

**STATE OF MISSISSIPPI
AND FEDERALLY ENFORCEABLE
AIR POLLUTION CONTROL
PERMIT**

**TO OPERATE AIR EMISSIONS EQUIPMENT AT A
SYNTHETIC MINOR SOURCE**

THIS CERTIFIES THAT

**Imerys Minerals USA, Inc.
Bentonite Mine Road
Aberdeen, Monroe County, Mississippi**

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 the Federal Clean Air Act and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), the regulations and standards adopted and promulgated thereunder, and the State Implementation Plan for operating permits for synthetic minor sources.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

**AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

Issued: _____

Permit No.: 1840-00010

Effective Date: As specified herein.

Expires: [No more than 5 years from the issue date.]

SECTION 1

A. GENERAL CONDITIONS

1. This permit is for air pollution control purposes only.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)
2. This permit is a Federally-approved permit to operate a synthetic minor source as described in 11 Miss. Admin. Code Pt. 2, R. 2.4.D.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.4.D.)
3. Any activities not identified in the application are not authorized by this permit.

(Ref.: Miss. Code Ann. 49-17-29 1.b)
4. The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for constructing or operating without a valid permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)
5. The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(7).)
6. 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 unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(a).)
7. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)
8. The permittee shall allow the Mississippi Department of Environmental Quality (MDEQ) Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their authorized representatives, upon the presentation of credentials:

- (a) To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit, and
- (b) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emission.

(Ref.: Miss. Code Ann. 49-17-21)

9. Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality Office of Pollution Control.

(Ref.: Miss. Code Ann. 49-17-39)

10. 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. 2.1.D(7).)

11. This permit does not authorize a modification as defined in Mississippi Administrative Code, Title 11, Part 2, Chapter 2 – “Permit Regulations for the Construction and/or Operation of Air Emission Equipment”. A modification may require a Permit to Construct and a modification of this permit.

“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 Part 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 Part 51 – 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).)

B. GENERAL OPERATIONAL CONDITIONS

- 1. 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 3 – “Regulations for the Prevention of Air Pollution Emergency Episodes” – for the level of emergency declared.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.10.)

- 2. Any diversion from or bypass of collection and control facilities is prohibited, except as provided for in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.10 – “Provisions for Upsets, Startups, and Shutdowns”.

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

- 3. Solids removed in the course of control of air emissions shall be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits.

(Ref.: Miss. Code Ann. 49-17-29 1.a(i and ii.))

- 4. Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, start-ups, and shutdowns.

- (a) Upsets

- (1) For an upset defined in 11 Miss. Admin. Code Pt. 2, R. 1.2., 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 five (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 twenty-four (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 the EPA or third party enforcement actions.
- (b) Start-ups and Shutdowns (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.)
- (1) Start-ups and shutdowns are part of normal source operation. Emission limitations apply during start-ups and shutdowns unless source specific emission limitations or work practice standards for start-ups 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 1, the Department

will consider establishing source specific emission limitations or work practice standards for start-ups and shutdowns. Source specific emission limitations or work practice standards established for start-ups 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.)

5. *Compliance Testing*: Regarding compliance testing:

- (a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations of this permit and in units of mass per time.
- (b) Compliance testing will be performed at the expense of the permittee.
- (c) Each emission sampling and analysis report shall include but not be limited to the following:
 - (1) Detailed description of testing procedures;
 - (2) Sample calculation(s);
 - (3) Results; and
 - (4) Comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B(3), (4), and (6).)

C. PERMIT RENEWAL / MODIFICATION / TRANSFER / TERMINATION

1. For renewal of this permit, the applicant shall make application not less than one-hundred eighty (180) days prior to the expiration date of the permit substantiated with current emissions data, test results or reports or other data as deemed necessary by the Mississippi Environmental Quality Permit Board.

If the applicant submits a timely and complete application pursuant to this paragraph and the Permit Board, through no fault of the applicant, fails to act on the application on or before the expiration date of the existing permit, the applicant shall continue to operate the stationary source under the terms and conditions of the expired permit, which shall remain in effect until final action on the application is taken by the Permit Board. Permit expiration terminates the source's ability to operate unless a timely and complete renewal application has been submitted.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.8.)

2. The permittee shall furnish to the MDEQ within a reasonable time any information the MDEQ 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 MDEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to the MDEQ 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. 2.2.B(15)(d).)

3. The permit and/or any part thereof may be modified, revoked, reopened and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. 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. 2.2.B(15)(b).)

4. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including (but not limited to):
 - (a) Persistent violation of any terms or conditions of this permit.
 - (b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - (c) A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

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

5. This permit may only be transferred upon approval of the Mississippi Environmental Quality Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.16.B.)

SECTION 2 EMISSION POINT DESCRIPTION

The permittee is authorized to operate air emissions equipment, as described in the following table:

Emission Point	Description
AA-000	Facility-Wide (Imerys Minerals USA, Inc.)
AA-001	60 Tons / Hour (TPH) Concurrent Rotary Dryer [equipped with 45 MMBTU / hour dual fuel-fired (natural gas and fuel oil) burner; includes a 75-ton roller mill surge bin (BN-02) and roller mill feed elevator (BE-02); overall emissions are routed to a common baghouse (DC-01); constructed before 1986]
AA-002	26 TPH Roller Mill (RL-01) [equipped with a baghouse (DC-02); constructed before August 1983]
AA-003	20 TPH Roller Mill (RL-02) [equipped with a baghouse (DC-03); constructed before August 1983]
AA-004	Apron Feeder Operations [includes an apron feeder burner (FE-01), an apron feeder heater, a dryer surge bin (BN-01), and a crude clay belt conveyor (BC-03); constructed before August 1983]
AA-005	Product Storage Silo (SI-01) [equipped with a baghouse (DC-05); constructed before August 1983]
AA-006	Packing / Rail Load-Out Bucket Elevator (BE-04) [includes four (4) product storage bins (SI-01 through SI-04); overall emissions are routed to a common baghouse (DC-06); constructed before August 1983]
AA-007	Mill Feed Bucket Elevator (BE-03) [includes four (4) product storage bins (SI-05 through SI-08); emissions are routed to a common baghouse (DC-07); constructed before August 1983]
AA-008	100 TPH Truck Loading Process [includes a 100-ton storage silo (SI-09); emissions are routed to a baghouse (DC-08); constructed before August 1983]
AA-009	100 TPH Packing Machine (BA-01) [includes a 100-ton packer surge bin (BN-03); overall emissions are routed to a common baghouse (DC-09); constructed before August 1983]
AA-009a	12 TPH Bulk Bag Filling Station (BA-02) [includes a reclaim hopper (HO-01); modified after April 2008]
AA-010	100 TPH Railcar Loading Process [emissions are routed to a baghouse (DC-10); constructed before August 1983]
AA-011	C&D Conveyor (BC-04) [emissions are routed to the baghouse attributed to Emission Point AA-001 (DC-01); modified after April 2008]
AA-012	125 TPH Shredder Feed Belt Conveyor (BC-01) [modified after April 2008]
AA-013	125 TPH Stacker Belt Conveyor (BC-02) [modified after April 2008]
AA-014	100 TPH Clay Shredder (CR-01) [modified after April 2008]

Emission Point	Description
AA-018	500 Gallon Diesel Storage Tank (TK-04)
AA-019	Brazing and Welding Equipment

SECTION 3
EMISSION LIMITATIONS AND STANDARDS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limitation / Standard
AA-000 (Facility-Wide)	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.1	Opacity (Smoke)	≤ 40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2	Opacity	
	11 Miss. Admin. Code Pt. 2, R. 1.3.C.	3.3	Air Pollutants	General Nuisance Clause
	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.4	PM (filterable)	$E = 4.1 \cdot (p^{0.67})$
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). (PSD Avoidance Limit)	3.5	PM (filterable)	245.0 tpy (Rolling 12-Month Total)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). (Title V Avoidance Limit)	3.6	PM ₁₀ (filterable only)	95.0 tpy (Rolling 12-Month Total)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.7	PM / PM ₁₀ (filterable only)	Operational Requirements (Baghouses)
AA-001	11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(b).	3.8	PM	$E = 0.8808 \cdot (T^{-0.1667})$
AA-009a AA-011 AA-012 AA-013 AA-014	40 CFR Part 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants	3.9	PM Opacity	General Applicability
	40 CFR 60.670(a)(1), (e), and (f); Subpart OOO			
	40 CFR 60.672(b), (d), and Table 3; Subpart OOO	3.10	Opacity (fugitive emissions)	≤ 7% (From Baghouse and Building Openings)
AA-011	40 CFR 60.672(b) and Table 2; Subpart OOO	3.11	PM	0.014 grains / dscf (or 0.032 grams / dscm)

3.1 For Emission Point AA-000 (Facility-Wide), except as otherwise specified or limited herein, the permittee shall not cause or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process that exceeds forty (40) percent opacity subject to the exceptions provided below:

- (a) Start-up operations may produce emissions that exceed 40% opacity for up to fifteen (15) minutes per start-up in any one (1) hour and not to exceed three (3) start-ups per stack in any twenty-four (24) hour period.

- (b) Emissions resulting from soot blowing operations (i.e. ash removal) shall be permitted provided such emissions do not exceed sixty (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 (1) hour.

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

- 3.2 For Emission Point AA-000 (Facility-Wide), except as otherwise specified or limited herein, the permittee shall not cause or allow the discharge into the ambient air from any point source 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 Condition 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.)

- 3.3 For Emission Point AA-000 (Facility-Wide), the permittee shall not cause or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.

- (a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner, which allows or may allow unnecessary amounts of particulate matter to become airborne.

- (b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gas-borne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

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

- 3.4 For Emission Point AA-000 (Facility-Wide), except as otherwise specified herein, the permittee shall not cause or allow the emission of particulate matter (PM) in total quantities in any one (1) hour from any manufacturing process (which includes any associated stacks, vents, outlets, or combination thereof) to exceed the amount determined by the relationship:

$$E = 4.1 \cdot (p^{0.67})$$

Where “**E**” is the emission rate in pounds per hour and “**p**” is the process weight input 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. 1.3.F.(1).)

- 3.5 For Emission Point AA-000 (Facility-Wide), the permittee shall limit the total emission of filterable particulate matter (PM) to no more than 245.0 tons per year (tpy) based on a rolling 12-month total.

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

- 3.6 For Emission Point AA-000 (Facility-Wide), the permittee shall limit the total emission of filterable PM less than 10 microns (μm) in diameter (PM_{10} ; filterable only) to no more than 95.0 tpy based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10). – Title V Avoidance Limit)

- 3.7 For Emission Point AA-000 (Facility-Wide), the permittee shall operate each baghouse at all times the corresponding process equipment is in active operation. During any period in which a baghouse is non-operational and/or fails, the permittee shall take actions as expeditiously as possible to bring the baghouse back to normal operation or cease operations from the process equipment that is directly associated with the corresponding baghouse.

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

- 3.8 For Emission Point AA-001, the maximum permissible emission of ash and/or particulate matter (PM) from a fossil fuel burning installation equal to or greater than ten (10) million BTU (MMBTU) per hour heat input but less than 10,000 MMBTU per hour heat input shall not exceed an emission rate as determined by the following relationship:

$$E = 0.8808 \cdot (I^{0.1667})$$

where “E” is the emission rate in pounds per MMBTU per hour heat input and “I” is the heat input in MMBTU per hour.

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

- 3.9 For Emission Points AA-009a, AA-011, AA-012, AA-013, and AA-014, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants and 40 CFR Part 60, Subpart A – General Provisions (as required in Table 1 of Subpart OOO).

(Ref.: 40 CFR 60.670(a)(1), (e), and (f); Subpart OOO)

- 3.10 For Emission Points AA-009a, AA-011, AA-012, AA-013, and AA-014, the permittee shall not cause or allow to be discharged into the atmosphere fugitive gases from a baghouse and/or an opening from a building that either contains an applicable operation or any transfer point on a conveyor belt that exceeds seven (7) percent opacity.

For the purpose of this permit, truck dumping into any screening operation, feed hopper, or crusher is exempt from the noted opacity standard.

(Ref.: 40 CFR 60.672(b), (d), and Table 3; Subpart OOO)

- 3.11 For Emission Point AA-011, the permittee shall limit the direct emission of PM from the baghouse to no more than 0.014 grains per dry standard cubic foot (gr./dscf) [or 0.032 grams per dry standard cubic meter (g./dscm)].

(Ref.: 40 CFR 60.672(b) and Table 2; Subpart OOO)

SECTION 4
WORK PRACTICE STANDARDS

THIS SECTION WAS INTENTIONALLY LEFT BLANK BECAUSE NO WORK PRACTICE STANDARDS APPLY TO THIS PERMIT ACTION.

SECTION 5
MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Monitoring / Recordkeeping Requirement
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.1	Recordkeeping	Maintain Records for a Minimum of Five (5) Years
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.2	PM / PM ₁₀ (filterable only)	Calculate and Monitor Emissions (Monthly and Rolling 12-Month Totals)
		5.3		Perform a Monthly Inspection on Each Baghouse Monitor Periods of Baghouse Non-Operation (Monthly)
		5.4		Monitor the Differential Pressure Drop for Each Baghouse (Weekly)
		5.5		Bentonite Clay Processed Monitor the Overall Throughput (Monthly and Rolling 12-Month Total)
AA-002 through AA-010 AA-012 AA-013 AA-014	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.6	Opacity	Perform a Quarterly Visible Emission Observation
AA-001	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.7	PM / PM ₁₀ (filterable only)	Conduct Routine Performance Testing
AA-011	40 CFR 60.674(c); Subpart OOO	5.8	Opacity	Perform a Quarterly Visible Emission Inspection

5.1 For Emission Point AA-000 (Facility-Wide), the permittee shall retain all required records, monitoring data, supporting information, and reports for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records, all original strip-chart recordings or other data from continuous monitoring instrumentation, and copies of all reports required by this permit. Copies of such records shall be submitted to the MDEQ as required by “Applicable Rules and Regulations” of this permit upon request.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.9.)

5.2 For Emission Point AA-000 (Facility-Wide), the permittee shall calculate and record the total emission of PM and PM₁₀ (filterable only) in tons both of a monthly and rolling 12-month total basis.

Unless otherwise specified herein, the permittee shall include all reference data utilized to validate the calculated emissions (e.g. operational data, applicable emission factors, engineering judgement determinations, manufacturer's guarantees, stack test results, etc.).

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

- 5.3 For Emission Point AA-000 (Facility-Wide), the permittee shall perform and record an inspection that evaluates the performance capability of each baghouse on a monthly basis. If a problem is noted during an inspection of a baghouse, the permittee shall perform the necessary maintenance to ensure operation as originally designed. Additionally, the permittee shall maintain on-site (to the extent practicable) sufficient components as is necessary to repair a baghouse.

The permittee shall maintain documentation that details the date / time each inspection is performed, any noted problem that is experienced, and any maintenance (either corrective or preventative) performed to return a baghouse to operation as originally designed. Additionally, the permittee shall monitor and record each period of time (including the date and duration) in which a baghouse is non-operational during the active operation of the corresponding process unit on a monthly basis.

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

- 5.4 For Emission Point AA-000 (Facility-Wide), the permittee shall monitor and record the differential pressure drop (in inches of water) across each baghouse on a weekly basis during active corresponding operations. If a monitored recording is outside the differential pressure drop range either outlined by the manufacturer's specifications / recommendations or determined during a performance test (as applicable), the permittee shall perform and record the necessary maintenance to return the baghouse to normal operation.

Additionally, the permittee shall maintain documentation for each baghouse that details the specified / recommended differential pressure drop range specified by the respective manufacturer.

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

- 5.5 For Emission Point AA-000 (Facility-Wide), the permittee shall monitor and record the overall throughput of bentonite clay processed in tons both on a monthly and rolling 12-month total basis.

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

- 5.6 For Emission Points AA-002 through AA-010 and AA-012 through AA-014, the permittee shall perform a visible emissions test in accordance with the following requirements once every quarter calendar period:

- (a) For each baghouse, the permittee shall conduct the visible emissions observation in accordance with EPA Test Method 22 (i.e. "Method 22") on the exhaust during

daylight hours and active operation of the corresponding process equipment. The duration of each test shall be six (6) consecutive minutes at a minimum.

If visible emissions are detected during an observation, the permittee shall then immediately perform a visible emission evaluation (VEE) in accordance with EPA Test Method 9.

- (b) For each building that encloses a grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, or truck / railcar loading station, the permittee shall conduct a visible emissions observation in accordance with Method 22 for a minimum of six (6) consecutive minutes and during daylight hours while the applicable equipment contained within a corresponding building is operating.

An observation is considered successful if no visible emissions are observed. However, if any visible emissions are observed during an observation, the permittee shall initiate corrective action within twenty-four (24) hours to prevent fugitive emissions from escaping a building or baghouse.

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

- 5.7 For Emission Point AA-001, the permittee shall evaluate the respective emission of PM and PM₁₀ (filterable only) by conducting routine performance stack testing once every five (5) years [and no later than sixty (60) months after the previously completed test] in accordance with the following requirements:

- (a) Each performance test shall be conducted in accordance with an applicable EPA-approved test method or an applicable alternative test method approved by the EPA prior to the testing event.
- (b) The permittee shall conduct a minimum of three (3) separate test runs for a performance test that shall each span a duration of one (1) hour.
- (c) The permittee shall monitor and record the hourly bentonite clay throughput rate (in tons) for each run during a performance test.
- (d) The permittee shall monitor and record the hourly usage of each fuel source combusted as well as the corresponding hourly heat input rate during a performance test.

Additionally, the permittee shall determine a differential pressure drop range across the baghouse (i.e. a minimum and maximum reading) during a performance test by continuously monitoring and recording the pressure drop during each test run.

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

- 5.8 For Emission Point AA-011, the permittee shall conduct a 30-minute visible emission inspection in accordance with EPA Test Method 22 (i.e. "Method 22") once every quarter calendar period while each baghouse is operating.

The permittee may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test simultaneously with a Method 22 test to determine what constitutes normal visible emissions from a corresponding baghouse when it is in compliance with an applicable PM concentration limitation. Upon determining the results, the revised visible emissions success level must be incorporated into the permit.

A test is considered successful if no visible emissions are observed. However, if any visible emissions are observed during an inspection, the permittee shall initiate corrective action within twenty-four (24) hours to either return a baghouse to normal operation or prevent fugitive emissions from escaping a building.

The permittee shall record each Method 22 test (including the date, time, and any corrective actions taken) in a logbook (in written or electronic format) maintained on-site that shall be made available to the MDEQ personnel upon request.

(Ref. 40 CFR 60.674(c); Subpart OOO)

SECTION 6 REPORTING REQUIREMENTS

Emission Point(s)	Applicable Requirement	Condition Number	Reporting Requirement
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.1	Report Permit Deviations Within Five (5) Working Days
		6.2	Submit a Certified Annual Monitoring Report
		6.3	All Documents Submitted to MDEQ Shall be Certified by a Responsible Official
	40 CFR 60.670(d) and 60.676; Subpart OOO	6.4	Submit a Notification on the Replacement of Process Equipment
AA-001	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11) and R. 2.6.B.(5).	6.5	Submit a Performance Testing Protocol Submit 10-Day Notification of Performance Testing Event
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.6	Submit Performance Test Results

6.1 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. The report shall be made within five (5) working days of the time the deviation began.

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

6.2 Except as otherwise specified herein, the permittee shall submit a certified annual monitoring report (AMR) postmarked no later than January 31 of each year for the preceding calendar year. If the permit was reissued or modified during the course of the preceding calendar year, the AMR shall address each version of the permit. All instances of deviations from permit requirements must be clearly identified in the report. Where no monitoring data is required to be reported and/or there are no deviations to report, the report shall contain the appropriate negative declaration.

Each AMR shall contain the following information (at a minimum):

- (a) The total emission of PM and PM₁₀ in tons both on a monthly and rolling 12-month total basis;
- (b) The total throughput of bentonite clay processed in tons both a monthly and rolling 12-month total basis;
- (c) An outline of any maintenance action(s) performed on a baghouse and any periods of time (including the date and duration) in which a baghouse was not operational / not utilized during the active operation of the corresponding process unit;

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

- 6.3 Any document required by this permit to be submitted to the MDEQ shall contain a certification signed by a responsible official stating 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. 2.2.B.(11).)

- 6.4 For Emission Point AA-000 (Facility-Wide), the permittee shall submit a written notification to the MDEQ on the following information about both any existing process unit replaced and the corresponding replacement equipment no later than fifteen (15) days after the actual replacement occurs:

- (a) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:
 - (1) The rated capacity in tons per hour of the existing facility being replaced; and
 - (2) The rated capacity in tons per hour of the replacement equipment.
- (b) For a screening operation:
 - (1) The width of the existing belt being replaced; and
 - (2) The width of the replacement conveyor belt.
- (c) For a conveyor belt:
 - (1) The width of the existing belt being replaced; and
 - (2) The width of the replacement conveyor belt.
- (d) For a storage bin:
 - (1) The rated capacity in tons of the existing storage bin being replaced; and
 - (2) The rated capacity in tons of replacement storage bins.

(Ref.: 40 CFR 60.670(d) and 60.676(a); Subpart OOO)

- 6.5 For Emission Point AA-001, the permittee shall submit a written performance test protocol for any testing required by this permit that details the procedures and test methods to be implemented during the actual testing event no later than thirty (30) days prior to the intended testing date.

The permittee shall notify the MDEQ in writing at least ten (10) days prior to the intended testing date so that a representative from the MDEQ may be afforded the opportunity to observe the stack testing.

If deemed necessary by the MDEQ, a conference may be required prior to the intended testing date to discuss the proposed test methods and procedures outlined in the performance testing protocol.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11) and R. 2.6.B.(5).)

6.6 For Emission Point AA-001, the permittee shall submit a report for any performance test required by Condition 5.7 no later than sixty (60) days after completing the actual test. In addition to the information specified in Section 1.B.5.(c) of this permit, the report shall include the following information:

- (a) The hourly bentonite clay throughput rate (in tons);
- (b) The hourly usage of each fuel source combusted as well as the corresponding hourly heat input rate; and
- (c) The differential pressure drop range (i.e. the minimum and maximum readings) established for the baghouse.

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