

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
General Shale Brick, Inc.

AUTHORIZING THE OPERATION OF
Henderson Facility
Clay Building Material and Refractories Manufacturing

LOCATED AT
Rusk County, Texas
Latitude 32° 10' 51" Longitude 94° 48' 12"
Regulated Entity Number: RN100640978

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: O1766 Issuance Date:

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 JJJJJ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1190 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)

- 4. 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)
5. 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)
6. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

Additional Monitoring Requirements

7. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:
- A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
 - B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
 - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time 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 the CD-1-BH-1 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 any fan for proper operation and inspect the capture system used in compliance of CAM for cracks, holes, tears, and other defects; or
 - (iii) 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.
8. The permit holder shall comply with the periodic monitoring requirements as specified in the attached “Periodic Monitoring Summary” upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time 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

9. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule (including the terms, conditions, monitoring, recordkeeping, and reporting identified in registered PBRs and permits by rule identified in the PBR Supplemental Tables dated April 5, 2024 in the application for project 36531), standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
- A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield

10. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
11. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).
12. The permit holder shall comply with the following requirements for Air Quality Standard Permits:
 - A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit
 - B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit
 - C. Requirements of the non-rule Air Quality Standard Permit for Pollution Control Projects

Compliance Requirements

13. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
14. Use of Discrete Emission Credits to comply with the applicable requirements:
 - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
 - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

- (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
- (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
- (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
- (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Protection of Stratospheric Ozone

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

Permit Location

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

Permit Shield (30 TAC § 122.148)

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

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

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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 |
|-------------------------------|--|--------------------------|---------------|--|-------------------------|
| CD-1 | MINERAL PROCESSING PLANT | N/A | 60UUU-CD-1 | 40 CFR Part 60, Subpart UUU | No changing attributes. |
| CD-1-BH-1 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R111-151 | 30 TAC Chapter 111, Nonagricultural Processes | No changing attributes. |
| CRUSH | MINERAL PROCESSING PLANT | N/A | 60000-CRUSH | 40 CFR Part 60, Subpart 000 | No changing attributes. |
| DSC-1 | MINERAL PROCESSING PLANT | N/A | 60000-DSC-1 | 40 CFR Part 60, Subpart 000 | No changing attributes. |
| FB-1 | MINERAL PROCESSING PLANT | N/A | 60000-FB | 40 CFR Part 60, Subpart 000 | No changing attributes. |
| FB-2 | MINERAL PROCESSING PLANT | N/A | 60000-FB | 40 CFR Part 60, Subpart 000 | No changing attributes. |
| FB-3 | MINERAL PROCESSING PLANT | N/A | 60000-FB | 40 CFR Part 60, Subpart 000 | No changing attributes. |
| GRP-CV | MINERAL PROCESSING PLANT | CV-1, CV-2, CV-3 | 60000-CV | 40 CFR Part 60, Subpart 000 | No changing attributes. |
| GRPKILN | DRYER/KILN/OVEN | K-1, K-2 | 63JJJJ-01 | 40 CFR Part 63, Subpart JJJJ | No changing attributes. |
| PRC-1 | MINERAL PROCESSING PLANT | N/A | 60000-PRC | 40 CFR Part 60, Subpart 000 | 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) |
|---------------------------|-------------------------|---------------|--------------|---|---|--|---|---|--|
| CD-1 | EU | 60UUU-CD-1 | PM | 40 CFR Part 60, Subpart UUU | § 60.732(a) | No emissions to the atmosphere from affected facilities shall contain PM over 0.092 g/dscm for calciners and for calciners and dryers installed in series and in excess of 0.057 g/dscm for dryers. | § 60.736(a) § 60.736(b)(1) ** See CAM Summary | None | § 60.735(d) |
| CD-1 | EU | 60UUU-CD-1 | PM (Opacity) | 40 CFR Part 60, Subpart UUU | § 60.732(b) | No emissions to the atmosphere from affected facilities shall exhibit over 10% opacity, unless the emissions are discharged from an affected facility using a wet scrubbing control device. | § 60.734(c) § 60.736(a) § 60.736(b)(2) ** See CAM Summary | § 60.735(a) | § 60.735(d) |
| CD-1-BH-1 | EP | R111-151 | PM | 30 TAC Chapter 111, Nonagricultural Processes | § 111.151(a) § 111.151(c) | No person may cause, suffer, allow, or permit emissions of particulate matter from any source to exceed the allowable rates specified in Table 1 as follows, except as provided by §111.153 of this title (relating to Emissions Limits for Steam Generators). | ** See CAM Summary | None | None |
| CRUSH | EU | 60000-CRUSH | PM | 40 CFR Part 60, Subpart OOO | § 60.672(a)-Table 2 § 60.672(a) | Stack emissions from affected facilities with capture systems (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction on or after April 22, 2008, the owner or operator must meet a PM limit of 0.032 g/dscm (0.014 gr/dscf). | § 60.675(a) § 60.675(b)(1) ** See Periodic Monitoring Summary | None | § 60.676(f) [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) |
|---------------------------|-------------------------|---------------|--------------|---------------------------------------|---|--|---|---|---|
| DSC-1 | EU | 60000-DSC-1 | PM | 40 CFR Part 60, Subpart OOO | § 60.672(a)-Table 2 § 60.672(a) | Stack emissions from affected facilities with capture systems (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008, the owner or operator must meet a PM limit of 0.05 g/dscm (0.022 gr/dscf). | § 60.675(a) § 60.675(b)(1) ** See Periodic Monitoring Summary | None | § 60.676(f) [G]§ 60.676(i) § 60.676(k) |
| DSC-1 | EU | 60000-DSC-1 | PM (Opacity) | 40 CFR Part 60, Subpart OOO | § 60.672(a)-Table 2 § 60.672(a) | Stack emissions from affected facilities with capture systems (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008, the owner or operator must meet an opacity limit of 7 percent for dry control devices. | § 60.675(a) § 60.675(b)(2) [G]§ 60.675(e)(2) § 60.675(g) ** See Periodic Monitoring Summary | None | § 60.675(g) § 60.676(f) [G]§ 60.676(i) § 60.676(k) |
| FB-1 | EU | 60000-FB | PM (Opacity) | 40 CFR Part 60, Subpart OOO | § 60.672(e)(1) | Any building enclosing affected facilities shall not emit fugitive emissions from building openings in excess of 7 percent opacity. | § 60.675(a) § 60.675(c)(1) § 60.675(c)(1)(i) § 60.675(c)(1)(ii) § 60.675(c)(3) § 60.675(d) § 60.675(d)(2) [G]§ 60.675(e)(2) § 60.675(g) ** See Periodic Monitoring Summary | None | § 60.675(g) § 60.676(f) [G]§ 60.676(i) § 60.676(k) |
| FB-2 | EU | 60000-FB | PM (Opacity) | 40 CFR Part 60, Subpart OOO | § 60.672(e)(1) | Any building enclosing affected facilities shall not | § 60.675(a) § 60.675(c)(1) | None | § 60.675(g) § 60.676(f) |

Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---------------------------|-------------------------|---------------|--------------|---------------------------------------|---|--|---|---|---|
| | | | | | | emit fugitive emissions from building openings in excess of 7 percent opacity. | § 60.675(c)(1)(i) § 60.675(c)(1)(ii) § 60.675(c)(3) § 60.675(d) § 60.675(d)(2) [G]§ 60.675(e)(2) § 60.675(g) ** See Periodic Monitoring Summary | | [G]§ 60.676(i) § 60.676(k) |
| FB-3 | EU | 60000-FB | PM (Opacity) | 40 CFR Part 60, Subpart OOO | § 60.672(e)(1) | Any building enclosing affected facilities shall not emit fugitive emissions from building openings in excess of 7 percent opacity. | § 60.675(a) § 60.675(c)(1) § 60.675(c)(1)(i) § 60.675(c)(1)(ii) § 60.675(c)(3) § 60.675(d) § 60.675(d)(2) [G]§ 60.675(e)(2) § 60.675(g) ** See Periodic Monitoring Summary | None | § 60.675(g) § 60.676(f) [G]§ 60.676(i) § 60.676(k) |
| GRP-CV | EU | 60000-CV | PM | 40 CFR Part 60, Subpart OOO | § 60.672(a)-Table 2 § 60.672(a) | Stack emissions from affected facilities with capture systems (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008, the owner or operator must meet a PM limit of 0.05 g/dscm (0.022 gr/dscf). | § 60.675(a) § 60.675(b)(1) ** See Periodic Monitoring Summary | None | § 60.676(f) [G]§ 60.676(i) § 60.676(k) |
| GRP-CV | EU | 60000-CV | PM (Opacity) | 40 CFR Part 60, Subpart OOO | § 60.672(a)-Table 2 § 60.672(a) | Stack emissions from affected facilities with capture systems (as defined in §§60.670 and 60.671) | § 60.675(a) § 60.675(b)(2) [G]§ 60.675(e)(2) § 60.675(g) | None | § 60.675(g) § 60.676(f) [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) |
|---------------------------|-------------------------|---------------|--------------|---------------------------------------|---|--|---|--|--|
| | | | | | | that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008, the owner or operator must meet an opacity limit of 7 percent for dry control devices. | ** See Periodic Monitoring Summary | | |
| GRP-CV | EU | 60000-CV | 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)(2) § 60.675(g) ** See Periodic Monitoring Summary | None | § 60.675(g) § 60.676(f) [G]§ 60.676(i) § 60.676(k) |
| GRPKILN | EU | 63JJJJ-01 | MERCURY | 40 CFR Part 63, Subpart JJJJJ | § 63.8405(a)-Table 1.1 § 63.8405(a) § 63.8405(a)-Table 1.3.b.i § 63.8405(a)-Table 1.3.b.ii § 63.8405(b) § 63.8405(c) § 63.8405(c)-Table 3.2.a.i § 63.8405(c)-Table | For each existing small tunnel kiln (design capacity <10 tph of fired product), including all process streams, comply with one of the following: Hg emissions must not exceed 1.7 E-04 kg/Mg (3.3 E-04 lb/ton) of fired product; or Hg emissions must not exceed 91 µg/dscm at 17% O ₂ ; or Hg emissions must not | § 63.8425(a) [G]§ 63.8425(b) [G]§ 63.8425(c) § 63.8425(d) § 63.8435 § 63.8440(a) § 63.8440(b) § 63.8445(a) § 63.8445(a)-Table 4.1.a § 63.8445(a)-Table 4.1.b | § 63.8420(b) [G]§ 63.8425(b) § 63.8445(a)-Table 4.3 § 63.8445(d) § 63.8465(b) § 63.8465(c) § 63.8490(a) § 63.8490(a)(1) § 63.8490(c) [G]§ 63.8490(c)(10) [G]§ 63.8490(c)(2) § 63.8490(c)(3) | [G]§ 63.8425(c) § 63.8470(c) § 63.8480(a) § 63.8480(b) § 63.8480(b)-Table 8.2 § 63.8480(b)-Table 8.3 § 63.8480(b)-Table 8.4 § 63.8480(b)-Table 8.5 [G]§ 63.8480(c) § 63.8485(b) § 63.8485(b)(1) § 63.8485(b)(2) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|---|---|---|--|
| | | | | | 3.2.a.ii § 63.8405(c)-Table 3.3.a.i § 63.8405(c)-Table 3.3.a.ii § 63.8405(c)-Table 3.4.a.i § 63.8410(a) § 63.8410(a)(2) § 63.8410(c) § 63.8410(d) § 63.8420(a) § 63.8420(b) § 63.8420(e) § 63.8420(f) [G]§ 63.8425(b) § 63.8445(b) § 63.8445(f)(1) [G]§ 63.8450(c) [G]§ 63.8450(d) § 63.8455(a) § 63.8455(a)-Table 5.3.c.ii § 63.8455(a)-Table 5.7.a § 63.8485(a) § 63.8485(c)(5) § 63.8490(b) § 63.8490(b)-Table 6.7.a.i § 63.8490(b)-Table 6.7.a.ii § 63.8490(b)-Table 6.7.a.iii § 63.8490(c)(11) [G]§ 63.8490(c)(7) § 63.8490(c)(9) | exceed 8.5 E-04 kg/hr (0.0019 lb/hr). | § 63.8445(a)-Table 4.1.c § 63.8445(a)-Table 4.1.d § 63.8445(a)-Table 4.1.g § 63.8445(a)-Table 4.3 § 63.8445(d) § 63.8445(e) § 63.8445(f) § 63.8445(f)(1) [G]§ 63.8450(c) [G]§ 63.8450(d) § 63.8455(a)-Table 5.3.c.ii § 63.8465(b) § 63.8465(c) § 63.8470(a) | § 63.8490(c)(4) § 63.8490(c)(6) § 63.8495(a) § 63.8495(b) § 63.8495(c) § 63.8505 | § 63.8485(b)(3) § 63.8485(b)(4) § 63.8485(b)(5) § 63.8485(c) § 63.8485(c)(1) § 63.8485(c)(2) § 63.8485(c)(3) § 63.8485(c)(4) § 63.8485(c)(4)(i) § 63.8485(c)(4)(ii) [G]§ 63.8485(c)(4)(iii) § 63.8485(c)(6) § 63.8485(c)(7) § 63.8485(c)(8) [G]§ 63.8485(c)(9) § 63.8485(e) [G]§ 63.8485(f) § 63.8490(a)(2) |
| GRPKILN | EU | 63JJJJ-01 | Opacity | 40 CFR Part 63, Subpart JJJJJ | § 63.8405(b)-Table 2.5.a | Tunnel kiln with no add-on control shall maintain no VE | [G]§ 63.8470(e)(1) § 63.8470(e)(2) | § 63.8490(a) § 63.8490(a)(1) | § 63.8470(c) § 63.8480(a) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|--|--|---|--|
| | | | | | § 63.8490(b) § 63.8490(c)(11) | from the stack. | | § 63.8490(b)-Table 6.5.a.i § 63.8495(a) § 63.8495(b) § 63.8495(c) § 63.8505 | § 63.8480(b) § 63.8480(b)-Table 8.2 § 63.8480(b)-Table 8.3 § 63.8480(b)-Table 8.4 § 63.8480(b)-Table 8.5 § 63.8485(b) § 63.8485(b)(1) § 63.8485(b)(2) § 63.8485(b)(3) § 63.8485(b)(4) § 63.8485(b)(5) § 63.8485(c) § 63.8485(c)(1) § 63.8485(c)(2) § 63.8485(c)(3) |
| GRPKILN | EU | 63JJJJ-01 | PM | 40 CFR Part 63, Subpart JJJJJ | § 63.8405(a)-Table 1.1 § 63.8405(a) § 63.8405(a)-Table 1.3.a.i § 63.8405(a)-Table 1.3.a.ii § 63.8405(b) § 63.8405(c) § 63.8405(c)-Table 3.2.a.i § 63.8405(c)-Table 3.2.a.ii § 63.8405(c)-Table 3.3.a.i § 63.8405(c)-Table 3.3.a.ii § 63.8405(c)-Table 3.4.a.i § 63.8410(a) § 63.8410(a)(2) § 63.8410(c) § 63.8410(d) § 63.8420(a) | For each existing small tunnel kiln (design capacity <10 tph of fired product), including all process streams, comply with one of the following: PM emissions must not exceed 0.19 kg/Mg (0.37 lb/ton) of fired product; or PM emissions must not exceed 4.8 mg/dscm (0.0021 gr/dscf) at 17% O ₂ ; or Non-Hg HAP metals emissions must not exceed 0.047 kg/hr (0.11 lb/hr). | § 63.8425(a) [G]§ 63.8425(b) [G]§ 63.8425(c) § 63.8425(d) § 63.8435 § 63.8440(a) § 63.8440(b) § 63.8445(a) § 63.8445(a)-Table 4.1.a § 63.8445(a)-Table 4.1.b § 63.8445(a)-Table 4.1.c § 63.8445(a)-Table 4.1.d § 63.8445(a)-Table 4.1.f.i § 63.8445(a)-Table 4.1.f.ii § 63.8445(a)-Table 4.3 § 63.8445(d) § 63.8445(e) | § 63.8420(b) [G]§ 63.8425(b) § 63.8445(a)-Table 4.3 § 63.8445(d) § 63.8465(b) § 63.8465(c) § 63.8490(a) § 63.8490(a)(1) § 63.8490(c) [G]§ 63.8490(c)(10) [G]§ 63.8490(c)(2) § 63.8490(c)(3) § 63.8490(c)(4) § 63.8490(c)(6) § 63.8495(a) § 63.8495(b) § 63.8495(c) § 63.8505 | [G]§ 63.8425(c) § 63.8470(c) § 63.8480(a) § 63.8480(b) § 63.8480(b)-Table 8.2 § 63.8480(b)-Table 8.3 § 63.8480(b)-Table 8.4 § 63.8480(b)-Table 8.5 [G]§ 63.8480(c) § 63.8485(b) § 63.8485(b)(1) § 63.8485(b)(2) § 63.8485(b)(3) § 63.8485(b)(4) § 63.8485(b)(5) § 63.8485(c) § 63.8485(c)(1) § 63.8485(c)(2) § 63.8485(c)(3) § 63.8485(c)(4) § 63.8485(c)(4)(i) § 63.8485(c)(4)(ii) [G]§ 63.8485(c)(4)(iii) § 63.8485(c)(6) |

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) |
|---------------------------|-------------------------|---------------|--------------|---------------------------------------|---|--|---|---|--|
| | | | | | § 63.8420(b) § 63.8420(e) § 63.8420(f) [G]§ 63.8425(b) § 63.8445(b) § 63.8445(f)(1) [G]§ 63.8450(c) [G]§ 63.8450(d) § 63.8455(a) § 63.8455(a)-Table 5.3.a.i § 63.8455(a)-Table 5.3.a.ii § 63.8455(a)-Table 5.3.b.i § 63.8455(a)-Table 5.3.b.ii § 63.8455(a)-Table 5.3.c.i § 63.8455(a)-Table 5.7.a § 63.8485(a) § 63.8485(c)(5) § 63.8490(b) § 63.8490(b)-Table 6.7.a.i § 63.8490(b)-Table 6.7.a.ii § 63.8490(b)-Table 6.7.a.iii § 63.8490(c)(11) [G]§ 63.8490(c)(7) § 63.8490(c)(9) | | § 63.8445(f) § 63.8445(f)(1) [G]§ 63.8450(c) [G]§ 63.8450(d) § 63.8455(a)-Table 5.3.a.i § 63.8455(a)-Table 5.3.a.ii § 63.8455(a)-Table 5.3.b.i § 63.8455(a)-Table 5.3.b.ii § 63.8455(a)-Table 5.3.c.i § 63.8465(b) § 63.8465(c) § 63.8470(a) | | § 63.8485(c)(7) § 63.8485(c)(8) [G]§ 63.8485(c)(9) § 63.8485(e) [G]§ 63.8485(f) § 63.8490(a)(2) |
| PRC-1 | EU | 60000-PRC | PM (Opacity) | 40 CFR Part 60, Subpart OOO | § 60.672(b)-Table 3 § 60.672(b) | Fugitive emissions from any crusher without a capture system that commenced construction, modification, or reconstruction on or after August 31, 1983 but before | § 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) | None | § 60.675(g) § 60.676(f) [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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|---|---|---|
| | | | | | | April 22, 2008 shall not exceed 15 percent opacity. | § 60.675(g) ** See Periodic Monitoring Summary | | |

Additional Monitoring Requirements

| | |
|--|-----------|
| Compliance Assurance Monitoring Summary | 23 |
| Periodic Monitoring Summary | 26 |

CAM Summary

| Unit/Group/Process Information | |
|---|------------------------------------|
| ID No.: CD-1 | |
| Control Device ID No.: CD-1-BH-1 | Control Device Type: Fabric filter |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart UUU | SOP Index No.: 60UUU-CD-1 |
| Pollutant: PM | Main Standard: § 60.732(a) |
| Monitoring Information | |
| Indicator: Pressure Drop | |
| Minimum Frequency: once per day | |
| Averaging Period: N/A | |
| Deviation Limit: Minimum Pressure Drop = 2 inches of water and Maximum Pressure Drop = 6 inches of water | |
| <p>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:</p> <ul style="list-style-type: none"> ± 0.5 inches water gauge pressure (± 125 pascals); or ± 0.5% of span. | |

CAM Summary

| Unit/Group/Process Information | |
|---|------------------------------------|
| ID No.: CD-1 | |
| Control Device ID No.: CD-1-BH-1 | Control Device Type: Fabric filter |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart UUU | SOP Index No.: 60UUU-CD-1 |
| Pollutant: PM (Opacity) | Main Standard: § 60.732(b) |
| Monitoring Information | |
| Indicator: Pressure Drop | |
| Minimum Frequency: once per day | |
| Averaging Period: N/A | |
| Deviation Limit: Minimum Pressure Drop = 2 inches of water and Maximum Pressure Drop = 6 inches of water | |
| <p>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:</p> <ul style="list-style-type: none"> ± 0.5 inches water gauge pressure (± 125 pascals); or ± 0.5% of span. | |

CAM Summary

| Unit/Group/Process Information | |
|---|------------------------------------|
| ID No.: CD-1-BH-1 | |
| Control Device ID No.: CD-1-BH-1 | Control Device Type: Fabric filter |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Nonagricultural Processes | SOP Index No.: R111-151 |
| Pollutant: PM | Main Standard: § 111.151(a) |
| Monitoring Information | |
| Indicator: Pressure Drop | |
| Minimum Frequency: once per day | |
| Averaging Period: N/A | |
| Deviation Limit: Minimum Pressure Drop = 2 inches of water and Maximum Pressure Drop = 6 inches of water | |
| <p>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:</p> <ul style="list-style-type: none"> ± 0.5 inches water gauge pressure (± 125 pascals); or ± 0.5% of span. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|------------------------------------|
| ID No.: CRUSH | |
| Control Device ID No.: GS-1-BH-2 | Control Device Type: Fabric filter |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart OOO | SOP Index No.: 60000-CRUSH |
| Pollutant: PM | Main Standard: § 60.672(a)-Table 2 |
| Monitoring Information | |
| Indicator: Pressure Drop | |
| Minimum Frequency: Once per week | |
| Averaging Period: N/A | |
| Deviation Limit: Minimum Pressure Drop = 2 inches of water and Maximum Pressure Drop = 6 inches of water | |
| <p>Periodic Monitoring Text: Measure and record the pressure drop. The monitoring instrumentation shall be calibrated, maintained and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit or above the maximum limit shall be considered and reported as a deviation.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|------------------------------------|
| ID No.: DSC-1 | |
| Control Device ID No.: GS-1-BH-2 | Control Device Type: Fabric filter |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart OOO | SOP Index No.: 60000-DSC-1 |
| Pollutant: PM | Main Standard: § 60.672(a)-Table 2 |
| Monitoring Information | |
| Indicator: Pressure Drop | |
| Minimum Frequency: Once per week | |
| Averaging Period: N/A | |
| Deviation Limit: Minimum Pressure Drop = 2 inches of water and Maximum Pressure Drop = 6 inches of water | |
| <p>Periodic Monitoring Text: Measure and record the pressure drop. The monitoring instrumentation shall be calibrated, maintained and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit or above the maximum limit shall be considered and reported as a deviation.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|------------------------------------|
| ID No.: DSC-1 | |
| Control Device ID No.: GS-1-BH-2 | Control Device Type: Fabric filter |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart OOO | SOP Index No.: 60000-DSC-1 |
| Pollutant: PM (Opacity) | Main Standard: § 60.672(a)-Table 2 |
| Monitoring Information | |
| Indicator: Opacity | |
| Minimum Frequency: Once per month | |
| Averaging Period: Six-minutes | |
| Deviation Limit: 7% Opacity | |
| Periodic Monitoring Text: Opacity shall be monitored, by a certified observer, for at least one, six-minute period in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Any opacity readings above the deviation limit shall be reported as a deviation. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|-------------------------------|
| ID No.: FB-1 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart OOO | SOP Index No.: 60000-FB |
| Pollutant: PM (Opacity) | Main Standard: § 60.672(e)(1) |
| Monitoring Information | |
| Indicator: Opacity | |
| Minimum Frequency: Once per month | |
| Averaging Period: Six-minutes | |
| Deviation Limit: 7% opacity | |
| Periodic Monitoring Text: Opacity shall be monitored, by a certified observer, for at least one, six-minute period in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Any opacity readings above the deviation limit shall be reported as a deviation. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|-------------------------------|
| ID No.: FB-2 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart OOO | SOP Index No.: 60000-FB |
| Pollutant: PM (Opacity) | Main Standard: § 60.672(e)(1) |
| Monitoring Information | |
| Indicator: Opacity | |
| Minimum Frequency: Once per month | |
| Averaging Period: Six-minutes | |
| Deviation Limit: 7% opacity | |
| Periodic Monitoring Text: Opacity shall be monitored, by a certified observer, for at least one, six-minute period in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Any opacity readings above the deviation limit shall be reported as a deviation. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|-------------------------------|
| ID No.: FB-3 | |
| 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-FB |
| Pollutant: PM (Opacity) | Main Standard: § 60.672(e)(1) |
| Monitoring Information | |
| Indicator: Opacity | |
| Minimum Frequency: Once per month | |
| Averaging Period: Six-minutes | |
| Deviation Limit: 7% opacity | |
| Periodic Monitoring Text: Opacity shall be monitored, by a certified observer, for at least one, six-minute period in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Any opacity readings above the deviation limit shall be reported as a deviation. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|------------------------------------|
| ID No.: GRP-CV | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart OOO | SOP Index No.: 60000-CV |
| Pollutant: PM | Main Standard: § 60.672(a)-Table 2 |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: Once per week | |
| Averaging Period: N/A | |
| Deviation Limit: Visible emissions or 7% opacity if Test Method 9 is performed | |
| <p>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.</p> <p>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.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|------------------------------------|
| ID No.: GRP-CV | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart OOO | SOP Index No.: 60000-CV |
| Pollutant: PM (Opacity) | Main Standard: § 60.672(a)-Table 2 |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per week | |
| Averaging Period: N/A | |
| Deviation Limit: Visible emissions or 7% opacity if Test Method 9 is performed | |
| <p>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.</p> <p>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.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|------------------------------------|
| ID No.: GRP-CV | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart OOO | SOP Index No.: 60000-CV |
| 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: Visible emissions or 10% opacity if Test Method 9 is performed | |
| <p>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.</p> <p>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.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|------------------------------------|
| ID No.: PRC-1 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart OOO | SOP Index No.: 60000-PRC |
| Pollutant: PM (Opacity) | Main Standard: § 60.672(b)-Table 3 |
| Monitoring Information | |
| Indicator: Opacity | |
| Minimum Frequency: Once per month | |
| Averaging Period: Six-minutes | |
| Deviation Limit: 15% opacity | |
| Periodic Monitoring Text: Opacity shall be monitored, by a certified observer, for at least one, six-minute period in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Any opacity readings above the deviation limit shall be reported as a deviation. | |

Permit Shield

Permit Shield 37

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 |
|-------------------------------|-------------------------|--------------------------------------|---|
| DIETANK3 | N/A | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 75 cubic meters. |
| DIETANK4 | N/A | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 75 cubic meters. |
| GRP-TD | K1D1, K1D2, K2D1, K2D2 | 40 CFR Part 60, Subpart UUU | Tunnel dryers used at mineral processing plants are not subject to the provisions of this subpart. |
| GRPKILN | K-1, K-2 | 40 CFR Part 60, Subpart UUU | Tunnel kilns used at mineral processing plants are not subject to the provisions of this subpart. |
| OILTANK1 | N/A | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 75 cubic meters. |
| OILTANK2 | N/A | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 75 cubic meters. |
| OILTANK3 | N/A | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 75 cubic meters. |
| OILTANK4 | N/A | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 75 cubic meters. |
| SCR-1 | N/A | 30 TAC Chapter 112, Sulfur Compounds | Not a liquid fuel-fired emission unit. |
| TU-1 | N/A | 40 CFR Part 60, Subpart OOO | Truck dumping of nonmetallic minerals into a feed hopper is exempt from the requirements of this section. |

New Source Review Authorization References

| | |
|--|-----------|
| New Source Review Authorization References | 39 |
| New Source Review Authorization References by Emission Unit | 40 |

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.

| 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.: 21012 | Issuance Date: 05/24/2024 |
| Authorization No.: 143021 | Issuance Date: 10/26/2016 |
| Permits By Rule (30 TAC Chapter 106) for the Application Area | |
| Number: 106.144 | Version No./Date: 09/04/2000 |
| Number: 106.183 | Version No./Date: 09/04/2000 |
| Number: 106.221 | Version No./Date: 09/04/2000 |
| Number: 106.227 | Version No./Date: 09/04/2000 |
| Number: 106.261 | Version No./Date: 11/01/2003 |
| Number: 106.263 | Version No./Date: 11/01/2001 |
| Number: 106.265 | Version No./Date: 09/04/2000 |
| Number: 106.373 | Version No./Date: 03/04/1997 |
| Number: 106.411 | Version No./Date: 09/04/2000 |
| Number: 106.412 | Version No./Date: 09/04/2000 |
| Number: 106.418 | Version No./Date: 09/04/2000 |
| Number: 106.454 | Version No./Date: 11/01/2001 |
| Number: 106.472 | Version No./Date: 09/04/2000 |
| Number: 106.473 | Version No./Date: 09/04/2000 |
| Number: 106.476 | Version No./Date: 09/04/2000 |
| Number: 111 | Version No./Date: 09/13/1993 |

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** |
|---------------------------|--------------------------------|--|
| CD-1 | CLAY DRYER | 21012 |
| CD-1-BH-1 | CLAY DRYER BAGHOUSE STACK | 21012 |
| CRUSH | CRUSHER | 21012 |
| CV-1 | CONVEYOR BELT SYSTEM 1 | 21012 |
| CV-2 | CONVEYOR BELT SYSTEM 2 | 21012 |
| CV-3 | CONVEYOR BELT SYSTEM 3 | 21012 |
| DIETANK3 | DIESEL TANK | 21012 |
| DIETANK4 | DIESEL TANK | 21012 |
| DSC-1 | DOUBLE SCREENS | 21012 |
| FB-1 | BUILDING 1 FUGITIVE EMISSIONS | 21012 |
| FB-2 | BUILDING 2 FUGITIVE EMISSIONS | 21012 |
| FB-3 | BUILDING3 FUGITIVE EMISSIONS | 21012, 143021, 106.261/11/01/2003 [153541] |
| K-1 | BRICK TUNNEL KILN NO.1 | 21012 |
| K-2 | BRICK TUNNEL KILN NO. 2 | 21012 |
| K1D1 | KILN 1 DRYER 1A | 21012 |
| K1D2 | KILN 1 DRYER 2A | 21012 |
| K2D1 | KILN 2 DRYER 2A | 21012 |
| K2D2 | KILN 2 DRYER 2B | 21012 |
| OILTANK1 | USED OIL TANK | 21012 |
| OILTANK2 | OIL TANK | 21012 |
| OILTANK3 | OIL TANK | 21012 |

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** |
|---------------------------|---------------------------------------|-----------------------------------|
| OILTANK4 | OIL TANK (280 GAL HYDRAULIC OIL) | 21012 |
| PRC-1 | PRIMARY CRUSHER | 21012 |
| SCR-1 | DRY SCRUBBER FOR TUNNEL KILNS | 21012 |
| TU-1 | TRUCK UNLOADING/CLAY RECEIVING HOPPER | 21012 |

**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 43

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 ₂ S | 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 |