}	0.07	0.15
		$PM_{2.5}$	0.02	0.04
Cyc-1	Cycal Handling (7)	PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	< 0.01	< 0.01
CC-1	Coke Crusher (7)	PM	0.02	< 0.01
		PM_{10}	0.01	< 0.01
		$PM_{2.5}$	< 0.01	< 0.01
Fug-2, Fug-3	Coal/Coke Handling (7)	PM	0.70	0.46
		PM_{10}	0.33	0.22
		$PM_{2.5}$	0.05	0.03
Fug-2A, Fug-3A	Coal/Coke Stockpile (Rail and Plant Areas) (7)	PM	0.56	2.47
		PM_{10}	0.28	1.24
		$PM_{2.5}$	0.04	0.19
RCLSLOAD	Limestone Railcar Loading (7)	PM	0.68	2.67
		PM_{10}	0.34	1.33
		$PM_{2.5}$	0.05	0.20

(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
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - 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
H_2SO_4 - sulfuric acid
HCl - hydrochloric acid
Pb - lead

Emission Sources - Maximum Allowable Emission Rates

Hg	- mercury
Ni	- nickel
V_2O_5	- vanadium pentoxide
Cr	- chromium
NiO	- nickel oxide

(4) Planned startup and shutdown emissions are included.
(5) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(6) Compliance with the lb/hr emission rates for SO_2 is based on a 30 operating 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 13, 2021

Texas Commission on Environmental Quality
Air Quality Permit

A Permit Is Hereby Issued To
Lhoist North America Of Texas, LLC
Authorizing the Construction and Operation of
Lime Manufacturing Plant
Located at **Clifton, Bosque County, Texas**
Latitude 31° 42′ 44″ Longitude −97° 35′ 8″

Permit: 8434
Amendment Date: September 14, 2021
Expiration Date: May 7, 2030

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] [1]
2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of $5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and

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

8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] [1]
9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. [1]

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

Common Acronyms in Air Permits

°C = Temperature in degrees Celsius
°F = Temperature in degrees Fahrenheit
°K = Temperature in degrees Kelvin
µg = microgram
$\mu g/m^3$ = microgram per cubic meter
acfm = actual cubic feet per minute
AMOC = alternate means of control
AOS = alternative operating scenario
AP-42 = Air Pollutant Emission Factors, 5th edition
APD = Air Permits Division
API = American Petroleum Institute
APWL = air pollutant watch list
BPA = Beaumont/ Port Arthur
BACT = best available control technology
BAE = baseline actual emissions
bbl = barrel
bbl/day = barrel per day
bhp = brake horsepower
BMP = best management practices
Btu = British thermal unit
Btu/scf = British thermal unit per standard cubic foot or feet
CAA = Clean Air Act
CAM = compliance-assurance monitoring
CEMS = continuous emissions monitoring systems
cfm = cubic feet (per) minute
CFR = Code of Federal Regulations
CN = customer ID number
CNG = compressed natural gas
CO = carbon monoxide
COMS = continuous opacity monitoring system
CPMS = continuous parametric monitoring system
DFW = Dallas/ Fort Worth (Metroplex)
DE = destruction efficiency
DRE = destruction and removal efficiency
dscf = dry standard cubic foot or feet
dscfm = dry standard cubic foot or feet per minute
ED = (TCEQ) Executive Director
EF = emissions factor
EFR = external floating roof tank
EGU = electric generating unit
EI = Emissions Inventory
ELP = El Paso
EPA = (United States) Environmental Protection Agency
EPN = emission point number
ESL = effects screening level
ESP = electrostatic precipitator
FCAA = Federal Clean Air Act
FCCU = fluid catalytic cracking unit
FID = flame ionization detector
FIN = facility identification number
ft = foot or feet
ft/sec = foot or feet per second
g = gram
gal/wk = gallon per week
gal/yr = gallon per year
GLC = ground level concentration
GLC_{max} = maximum (predicted) ground-level concentration
gpm = gallon per minute
gr/1000scf = grain per 1000 standard cubic feet
gr/dscf = grain per dry standard cubic feet
H_2CO = formaldehyde
H_2S = hydrogen sulfide
H_2SO_4 = sulfuric acid
HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
HC = hydrocarbons
HCl = hydrochloric acid, hydrogen chloride
Hg = mercury
HGB = Houston/Galveston/Brazoria
hp = horsepower
hr = hour
IFR = internal floating roof tank
in H_2O = inches of water
in Hg = inches of mercury
IR = infrared
ISC3 = Industrial Source Complex, a dispersion model
ISCST3 = Industrial Source Complex Short-Term, a dispersion model
K = Kelvin; extension of the degree Celsius scaled-down to absolute zero
LACT = lease automatic custody transfer
LAER = lowest achievable emission rate
lb = pound
hp = horsepower
hr = hour lb/day = pound per day
lb/hr = pound per hour
lb/MMBtu = pound per million British thermal units
LDAR = Leak Detection and Repair (Requirements)
LNG = liquefied natural gas
LPG = liquefied petroleum gas
LT/D = long ton per day
m = meter
m^3 = cubic meter
m/sec = meters per second
MACT = maximum achievable control technology
MAERT = Maximum Allowable Emission Rate Table
MERA = Modeling and Effects Review Applicability
mg = milligram
mg/g = milligram per gram
mL = milliliter
MMBtu = million British thermal units
MMBtu/hr = million British thermal units per hour
MSDS = material safety data sheet
MSS = maintenance, startup, and shutdown
MW = megawatt
NAAQS = National Ambient Air Quality Standards
NESHAP = National Emission Standards for Hazardous Air Pollutants
NGL = natural gas liquids
NNSR = nonattainment new source review
NO_x = total oxides of nitrogen

NSPS = New Source Performance Standards
PAL = plant-wide applicability limit
PBR = Permit(s) by Rule
PCP = pollution control project
PEMS = predictive emission monitoring system
PID = photo ionization detector
PM = periodic monitoring
PM = total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
$PM_{2.5}$ = particulate matter equal to or less than 2.5 microns in diameter
PM_{10} = total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
POC = products of combustion
ppb = parts per billion
ppm = parts per million
ppmv = parts per million (by) volume
psia = pounds (per) square inch, absolute
psig = pounds (per) square inch, gage
PTE = potential to emit
RA = relative accuracy
RATA = relative accuracy test audit
RM = reference method
RVP = Reid vapor pressure
scf = standard cubic foot or feet
scfm = standard cubic foot or feet (per) minute
SCR = selective catalytic reduction
SIL = significant impact levels
SNCR = selective non-catalytic reduction
SO_2 = sulfur dioxide
SOCMI = synthetic organic chemical manufacturing industry
SRU = sulfur recovery unit
TAC = Texas Administrative Code
TCAA = Texas Clean Air Act
TCEQ = Texas Commission on Environmental Quality
TD = Toxicology Division
TLV = threshold limit value
TMDL = total maximum daily load
tpd = tons per day
tpy = tons per year
TVP = true vapor pressure
VOC = volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
VRU = vapor recovery unit or system

Special Conditions

Permit Numbers 8434 and PSDTX441M2

Emission Standards and Fuel Specifications

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT), and those sources are limited to the emission limits and other conditions specified in the attached table. In addition to the emissions from routine operations, this permit authorizes emissions from planned maintenance, startup, and shutdown (MSS) activities, and those emissions shall comply with the limits specified in the MAERT. **(12/13)**

2. Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel(s) utilized in this facility or shall allow air pollution control agency representatives to obtain a sample for analysis.

Operational Limitations, Work Practices, and Plant Design

3. The company has represented the following:

   A. All capture and collection systems shall be effective in controlling emissions from this equipment. The capture and collection systems shall be maintained free of holes, cracks, and other conditions that would reduce the collection efficiency of the control system. The facility covered by this permit shall not operate unless all associated air pollution abatement equipment is in good working order and in use.

   B. The company is authorized to use coal, petroleum coke, and/or natural gas as fuel for the kiln.

   C. The mixture of fuels fed to the kiln shall be of a ratio that restricts the total sulfur content to less than or equal to 391 pounds of sulfur per hour of total sulfur.

   D. Fuel gas fired in Kiln 3 shall be natural gas containing no more than 25 grains of total sulfur per 100 dry standard cubic feet.

   E. A baghouse shall be used to filter the kiln exhaust gases prior to venting to the atmosphere. **(6/11)**

   F. The lime production rate of this kiln is 25 tons per hour as averaged over a rolling 30-day period.

   G. Emissions from the kiln shall not exceed 3.5 pounds of CO per ton of lime produced on a three-hour average basis, except during periods of planned MSS as specified in Special Condition Nos. 4 and 5.

   H. The Single-Fixed Stacking Conveyor (Equipment No. 1309/Emission Point No. [EPN] STOCK3) shall comply with the applicable portions of New Source Performance Standards as specified in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart A and OOO for Non-Metallic Material Processing Plants.

Planned Maintenance, Startup, and Shutdown

4. Emissions from kiln planned MSS activities shall be minimized by the following:

A. The kiln and air pollution control equipment shall be operated in a manner consistent with good practices for minimizing emissions.

B. The frequency and duration of operation in MSS mode will be minimized.

C. Low temperature startup events for the kiln shall not exceed 10 days. A low temperature startup event is defined as a startup of the kiln from temperatures below 1100 degrees Fahrenheit. These startup events begin with the firing of natural gas and may require the use of the inline heater.

D. Warm startup events for the kiln shall not exceed 7 days. A warm startup event is defined as a startup of the kiln at temperatures more than 1100 degrees Fahrenheit but below the normal operating temperature range.

E. Hot startup events for the kiln shall not exceed 3 hours. A hot startup event is defined as a startup of the kiln after lime production stops and in which production rate temperatures (1750 to 2000 degrees Fahrenheit) are maintained during the suspension of lime production.

F. Shutdown events for the kiln shall not exceed 10 days. This condition is not intended to limit the amount of time the kiln is allowed to sit idle.

5. Bag replacements are authorized by this permit. Emissions during these events shall comply with the MAERT. The performance of each maintenance activity and the emissions associated with it shall be recorded, and the emissions shall be totaled annually. These records shall include the following:

A. The physical location at which the MSS activity occurred, including the EPN and common name;

B. The date and time of the bag changeout and its duration; and

C. The reason for the planned bag replacement activity.

Determination of Compliance

6. Upon request by the TCEQ Executive Director, TCEQ Waco Regional Director, or any air pollution control agency having jurisdiction and as specified by this special condition, 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 Kiln 3, EPN: LK-3, while firing coal and/or petroleum coke. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate U.S. Environmental Protection Agency (EPA) Reference Methods. **(9/21)**

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.

(6) Procedure used to determine primary operating parameters that enable determination of production rate during and after the sampling period.

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, the TCEQ, or the 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 this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for NSPS testing which must have EPA approval shall be submitted to the TCEQ Office of Air, Air Permits Division.

B. Air contaminants emitted from the kiln to be tested for include (but are not limited to) NO_x, CO, SO_2, and PM_{10}.

C. Sampling for SO_2 and PM_{10} shall be performed within 180 days after installation of the baghouse to ensure compliance with the hourly and annual emission limits in the MAERT. Requests for additional time to perform sampling shall be submitted to the TCEQ Waco Regional Office.

D. Sampling shall occur at such times as may be required by the TCEQ Executive Director or TCEQ Waco Regional Director. Additional time to comply with the applicable requirements of 40 CFR Part 60 requires EPA approval, and requests shall be submitted to the TCEQ Office of Air, Air Permits Division.

E. Kiln 3 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 shall be determined at the pretest meeting and shall be stated in the sampling report. If the plant is unable to operate at maximum rates during testing, then future production rates may be limited to the rates established during testing. Additional stack testing may be required when higher production rates are achieved.

F. Three 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 attached 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, Austin.

(3) One copy to the US EPA Region 6 Office, Dallas.

7. No visible emissions shall leave the property boundary. Observations for visible emissions shall be performed and recorded once per week while the facility is in operation. The visible emission determination must be made in accordance with EPA Test Method 22 (Title 40 Code of Federal Regulations [40 CFR] Part 60, Appendix A). The observation period when conducting Method 22 shall extend for at least five minutes during normal operations. If visible emissions are observed crossing the property line, then an evaluation and identification of the source and cause of the

visible emissions shall be conducted within 24 hours and documented. Corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation of the visible emissions.

8. In order to demonstrate compliance with the Kiln No. 3 annual emissions limit of 3.85 TPY for HCl, the following formula shall be used: **(9/21)**
(0.035 * LK-3)/2,000 <= 3.85
where:
LK-3 = tons of lime produced in Kiln No. 3 during the previous 12-month rolling period.

Continuous Monitoring

9. The following equipment shall be controlled with a Baghouse: 1604 and 1615 conveyors, 1513 feeder, solid fuel mill fan, pulverized solid fuel bin, limestone hopper, raw solid fuel bins, and trommel screen.

A. The capture and control systems of the baghouses shall be operated and maintained in accordance with the manufacturer's recommendations as to assure that the minimum control efficiency is met at all times when the 1604 and 1615 conveyors baghouse, 1513 feeder baghouse, solid fuel mill fan baghouse, pulverized solid fuel bin baghouse, limestone hopper baghouse, raw solid fuel bins baghouse, and trommel screen baghouse are required to be operated. The holder of this permit shall install, calibrate, and maintain a device to monitor pressure drop across the baghouses. A pressure drop gauge shall be installed on each baghouse across the filter bank. The monitoring device for each system shall be calibrated at least annually in accordance with the manufacturer's specifications and shall be accurate to within a range ± 0.5 inch water gauge pressure (± 125 pascals) or a span of ± 0.5 percent. Pressure drop readings for each baghouse shall be recorded at least once per week that the system is required to be operated. Filters shall be replaced whenever the pressure drop across the filter is outside of the minimum and maximum pressure differential range specified in the table below. Records of maintenance performed, including dates of filter replacement, shall be included in a log as they occur. If the filter system operating performance parameters are outside of the operating range specified in the table below, the affected facility shall not be in operation until the abatement equipment is repaired. **(6/11)**

Table 1: Baghouse operating parameters

EPN	Source Name	Equipment Number	Minimum Differential Pressure (inches of water)	Maximum Differential Pressure (inches of water)
DC-5	1513 Feeder Baghouse	1620	1	9
DC-6	1604 and 1615 Conveyors Baghouse	1685	1	7
DC-19	1217 Solid Fuel Mill Fan Baghouse	1218	1	7.5

EPN	Source Name	Equipment Number	Minimum Differential Pressure (inches of water)	Maximum Differential Pressure (inches of water)
DC-20	Pulverized Solid Fuel Bin Baghouse	1222	1	8.5
DC-26	Limestone Hopper Baghouse	1325	1	9
DC-27	Raw Solid Fuel Bins Baghouse	1203	1	9
DC-28	Trommel Screen Baghouse	1650	1	7

B. The permit holder shall conduct a once a month visible, audible, and/or olfactory inspection of each capture systems' duct work to check for leaking components and to verify that there are no holes, cracks, and/or other conditions that would reduce the collection efficiency of the emission capture systems. If the results of the inspections indicate that a capture system is not working properly, the permit holder shall take necessary corrective actions as expeditiously as possible, but no later than one week after the inspection indicating that the capture system was not working properly.

C. An inspection and maintenance log shall be kept for each baghouse and capture system whereby the log shall note the date of each inspection, the name of the inspector and any repairs and/or maintenance work performed. The log(s) shall reflect inspection and maintenance for a minimum period of five years.

10. Kiln 3 shall be controlled with a baghouse. **(6/11)**

A. The capture and control system of the baghouse shall be operated and maintained in accordance with the manufacturer's recommendations as to assure that the minimum control efficiency is met at all times when Kiln 3 is required to be operated. The holder of this permit shall install, calibrate, and maintain a device to monitor pressure drop across the baghouse. A pressure drop gauge shall be installed across the filter bank showing differential pressure between 2 and 10 inches water column, or as defined by the manufacturer. The gauge shall meet performance specifications as recommended by the manufacturer for the system. The monitoring device for each system shall be calibrated at least annually in accordance with the manufacturer's specifications and shall be accurate to within a range ± 0.5 inch water gauge pressure (± 125 pascals) or a span of ± 0.5 percent. Pressure drop readings shall be recorded at least four times per hour that the system is required to be operated and hourly averages of the data shall be used to determine compliance with the allowable limit. Filters shall be replaced whenever the pressure drop across the filter no longer meets the manufacturer's recommendation. Records of maintenance performed, including dates of filter replacement, shall be included in a log as they occur. If the filter system operating performance parameters are outside of the 2 and 10 inches water column or the manufacturer's recommended operating range, the affected facility shall not be in operation until the abatement equipment is repaired.

B. The capture system's duct work shall be operated under negative pressure and the pressure shall be checked monthly. A visual and olfactory inspection of the capture system shall be performed monthly to check for leaking components. If the capture system is not working properly, the permit holder shall take necessary corrective actions as expeditiously as possible, but no later than one week after the discovery indicating that the capture system was not working properly.

C. An inspection and maintenance log shall be kept for the baghouse whereby the log shall note the date of each inspection, the name of the inspector and any repairs and/or maintenance work performed.

11. Fuel fired in Kiln 3 shall be sampled as follows:

A. The solid fuel mixture shall be sampled weekly and within 24 hours of any change in fuel mixture to determine the fuel sulfur content.

B. The fuel gas shall be sampled or a certification from the fuel gas supplier shall be obtained annually to determine the fuel sulfur content.

Recordkeeping Requirements

12. A copy of this permit shall be kept at the plant site and made available to the TCEQ personnel upon request.

13. The permit amendment application dated January 25, 2006, subsequent representations submitted to the TCEQ on April 10, 2006; the permit amendment application dated December 12, 2008, and subsequent representations submitted to the TCEQ dated December 10, 2009, January 5, 2010, January 20, 2010, and April 5, 2010, shall be kept at the plant for the life of the permit and shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction.

14. The following information shall be maintained on a five year rolling basis by the holder of this permit in a form suitable for inspection and shall be made immediately available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction:

A. Stack sampling results or other air emissions testing that may be conducted on units authorized under this permit after the date of issuance of this permit until superseded by subsequent sampling or testing.

B. All records of monitoring conducted according to Special Condition Nos. 7 through 11.

C. All records of fuel sulfur content analysis and/or vendor certifications.

D. All records of the daily quantity and type of fuel fired and daily quantity of lime produced in the kiln.

E. Records of startup and shutdown of the kiln and bag replacements to demonstrate compliance with Special Condition Nos. 4 and 5 and the MAERT, including the date, time, duration, and emissions associated with those activities. **(12/13)**

15. The holder of this permit will install and operate a continuous emission monitoring system for nitrogen oxides on the kiln if there is any future increases in allowable NO_x emissions of the kiln as specified in the MAERT or any production increase above the limit in Special Condition No. 3F.

16. The table below lists the sources or activities that are authorized by permits by rule (PBR) under Title 30 Texas Administrative Code (30 TAC) Chapter 106. This list is not intended to be all inclusive and can be altered at the site without modifications to this permit. **(12/13)**

Table 2: PBR authorization references

Source or Activity	Authorization
Vacuum truck solids loading	PBR 106.263
Vacuum truck solids unloading	PBR 106.263
Material handling system maintenance	PBR 106.263
Dry abrasive blasting	PBR 106.263
CEMS calibration	PBR 106.263
Organic chemical usage	PBR 106.263
Lube oil maintenance	PBR 106.263
Refractory maintenance operations	PBR 106.263
Deslagging/descaling maintenance operations	PBR 106.263
Management of sludge from pits, ponds, sumps, and water conveyances	PBR 106.263
Gaseous fuel venting	PBR 106.263
Solid material transfers using shovels, skid-steer loaders, dumpsters, etc. for housekeeping purposes	PBR 106.263

Date: September 14, 2021

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 8434 and PSDTX441M2

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)
LK-3	Lime Kiln No. 3 Baghouse Stack	NO_x (6)	75.00	328.50
		CO (6)	87.37	382.68
		PM (6)	4.37	19.14
		PM_{10} (6)	4.37	19.14
		$PM_{2.5}$ (6)	2.14	9.38
		SO_2 (6)	39.13	171.37
		H_2SO_4	0.86	3.77
		VOC	5.60	24.53
		HCl	0.88	3.85
STOCK3	Kiln No. 3 Stone Stockpile (7)	PM	0.97	4.26
		PM_{10}	0.49	2.13
		$PM_{2.5}$	0.07	0.32
REJECT2	Kiln No. 3 Reject Stockpile (7)	PM	0.01	0.06
		PM_{10}	<0.01	0.03
		$PM_{2.5}$	<0.01	<0.01
CC-1	Coke Crusher (7), (8)	PM	0.02	<0.01
		PM_{10}	0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
FUG-2	Fuel Handling (7), (8)	PM	0.16	0.09
		PM_{10}	0.07	0.04
		$PM_{2.5}$	0.01	<0.01
FUG-2	Fuel Stockpile (7), (8)	PM	0.09	0.39

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lb/hour	TPY (4)
		PM_{10}	0.04	0.19
		$PM_{2.5}$	<0.01	0.03
FUG-3	Fuel Handling (7), (8)	PM	0.05	0.05
		PM_{10}	0.02	0.02
		$PM_{2.5}$	<0.01	<0.01
FUG-3	Fuel Stockpile (7), (8)	PM	0.12	0.52
		PM_{10}	0.06	0.26
		$PM_{2.5}$	<0.01	0.04
DC-5	1513 Feeder Baghouse	PM	0.13	0.57
		PM_{10}	0.13	0.57
		$PM_{2.5}$	0.06	0.28
DC-6	1604 and 1615	PM	0.13	0.57
		PM_{10}	0.13	0.57
		$PM_{2.5}$	0.06	0.28
DC-19	1217 Solid Fuel Mill Fan Baghouse	NO_x	0.34	1.50
		CO	0.29	1.26
		PM	0.50	2.17
		PM_{10}	0.50	2.17
		$PM_{2.5}$	0.24	1.06
		VOC	0.02	0.08
		SO_2	0.26	1.13
DC-20	Pulverized Solid Fuel Bin Baghouse	PM	0.07	0.31
		PM_{10}	0.07	0.31
		$PM_{2.5}$	0.03	0.15
DC-26	Limestone Hopper Baghouse	PM	0.09	0.38

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lb/hour	TPY (4)
		PM_{10}	0.09	0.38
		$PM_{2.5}$	0.04	0.18
DC-27	Raw Solid Fuel Bins Baghouse	PM	0.08	0.34
		PM_{10}	0.08	0.34
		$PM_{2.5}$	0.04	0.17
DC-28	Trommel Screen Baghouse	PM	0.17	0.76
		PM_{10}	0.17	0.76
		$PM_{2.5}$	0.08	0.37

(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
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - 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
H_2SO_4 - sulfuric acid mist

(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) These emissions are permitted under Prevention of Significant Deterioration (PSD) and State.

(7) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

(8) These EPNs are included in Permit Number 23214 and Permit Numbers 4335A and PSDTX31; the emission rates listed here are for emissions allocated to the Kiln No. 3 (EPN LK-3) operation.

Date: September 14, 2021