

**STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
TITLE V PERMIT
TO OPERATE AIR EMISSIONS EQUIPMENT
THIS CERTIFIES THAT**

Oil Dri Production Company
1800 1/2 Highway 15 North
Ripley, Mississippi
Tippah County

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

Permit Issued: October 14, 2015

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD



AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: September 30, 2020

Permit No.: 2620-00014

Permit Modified: July 25, 2016, August 21 and DEC 02 2019

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APPENDIX A LIST OF ABBREVIATIONS USED IN THIS PERMIT

SECTION 1. GENERAL CONDITIONS

1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(a).)

1.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(b).)

1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(c).)

1.4 Prior to its expiration, this permit may be reopened in accordance with the provisions listed below.

(a) This permit shall be reopened and revised under any of the following circumstances:

(1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of 3 or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.

(2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

(3) The Permit Board or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.

(4) The Administrator or the Permit Board determines that the permit must be

revised or revoked to assure compliance with the applicable requirements.

- (b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (c) Reopenings shall not be initiated before a notice of such intent is provided to the Title V source by the DEQ at least 30 days in advance of the date that the permit is to be reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.G.)

- 1.5 The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(e).)

- 1.6 This permit does not convey any property rights of any sort, or any exclusive privilege.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(d).)

- 1.7 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(5).)

- 1.8 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation 11 Miss. Admin. Code Pt. 2, Ch. 6.

- (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of

the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

- (b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

- (c) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D(2).)

- (d) The fee shall be due September 1 of each year. By July 1 of each year the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the DEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.)

- (e) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.C.)

- 1.9 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(8).)

- 1.10 Any document required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)

- 1.11 The permittee shall allow the DEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- (a) enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(2).)

- 1.12 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(1).)

- 1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)

- 1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(1).)

- 1.15 Nothing in this permit shall alter or affect the following:

- (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
- (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- (c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
- (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(2).)

- 1.16 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)

- 1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C(2)., R. 6.4.B., and R. 6.2.A(1)(c).)

- 1.18 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:

- (a) the changes are not modifications under any provision of Title I of the Act;

- (b) the changes do not exceed the emissions allowable under this permit;
- (c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:
 - (1) a brief description of the change(s),
 - (2) the date on which the change will occur,
 - (3) any change in emissions, and
 - (4) any permit term or condition that is no longer applicable as a result of the change;
- (d) the permit shield shall not apply to any Section 502(b)(10) change.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F(1).)

- 1.19 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in 11 Miss. Admin. Code Pt. 2, Ch. 3., "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)

- 1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2., "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations 11 Miss. Admin. Code Pt. 2, Ch. 6., "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". Modification is defined as "[a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:

- (a) routine maintenance, repair, and replacement;

- (b) use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
- (d) use of an alternative fuel or raw material by a stationary source which:
 - (1) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I, or 40 CFR 51.166; or
 - (2) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, or 40 CFR 51.166;
- (e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or
- (f) any change in ownership of the stationary source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.C(15).)

1.21 Any change in ownership or operational control must be approved by the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)

1.22 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B(1).)

1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels

which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.

- (a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.
- (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.
- (c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.G.)

1.24 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies:

- (a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.
- (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) the permitted facility was at the time being properly operated;

- (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - (4) the permittee submitted notice of the emergency to the DEQ within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)

1.25 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.

- (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:
 - (i) An upset occurred and that the source can identify the cause(s) of the upset;
 - (ii) The source was at the time being properly operated;
 - (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
 - (iv) That within 5 working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;

- (v) That as soon as practicable but no later than 24 hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
 - (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
 - (3) This provision is in addition to any upset provision contained in any applicable requirement.
 - (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
- (b) Startups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
- (1) Startups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific emission limitations or work practice standards for startups and shutdowns are defined by an applicable rule, regulation, or permit.
 - (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in this regulation, 11 Mississippi Administrative Code, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for startups and shutdowns. Source specific emission limitations or work practice standards established for startups and shutdowns are subject to the requirements prescribed in 11 Miss. Admin. Code Pt. 2, R. 1.10.B(2)(a) through (e).
 - (3) Where an upset as defined in Rule 1.2 occurs during startup or shutdown, see the upset requirements above.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

- 1.26 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Regulation 11 Miss Admin. Code Pt. 2, R. 1.8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

(Ref.: 11 Miss Admin. Code Pt. 2, R. 1.8.)

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-000	Entire Facility
AA-001*	LVM Calciner/RVM Dryer No. 2, 30 TPH/50 TPH, 52.5 MMBTUH, natural gas, virgin fuel oil, or on spec used fuel oil-fired (Oil-Dri Ref. No. 1), equipped with a cooler (Oil-Dri Ref. No. 7) and a scrubber (Oil-Dri Ref. No. 1C). *Emission Point AA-001 can be operated as either a calciner or a dryer.
AA-003	LVM Calciner No. 1 System, 27.1 TPH, 22 MMBTUH, natural gas, virgin fuel oil, or on spec used fuel oil-fired, consisting of a calciner (Oil-Dri Ref. No. 4) and a cooler (Oil-Dri Ref. No. 6) equipped with a cyclone (Oil-Dri Ref. No. 6A) followed by a wet scrubber (Oil-Dri Ref. No. 6B).
AA-004	Mill room baghouse for mill room (Oil-Dri Ref. No. 2620-B).
AA-005	Bulk loading baghouse for product transfer and product de-dusting (Oil-Dri Ref. No. 2620-C).
AA-006	Southeast mill room baghouse for mill room (Oil-Dri Ref. No. 2620-D).
AA-007	Griffin packaging baghouse for product bulk loading and bulk bagger (Oil-Dri Ref. No. 2620-E).
AA-008	Kice product dedusting baghouse for product packaging (Oil-Dri Ref. No. 2620-F).
AA-009	Old New York South baghouse for mill room (Oil-Dri Ref. No. 2620-G).
AA-010	Old New York North baghouse for mill room.
AA-011	RVM Dryer, 75 TPH, 100 MMBTUH, natural gas, virgin fuel oil, on spec used fuel oil, or coal-fired (Oil-Dri Ref. No. 7) equipped with a cooler (Oil Dri Ref. No. 3) and a wet scrubber (Oil-Dri Ref. No. 7A) followed by a packed tower scrubber.
AA-012	RVM Mill Room (Oil-Dri Ref. No. X2) with a baghouse.
AA-013	Product Screening Area (Oil-Dri Ref. No. X3) with a baghouse.
AA-014	Baghouse handling emissions from the north out-of-spec silo.
AA-015	Baghouse handling emissions from the surge-in spec silo.
AA-016	6.0-ton/hour clay dryer with a 14.76-MMBTUH natural gas/fuel oil fired burner with a scrubber.
AA-017	6.0-ton/hour clay dryer with a 14.76-MMBTUH natural gas/fuel oil fired burner with a scrubber.
AA-018	Baghouse handling emissions from product storage, bulk bag loader, rail loading, and truck loading.
AA-021	Baghouse handling emissions from product additive mixer system and packaging machine.
AA-022	Baghouse (1 st) handling emissions from the Mill Room.
AA-023	Baghouse (2 nd) handling emissions from the Mill Room.

SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. Facility-Wide Emission Limitations & Standards

- 3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).
- (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
 - (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.)

- 3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Paragraph 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.B.)

B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard		
AA-001 as a LVM Calciner	Federally enforceable Permit to Construct issued on December 17, 1996, and modified on December 10, 1997. 11 Miss. Admin. Code Pt. 2, R. 1.4.D(1)(b) 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1) 11 Miss. Admin. Code Pt. 2, R. 1.4.B(1) 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.1	PM/PM ₁₀	16.6 lb/hr and 72.7 tons/year		
		3.B.5	PM	E = 0.8808*(I) ^{-0.1667}		
		3.B.8		E = 4.1*(p) ^{0.67}		
		3.B.9				
		3.B.10	SO ₂	4.5 lb/hr and 19.71 tons/year		
		3.B.11		4.8 lb/MMBTU		
				2000 ppm (volume) if in existence prior to January 25, 1972. 500 ppm (volume) if constructed after January 25, 1972.		
			Fuel Restriction	Natural Gas, Virgin Fuel Oil, or On Spec. Used Fuel Oil When burning fuel oils, ≤ 1.0% Sulfur by weight		
		AA-001 as a RVM Dryer	Federally enforceable Permit to Construct issued on December 17, 1996, and modified on December 10, 1997. 11 Miss. Admin. Code Pt. 2, R. 1.4.D(1)(b) 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1) 11 Miss. Admin. Code Pt. 2, R. 1.4.B(1) 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.1	PM/PM ₁₀	10.4 lb/hr and 45.6 tons/year
				3.B.5	PM	E = 0.8808*(I) ^{-0.1667}
3.B.8	E = 4.1*(p) ^{0.67}					
3.B.9						
3.B.10	SO ₂			4.5 lb/hr and 19.71 tons/year		
3.B.11				4.8 lb/MMBTU		
				2000 ppm (volume) if in existence prior to January 25, 1972. 500 ppm (volume) if constructed after January 25, 1972.		
	Fuel Restriction			Natural Gas, Virgin Fuel Oil, or On Spec. Used Fuel Oil When burning fuel oils, ≤ 1.0% Sulfur by weight		

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard			
AA-003	<p>Federally enforceable Permit to Construct issued on December 17, 1996, and modified on December 10, 1997.</p> <p>40 CFR 60, Subpart A- General Provisions</p> <p>40 CFR 60, Subpart UUU- Standards of Performance for Calciners and Dryers in Mineral Industries</p> <p>11 Miss. Admin. Code Pt. 2, R. 1.4.D(1)(b)</p> <p>11 Miss. Admin. Code Pt. 2, R. 1.4.A(1)</p> <p>11 Miss. Admin. Code Pt. 2, R. 1.4.B(1)</p> <p>11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)</p>	<p>3.B.1</p> <p>3.B.3</p> <p>3.B.5</p> <p>3.B.8</p> <p>3.B.9</p> <p>3.B.10</p> <p>3.B.11</p>	PM/PM ₁₀	0.092 grams/dscm; not to exceed 11.5 lb/hr and 50.4 tons/year			
			PM	$E = 0.8808*(I)^{-0.1667}$			
				$E = 4.1*(p)^{0.67}$			
			SO ₂	4.5 lb/hr and 19.71 tons/year			
				4.8 lb/MMBTU			
				500 ppm (volume)			
			Fuel Restriction	<p>Natural Gas, Virgin Fuel Oil, or On Spec. Used Fuel Oil</p> <p>When burning fuel oils, ≤1.0% Sulfur by weight</p>			
			AA-004	<p>Federally enforceable Permit to Construct issued on April 1, 1994, and modified on October 10, 1995, and July 7, 1998.</p> <p>40 CFR 60, Subparts A</p> <p>40 CFR 60, Subpart OOO- Standards of Performance for Nonmetallic Mineral Processing Plants</p> <p>11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)</p>	<p>3.B.2</p> <p>3.B.4</p> <p>3.B.11</p>	PM/PM ₁₀	0.05 grams/dscm; not to exceed 4.9 lb/hr and 21.5 tons/year
						PM	$E = 4.1*(p)^{0.67}$
						Opacity	≤ 7.0%
AA-005	<p>Federally enforceable Permit to Construct issued on April 1, 1994, and modified on October 10, 1995, and July 7, 1998.</p> <p>40 CFR 60, Subparts A & OOO</p> <p>11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)</p>	<p>3.B.2</p> <p>3.B.4</p> <p>3.B.11</p>				PM/PM ₁₀	0.05 grams/dscm; not to exceed 0.7 lb/hr and 3.1 tons/year
PM	$E = 4.1*(p)^{0.67}$						
Opacity	≤ 7.0%						

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-006	Federally enforceable Permit to Construct issued on April 1, 1994, and modified on October 10, 1995, and July 7, 1998. 40 CFR 60, Subparts A & OOO 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.2 3.B.4 3.B.11	PM/PM ₁₀	0.05 grams/dscm; not to exceed 1.4 lb/hr and 6.1 tons/year
			PM	$E = 4.1*(p)^{0.67}$
			Opacity	≤ 7.0%
AA-007	Federally enforceable Permit to Construct issued on April 1, 1994, and modified on October 10, 1995, and July 7, 1998. 40 CFR 60, Subparts A & OOO 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.2 3.B.4 3.B.11	PM/PM ₁₀	0.05 grams/dscm; not to exceed 2.8 lb/hr and 12.3 tons/year
			PM	$E = 4.1*(p)^{0.67}$
			Opacity	≤ 7.0%
AA-008	Federally enforceable Permit to Construct issued on April 1, 1994, and modified on October 10, 1995, and July 7, 1998. 40 CFR 60, Subparts A & OOO 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.2 3.B.4 3.B.11	PM/PM ₁₀	0.05 grams/dscm; not to exceed 2.2 lb/hr and 9.6 tons/year
			PM	$E = 4.1*(p)^{0.67}$
			Opacity	≤ 7.0%
AA-009	Federally enforceable Permit to Construct issued on April 1, 1994, and modified on October 10, 1995, and July 7, 1998. 40 CFR 60, Subparts A & OOO 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.2 3.B.4 3.B.11	PM/PM ₁₀	0.05 grams/dscm; not to exceed 3.6 lb/hr and 15.8 tons/year
			PM	$E = 4.1*(p)^{0.67}$
			Opacity	≤ 7.0%

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-010	Federally enforceable Permit to Construct issued on April 1, 1994, and modified on October 10, 1995, and July 7, 1998. 40 CFR 60, Subparts A & OOO 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.2 3.B.4 3.B.11	PM/PM ₁₀	0.05 grams/dscm; not to exceed 3.6 lb/hr and 15.8 tons/year
			PM	$E = 4.1*(p)^{0.67}$
			Opacity	≤ 7.0%
AA-011	Federally enforceable Permit to Construct issued on December 17, 1996, and modified on December 10, 1997. 40 CFR 60, Subparts A & UUU 11 Miss. Admin. Code Pt. 2, R. 1.4.D(1)(b) 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1) 11 Miss. Admin. Code Pt. 2, R. 1.4.B(1) 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.1 3.B.3 3.B.5 3.B.8 3.B.9 3.B.10 3.B.11	PM/PM ₁₀	0.057 grams/dscm; not to exceed 8.8 lb/hr and 38.5 tons/year
			PM	$E = 0.8808*(I)^{-0.1667}$
				$E = 4.1*(p)^{0.67}$
			SO ₂	105.8 lb/hr and 200.0 tons/year
				4.8 lb/MMBTU
				500 ppm (volume)
			Fuel Restriction	Natural Gas, Virgin Fuel Oil, or On Spec. Used Fuel Oil When burning fuel oils, ≤ 1.0% Sulfur by weight
AA-012	40 CFR 60, Subparts A & OOO 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.4 3.B.11	PM/PM ₁₀	0.05 grams/dscm
			PM	$E = 4.1*(p)^{0.67}$
			Opacity	≤ 7.0%
AA-013	40 CFR 60, Subparts A & OOO 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.4 3.B.11	PM/PM ₁₀	0.05 grams/dscm
			PM	$E = 4.1*(p)^{0.67}$
			Opacity	≤ 7.0%

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-014	Federally enforceable Permit to Construct issued on December 9, 2008. 40 CFR 60, Subparts A & OOO 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.4 3.B.6 3.B.11	PM	0.05 grams/dscm; not to exceed 0.32 lb/hr and 1.39 tons/year
				$E = 4.1*(p)^{0.67}$
			PM ₁₀	0.19 lb/hr and 0.84 tons/year
			Opacity	≤ 7.0%
AA-015	Federally enforceable Permit to Construct issued on December 9, 2008. 40 CFR 60, Subparts A & OOO 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.4 3.B.6 3.B.11	PM	0.05 grams/dscm; not to exceed 0.32 lb/hr and 1.39 tons/year
				$E = 4.1*(p)^{0.67}$
			PM ₁₀	0.19 lb/hr and 0.84 tons/year
			Opacity	≤ 7.0%
AA-016	Federally enforceable Permit to Construct issued on December 9, 2008. 40 CFR 60, Subparts A & UUU 11 Miss. Admin. Code Pt. 2, R. 1.4.D(1)(b) 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1) 11 Miss. Admin. Code Pt. 2, R. 1.4.B(1) 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.3 3.B.6 3.B.7 3.B.8 3.B.9 3.B.10 3.B.11	PM	0.057 grams/dscm; not to exceed 1.86 lb/hr and 8.15 tons/year
				$E = 0.8808*(I)^{-0.1667}$
				$E = 4.1*(p)^{0.67}$
			PM ₁₀	1.12 lb/hr and 4.89 tons/year
			NOx	4.38 lb/hr and 19.18 tons/year
			SO ₂	4.46 lb/hr and 19.54 tons/year
				4.8 lb/MMBTU
				500 ppm (volume)
			Fuel Restriction	When burning fuel oils, ≤ 0.5% Sulfur by weight

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-017	Federally enforceable Permit to Construct issued on December 9, 2008. 40 CFR 60, Subparts A & UUU 11 Miss. Admin. Code Pt. 2, R. 1.4.D(1)(b) 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1) 11 Miss. Admin. Code Pt. 2, R. 1.4.B(1) 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.3 3.B.6 3.B.7 3.B.8	PM	0.057 grams/dscm; not to exceed 1.86 lb/hr and 8.15 tons/year
				$E = 0.8808*(I)^{-0.1667}$
				$E = 4.1*(p)^{0.67}$
		3.B.9 3.B.10 3.B.11	PM ₁₀	1.12 lb/hr and 4.89 tons/year
			NO _x	4.38 lb/hr and 19.18 tons/year
		3.B.11	SO ₂	4.46 lb/hr and 19.54 tons/year
				4.8 lb/MMBTU
				500 ppm (volume)
		Fuel Restriction	When burning fuel oils, ≤ 0.5% Sulfur by weight	
		AA-018	Federally enforceable Permit to Construct issued on December 9, 2008. 40 CFR 60, Subparts A & OOO 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.4 3.B.6 3.B.11
$E = 4.1*(p)^{0.67}$				
PM ₁₀	0.53 lb/hr and 2.32 tons/year			
Opacity	≤ 7.0%			
AA-021 AA-022 AA-023	40 CFR 60, Subparts A & OOO	3.B.4	PM/PM ₁₀	0.032 grams/dscm
AA-021 AA-022 AA-023	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)	3.B.11	PM/PM ₁₀	$E = 4.1*(p)^{0.67}$
AA-023	11 Miss. Admin. Code Pt.2, R.6.3.B(1). PSD avoidance limit	3.B.12	PM/PM ₁₀	0.030 grams/dscm not to exceed 3.25 lb/hr and 14.2 tons/yr

3.B.1 For Emission Points AA-001, AA-003, and AA-011, the permittee is limited by the federally enforceable Permit to Construct issued on December 17, 1996, and modified on December 10, 1997.

3.B.2 For Emission Points AA-004, AA-005, AA-006, AA-007, AA-008, AA-009, and AA-010, the permittee is limited by the federally enforceable Permit to Construct issued on April 1, 1994, and modified on October 10, 1995, and July 7, 1998.

3.B.3 Emission Points AA-003, AA-011, AA-016, and AA-017 are subject to and shall comply with the emission limitations and other requirements of New Source Performance Standards, 40 CFR 60, Subpart A and Subpart UUU, General Provisions and Standards of Performance for Calciners and Dryers in Mineral Industries, and shall be operated in accordance with the emission limitations and monitoring requirements specified herein. No emissions shall be discharged into the atmosphere that:

- (a) Contain particulate matter in excess of 0.092 gram per dry standard cubic meter (g/dscm) [0.040 grain per dry standard cubic foot (gr/dscf)] for calciners and dryers installed in series and in excess of 0.057 g/dscm for dryers; and
- (b) Exhibits greater than 10 percent opacity, unless the emissions are discharged from an affected facility using a wet scrubbing control device.

(Ref.: 40 CFR 60, Subpart UUU - Standards of Performance for Calciners and Dryers in Mineral Industries; 40 CFR 60.732)

3.B.4 Emission Points AA-004, AA-005, AA-006, AA-007, AA-008, AA-009, AA-010, AA-012, AA-013, AA-014, AA-015, AA-018, AA-021, AA-022 and AA-023 are subject to and shall comply with the emission limitations and other requirements of New Source Performance Standards, 40 CFR 60, Subparts A and OOO, General Provisions and Standards of Performance for Nonmetallic Mineral Processing Plants, and shall be operated in accordance with the emission limitations and monitoring requirements specified herein.

(Ref.: 40 CFR, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants; 40 CFR 60.672)

3.B.5 For Emission Points AA-001, AA-003, and AA-011, the permittee shall use as fuels natural gas, virgin fuel oil with no more than 1.0% sulfur by weight, and on-specification (on-spec.) used oil with no more than 1.0% sulfur by weight. The permittee shall comply with 40 CFR Part 279, Used Oil Management Standards.

(Ref.: Federally enforceable Permit to Construct issued on December 17, 1996, and modified on December 10, 1997)

3.B.6 For Emission Points AA-014, AA-015, AA-016, AA-017 and AA-018, the permittee is limited by the federally enforceable Permit to Construct issued on December 9, 2008.

3.B.7 For Emission Points AA-016 and AA-017, the permittee shall use as fuels natural gas and fuel oil with no more than 0.5% sulfur by weight.

(Ref.: Federally enforceable Permit to Construct issued on December 9, 2008)

- 3.B.8 For Emission Points AA-001, AA-003, AA-011, AA-016, and AA-017, emissions from installations equal to or greater than 10 million BTU per hour heat input but less than 10,000 million BTU per hour heat input shall not exceed an emission rate as determine by the relationship

$$E = 0.8808 * (I)^{-0.1667}$$

where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b))

- 3.B.9 For Emission Points AA-001, AA-003, AA-011, AA-016, and AA-017, the maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1))

- 3.B.10 For Emission Points AA-001, AA-003, AA-011, AA-016, and AA-017, except as otherwise provided herein, no person shall cause or permit the emission of gas containing sulfur oxides (measured as sulfur dioxide) in excess of 2,000 ppm (volume) from any process equipment in existence on January 25, 1972, or in excess of 500 ppm (volume) from any process equipment constructed after January 25, 1972. The 500 ppm (volume) requirement shall apply for equipment constructed after January 25, 1972, unless otherwise provided by the Commission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.B(1))

- 3.B.11 Except as otherwise specified, no person shall cause, permit, or allow the emission of particulate matter in total quantities in any one hour from any manufacturing process, which includes any associated stacks, vents, outlets, or combination thereof, to exceed the amount determined by the relationship

$$E = 4.1 * (p)^{0.67}$$

where E is the emission rate in pounds per hour and p is the process weight input rate in tons per hour. Conveyor discharge of coarse solid matter may be allowed if no nuisance is created beyond the property boundary where the discharge occurs.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.F(1))

- 3.B.12 For Emission Point AA-023, the permittee shall not discharge Particulate Matter and Particulate Matter with a diameter of 10 μ m or less in concentrations higher than 0.030 grams/dscm, not to exceed 3.25 lb/hr and 14.2 tons/yr.

(Ref.: 11 Miss. Admin. Code Pt.2, R.6.3.B(1).)

C. Insignificant and Trivial Activity Emission Limitations & Standards

Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.C.1	PM	0.6 lbs/MMBTU
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2	SO ₂	4.8 lbs/MMBTU

- 3.C.1 The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).)

- 3.C.2 The maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).)

SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, by January 31 for the preceding calendar year. Each compliance certification shall include the following:
- (a) the identification of each term or condition of the permit that is the basis of the certification;
 - (b) the compliance status;
 - (c) whether compliance was continuous or intermittent;
 - (d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
 - (e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(5)(a), (c), & (d).)

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

A. General Monitoring, Recordkeeping and Reporting Requirements

5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:

- (a) the date, place as defined in the permit, and time of sampling or measurements;
- (b) the date(s) analyses were performed;
- (c) the company or entity that performed the analyses;
- (d) the analytical techniques or methods used;
- (e) the results of such analyses; and
- (f) the operating conditions existing at the time of sampling or measurement.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(1).)

5.A.3 Except where a longer duration is specified in an applicable requirement, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(2).)

5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all

required reports must be certified by a responsible official consistent with 11 Miss. Admin. Code Pt. 2, R. 6.2.E.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) days of the time the deviation began.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(2).)

5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions, or their equivalents approved by the DEQ and the EPA.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

B. Specific Monitoring, Recordkeeping and Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping/Reporting Requirement
AA-000 (Facility Wide)	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.1	Control Equipment	Operate pollution control equipment at all times and inspect it weekly
AA-004 AA-005 AA-006 AA-007 AA-008 AA-009 AA-010 AA-012 AA-013 AA-014 AA-015 AA-018 AA-021 AA-022 AA-023	40 CFR 60, Subpart OOO- Standards of Performance for Nonmetallic Mineral Processing Plants 40 CFR 60, Subpart A- General Provisions 40 CFR 60.670-676	5.B.2		General Applicability

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping/Reporting Requirement
AA-003 AA-011 AA-016 AA-017	40 CFR 60, Subpart UUU - Standards of Performance for Calciners and Dryers in Mineral Industries; 40 CFR 60, Subpart A- General Provisions 40 CFR 60.730-736	5.B.3		General Applicability
AA-001 AA-003 AA-011	Federally enforceable Title V Operating Permit issued May 17, 2005 and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a).	5.B.4	SO ₂ /Sulfur	Notify MDEQ within 15 days of firing virgin fuel oil or on-spec used oil. If virgin oil or on-spec used oil is fired, then monitor and record fuel oil usage, hours of operation, SO ₂ emissions, sulfur content; and submit monitoring in semi-annual report
		5.B.5		Comply with 40 CFR Part 279- Standards for the Management of Used Oil; 40 CFR 279.11
		5.B.6	PM/SO ₂	When firing virgin or on-spec used fuel oil, stack test within 180 days of firing oil and biennially thereafter
AA-004 AA-005 AA-006 AA-007 AA-008 AA-009 AA-010 AA-012 AA-013	Federally enforceable Title V Operating Permit issued May 17, 2005	5.B.7	PM/Opacity	Biennial Stack-testing
AA-016 AA-017	Federally enforceable Permit to Construct issued December 9, 2008	5.B.8	SO ₂	Notify MDEQ within 15 days of firing virgin fuel oil or on-spec used oil. If virgin oil or on-spec used oil is fired, then monitor and record hours of operation and SO ₂ emissions
AA-001 AA-003 AA-004 AA-005 AA-006 AA-007 AA-008 AA-009 AA-010 AA-012 AA-013 AA-014 AA-015 AA-018 AA-021 AA-022	40 CFR Part 64 – Compliance Assurance Monitoring (40 CFR 64.7-64.9)	5.B.9 5.B.10 5.B.11 5.B.12 5.B.13	Pressure drop/ Flow rate/ Opacity	Compliance Assurance Monitoring (CAM) is conducted for each control device as specified

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping/Reporting Requirement
AA-023 AA-011 AA-016 AA-017				

5.B.1 For all emission points, the permittee shall operate the pollution control equipment at all times while the facility is in operation. The permittee shall perform regular inspections and any required maintenance each week or more often, if necessary, to maintain proper operation of the pollution control equipment. The permittee shall also maintain on hand at all times sufficient equipment as is necessary to repair and/or replace the pollution control equipment.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2))

5.B.2 Emission Points AA-004 through AA-010, AA-012, AA-013, AA-014, AA-015, AA-018, AA-021, AA-022 and AA-023 are subject to and shall comply with the monitoring, recordkeeping, reporting, and other requirements of New Source Performance Standards, 40 CFR Part 60, Subpart A- General provisions and Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants, and shall be operated in accordance with the monitoring requirements specified herein.

(Ref.: 40 CFR 60, Subpart OOO- Standards of Performance for Nonmetallic Mineral Processing Plants; 40 CFR 60.670-676)

5.B.3 Emission Points AA-003, AA-011, AA-016, and AA-017 are subject to the emission limitations and other requirements of New Source Performance Standards, 40 CFR Part 60, Subpart A – General provisions and Subpart UUU - Standards of Performance for Calciners and Dryers in Mineral Industries, and shall be operated in accordance with the monitoring, recordkeeping, reporting, and other requirements specified herein.

(Ref.: 40 CFR 60, Subpart UUU - Standards of Performance for Calciners and Dryers in Mineral Industries; 40 CFR 60.730-736)

5.B.4 For Emission Points AA-001, AA-003, and AA-011, the permittee shall certify semi-annually that no virgin or on-spec used fuel oil is fired. The permittee shall report the required certification in accordance with Permit Condition 5.A.4.

If virgin or on-spec used fuel oil is fired, the permittee shall notify MDEQ within fifteen (15) days of firing it. The permittee shall resume monitoring and recording the fuel oil usage by type and quantity, the hours of operation and the SO₂ emissions in pounds per

hour and tons per year on both a daily basis and for each consecutive 365-day period. Also, the permittee shall resume monitoring and recording the sulfur content (percent sulfur by weight) of virgin fuel oil and on-specification used oil through sampling and analysis of each lot or shipment received. The permittee shall report the required monitoring in accordance with Permit Condition 5.A.4.

(Ref.: Federally enforceable Title V Operating Permit issued May 17, 2005 and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a).)

- 5.B.5 For Emission Points AA-001, AA-003, and AA-011, the permittee shall monitor, record, and maintain adequate records showing compliance with 40 CFR 279 – Standards for the Management of Used Oil. As a minimum, the permittee shall maintain records showing compliance with the on-specification used oil requirements, 40 CFR 279.11, for each shipment of used oil received. Additionally, for each shipment, the permittee shall maintain records showing the name, address, phone number, and EPA identification number for both the used oil marketer and transporter. The permittee shall report the required monitoring in accordance with Permit Condition 5.A.4.

(Ref.: Federally enforceable Title V Operating Permit issued May 17, 2005 and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a).)

- 5.B.6 For Emission Points AA-001, AA-003, and AA-011, when virgin or on-spec fuel oil is fired, the permittee shall demonstrate compliance with permit particulate matter and sulfur dioxide emission limitations by stack testing, in accordance with Office of Pollution Control approved EPA Reference Methodology while burning virgin or on-spec fuel oil. The testing shall be performed, and stack test report submitted within one hundred and eighty (180) days of firing virgin or on-spec used oil, and biennially thereafter. The permittee shall submit the test protocol in accordance with Condition 5.C.2.

(Ref.: Federally enforceable Title V Operating Permit issued May 17, 2005 and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a).)

- 5.B.7 For Emission Points AA-004 through AA-010, AA-012, and AA-013, the permittee shall demonstrate compliance with:
- (a) Particulate matter using Method 5 or Method 17 where the sample volume is at least 1.70 dscm. For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121°C, to prevent water condensation on the filter; and,

(b) Opacity using Method 9 and the procedures in 40 CFR 60.11.

The testing shall be performed and stack test report submitted by December 1, 2019, and biennially thereafter. The permittee shall submit the test protocol in accordance with Condition 5.C.2.

(Ref.: Federally enforceable Title V Operating Permit issued May 17, 2005 and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a).)

5.B.8 For Emission Points AA-016 and AA-017, the permittee shall use as fuels natural gas and fuel oil with no more than 0.5% sulfur by weight. The permittee shall certify semi-annually that no virgin or on-spec used fuel oil is fired in accordance with Condition 5.C.2. If virgin or on-spec used fuel oil is fired, the permittee shall notify MDEQ within fifteen (15) days of firing it. The permittee shall resume monitoring and recording the hours of operation and the SO₂ emissions in pounds per hour and tons per year on both a daily basis and for each consecutive 365-day period.

(Ref.: Federally enforceable Permit to Construct issued December 9, 2008 and Federally enforceable Title V Operating Permit issued October 14, 2015 and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a).)

5.B.9 The table below is the CAM plan for Emission Point AA-001:

	INDICATOR NO. 1	INDICATOR NO. 2
Indicator	Pressure drop	Scrubber water flow rate
Measurement Approach	Pressure drop is measured using a differential pressure gauge	Scrubber water flow rate is measured using a flow meter.
Monitoring Methods and Location	Continuously monitor the pressure drop across the scrubber	Scrubber water flow rate will be continuously monitored.
Indicator Range	Pressure drop across scrubber is greater than 4.1 inches of water Pressure drop compliance values to be reassessed and adjusted if necessary at each subsequent permit required stack test for PM for this source.	+/- 20% of observed water flow rate during most recent passing test (per NSPS). Currently, water flow rate to the scrubber is between 100-300 gpm. Water flow compliance values to be reassessed and adjusted if necessary at each subsequent permit-required stack test for particulate matter.
Data Collection Frequency	Pressure drop measured continuously	Water flow rate to the scrubber measured continuously.
Averaging Period	2 hour average for pressure drop (per NSPS)	2 hour average for water flow rate (per NSPS)
Recordkeeping	Records of pressure drop will be kept at the facility for a period of five (5) years.	Water flow rate records and copies of all inspections and calibrations will be kept at the facility for a period of five (5) years.
QA/QC	Monthly maintenance inspections Annual pressure drop gauge calibration	Monthly maintenance inspections and annual flow meter calibration.

5.B.10 The table below is the CAM plan for Emission Point AA-003:

	INDICATOR NO. 1	INDICATOR NO. 2
Indicator	Pressure drop	Scrubber water flow rate
Measurement Approach	Pressure drop is measured using a differential pressure gauge	Scrubber water flow rate is measured using a flow meter.
Monitoring Methods and Location	Continuously monitor the pressure drop across the scrubber	Scrubber water flow rate will be continuously monitored (per NSPS).
Indicator Range	Pressure drop across scrubber is greater than 4.1 inches of water Pressure drop compliance values to be re-assessed and adjusted if necessary at each subsequent permit required stack test for PM for this source.	+/- 20% of observed water flow rate during most recent passing test (per NSPS).
Data Collection Frequency	Pressure drop measured continuously	Measure water flow rate to the scrubber on a continuous basis.
Averaging Period	2 hour average for pressure drop (per NSPS)	2-hour average for water flow rate to the scrubber (per NSPS).
Recordkeeping	Records of pressure drop will be kept at the facility for a period of five (5) years.	Water flow rate records and copies of all inspections and calibrations will be kept at the facility for a period of five (5) years.
QA/QC	Monthly maintenance inspections Annual pressure drop gauge calibration	Monthly maintenance inspections and annual flow meter calibration.

5.B.11 The table below is the CAM plan for Emission Points AA-004 through AA-010, AA-012 through AA-015, AA-018, AA-021, AA-022, AA-023

	INDICATOR NO. 1	INDICATOR NO. 2
Indicator	Baghouse pressure drop	Opacity
Measurement Approach	Pressure drop across the baghouses is measured daily using a pressure drop gauge.	Visual emissions are measured weekly using EPA Method 22.
Monitoring Methods and Locations	Monitor baghouse differential pressure across inlet and outlet.	Observe visible emissions at outlet consistent with Method 22 and Method 9 observation position requirements.
Indicator Range	AA-004: 2-7 inches water AA-005: 2-7 inches water AA-006: 2-7 inches water AA-007: 2-10 inches water AA-008: 2-7 inches water AA-009: 2-7 inches water AA-010: 2-7 inches water AA-012: 2-7 inches water AA-013: 2-7 inches water AA-014: 2-7 inches water AA-015: 2-7 inches water AA-018: 2-7 inches water AA-021: 3-8 inches water AA-022: 2-7 inches water AA-023: 2-7 inches water	Visible emissions < 7%
Data Collection Frequency	Measure pressure drop on a daily basis.	Measure visible emissions on a weekly basis.
Averaging Period	All baghouse pressure drop readings will be assumed to be representative of the preceding 24-hour period.	Averaging per EPA Method 9
Recordkeeping	Pressure drop records and copies of all inspections and calibrations will be kept at the facility for a period of five (5) years.	Copies of visible emissions observations will be kept at the facility for a period of five (5) years.
QA/QC	Monthly maintenance inspections and annual pressure drop gauge calibration.	Opacity observer trained and certified per EPA Method 9 and maintain monthly inspections.

5.B.12 The table below is the CAM plan for Emission Point AA-011:

	INDICATOR NO. 1	INDICATOR NO. 2
Indicator	Pressure drop	Scrubber water flow rate
Measurement Approach	Pressure drop is measured using a differential pressure gauge	Scrubber water flow rate is measured using a flow meter.
Monitoring Methods and Location	Continuously monitor the pressure drop across the scrubber	Scrubber water flow rate will be continuously monitored (per NSPS).
Indicator Range	Pressure drop across scrubber is greater than 8.0 inches of water Pressure drop compliance values to be re-assessed and adjusted if necessary at each subsequent permit required stack test for PM for this source.	+/- 20% of observed water flow rate during most recent passing test (per NSPS).
Data Collection Frequency	Pressure drop measured continuously	Measure water flow rate to the scrubber on a continuous basis.
Averaging Period	2 hour average for pressure drop (per NSPS)	2-hour average for water flow rate to the scrubber (per NSPS).
Recordkeeping	Records of pressure drop will be kept at the facility for a period of five (5) years.	Water flow rate records and copies of all inspections and calibrations will be kept at the facility for a period of five (5) years.
QA/QC	Monthly maintenance inspections Annual pressure drop gauge calibration	Monthly maintenance inspections and annual flow meter calibration.

5.B.13 The table below is the CAM plan for Emission Points AA-016 and AA-017:

	INDICATOR NO. 1	INDICATOR NO. 2
Indicator	Pressure drop	Scrubber water flow rate
Measurement Approach	Pressure drop is measured using a differential pressure gauge	Scrubber water flow rate is measured using a flow meter.
Monitoring Methods and Location	Continuously monitor the pressure drop across the scrubber	Scrubber water flow rate will be continuously monitored (per NSPS).
Indicator Range	Pressure drop across scrubber is greater than 2.43 inches of water Pressure drop compliance values to be re-assessed and adjusted if necessary at each subsequent permit required stack test for PM for this source.	+/- 20% of observed water flow rate during most recent passing test (per NSPS).
Data Collection Frequency	Pressure drop measured continuously	Measure water flow rate to the scrubber on a continuous basis.
Averaging Period	2 hour average for pressure drop (per NSPS)	2-hour average for water flow rate to the scrubber (per NSPS).
Recordkeeping	Records of pressure drop will be kept at the facility for a period of five (5) years.	Water flow rate records and copies of all inspections and calibrations will be kept at the facility for a period of five (5) years.
QA/QC	Monthly maintenance inspections Annual pressure drop gauge calibration	Monthly maintenance inspections and annual flow meter calibration.

C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Reporting Requirement
AA-001 AA-003 AA-011 AA-016 AA-017	11 Miss. Admin. Code Pt. 2, R. 2.2(B)(10).	5.C.1	Sulfur	When fuel oil is fired, submit fuel reports quarterly
AA-004 through AA-010 AA-012 AA-013	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.C.2		Stack testing reporting requirements
Entire Facility	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.C.3		Semi-annual reporting requirements

5.C.1 If virgin or on-spec fuel oil is fired, the permittee shall resume submitting quarterly (calendar) fuel usage reports; otherwise the facility is exempt from the reporting requirements of this condition. For each quarter, the report shall provide the maximum amount of each fuel used in any day, the amount of fuel used for each consecutive 365-day period, and the maximum sulfur content of any shipment received. When no shipment is received/combusted, the report shall indicate such. Each report is due within 30 days of the close of the calendar quarter. The permittee shall include in the quarterly reports any shipments of used oil received which did not meet the specifications and how these shipments were handled.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2(B)(10).)

5.C.2 For Emission Points AA-004 through AA-010, AA-012, and AA-013, the permittee shall submit the following notifications, information, and reports for each required performance test on or before the dates specified in Section 5.B:

- (a) A notification of the scheduled test date(s) should be submitted ten (10) days prior to the scheduled date(s) so an observer may be afforded the opportunity to witness the test(s).
- (b) For all required testing, the permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to the MDEQ. If the test protocol contains variances from

the EPA Reference Methods, the permittee shall submit a written test protocol at least ninety (90) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to the DEQ. After the first successful submittal of a written test protocol, the permittee may request that the submittal of a testing protocol be waived for subsequent testing by certifying in writing at least thirty (30) days prior to the subsequent testing that all conditions for testing remain unchanged such that the original protocol can and will be followed.

- (c) The performance test results must be submitted to MDEQ within sixty (60) days following completion of the performance test.
- (d) The permittee shall submit a summary of the results of any periodic and/or parametric monitoring required to be monitored and recorded during performance testing.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

5.C.3 The permittee must submit each semi-annual compliance report in accordance with Condition 5.A.4 of this permit. At a minimum the report should contain the following:

- (a) Company name and address
- (b) Statement by the responsible official with that official's name, title, and signature certifying the truth, accuracy, and completeness of the content of the report.
- (c) Date of the report and beginning and ending dates of the reporting period.
- (d) A description of control device maintenance performed while the control device was offline and one or more of the process units controlled by the control device was operating, including the information specified in (1) and (2) below.
 - (1) The date and time when the control device was shut down and restarted.
 - (2) Identification of the process units that were operating and the number of hours that each process unit operated while the control device was offline.
- (e) Results from performance tests conducted during the semiannual reporting period.
- (f) The permittee shall certify that no virgin or on-spec used fuel oil is fired.
- (g) The reports shall be submitted according to Condition 5.A.4. All instances of deviations from permit requirements must be clearly identified and all required

reports must be certified by a responsible official consistent with 11 Miss. Admin. Code Pt. 2, R. 6.2.E.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

6.1 None permitted.

SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at <http://www.ecfr.gov/> under Title 40, or DEQ shall provide a copy upon request from the permittee.

- 7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A – Production and Consumption Controls.
- 7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B – Servicing of Motor Vehicle Air Conditioners.
- 7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E – The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:
 - (a) All containers in which a class I or class II substance is stored or transported;
 - (b) All products containing a class I substance; and
 - (c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.
- 7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F – Recycling and Emissions Reduction:
 - (a) Servicing, maintaining, or repairing appliances;
 - (b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or

- (c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G – Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.

7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H – Halon Emissions Reduction:

- (a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;
- (b) Any person disposing of halons;
- (c) Manufacturers of halon blends; or
- (d) Organizations that employ technicians who service halon-containing equipment.

APPENDIX A

List of Abbreviations Used In this Permit

11 Miss. Admin. Code Pt. 2, Ch. 1.	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
11 Miss. Admin. Code Pt. 2, Ch. 2.	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
11 Miss. Admin. Code Pt. 2, Ch. 3.	Regulations for the Prevention of Air Pollution Emergency Episodes
11 Miss. Admin. Code Pt. 2, Ch. 4.	Ambient Air Quality Standards
11 Miss. Admin. Code Pt. 2, Ch. 5.	Regulations for the Prevention of Significant Deterioration of Air Quality
11 Miss. Admin. Code Pt. 2, Ch. 6.	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
11 Miss. Admin. Code Pt. 2, Ch. 7.	Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act
BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
grams/dscm	Grams per Dry Standard Cubic Meter
HP	Horsepower
HAP	Hazardous Air Pollutant
lbs/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards for Hazardous Air Pollutants, 40 CFR 61 or National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 CFR 63
NMVOC	Non-Methane Volatile Organic Compounds
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M	Operation and Maintenance
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 µm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOC	Volatile Organic Compound