

**STATE OF MISSISSIPPI  
AIR POLLUTION CONTROL  
TITLE V PERMIT**

**TO OPERATE AIR EMISSIONS EQUIPMENT**

**THIS CERTIFIES THAT**

Roxul USA, Inc. d/b/a ROCKWOOL  
4594 Cayce Road  
Byhalia, Mississippi  
Marshall 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:** \_\_\_\_\_

**Effective Date:** As specified herein.

**MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD**

\_\_\_\_\_  
**AUTHORIZED SIGNATURE**  
**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Expires:**[Date not to exceed 5 yrs from issuance]

**Permit No.:** 1780-00052

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## 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	<b>Mineral Wool Insulation Manufacturing Facility</b>
AA-100	<b>Mineral Wool Line 1 (L1)</b>
AA-101	Melting Furnace firing coal, natural gas, and oxygen with secondary combustion chamber and integrated SNCR equipped with two baghouses in series. The first baghouse is considered inherent to the process, and the second baghouse is equipped with dry sorbent and semi-dry recycle sorbent injection to control sulfur dioxide and acid gases.
AA-102	Combined stack for the Spinning Chamber with pretreatment filtration and the Cooling Section (following the Curing Oven) with pretreatment filtration. Emissions from both sources are controlled by a shared wet electrostatic precipitator for control of particulate matter emissions.
AA-103	Curing Oven consisting of two (2) natural gas-fired circulation burners with exhaust controlled by a natural gas-fired main burner afterburner, then pretreatment filtration, followed by a water quench for additional control of condensable particulate matter emissions during production of specified products.
AA-105	Line De-dusting Baghouse
AA-106	Two (2) Cooling Towers
AA-107	Edge Trim Baghouse
AA-109	Fugitive Emissions from Material Handling
AA-111	Conveyor Transfer Point (No. 2) with fabric filter
AA-112	Charging Building Material Handling with fabric filter, which vents inside the building
AA-113	Charging Building Vacuum System with fabric filter
AA-114	Two (2) coal storage silos with bin vent filters
AA-115	Coal Feed Tank with bin vent filter
AA-116	Filter Fines Receiving Silo with bin vent filter
AA-118	Dry Ice Cleaning (fugitive source venting inside the Furnace/Curing building)
AA-119	Fleece Application
AA-120	Lime Storage Silo with bin vent filter
AA-300	<b>Recycle Plant (RP1)</b>
AA-304	Melting Furnace Portable Crusher (temporary source brought in from a third party as needed)
AA-305	Fugitive Emissions from Recycle Plant Material Handling

Emission Point	Description
<b>AA-500</b>	<b>Rockfon Line (RFN1)</b>
AA-501	IR Zone
AA-502	Hot Press & Cure
AA-503	De-dusting Baghouse for control of cutting, sanding, and milling operations. (Exhaust from the De-dusting Baghouse may be routed through an additional filter and back to the Rockfon Building (AA-510) to provide warm air for the building.)
AA-504	Drying Oven 1 equipped with particulate filters for PM control
AA-505	High Oven A
AA-506	Drying Oven 2 & 3 equipped with particulate filters for PM control
AA-507	Cooling Zone
AA-509	Spray Paint Cabin equipped with particulate filters for control of overspray (PM)
AA-510	Rockfon Building Exhaust
<b>AA-600</b>	<b>Other Facility-Wide Operations and Activities</b>
AA-600a	3.0 MMBTUH natural gas-fired boiler equipped with a low-NOx burner
AA-600b	3.0 MMBTUH natural gas-fired boiler equipped with a low-NOx burner
AA-600c	157 horsepower diesel-fired emergency fire pump engine with dedicated 180-gallon diesel fuel tank
AA-600e	Welding shop equipped with a vent filter to serve Mineral Wool Line 1.
AA-600h	Rockfon Building 700 Natural Gas-fired Sources
AA-600i	Rockfon Miscellaneous Natural Gas-fired Sources
AA-600j	Rockfon Maintenance Welding Shop
AA-602	Facility-Wide Storage Tanks
AA-603	Facility-Wide Fugitive Emissions from Roadways

### 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.)

3.A.3 For the entire facility, the permittee shall not cause, permit, 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 gasborne 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.)

**B. Emission Point Specific Emission Limitations & Standards**

Emission Point(s)	Applicable Requirement <sup>1</sup>	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-000 (Facility-Wide)	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012 (PSD BACT Limit)	3.B.1	Opacity	≤ 20%, unless otherwise limited herein
AA-100, AA-500	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.B.2	PM (filterable)	$E = 4.1 * p^{0.67}$
AA-101, AA-102, AA-103, AA-118	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012 and modified DATE (PSD BACT Limit)	3.B.4	CO <sub>2</sub> e	158,060 tpy (combined limit) and good operation and maintenance to maintain efficiency
AA-101, AA-102, AA-103	40 CFR Part 63, Subpart DDD (NESHAP for Mineral Wool Production) 40 CFR 63.1177, 63.1194, and Table 1 of Subpart DDD	3.B.5	HAP	Applicability
AA-101	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014 and DATE (PSD BACT Limits)	3.B.6	PM <sub>10</sub> (filterable and condensable)	1.08 lb/ton of melt
			PM <sub>2.5</sub> (filterable and condensable)	0.39 lb/ton of melt
			SO <sub>2</sub>	78.77 lb/hr (30-day rolling average)
			H <sub>2</sub> SO <sub>4</sub>	0.12 lb/ton of melt
			CO	13.29 lb/hr (30-day rolling average)
			NO <sub>x</sub>	32.75 lb/hr (30-day rolling average)
AA-101	40 CFR 63.1178(a) and Table 2, Subpart DDD	3.B.7	COS	3.2 lb/ton of melt
			PM (filterable)	0.10 lb/ton of melt
			HF	0.015 lb/ton melt
			HCl	0.012 lb/ton melt
	40 CFR 63.1178(b)(3)(ii), Subpart DDD	3.B.8	% Excess O <sub>2</sub>	Maintain minimum % excess oxygen
AA-101	40 CFR Part 64 (Compliance Assurance Monitoring) 40 CFR 64.2(a)	3.B.54	SO <sub>2</sub> , CO, NO <sub>x</sub> , PM <sub>10</sub> , PM <sub>2.5</sub>	CAM Applicability

<sup>1</sup> The PSD Construction Permit issued August 22, 2012 was subsequently modified February 25, 2014; February 1, 2017; and DATE. If a limit associated with the given Emission Point was revised during a modification, the date it was revised is reflected in the applicable requirement.



Emission Point(s)	Applicable Requirement <sup>1</sup>	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-101	11 Miss. Admin. Code Pt. 2, R. 1.4.B(1).	3.B.3	SO <sub>2</sub>	500 ppmv (30-day rolling average)
AA-102	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014 and DATE (PSD BACT Limits)	3.B.9	PM/PM <sub>10</sub> /PM <sub>2.5</sub> (filterable)	Pretreatment filtration on Spinning Chamber and Cooling Section
AA-102	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014 (PSD Air Quality Limit)	3.B.10	PM <sub>10</sub> (filterable and condensable)	13.21 lb/hr
			PM <sub>2.5</sub> (filterable and condensable)	7.29 lb/hr
AA-102, AA-105	40 CFR Part 64 – Compliance Assurance Monitoring 40 CFR 64.2(a)	3.B.54	PM <sub>10</sub> , PM <sub>2.5</sub>	CAM Applicability
AA-103	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012 and modified on DATE (PSD BACT Limits)	3.B.11	PM/PM <sub>10</sub> /PM <sub>2.5</sub> (filterable)	Pretreatment filtration
			PM <sub>10</sub> (filterable and condensable)	6.25 lb/hr
			PM <sub>2.5</sub> (filterable and condensable)	5.18 lb/hr
			PM <sub>10</sub> /PM <sub>2.5</sub> (condensable)	Use water quench system when LOI <sub>PUF</sub> setting is > 3.5%
			NO <sub>x</sub>	12.13 lb/hr
				0.078 lb/MMBTU for circulation burners and afterburner when utilizing Natural Gas only
			SO <sub>2</sub>	Natural gas only
			H <sub>2</sub> SO <sub>4</sub>	
			CO	Use of Afterburner
VOC				

Emission Point(s)	Applicable Requirement <sup>1</sup>	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-102*, AA-103  <i>*Spinning Chamber only</i>	40 CFR 63.1179(a) and Table 2, Subpart DDD	3.B.12	Formaldehyde	2.4 lb/ton melt
			Methanol	0.92 lb/ton melt
			Phenol	0.71 lb/ton melt
	40 CFR 63.1179(b)(1), Subpart DDD	3.B.13	Formaldehyde	Maximum free-formaldehyde content of each resin lot and binder formulation
40 CFR 63.1179(b)(2), Subpart DDD		Operating Temperature	Maintain minimum afterburner temperature	
AA-105, AA-107	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012  (PSD BACT Limits)	3.B.14	PM/PM <sub>10</sub> (filterable)	0.0044 gr/dscf
			PM <sub>2.5</sub> (filterable)	0.0022 gr/dscf
AA-106	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012  (PSD BACT Limits)	3.B.15	PM/PM <sub>10</sub> /PM <sub>2.5</sub> (filterable)	High efficiency Mist Eliminators with ≤ 0.005% drift loss
AA-109	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012  (PSD BACT Limit)	3.B.16	PM, PM <sub>10</sub> , PM <sub>2.5</sub> (filterable)	Partial enclosures and good housekeeping practices
AA-111, AA-112, AA-116	40 CFR Part 60, Subpart OOO  (NSPS for Nonmetallic Mineral Processing Plants)  40 CFR 60.670(a), (e), (f) and Table 1, Subpart OOO	3.B.20	PM (filterable) and Opacity	Applicability
AA-111	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014  (PSD BACT Limits)	3.B.17	PM/PM <sub>10</sub> (filterable)	0.02 tpy
			PM <sub>2.5</sub> (filterable)	0.01 tpy
	40 CFR 60.672(a) and Table 2, Subpart OOO	3.B.21	PM (filterable)	0.014 gr/dscf
AA-112	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014 and DATE  (PSD BACT Limits)	3.B.18	PM/PM <sub>10</sub> (filterable)	0.31 tpy
			PM <sub>2.5</sub> (filterable)	0.16 tpy
AA-112, AA-116	40 CFR 60.672(e)(1), (f), Subpart OOO	3.B.22	Opacity	≤ 7%

Emission Point(s)	Applicable Requirement <sup>1</sup>	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-113	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014	3.B.19	PM/PM <sub>10</sub> (filterable)	1.24 tpy
			PM <sub>2.5</sub> (filterable)	0.62 tpy
AA-114, AA-115	(PSD BACT Limits)	3.B.23	PM/PM <sub>10</sub> (filterable)	0.39 tpy
			PM <sub>2.5</sub> (filterable)	0.19 tpy
AA-116	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014  (PSD BACT Limits)	3.B.24	PM/PM <sub>10</sub> (filterable)	0.24 tpy
			PM <sub>2.5</sub> (filterable)	0.12 tpy
AA-103, AA-119	40 CFR Part 63, Subpart JJJJ (NESHAP for Paper and Other Web Coating)  40 CFR 63.3290, 63.3300, 63.3340(d), and Table 2 Subpart JJJJ	3.B.25	Organic HAP	Applicability
	40 CFR 63.3320(b)(2) and (b)(3) and 63.3330, Subpart JJJJ	3.B.26		1.6 percent of mass of coating materials for each month or 8 percent of the coating solids applied each month
AA-120	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 1, 2017  (PSD BACT Limits)	3.B.27	PM/PM <sub>10</sub> (filterable)	0.04 lb/hr (24-hr average)
			PM <sub>2.5</sub> (filterable)	0.02 lb/hr (24-hr average)
AA-304	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012  (PSD BACT Limits)	3.B.28	PM, PM <sub>10</sub> , PM <sub>2.5</sub> (filterable)	12 hours/day, not to exceed 360 hr/yr (calendar year basis)
AA-305		3.B.16	PM, PM <sub>10</sub> , PM <sub>2.5</sub> (filterable)	Use of partial enclosures and good housekeeping practices
AA-500	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014 and February 1, 2017  (PSD BACT Limit)	3.B.29	CO <sub>2e</sub>	6,298.41 tpy

Emission Point(s)	Applicable Requirement <sup>1</sup>	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-501, AA-502	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014; February 1, 2017; and DATE  (PSD BACT Limits)	3.B.30	PM <sub>10</sub> (filterable and condensable)	0.02 lb/hr (24-hr average)
			PM <sub>2.5</sub> (filterable and condensable)	0.01 lb/hr (24-hr average)
		3.B.31	VOC	53 g of VOC per kg glue, not to exceed and 7.48 tpy (rolling 12 month total)
AA-503	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014 and February 1, 2017  (PSD BACT Limits)	3.B.32	PM/PM <sub>10</sub> (filterable)	0.34 lb/hr (24-hr average)
			PM <sub>2.5</sub> (filterable)	0.17 lb/hr (24-hr average)
AA-503, AA-509	40 CFR 64.2(a), Compliance Assurance Monitoring	3.B.54	PM <sub>10</sub> , PM <sub>2.5</sub>	CAM Applicability
AA-504	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014; February 1, 2017; and DATE  (PSD BACT Limits)	3.B.33	PM <sub>10</sub> (filterable and condensable)	0.08 lb/hr (24-hr average)
			PM <sub>2.5</sub> (filterable and condensable)	0.06 lb/hr (24-hr average)
AA-505	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014; February 1, 2017; and DATE  (PSD BACT Limits)	3.B.34	PM <sub>10</sub> (filterable and condensable)	0.12 lb/hr (24-hr average)
			PM <sub>2.5</sub> (filterable and condensable)	0.09 lb/hr (24-hr average)
AA-506	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014; February 1, 2017; and DATE  (PSD BACT Limits)	3.B.35	PM <sub>10</sub> (filterable and condensable)	0.13 lb/hr (24-hr average)
			PM <sub>2.5</sub> (filterable and condensable)	0.09 lb/hr (24-hr average)
AA-504, AA-505, AA-506	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014; February 1, 2017; and DATE  (PSD BACT Limits)	3.B.36	SO <sub>2</sub> NO <sub>x</sub> CO	Good combustion practices and use of natural gas only

Emission Point(s)	Applicable Requirement <sup>1</sup>	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-504, AA-505, AA-506, AA-507, AA-509	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014 and February 1, 2017  (PSD BACT Limits)	3.B.37	VOC	Water-based coatings with $\leq 80$ g/L VOC content, not to exceed 30.69 tpy (rolling 12 month total)
AA-507	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014; February 1, 2017; and DATE  (PSD BACT Limits)	3.B.38	PM <sub>10</sub> (filterable and condensable)	0.19 lb/hr (24-hr average)
			PM <sub>2.5</sub> (filterable and condensable)	0.14 lb/hr (24-hr average)
AA-509	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 1, 2017  (PSD BACT Limits)	3.B.39	PM <sub>10</sub> (filterable and condensable)	0.88 lb/hr (24-hr average)
			PM <sub>2.5</sub> (filterable and condensable)	0.66 lb/hr (24-hr average)
AA-510	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 1, 2017  (PSD BACT Limit)	3.B.40	PM, PM <sub>10</sub> , PM <sub>2.5</sub> (filterable)	Good Housekeeping Practices
AA-600a, AA-600b	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014 and February 1, 2017  (PSD BACT Limits)	3.B.41	NO <sub>x</sub>	Use of low-NO <sub>x</sub> burners meeting 30 ppmvd NO <sub>x</sub> @ 3% O <sub>2</sub>
			PM/PM <sub>10</sub> /PM <sub>2.5</sub> (filterable and condensable)	Good combustion practices and use of natural gas only
			CO	
			VOC	
			SO <sub>2</sub>	
AA-600a, AA-600b	40 CFR Part 63, Subpart DDDDD (NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters)  40 CFR 63.7485, 63.7490(a)(2) and (b), and 63.7495(a), 63.7499(l), 63.7500(a)(1), 63.7565, and Table 10 of Subpart DDDDD	3.B.42	HAP	Applicability
AA-600c	40 CFR 60, Subpart III (NSPS for Stationary Compression Ignition Internal Combustion Engines)  40 CFR 60.4200(a)(2)(ii), 60.4218,	3.B.43	NMHC+NO <sub>x</sub> , PM, SO <sub>2</sub>	Applicability

Emission Point(s)	Applicable Requirement <sup>1</sup>	Condition Number(s)	Pollutant/Parameter	Limit/Standard
	Table 8, Subpart IIII			
	40 CFR 60.4205(c), 60.4206, and Table 4 to Subpart IIII	3.B.44	PM (filterable)	0.30 g/kW-hr (0.22 g/hp-hr)
			NMHC + NO <sub>x</sub>	4.0 g/kW-hr (3.0 g/hp-hr)
	40 CFR 60.4207(b), Subpart IIII	3.B.45	Fuel Requirement	Maximum diesel sulfur content of 15 ppm
				Minimum cetane index of 40, or maximum aromatic content of 35 volume percent
	40 CFR 60.4211(a) and (c), Subpart IIII	3.B.46	NMHC+NO <sub>x</sub> , PM	Certified engine requirements
	40 CFR 60.4211(f), Subpart IIII	3.B.47		Limit maintenance and readiness checks to 100 hours per year (50 hrs of which may be used for non-emergency operation that is not prohibited)
	40 CFR Part 63, Subpart ZZZZ (NESHAP for Stationary Reciprocating Internal Combustion Engines)  40 CFR 63.6585, 63.6590(a)(2)(ii), 63.6590(c)(6), Subpart ZZZZ	3.B.48	HAPs	Applicability
AA-600e, AA-600j	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014 and February 1, 2017  (PSD BACT Limits)	3.B.49	PM, PM <sub>10</sub> , PM <sub>2.5</sub> (filterable)	Use vent filter
AA-600h	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014; February 1, 2017; and DATE  (PSD BACT Limits)	3.B.50	NO <sub>x</sub>	70 ppmvd NO <sub>x</sub>
			PM/PM <sub>10</sub> /PM <sub>2.5</sub> (filterable and condensable)	Good combustion practices and natural gas only
			CO	
			VOC	
			SO <sub>2</sub>	
AA-600i	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified February 25, 2014 and February 1, 2017	3.B.51	NO <sub>x</sub>	Good combustion practices and natural gas only
			PM/PM <sub>10</sub> /PM <sub>2.5</sub> (filterable and condensable)	
			CO	

Emission Point(s)	Applicable Requirement <sup>1</sup>	Condition Number(s)	Pollutant/Parameter	Limit/Standard
	(PSD BACT Limits)		VOC	
			SO <sub>2</sub>	
AA-602	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012  (PSD BACT Limit)	3.B.52	VOC	Good operating practices
AA-603	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012  (PSD BACT Limits)	3.B.53	PM/PM <sub>10</sub> /PM <sub>2.5</sub>  (filterable)	Development of a Dust Control Plan

3.B.1 For Emission Point AA-000 (Facility-Wide), unless otherwise limited herein, the permittee shall limit opacity from each emission source to no more than 20%.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012 – PSD BACT Limit)

3.B.2 For Emission Points AA-100 (Mineral Wool Line 1) and AA-500 (Rockfon Line), the permittee shall not 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. 1.3.F(1).)

3.B.3 For Emission Point AA-101, 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 500 ppm (volume), as determined on a 30-day rolling average.

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

3.B.4 For Emission Points AA-101, AA-102, AA-103, and AA-118, the permittee shall limit emissions of Carbon Dioxide equivalent (CO<sub>2e</sub>) to no more than 158,060 tons per year combined, as determined for each consecutive 12-month period on a rolling basis, and shall implement good operation and maintenance to maintain efficiency.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012 and modified on DATE – PSD BACT Limit)

3.B.5 For Emission Points AA-101, AA-102 (*Spinning Chamber only*), and AA-103, the permittee is subject to and shall comply with the applicable requirements for new sources in 40 CFR 63, Subpart DDD – National Emission Standards for Hazardous Air Pollutants

(NESHAP) for Mineral Wool Production, and the applicable requirements of the General Provisions in Subpart A, as specified in Table 1 to Subpart DDD.

(Ref.: 40 CFR 63.1177, 63.1194, and Table 1 of Subpart DDD)

3.B.6 For Emission Point AA-101, the permittee shall limit emissions from each emission point as noted in the following table and shall only combust natural gas in the preheat burner.

Pollutant	Emission Limit <sup>1,2</sup>
PM <sub>10</sub> (filterable and condensable)	1.08 lb/ton of melt
PM <sub>2.5</sub> (filterable and condensable)	0.39 lb/ton of melt
SO <sub>2</sub>	78.77 lb/hr (30-day rolling average)
H <sub>2</sub> SO <sub>4</sub>	0.12 lb/ton of melt
CO	13.29 lb/hr (30-day rolling average)
NO <sub>x</sub>	32.75 lb/hr (30-day rolling average)

<sup>1</sup> Ton of melt shall include all raw materials, excluding code, that are charged into the furnace, heated to a molten state, and discharged to the fiber forming and collection process.

<sup>2</sup> Emission limits are considered a 3-hour average unless otherwise specified.

The permittee shall utilize a baghouse (the second baghouse in series) for control of particulate matter emissions; a baghouse (the second baghouse) with dry sorbent and semi-dry recycle sorbent injection for control of SO<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub>, HCl, and HF; a secondary combustion chamber for control of CO and VOC; selective non-catalytic reduction (SNCR) to control NO<sub>x</sub> generated from the process; and natural gas and good combustion practices to control NO<sub>x</sub> from the preheat burners.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 and DATE – PSD BACT Limits)

3.B.7 For Emission Point AA-101, the furnace is considered an open-top cupola, which use slag as a raw material. Therefore, the permittee shall limit emissions in accordance with the following table.

Pollutant	Emission Standard <sup>1,2</sup>
PM (filterable)	0.10 lb/ton of melt
Carbonyl sulfide (COS)	3.2 lb/ton of melt
Hydrogen fluoride (HF)	0.015 lb/ton of melt
Hydrogen chloride (HCl)	0.012 lb/ton of melt

<sup>1</sup> Ton of melt shall include all raw materials, excluding coke, that are charged into the furnace, heated to a molten state, and discharged to the fiber forming and collection process.

(Ref.: 40 CFR 63.1178(a) and Table 2 of Subpart DDD)



3.B.8 For Emission Point AA-101, the permittee shall maintain the percent excess oxygen in the cupola (furnace) at or above the level established during the performance test, based on a three-hour block average. Percent excess oxygen shall be determined using the following equation:

$$\text{Percent excess oxygen} = \left( \left( \frac{\text{Oxygen available}}{\text{Fuel demand for oxygen}} \right) - 1 \right) * 100$$

Where:

*Percent excess oxygen* = Percentage of excess oxygen present above the stoichiometric balance of 1.00, (%)

1.00 = Ratio of oxygen in a cupola combustion chamber divided by the stoichiometric quantity of oxygen required to obtain complete combustion of fuel.

*Oxygen available* = Quantity of oxygen introduced into the cupola combustion zone.

*Fuel demand for oxygen* = Required quantity of oxygen for stoichiometric combustion of the quantity of fuel present.

(Ref.: 40 CFR 63.1178(b)(3)(ii), Subpart DDD)

3.B.9 For Emission Point AA-102, the permittee shall utilize pretreatment filtration on the Spinning Chamber and Cooling Section to control particulate matter emissions.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 and DATE – PSD BACT Limits)

3.B.10 For Emission Point AA-102, the permittee shall limit emissions from each emission point as noted in the following table.

Pollutant	Emission Limit <sup>1</sup>
PM <sub>10</sub> (filterable and condensable)	13.21 lb/hr
PM <sub>2.5</sub> (filterable and condensable)	7.29 lb/hr

<sup>1</sup> Emission limits are considered a 3-hour average unless otherwise specified.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 – PSD Air Quality Limits)

3.B.11 For Emission Point AA-103, the permittee shall limit emissions from each emission point as noted in the following table.

Pollutant	Emission Limit <sup>1</sup>
PM <sub>10</sub> (filterable and condensable)	6.25 lb/hr
PM <sub>2.5</sub> (filterable and condensable)	5.18 lb/hr
NO <sub>x</sub>	12.13 lb/hr and 0.078 lb/MMBTU, when combusting only natural gas

<sup>1</sup> Emission limits are considered a 3-hour average unless otherwise specified.

The permittee shall utilize pretreatment filtration to control particulate matter emissions at all times that the Curing Oven is in operation. The permittee shall operate and maintain the water quench system to control emissions of condensable particulate matter at all times emissions when products with an LOI<sub>PUF</sub> setting above 3.5% are being produced. The permittee shall use an afterburner for control of CO and VOC emissions, combust only natural gas in the oven burners to minimize emissions of SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> emissions, and use good combustion practices to minimize emissions of NO<sub>x</sub>.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012 and modified on DATE – PSD BACT Limits)

3.B.12 For Emission Points AA-102 (*Spinning Chamber only*) and AA-103, the spinning chamber and curing oven are considered combined vertical collection/curing operations. Therefore, the permittee shall limit emissions in accordance with the following table.

Pollutant	Emission Standard <sup>1,2</sup>
Formaldehyde	2.4 lb/ton of melt
Methanol	0.92 lb/ton of melt
Phenol	0.71 lb/ton of melt

<sup>1</sup> Melt shall include all raw materials, excluding coke, that are charged into the furnace, heated to a molten state, and discharged to the fiber forming and collection process.

(Ref.: 40 CFR 63.1179(a) and Table 2 of Subpart DDD)

3.B.13 For Emission Points AA-102 (*Spinning Chamber only*) and AA-103, the permittee shall meet the following operating limits for each combined collection/curing operation:

- (a) Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges of the resin and binder used during the performance test.
- (b) Maintain the operating temperature of each incinerator (or afterburner) so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.

(Ref.: 40 CFR 63.1179(b), Subpart DDD)

- 3.B.14 For Emission Points AA-105 and AA-107, the permittee shall limit emissions from each emission point as noted in the following table.

Pollutant	Emission Limit <sup>1</sup>
PM/PM <sub>10</sub> (filterable only)	0.0044 gr/dscf
PM <sub>2.5</sub> (filterable only)	0.0022 gr/dscf

<sup>1</sup> Emission limits are considered a 3-hour average unless otherwise specified.

The permittee shall utilize a baghouse and good housekeeping practices for control of filterable particulate matter.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012 – PSD BACT Limits)

- 3.B.15 For Emission Point AA-106, the permittee shall utilize high efficiency mist eliminators designed with a drift loss of no more than 0.005% in order to control PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012 – PSD BACT Limit)

- 3.B.16 For Emission Point AA-109 and AA-305, the permittee shall utilize partial enclosures and good housekeeping practices to reduce emissions of filterable PM, PM<sub>10</sub>, and PM<sub>2.5</sub>. For Emission Point AA-109, the permittee shall construct and maintain three-sided enclosures with roofs for the outdoor main stockpiles of raw materials, excluding recycle materials.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012 – PSD BACT Limit)

- 3.B.17 For Emission Point AA-111, the permittee shall limit emissions from each emission point as noted in the following table.

Pollutant	Emission Limit <sup>1</sup>
PM/PM <sub>10</sub> (filterable only)	0.02 tpy
PM <sub>2.5</sub> (filterable only)	0.01 tpy

<sup>1</sup> Emission limits are based on a 12-month rolling total.

The permittee shall utilize a fabric filter and good housekeeping practices for control of filterable particulate matter.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 – PSD BACT Limits)

- 3.B.18 For Emission Point AA-112, the permittee shall limit emissions as noted in the following table.

<b>Pollutant</b>	<b>Emission Limit<sup>1</sup></b>
PM/PM <sub>10</sub> (filterable only)	0.31 tpy
PM <sub>2.5</sub> (filterable only)	0.16 tpy

<sup>1</sup> Emission limits are based on a 12-month rolling total.

The permittee shall utilize a fabric filter and good housekeeping practices for control of filterable particulate matter.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 and DATE – PSD BACT Limits)

- 3.B.19 For Emission Point AA-113, the permittee shall limit emissions from each emission point as noted in the following table.

<b>Pollutant</b>	<b>Emission Limit<sup>1</sup></b>
PM/PM <sub>10</sub> (filterable only)	1.24 tpy
PM <sub>2.5</sub> (filterable only)	0.62 tpy

<sup>1</sup> Emission limits are based on a 12-month rolling total.

The permittee shall utilize a fabric filter and good housekeeping practices for control of filterable particulate matter.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 – PSD BACT Limits)

- 3.B.20 For Emission Points AA-111, AA-112, and AA-116, the permittee is subject to and shall comply with 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants and the applicable requirements of Subpart A – General Provisions, except as noted in Table 1 to Subpart OOO.

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

- 3.B.21 For Emission Point AA-111, the permittee shall limit PM emissions (for each emission point) to no more than 0.014 grains/dry standard cubic foot (gr/dscf).

(Ref.: 40 CFR 60.672(a) and Table 2, Subpart OOO)

- 3.B.22 For Emission Point AA-112, the permittee shall limit opacity to 7 percent from building openings. For Emission Point AA-116, the permittee shall limit opacity from the silo bin vent filters to no more than 7 percent.

(Ref.: 40 CFR 60.672(e)(1), (f), and Table 2, Subpart OOO)

- 3.B.23 For Emission Points AA-114 and AA-115, the permittee shall limit emissions from each emission point as noted in the following table.

<b>Pollutant</b>	<b>Emission Limit<sup>1</sup></b>
PM/PM <sub>10</sub> (filterable only)	0.39 tpy
PM <sub>2.5</sub> (filterable only)	0.19 tpy

<sup>1</sup> Emission limits are based on a 12-month rolling total.

The permittee shall utilize a bin vent filter and good housekeeping practices for control of filterable particulate matter.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 – PSD BACT Limits)

- 3.B.24 For Emission Points AA-116, the permittee shall limit emissions as noted in the following table.

<b>Pollutant</b>	<b>Emission Limit<sup>1</sup></b>
PM/PM <sub>10</sub> (filterable only)	0.24 tpy
PM <sub>2.5</sub> (filterable only)	0.12 tpy

<sup>1</sup> Emission limits are based on a 12-month rolling total.

The permittee shall utilize a fabric filter and good housekeeping practices for control of filterable particulate matter.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 – PSD BACT Limits)

- 3.B.25 For Emission Points AA-103 and AA-119, the permittee is subject to and shall comply with the applicable provisions of 40 CFR 63, Subpart JJJJ – NESHAP: Paper and Other Web Coating and the applicable requirements of the General Provisions in Subpart A, as specified in Table 2 to Subpart JJJJ. The web coating lines regulated under Subpart JJJJ include the work stations and any associated curing/drying equipment between an unwind or feed station and a rewind or cutting station.

(Ref.: 40 CFR 63.3290, 63.3300, 63.3340(d), and Table 2 of Subpart JJJJ)

- 3.B.26 For Emission Points AA-103 and AA-119, the permittee shall limit organic HAP emissions to no more than 1.6 percent of the mass of coating material applied for each month or 8 percent of the coating solids applied for each month for all periods of operation, including startup, shutdown, and malfunction (SSM). (For Emission Point AA-119, before July 9, 2021, the permittee must be in compliance with the emission limit at all times except during periods of SSM. On and after July 9, 2021, for Emission Point AA-119, the permittee must be in compliance with the emission limit at all times, including periods of SSM.)

(Ref.: 40 CFR 63.3320(b)(2) and (b)(3) and 63.3330, Subpart JJJJ)

- 3.B.27 For Emission Point AA-120, the permittee shall limit emissions as noted in the following table.

<b>Pollutant</b>	<b>Emission Limit<sup>1</sup></b>
PM/PM <sub>10</sub> (filterable only)	0.04 lb/hr
PM <sub>2.5</sub> (filterable only)	0.02 lb/hr

<sup>1</sup> Emission limits are based on a 24-hr average.

The permittee shall utilize a bin vent filter and good housekeeping practices for control of filterable particulate matter.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 1, 2017 – PSD BACT Limits)

- 3.B.28 For Emission Point AA-304, the permittee shall not operate the source more than 12 hours per day and no more than 360 hours per calendar year. The permittee shall utilize good housekeeping practices in order to control filterable PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012 – PSD BACT Limits)

- 3.B.29 For Emission Point AA-500, the permittee shall limit emissions of Carbon Dioxide equivalent (CO<sub>2e</sub>) to no more than 6,298.41 tons per year, as determined for each consecutive 12-month period on a rolling basis, and shall implement good operation and maintenance to maintain energy efficiency.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 and February 1, 2017 – PSD BACT Limits)

- 3.B.30 For Emission Points AA-501 and AA-502, the permittee shall limit emissions from each emission point as noted in the following table.

<b>Pollutant</b>	<b>Emission Limit<sup>1</sup></b>
PM <sub>10</sub> (filterable and condensable)	0.02 lb/hr
PM <sub>2.5</sub> (filterable and condensable)	0.01 lb/hr

<sup>1</sup> Emission limits are based on a 24-hour average.

The permittee shall utilize good housekeeping practices for control of particulate matter.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014; February 1, 2017; and DATE – PSD BACT Limits)

- 3.B.31 For Emission Points AA-501 and AA-502, the permittee shall use glue with a VOC content of no more than 53 g/kg and shall limit VOC emissions to no more 7.48 tpy, as determined for each consecutive 12-month period on a rolling basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 and February 1, 2017 – PSD BACT Limits)

- 3.B.32 For Emission Point AA-503, the permittee shall limit emissions as noted in the following table.

Pollutant	Emission Limit <sup>1</sup>
PM/PM <sub>10</sub> (filterable only)	0.34 lb/hr
PM <sub>2.5</sub> (filterable only)	0.17 lb/hr

<sup>1</sup> Emission limits are based on a 24-hour average.

The permittee shall utilize a baghouse and good housekeeping practices for control of filterable particulate matter.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 and February 1, 2017 – PSD BACT Limits)

- 3.B.33 For Emission Point AA-504, the permittee shall limit emissions as noted in the following table.

Pollutant	Emission Limit <sup>1</sup>
PM <sub>10</sub> (filterable and condensable)	0.08 lb/hr
PM <sub>2.5</sub> (filterable and condensable)	0.06 lb/hr

<sup>1</sup> Emission limits are based on a 24-hour average.

The permittee shall use a particulate filter and good combustion practices for control of particulate matter.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014; February 1, 2017; and DATE – PSD BACT Limits)

- 3.B.34 For Emission Point AA-505, the permittee shall limit emissions as noted in the following table.

<b>Pollutant</b>	<b>Emission Limit<sup>1</sup></b>
PM <sub>10</sub> (filterable and condensable)	0.12 lb/hr
PM <sub>2.5</sub> (filterable and condensable)	0.09 lb/hr

<sup>1</sup> Emission limits are based on a 24-hour average.

The permittee shall utilize good combustion practices for control of particulate matter.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014; February 1, 2017; and DATE – PSD BACT Limits)

- 3.B.35 For Emission Point AA-506, the permittee shall limit emissions as noted in the following table.

<b>Pollutant</b>	<b>Emission Limit<sup>1</sup></b>
PM <sub>10</sub> (filterable and condensable)	0.13 lb/hr
PM <sub>2.5</sub> (filterable and condensable)	0.09 lb/hr

<sup>1</sup> Emission limits are based on a 24-hour average.

The permittee shall use a particulate filter and good combustion practices for control of particulate matter.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014; February 1, 2017; and DATE – PSD BACT Limits)

- 3.B.36 For Emission Points AA-504, AA-505, and AA-506, the permittee shall only burn natural gas and shall utilize good combustion practices to minimize SO<sub>2</sub>, NO<sub>x</sub>, and CO emissions.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014; February 1, 2017; and DATE – PSD BACT Limits)

- 3.B.37 For Emission Points AA-504, AA-505, AA-506, AA-507, and AA-509, the permittee shall use water-based coatings with no more than 80 grams per liter VOC content and shall limit VOC emissions to no more than 30.69 tpy, as determined for each consecutive 12-month period on a rolling basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 and February 1, 2017 – PSD BACT Limits)



3.B.38 For Emission Point AA-507, the permittee shall limit emissions as noted in the following table.

<b>Pollutant</b>	<b>Emission Limit<sup>1</sup></b>
PM <sub>10</sub> (filterable and condensable)	0.19 lb/hr
PM <sub>2.5</sub> (filterable and condensable)	0.14 lb/hr

<sup>1</sup> Emission limits are based on a 24-hour average.

The permittee shall utilize good housekeeping practices for control of particulate matter.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014; February 1, 2017; and DATE – PSD BACT Limits)

3.B.39 For Emission Point AA-509, the permittee shall limit emissions as noted in the following table.

<b>Pollutant</b>	<b>Emission Limit<sup>1</sup></b>
PM <sub>10</sub> (filterable and condensable)	0.88 lb/hr
PM <sub>2.5</sub> (filterable and condensable)	0.66 lb/hr

<sup>1</sup> Emission limits are based on a 24-hour average.

The permittee shall utilize a filter and good housekeeping practices for control of particulate matter.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 and February 1, 2017 – PSD BACT Limits)

3.B.40 For Emission Point AA-510, the permittee shall utilize good housekeeping practices in order to minimize filterable PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 1, 2017 – PSD BACT Limits)

- 3.B.41 For Emission Points AA-600a and AA-600b, the permittee shall install low-NO<sub>x</sub> burners with a manufacturer's guarantee of 30 ppmvd NO<sub>x</sub> @ 3% O<sub>2</sub> to minimize NO<sub>x</sub> emissions. The permittee shall only burn natural gas and shall utilize good combustion practices to minimize SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC, PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 and February 1, 2017 – PSD BACT Limits)

- 3.B.42 For Emission Points AA-600a and AA-600b, the permittee is subject to and shall comply with 40 CFR 63, Subpart DDDDD – NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, and the applicable requirements of Subpart A – General Provisions, as outlined in Table 10 of Subpart DDDDD. The permittee is permitted to burn natural gas only; therefore, these units are considered “units designed to burn gas 1 fuels” subcategory and do not have any emission limits but shall comply with the Work Practice Standards in Section 3.D of this permit.

(Ref.: 40 CFR 63.7485, 63.7490(a)(2) and (b), 63.7495(a), 63.7499(l), 63.7500(a)(1), 63.7565, and Table 10 of Subpart DDDDD)

- 3.B.43 For Emission Point AA-600c, the permittee is subject to and shall comply with 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and the applicable requirements of Subpart A – General Provisions, as noted in Table 8 to Subpart IIII.

(Ref.: 40 CFR 60.4200(a)(2)(ii), 60.4218, and Table 8 of Subpart IIII)

- 3.B.44 For Emission Point AA-600c, the permittee shall comply with the Emission Standards in Table 4 of Subpart IIII for the life of the engine and shall limit emissions of non-methane hydrocarbons (NMHC) and nitrogen oxides (NO<sub>x</sub>) combined to 4.0 g/kW-hr (3.0 g/hp-hr) and filterable particulate matter (PM) to 0.30 g/kW-hr (0.22 g/hp-hr).

(Ref.: 40 CFR 60.4205(c), 60.4206, and Table 4 of Subpart IIII)

- 3.B.45 For Emission Point AA-600c, the permittee shall utilize diesel fuel that meets the requirements of 40 CFR 1090.305 as follows:

- (a) Maximum sulfur content of 15ppm.
- (b) Minimum cetane index of 40 or maximum aromatic content of 35 volume percent.

(Ref.: 40 CFR 60.4207(b), Subpart IIII)

- 3.B.46 For Emission Point AA-600c, the permittee shall comply with the emission standards contained in Condition 3.B.44 by purchasing, installing, operating, and maintaining an engine certified to meet the emission standards. The permittee shall operate and maintain

the engine in accordance with the manufacturer's emission-related written instructions and can only change the emission-related settings that are permitted by the manufacturer.

(Ref.: 40 CFR 60.4211(a) and (c), Subpart IIII)

3.B.47 For Emission Point AA-600c, the permittee shall operate the emergency stationary ICE according to the requirements in paragraphs (a) through (c) below. In order for the engine to be considered an emergency stationary ICE, any operation other than operation described in paragraphs (a) through (c) below is prohibited. If the permittee does not operate the engine according to the requirements in paragraphs (a) through (c) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

- (a) There is no time limit on the use of emergency stationary ICE in emergency situations.
- (b) The permittee may operate the engines for maintenance checks and readiness testing for a maximum of 100 hours per calendar year provided the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or insurance company associated with the engines. The permittee may petition the DEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating the federal, state, or local standards require maintenance testing of the engines beyond 100 hours per calendar year.
- (c) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (b). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 60.4211(f), Subpart IIII)

3.B.48 For Emission Point AA-600c, the engines are considered new emergency RICE with a site rating of less than 500 hp located at a major source of HAP. As such, the permittee is subject to and shall comply with the requirements of 40 CFR 63, Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines by meeting the requirements of 40 CFR Part 60, Subpart IIII. No further requirements apply for such engines under Subpart ZZZZ.

(Ref.: 40 CFR 63.6585, 63.6590(a)(2)(ii), and 63.6590(c)(6), Subpart ZZZZ)

- 3.B.49 For Emission Points AA-600e and AA-600j, the permittee shall utilize a vent filter for controlling emissions of filterable PM, PM<sub>10</sub>, and PM<sub>2.5</sub>.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 and February 1, 2017 – PSD BACT Limits)

- 3.B.50 For Emission Point AA-600h, the permittee shall install low-NO<sub>x</sub> burners meeting a manufacturer's guarantee of 70 ppmvd NO<sub>x</sub> to minimize NO<sub>x</sub> emissions. The permittee shall only burn natural gas and shall utilize good combustion practices to minimize SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC, PM, PM<sub>10</sub>, and PM<sub>2.5</sub>, emissions.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 and February 1, 2017 – PSD BACT Limits)

- 3.B.51 For Emission Point AA-600i, the permittee shall only burn natural gas and shall utilize good combustion practices in order to minimize emissions of PM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC, and CO emissions.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012, and modified on February 25, 2014 and February 1, 2017 – PSD BACT Limits)

- 3.B.52 For Emission Point AA-602, the permittee shall use good operating practices to minimize emissions of VOC.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012 – PSD BACT Limit)

- 3.B.53 For Emission Point AA-603, the permittee shall develop and implement a dust control plan in order to minimize fugitive particulate matter emissions.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Construction Permit issued August 22, 2012 – PSD BACT Limit)

- 3.B.54 For Emission Points AA-101, AA-102, AA-105, AA-503, and AA-509, the permittee is subject to and shall comply with all applicable requirements of 40 CFR Part 64 – Compliance Assurance Monitoring (CAM).

(Ref.: 40 CFR 64.2(a); Compliance Assurance Monitoring)

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 (filterable)	0.6 lbs/MMBTU
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2	SO <sub>2</sub>	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).)

D. Work Practice Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-101, AA-102*, AA-103 <i>*Spinning chamber only</i>	40 CFR 63.1180(b), Subpart DDD	3.D.1	HAP	Operation and maintenance
	40 CFR 63.1197, Subpart DDD	3.D.2	HAP	Startup and shutdown requirements
AA-101	40 CFR 63.1178(b)(1) and (b)(2), Subpart DDD	3.D.3	HAP	Bag leak alarms
AA-103, AA-119	40 CFR 63.3340(b), Subpart JJJJ	3.D.4	Organic HAP	Operation and maintenance
AA-600a, AA-600b	40 CFR 63.7500(a)(1) and (e), 63.7515(d), 63.7540(a)(10)(i)-(vi), (12), and (13), and Table 3, Subpart DDDDD	3.D.5	HAP	Tune-ups
	40 CFR 63.7500(a)(3), Subpart DDDDD	3.D.6	HAP	Operation and maintenance
AA-602	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	3.D.7	VOC	Work practices

3.D.1 For Emission Points AA-101, AA-102 (*Spinning Chamber only*), and AA-103, the permittee must operate and maintain the affected sources, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the DEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(Ref.: 40 CFR 63.1180(b), Subpart DDD)

3.D.2 For Emission Points AA-101, AA-102 (*Spinning Chamber only*), and AA-103, the permittee shall comply with the following provisions for startups and shutdowns at all times:

- (a) The permittee must not shut down items of equipment that are utilized for compliance with 40 CFR 63, Subpart DDD during times when emissions are being, or are otherwise required to be, routed to such items of equipment.
- (b) Startup begins when fuels are ignited in the cupola (furnace). Startup ends when the cupola (furnace) produces molten material.
- (c) Shutdown begins when the cupola (furnace) has reached the end of the melting campaign and is empty. No molten material continues to flow from the cupola (furnace) during shutdown.

- (d) During periods of startups and shutdowns, the permittee must operate the cupola (furnace) according to one of the following methods and keep records demonstrating compliance.
  - (1) Emissions were controlled using air pollution control devices operated at the parameters established by the most recent performance test that showed compliance with the standard; or
  - (2) Only clean fuels were used during startup and shutdown, and the cupola (furnace) was operated during startup and shutdown with three percent oxygen over the fuel demand for oxygen.

(Ref.: 40 CFR 63.1197, Subpart DDD)

3.D.3 For Emission Point AA-101 (the second baghouse), the permittee shall meet the following operating limits for each or cupola (furnace):

- (a) Begin within one hour after the alarm on a bag leak detection system sounds, and complete in a timely manner, corrective actions as specified in the operations, maintenance, and monitoring plan required by Condition 5.B.10.
- (b) When the alarm on a bag leak detection system sounds for more than five percent of the total operating time in a six-month reporting period, develop and implement a written quality improvement plan (QIP) consistent with the compliance assurance monitoring requirements of 40 CFR 64.8(b)-(d).

(Ref.: 40 CFR 63.1178(b)(1) and (2), Subpart DDD)

3.D.4 For Emission Points AA-103 and AA-119, the permittee must always operate and maintain the source, including all air pollution control and monitoring equipment used for purposes of complying with this subpart, according to the provisions in 40 CFR 63.6(e)(1)(i). On and after July 9, 2021, the permittee must always operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the DEQ, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(Ref.: 40 CFR 63.3340(b), Subpart JJJJ)

3.D.5 For Emission Points AA-600a and AA-600b, the permittee shall complete a tune-up of each boiler every five (5) years, with the first tune-up conducted within 61 months of initial startup and subsequent tune-ups conducted within 61 month after the previous tune-up. If the unit is not operating on the required date of the tune-up, the tune-up must be conducted within 30 calendar days of startup. The tune-up must be completed in accordance with (a) through (f) below.

- (a) As applicable, inspect the burner, and clean or replace any components of the burner as necessary. (The permittee may delay the burner inspection until the next scheduled unit shutdown not to exceed 72 months from the previous burner inspection.) At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment.
- (b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- (c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. (The permittee may delay the inspection until the next scheduled unit shutdown.)
- (d) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject.
- (e) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- (f) Maintain on-site and submit, if requested by MDEQ, a report containing the following information listed in (1) and (2) below:
  - (1) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler; and
  - (2) A description of any corrective actions taken as a part of the tune-up of the boiler.

(Ref.: 40 CFR 63.7500(a)(1) and (e), 63.7515(d), 63.7540(a)(10)(i)-(vi), (12), and (13), and Table 3 of Subpart DDDDD)



- 3.D.6 For Emission Points AA-600a and AA-600b, at all times the permittee must operate and maintain the boilers, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the DEQ that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(Ref.: 40 CFR 63.7500(a)(3), Subpart DDDDD)

- 3.D.7 For Emission Point AA-602, the permittee shall ensure that handling and transfer of VOC-containing materials to and from containers, tanks, and drums is conducted in a manner that minimizes spills. All containers, tanks, and drums shall be free of cracks, holes, and other defects and remain closed unless materials are being added to or removed from them.

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

## 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. If the permit was reissued or modified during the course of the preceding calendar year, the compliance certification shall address each version of the permit or shall address the specific permit terms and conditions which were modified. 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;
  - (a) the compliance status;
  - (b) whether compliance was continuous or intermittent;
  - (c) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
  - (d) 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).)

- 4.3 A PSD Permit to Construct Air Emissions Equipment for Rockfon Line 2 and Off-line Confectioning was issued June 5, 2019, and modified on December 29, 2020, to provide an 18-month extension to begin actual construction. The PSD Permit to Construct was issued prior to issuance of this Title V permit, and contains applicable requirements for new equipment at the facility. These requirements will become effective as outlined in the construction permit. These applicable requirements will be fully incorporated into this permit using the appropriate modification procedures required in 11 Miss. Admin. Code Pt. 2, R. 6.4.E. following submittal of the application required in 11 Miss. Admin. Code Pt. 2, R. 2.5.D(5). and 11 Miss. Admin. Code Pt. 2, R. 6.2.A(1)(b).

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

## 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<sup>st</sup> and January 31<sup>st</sup> 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 6, Rule 6.2.E. For applicable periodic reporting requirements in 40 CFR Parts 60, 61, and 63, the permittee shall comply with the deadlines in this condition for reporting conducted on a semiannual, or less frequent, basis and shall submit any required quarterly reports by the end of the month following each calendar quarter (i.e., April 30<sup>th</sup>, July 31<sup>st</sup>, October 31<sup>st</sup>, and January 31<sup>st</sup>).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1)., 40 CFR 60.19(c), 61.10(g), and 63.10(a)(5))

- 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) working 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 MDEQ 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).)

- 5.A.8 Unless otherwise specified, upon permit issuance, the monitoring, testing, recordkeeping, and reporting requirements of Section 5 herein supersede the requirements of any preceding permit to construct and/or operate.

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

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
AA-101, AA-102, AA-103, AA-107, AA-111, AA-112, AA-503, AA-504, AA-506, AA-509	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.1	Visible emissions/ Opacity	Monthly 3-minute visible emissions observation followed by Method 9 evaluation if visible emissions are noted.
AA-000 (Facility-wide)	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.2	Control Devices	Record date, time, and duration any control device is inoperable while the respective emission unit is operating.
		5.B.3	Opacity	Performance testing requirements for opacity
	11 Miss. Admin. Code Pt. 2, R. 2.6.B(7).	5.B.4	Performance Testing	General performance testing requirements
AA-101, AA-102, AA-103, and AA-118 (combined), and AA-500	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.5	CO <sub>2e</sub>	Determine 12-month rolling total emissions
AA-101	40 CFR 63.1181 and 63.1184, Subpart DDD	5.B.6	PM	Bag leak detection system requirements
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.7	% Excess Oxygen	Continuously monitor inlet O <sub>2</sub> and air flow and fuel input to calculate % excess oxygen
AA-103	40 CFR 63.1183, Subpart DDD	5.B.8	Formaldehyde, phenol, methanol	Continuously monitor temperature in the afterburner and performance testing
AA-101, AA-103	40 CFR 63.1186, Subpart DDD	5.B.9	Operating Parameters	Request to change monitored parameter levels
AA-101, AA-102, AA-103	40 CFR 63.1187, Subpart DDD	5.B.10	HAP	Operations, Maintenance, and Monitoring Plan
	40 CFR 63.1188, Subpart DDD	5.B.11		Performance test requirements
	40 CFR 63.1192, Subpart DDD	5.B.12		Recordkeeping requirements
AA-101	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.13	PM <sub>10</sub> , PM <sub>2.5</sub> , H <sub>2</sub> SO <sub>4</sub> , Opacity	Performance testing required biennially, every two years from previous test
		5.B.14	CO, NO <sub>x</sub> , SO <sub>2</sub>	Install, operate, and maintain CEMS

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
AA-102, AA-103, AA-105, AA-107	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.15	PM, PM <sub>10</sub> , PM <sub>2.5</sub>	Performance testing  *See Permit Condition for specific requirements for each emission point.
AA-103	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.16	PM, PM <sub>10</sub> , PM <sub>2.5</sub>	Monthly inspection of pretreatment filtration
		5.B.17	PM <sub>10</sub> , PM <sub>2.5</sub>	Monitor and record daily, when required, the air pressure and water flow to the quench system
AA-107	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.18	Pressure drop	Monitor pressure drop across the baghouse and install warning alarm
AA-504, AA-506	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.19	PM, PM <sub>10</sub> , PM <sub>2.5</sub>	Monthly inspection of particulate filters
AA-103	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.20	NO <sub>x</sub>	Conduct annual burner inspections and tune-ups and conduct performance testing (initially and every two years thereafter)
AA-106	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.21	% Drift	Documentation of cooling tower mist eliminator design
AA-109, AA-305, AA-510, AA-603	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.22	Fugitive Dust	Develop and implement a Fugitive Dust Management Plan
AA-111, AA-116	40 CFR 60.674(c), Subpart OOO	5.B.23	Visible Emissions	Conduct quarterly 30-minute visible emissions inspections using EPA Method 22
	40 CFR 60.676(b)(1), Subpart OOO	5.B.24		Records of visible emissions inspections, including dates and corrective actions
AA-112	40 CFR 60.675(c)(1) and (3), 60.675(d), and Table 3, Subpart OOO	5.B.25	Opacity	Visible emissions evaluation

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
AA-103, AA-119	40 CFR 63.3370, Subpart JJJJ	5.B.26	Organic HAP	Monthly compliance demonstration method
	40 CFR 63.3370(a)(1)-(3), (b), (c), and (d), Subpart JJJJ	5.B.27		Monthly compliance options: <ul style="list-style-type: none"> <li>As-purchased compliant coating materials</li> <li>As-applied compliant coating materials</li> <li>Total monthly organic HAP applied</li> </ul>
	40 CFR 63.3370(a)(4) and (e), Subpart JJJJ	5.B.28		Option to develop site- or product-specific emission factor
	40 CFR 63.3410(a)(1) and (e), Subpart JJJJ	5.B.29		Monthly records
	40 CFR 63.3410(c)(3), Subpart JJJJ	5.B.30		Records required if emission limit(s) is not met
AA-304	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.31	Hours of operation	Record daily hours of operation and total for calendar year
AA-501, AA-502	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.32	VOC	Determine VOC content for each glue and 12-month rolling total VOC emissions
AA-504, AA-505, AA-506, AA-507, AA-509	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.33	VOC	Determine VOC content of each coating and 12-month rolling total VOC emissions
AA-600a, AA-600b	40 CFR 63.7555(a)(1) and 63.7560, Subpart DDDDD	5.B.34	HAP	Recordkeeping requirements
AA-600c	40 CFR 60.4209(a) and 60.4214(b), Subpart IIII	5.B.35	Hours of Operation	Install non-resettable hour meter and keep records of hours of operation
AA-103, AA-600a, AA-600b AA-600h	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.36	NO <sub>x</sub>	Maintain record of manufacturer's guarantee for burners
AA-101	40 CFR 64.3(a) and (b), 64.6(c), Compliance Assurance Monitoring	5.B.37	SO <sub>2</sub> , NO <sub>x</sub> , CO	CEMS
AA-102			PM <sub>10</sub> , PM <sub>2.5</sub>	Continuously monitor secondary voltage and secondary current and calculate daily average
AA-105			PM <sub>10</sub> , PM <sub>2.5</sub>	Daily visible emissions observations
AA-503			PM <sub>10</sub> , PM <sub>2.5</sub>	Continuously monitor differential pressure and calculate the daily average
AA-509			PM <sub>10</sub> , PM <sub>2.5</sub>	Daily inspection of filters on days the spray paint cabin operates

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
AA-101, AA-102, AA-105, AA-503, AA-509	40 CFR 64.7(b) and (c), CAM	5.B.38	CAM Requirements	Operation and maintenance requirements for monitoring system(s)
	40 CFR 64.7(d), CAM	5.B.39		Corrective Action response to an excursion/exceedance of a CAM indicator
	40 CFR 64.8, CAM	5.B.40		Upon request by DEQ, develop a Quality Improvement Plan (QIP)
	40 CFR 64.9(b), CAM	5.B.41		Recordkeeping
AA-504, AA-505, AA-506, AA-600h	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.42	Once/5 year Tune-up	Records of tune-up and inspection report

5.B.1 For Emission Points AA-101, AA-102, AA-103, AA-107, AA-111, AA-112, AA-503, AA-504, AA-506, and AA-509, the permittee shall demonstrate compliance with the facility-wide opacity limit of 20% using the following procedures:

- (a) On at least a monthly basis, determine if there are any visible emissions from each emission point by observing the emission point for a period of three (3) consecutive minutes using the procedures in Method 22. More than one emission point may be observed concurrently if they are in the line of sight of the observer.
- (b) If visible emissions are observed, conduct one 6-minute visible emissions evaluation (VEE) for opacity in accordance with Method 9 of 40 CFR Part 60, Appendix A. The VEE shall be conducted during the same day that visible emissions are observed or as soon as practicable thereafter should weather conditions prevent VEE from being conducted the same day.
- (c) The results of all monthly visible emissions observations and any subsequent VEEs shall be recorded in log form and shall include, at a minimum, the emission point, date and time (start/stop time), name of the observer, results of the 3-minute observation, results of the Method 9 VEE (if required), and any corrective actions. The Method 9 VEE form shall also be completed and made available with the relevant monthly log.
- (d) Employees conducting visible emissions observations shall be trained in Method 22 observation procedures initially (prior to conducting observations) and annually thereafter. Method 22 training may be provided internally by an employee knowledgeable of Method 22. Employees conducting VEEs must be certified Method 9 observers. Records of training and certifications shall be maintained on-site and made available for review by DEQ personnel.

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



- 5.B.2 For those emission points with control devices, the permittee shall record the date, time, and duration that any control device is inoperable while the respective emission source is operating. The permittee shall include with these records any corrective actions taken to restore the control device to proper operating conditions. Such periods of operation shall be considered deviations from the requirements of the permit, and the permittee shall notify DEQ of such in accordance with Condition 5.A.5.

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

- 5.B.3 For those emission points specifically required to conduct performance testing for PM<sub>10</sub> and/or PM<sub>2.5</sub> using EPA Reference Method 201A, the permittee may elect to use EPA Reference Method 5 to determine filterable PM in lieu of Method 201A. In such case, the permittee must assume filterable PM<sub>10</sub> and/or PM<sub>2.5</sub> are equal to the total filterable PM measured by Method 5, except as otherwise allowed in Condition 5.B.15.

For those emission points specifically required to conduct performance testing for opacity using EPA Reference Method 9, the permittee shall conduct the Method 9 visible emissions evaluation in conjunction with the Method 5 or 201A testing (if required) for a period of three (3) hours (i.e., 30 six-minute averages). If visibility or other conditions prevent the opacity observations from being performed concurrently with the performance testing, the permittee shall reschedule the opacity observations as soon after the performance testing as possible, but no later than thirty (30) days thereafter, and shall notify DEQ of the rescheduled date. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the stack test.

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

- 5.B.4 Unless otherwise specified in a specific permit condition, all performance testing required herein shall be performed when the stationary source is operating at capacity and is otherwise operating normally. In the event that a demonstration of compliance by testing is performed at less than capacity, the DEQ may modify the permit to limit capacity of the stationary source to the rate at which compliance was demonstrated if the DEQ determines the rate was not representative of the normal operation of the stationary source or compliance with applicable emission limit was not demonstrated. In the event that the stationary source is not operating or being operated normally during a demonstration of compliance by testing, the results of such testing will not be accepted by the DEQ as representative of normal operation and will be considered inadequate.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B(7).)

- 5.B.5 For Emission Points AA-100 and AA-500 (Mineral Wool Line 1 and the Rockfon Line), the permittee shall determine and maintain sufficient monthly records to document the emission rate for CO<sub>2e</sub> in tons per year as determined on a rolling basis for each consecutive 12-month period. The permittee may utilize calculation methodologies and emission factors from 40 CFR Part 98, fuel usage records, and any other data necessary to demonstrate compliance with CO<sub>2e</sub> limits in the permit herein.

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

5.B.6 For Emission Point AA-101 (the second baghouse), the permittee shall comply with the PM standards in Condition 3.B.7 by meeting the following requirements:

- (a) Install, adjust, maintain, and continuously operate a bag leak detection system for each fabric filter according to the requirements of 40 CFR 63.1184 and further described in the Operations, Maintenance, and Monitoring Plan required by Condition 5.B.10.
- (b) Do a performance test as specified in Condition 5.B.11 and show compliance with the PM emission limits while the bag leak detection system is installed, operational, and properly adjusted.
- (c) Begin corrective actions specified in the operations, maintenance, and monitoring plan required by Condition 5.B.10 within one hour after the alarm on a bag leak detection system sounds. Complete the corrective actions in a timely manner.
- (d) Develop and implement a written QIP consistent with compliance assurance monitoring requirements of 40 CFR 64.8(b) through (d) when the alarm on a bag leak detection system sounds for more than five percent of the total operating time in a six-month reporting period.

(Ref.: 40 CFR 63.1181 and 63.1184, Subpart DDD)

5.B.7 For Emission Point AA-101, the permittee shall demonstrate compliance with the COS, HF, and HCl standards in Condition 3.B.7 by meeting the following requirements:

- (a) Install, calibrate, maintain, and operate a device that continuously measures the oxygen and air flow introduced into the cupola (furnace) combustion zone.
- (b) Monitor the hourly quantity of fuel input to the cupola (furnace).
- (c) While conducting a performance test as specified in Condition 5.B.11, measure and record the quantity of oxygen, air, and fuel input and determine the three-hour average percent excess oxygen.
- (d) Maintain the percent excess oxygen so that the average excess oxygen for each three-hour block period never falls below the average established during the performance test.
- (e) Operate and maintain the furnace and related monitoring equipment as specified in the operations, maintenance, and monitoring plan required by Condition 5.B.10.

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

- 5.B.8 For Emission Point AA-103, the permittee shall demonstrate compliance with the formaldehyde, phenol, and methanol standards Condition 3.B.12 by meeting the following requirements:
- (a) Install, calibrate, maintain, and operate a device that continuously measures the operating temperature in the firebox of each thermal incinerator (afterburner).
  - (b) Conduct a performance test as specified in Condition 5.B.11 while manufacturing the product that requires a binder formulation made with the resin containing the highest free-formaldehyde content specification range. Show compliance with the formaldehyde, phenol, and methanol emissions limits while the device for measuring the operating temperature is installed, operational, and properly calibrated. Establish the average operating temperature based on the performance test as specified in 40 CFR 63.1185(a).
  - (c) During the performance test that uses the binder formulation made with the resin containing the highest free-formaldehyde content specification range, record the free-formaldehyde content specification range of the resin used, and the formulation of the binder used, including the formaldehyde content and binder specification.
  - (d) Following the performance test, monitor and record the free-formaldehyde content of each resin lot and the formulation of each batch of binder used, including the formaldehyde, phenol, and methanol content.
  - (e) Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges established during the performance test.
  - (f) Following the performance test, measure and record the average operating temperature of the incinerator as specified in 40 CFR 63.1185(b).
  - (g) Maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.
  - (h) Operate and maintain the incinerator as specified in the operations, maintenance, and monitoring plan required by Condition 5.B.10.
  - (i) With prior approval from the DEQ, the permittee may do short-term experimental production runs using resin where the free-formaldehyde content, or binder formulations where the formaldehyde content, is higher than the specification ranges of the resin and binder used during previous performance tests, or using experimental pollution prevention process modifications without first doing additional performance tests. Notification of intent to perform a short-term experimental production run must include the following information:

- (1) The purpose of the experimental run.
- (2) The affected production process.
- (3) How the resin free-formaldehyde content or binder formulation will deviate from previously approved levels or what the experimental pollution prevention process modifications are.
- (4) The duration of the experimental run.
- (5) The date and time of the experimental run.
- (6) A description of any emissions testing to be done during the experimental run.

*(Note: Only the Curing Oven is controlled by an incinerator, or afterburner. The Spinning Chamber is not controlled for purposes of meeting 40 CFR 63, Subpart DDD.)*

(Ref.: 40 CFR 63.1183, Subpart DDD)

5.B.9 For Emission Points AA-101 and AA-103, the permittee may change control device and process operating parameter levels established during performance tests and used to monitor compliance upon compliance with the following requirements:

- (a) Notify the DEQ of the desire to expand the range of a control device or process operating parameter level.
- (b) Upon approval from the DEQ, conduct additional performance tests at the proposed new control device or process operating parameter levels. Before operating at these levels, the performance test results must verify that, at the new levels, the permittee complies with the emission limits in Conditions 3.B.7 or 3.B.12, as applicable.

(Ref.: 40 CFR 63.1186, Subpart DDD)

5.B.10 For Emission Points AA-101, AA-102, and AA-103, the permittee has submitted an approved Operations, Maintenance, and Monitoring Plan meeting the requirements of 40 CFR 63.1187. The permittee shall comply with the conditions of the Plan and may modify the Plan upon approval from the DEQ.

(Ref.: 40 CFR 63.1187, Subpart DDD)

5.B.11 For Emission Points AA-101, AA-102, and AA-103, the permittee shall comply with the following performance test requirements and use the test method requirements specified in 40 CFR 63.1189:

- (a) All monitoring systems and equipment must be installed, operational, and properly calibrated before the performance tests.
- (b) Conduct a performance test, consisting of three test runs, for each cupola (furnace) and curing oven or combined collection/curing operation subject to this subpart at the maximum production rate to demonstrate compliance with each of the applicable emissions limits specified in Conditions 3.B.7 and 3.B.12.
- (c) Following the initial performance test, the permittee shall conduct a performance test to demonstrate compliance with each of the applicable emissions limits specified in Conditions 3.B.7 and 3.B.12, at least once every five (5) years.
- (d) To determine the average melt rate, measure and record the amount of raw materials, excluding coke, charged into and melted in each cupola (furnace) during each performance test run. Determine and record the average hourly melt rate for each performance test run. Determine and record the arithmetic average of the average hourly melt rates associated with the three performance test runs. The average hourly melt rate of the three performance test runs is used to determine compliance with the applicable emission limits.
- (e) Compute and record the average emissions of the three performance test runs and use the equations in 40 CFR 63.1190 of this subpart to determine compliance with the applicable emission limits.

(Ref.: 40 CFR 63.1188, Subpart DDD)

5.B.12 For Emission Points AA-101, AA-102, and AA-103, the permittee shall meet the following recordkeeping provisions:

- (a) Maintain files of all information required by 40 CFR 63.10(b), including all notifications and reports.
- (b) Maintain records of the following information also:
  - (1) Cupola (furnace) production (melt) rate (Mg/hr (tons/hr) of melt).
  - (2) All bag leak detection system alarms. Include the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.
  - (3) The free-formaldehyde content of each resin lot and the binder formulation, including formaldehyde content, of each binder batch used in the manufacture of bonded products.

- (4) Incinerator (afterburner) operating temperature and results of incinerator (afterburner) inspections. For all periods when the average temperature in any three-hour block period fell below the average temperature established during the performance test and all periods when the inspection identified incinerator components in need of repair or maintenance, include the date and time of the problem, when corrective actions were initiated, the cause of the problem, an explanation of the corrective actions taken, and when the cause of the problem was corrected.
- (c) Retain each record for at least five (5) years following the date of each occurrence, measurement, corrective action, maintenance, record, or report. The most recent two (2) years of records must be retained at the facility. The remaining three (3) years of records may be retained off site.
- (d) Records must be maintained in a form suitable and readily available for expeditious review.
- (e) Report the required information on paper or on a labeled computer disk using commonly available and compatible computer software.

(Ref.: 40 CFR 63.1192, Subpart DDD)

5.B.13 For Emission Point AA-101, the permittee shall conduct a performance test for the following pollutants within two years of the previous test (i.e., biennially). The permittee shall conduct performance testing for the following pollutants using the test methods below, or an EPA-approved alternative:

- (a) Filterable PM<sub>10</sub>/PM<sub>2.5</sub> – EPA Reference Method 201A (see Condition 5.B.3)
- (b) Condensable PM – EPA Reference Method 202
- (c) H<sub>2</sub>SO<sub>4</sub> – EPA Reference Method 8 or an approved alternative
- (d) Opacity – EPA Reference Method 9 (see Condition 5.B.3)

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

5.B.14 For Emission Point AA-101, the permittee shall install, operate, and maintain a Continuous Emissions Monitoring System (CEMS) for the emissions of CO, NO<sub>x</sub>, and SO<sub>2</sub>. The CEMS shall be installed, operated, and maintained according to the manufacturers design specifications and recommendations, which shall be incorporated in a CEMS protocol developed by the permittee and maintained on-site. The CEMS shall be used to demonstrate compliance with the 30-day rolling average emission limits for CO, NO<sub>x</sub>, and SO<sub>2</sub>, by calculating a daily (24-hour block) average emission rate in lb/hr for those hours with at least two valid data points and calculating the 30-day rolling average for those days

the emission source operated. The CEMS shall meet the applicable performance specifications of 40 Part 60, Appendix B, the applicable quality assurance procedures required in 40 CFR Part 60, Appendix F, and the requirements of 40 CFR 60.13. In lieu of the requirements of 40 CFR Part 60, Appendix F, 5.1.1, 5.1.3, and 5.1.4, the permittee may conduct either a Relative Accuracy Audit (RAA) or a Relative Accuracy Test Audit (RATA) on the CEMS at least once every three (3) years. The permittee shall conduct Cylinder Gas Audits (CGA) each calendar quarter during which a RAA or a RATA is not performed.

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

5.B.15 For Emission Points AA-102, AA-103, AA-105, and AA-107, the permittee shall conduct a performance test for the following pollutants within 12 months of permit issuance, if a test has not previously been conducted. For Emission Points AA-102 and AA-103, the permittee shall conduct subsequent performance tests within two years of the previous test, and for Emission Points AA-105 and AA-107, within five years of the previous test. For Emission Point AA-103, the permittee shall alternate the operating conditions for each biennial test such that the water quench is operating while a product LOI<sub>PUF</sub> setting above 3.5% is being produced during every other performance test event. The permittee shall conduct performance testing for the following pollutants using the test methods below, or an EPA-approved alternative.

- (a) Filterable PM – EPA Reference Method 5 (\*for AA-105 and AA-107, unless used per Condition 5.B.3)
- (b) Filterable PM<sub>10</sub>/PM<sub>2.5</sub> – EPA Reference Method 201A<sup>(1)</sup> (see Condition 5.B.3)
- (c) Condensable PM – EPA Reference Method 202 (\*required for Emission Points AA-102 and AA-103, only)
- (d) Opacity – EPA Reference Method 9 (see Condition 5.B.3)

<sup>(1)</sup> For Emission Point AA-107, since the stack diameter is smaller than what can feasibly be tested with EPA Reference Method 201A, and for AA-102 and AA-103 (when using water quench), since the presence of water droplets interfere with EPA Reference Method 201A, the permittee shall assume that filterable PM<sub>10</sub> is equivalent to filterable PM determined by Method 5 and filterable PM<sub>2.5</sub> is 50% of the filterable PM determined by Method 5. These assumptions shall be used to demonstrate compliance with the applicable emission limits.

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

5.B.16 For Emission Point AA-103, the permittee shall conduct inspections of the pretreatment filtration at least monthly to determine if maintenance or replacement is needed. The permittee shall record in a log the date, time, and any corrective actions taken (including the date corrective action is taken) for each monthly inspection.

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

- 5.B.17 For Emission Point AA-103, the permittee shall install, maintain, and operate measurement devices for monitoring the air pressure and water flow to the water quench system. Air pressure and water flow shall be recorded at least once daily, when the process is operating and when products with an LOI<sub>PUF</sub> setting above 3.5% are being produced. When operating, the water quench system shall be maintained so that the daily air pressure and water flow do not fall below the average air pressure and water flow established during the most recent performance test demonstrating compliance with the PM<sub>10</sub> and PM<sub>2.5</sub> limits.

The permittee shall record in a log the date, time, and results of each daily measurement, and any corrective actions taken (including the date corrective action is taken) as a result of each instance air flow and/or water pressure fall below the averages established. The log shall also indicate the LOI<sub>PUF</sub> setting of the product being produced at the time of recording and the average air pressure and water flow indicators. The measurement devices shall be maintained according to the manufacturer's specifications or a written site-specific maintenance plan. The manufacturer's specifications or written maintenance plan shall be maintained on site and made readily available for review upon request by DEQ personnel.

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

- 5.B.18 For Emission Point AA-107, within 180 days of permit issuance, the permittee shall install, maintain, and operate a device for measuring the pressure drop across the baghouse. A warning alarm shall be set at both minimum and maximum pressure drops, based on the baghouse manufacturer's recommendations or results from previous stack tests, to indicate when corrective actions may be necessary due to bag breaks, holes, blinding, etc. The pressure measurement devices shall be maintained according to the manufacturer's specifications or a written site-specific maintenance plan. The manufacturer's specifications or written maintenance plan shall be maintained on site and made readily available for review upon request by DEQ personnel. The permittee shall record in a log the date, time, and any corrective actions taken (including date corrective action is taken) as a result of each warning alarm.

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

- 5.B.19 For Emission Points AA-504 and AA-506, the permittee shall conduct inspections of the particulate filters at least monthly to determine if filter replacement is needed. The permittee shall record in a log the date, time, and any corrective actions taken (including date corrective action is taken) as a result of each monthly inspection.

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

- 5.B.20 For Emission Point AA-103, the permittee shall demonstrate compliance with nitrogen oxides (NO<sub>x</sub>) limit of 12.13 lb/hr through performance testing. The permittee shall demonstrate compliance with the NO<sub>x</sub> limit of 0.078 lb/MMBtu by installing, operating, and maintaining burners with a manufacturer's guarantee at or below the emission limit.



The permittee shall conduct annual inspections and tune-ups of the burners in accordance with the manufacturer's recommendations or with standard operating procedures developed by the permittee. The permittee shall maintain records of the annual inspections and tune-ups, including the date, person conducting the inspection and tune-up, and any adjustments or maintenance conducted as a result of the inspection and tune-up. The annual inspection and tune-up records, as well as the procedures used to conduct the inspection and tune-up shall be maintained on-site and made available for review by DEQ personnel upon request.

For Emission Point AA-103, the permittee shall conduct a performance test for NO<sub>x</sub> within two years of the previous test. The permittee shall conduct performance testing for NO<sub>x</sub> using EPA Reference Method 7E, or an EPA-approved alternative.

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

- 5.B.21 For Emission Point AA-106, the permittee shall install mist eliminators on the cooling towers that have a manufacturer's design guarantee for 0.005% drift or less. The permittee shall maintain documentation demonstrating the mist eliminators were designed to meet the required drift loss.

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

- 5.B.22 For Emission Points AA-109, AA-305, AA-510, and AA-603, within 180 days of permit issuance, the permittee shall develop and implement a Fugitive Dust Management Plan to ensure dust is minimized and does not create a nuisance condition. The Plan shall be maintained and revised as needed and made readily available for review by DEQ personnel upon request.

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

- 5.B.23 For Emission Points AA-111 and AA-116, the permittee shall conduct quarterly 30-minute visible emissions inspections using EPA Method 22, as referenced in 40 CFR Part 60, Appendix A-7. The Method 22 test shall be conducted while the baghouse is operating and is successful if no visible emissions are observed. If any visible emissions are observed, the permittee must initiate corrective action within 24 hours to return the baghouse to normal operation. The permittee shall record each Method 22 test, including the date and any corrective actions taken, in the logbook required under Condition 5.B.24. 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 according to 40 CFR 60.675(b) simultaneously with a Method 22 to determine what constitutes normal visible emissions from the baghouse when it is in compliance with the applicable PM concentration limit in Table 2 of Subpart OOO. The revised visible emissions success level must be incorporated into the permit.

(Ref.: 40 CFR 60.674(c), Subpart OOO)

- 5.B.24 For Emission Points AA-111 and AA-116, the permittee shall record each periodic inspection required by Condition 5.B.23, including any dates and any corrective actions taken, in a logbook (in written or electronic format). The permittee must keep the logbook onsite and make hard or electronic copies (whichever is requested) available to the DEQ upon request.

(Ref.: 40 CFR 60.676(b)(1), Subpart OOO)

- 5.B.25 For Emission Point AA-112, the permittee shall comply with the applicable opacity standard using EPA Reference Method 9 from 40 CFR Part 60, Appendix A-4 and the procedures in 40 CFR 60.11, with the following additions:

- (a) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
- (b) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources. The required observer position relative to the sun, per Section 2.1 of Method 9, must be followed.
- (c) The duration of the Method 9 observations must be thirty (30) minutes (five 6-minute averages). Compliance with the opacity limit must be based on the average of the five 6-minute averages.

Subsequent opacity observations shall be conducted within five (5) years of the previous observation.

(Ref.: 40 CFR 60.675(c)(1) and (3), 60.675(d), and Table 3, Subpart OOO)

- 5.B.26 For Emission Points AA-103 and AA-119, the permittee shall demonstrate compliance each month with the emission limitations in Condition 3.B.26. For each monthly demonstration, the permittee may apply any combination of the emission limitations in Condition 3.B.26 to each of the web coating lines individually, to each of one or more groupings of the lines (including a single grouping encompassing all lines of the affected source), or to any combination of individual and grouped lines, so long as each web coating line is included in the compliance demonstration for the month (i.e., the permittee is not required to apply the same emission limitation to each of the individual lines or groups of lines). The permittee may change the emission limitation that apply each month to the individual or grouped lines, and may change line groupings for monthly compliance demonstration.

(Ref.: 40 CFR 63.3370, Subpart JJJ)

- 5.B.27 For Emission Points AA-103 and AA-119, the permittee must demonstrate compliance using one of the following options:

- (a) *As-purchased compliant coating materials:* Demonstrate that each coating material used does not exceed 0.016 kg organic HAP per kg coating material as-purchased or does not exceed 0.08 kg organic HAP per kg coating solids as-purchased, as determined in accordance with 40 CFR 63.3360(c). Compliance is demonstrated with Condition 3.B.26 if each coating material applied as-purchased contains no more than the limit specified in this paragraph.
  
- (b) *As-applied compliant coating materials:* Demonstrate that each coating material used does not exceed one of the following limits, as determined using the procedures in 40 CFR 63.3370(c)(1) through (4). Compliance is demonstrated with Condition 3.B.26 if the organic HAP content of each coating material as applied or the monthly average organic HAP content of all as-applied coating materials is no more than the following limit, as applicable based on the monthly compliance option:
  - (1) 0.016 kg organic HAP per kg coating material as-applied, or
  - (2) 0.08 kg organic HAP per kg coating solids as-applied, or
  - (3) 0.016 kg organic HAP per kg coating material as-applied on a monthly average basis, or
  - (4) 0.08 kg organic HAP per kg coating solids as-applied on a monthly average basis.
  
- (c) *Total monthly organic HAP applied:* Demonstrate that the total monthly organic HAP applied as determined by Equation 10 of Subpart JJJJ does not exceed the calculated equivalent allowable organic HAP as determined by Equation 17 or 18 of Subpart JJJJ.

(Ref.: 40 CFR 63.3370(a)(1)-(3), (b), (c), and (d), Subpart JJJJ)

- 5.B.28 For Emission Points AA-103 and AA-119, the permittee may develop a site- or product-specific emission factor for a group of products to account for volatile matter retained in the coated web or not otherwise emitted. The permittee shall identify each group of similar products that can utilize each site- and product-specific emission factor. The permittee shall determine the factor in accordance with 40 CFR 63.3360(g).

(Ref.: 40 CFR 63.3370(a)(4) and (e), Subpart JJJJ)

- 5.B.29 For Emission Points AA-103 and AA-119, the permittee must maintain the records specified in paragraphs below on a monthly basis:

- (a) Organic HAP content data for the purpose of demonstrating compliance in accordance with the requirements of 40 CFR 63.3360(c).

- (b) Volatile matter and coating solids content data for the purpose of demonstrating compliance in accordance with the requirements of 40 CFR 63.3360(d);
- (c) Material usage, organic HAP usage, volatile matter usage, and coating solids usage and compliance demonstrations using these data in accordance with the requirements of Condition 5.B.27.
- (d) Emission factor development calculations and HAP content for coating materials used to develop the emission factor as needed for Condition 5.B.28.

The permittee shall maintain files of all information (including all reports and notifications) recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be retained on site. The remaining three (3) years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. Any records required to be maintained by Subpart JJJJ that are submitted electronically via EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to the DEQ or the EPA as part of an on-site compliance evaluation.

(Ref.: 40 CFR 63.3410(a)(1) and (e), Subpart JJJJ)

5.B.30 For Emission Points AA-103 and AA-119, if the source failed to meet an applicable emission limit in Condition 3.B.26, the permittee must record the following for the corresponding affected equipment:

- (a) Record an estimate of the quantity of HAP (or VOC if used a surrogate in accordance with 40 CFR 63.3360(d)) emitted in excess of the emission limit for the month, and a description of the method used to estimate the emissions.
- (b) Record actions taken to minimize emissions in accordance with Condition 3.D.4 and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(Ref.: 40 CFR 63.3410(c)(3), Subpart JJJJ)

5.B.31 For Emission Point AA-304, the permittee shall record the daily hours of operation of the portable rock crusher. The permittee shall total all hours of operation for each calendar year to demonstrate compliance with the annual limit of 360 hours per year.

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

5.B.32 For Emission Points AA-501 and AA-502, the permittee shall determine the VOC content of each glue used and maintain sufficient monthly records to document:

- (a) Quantity used;
- (b) The density, if quantity is tracked by volume and not mass;
- (c) The VOC content, expressed as gram per kilogram;
- (d) The monthly emissions of VOC (tons) from each type of glue, assuming all of the VOCs are emitted; and
- (e) The 12-month rolling total VOC emissions (tpy) from AA-501 and AA-502 combined.

The permittee may utilize data supplied by the manufacturer, or analysis of VOC content by EPA Test Method 24 found in 40 CFR Part 60, Appendix A.

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

5.B.33 For Emission Points AA-504, AA-505, AA-506, AA-507, and AA-509, the permittee shall determine the VOC content of each coating used and maintain sufficient monthly records to document:

- (a) Quantity used;
- (b) The density, if quantity is tracked by volume not mass;
- (c) The VOC content, expressed as gram per liter;
- (d) The monthly emissions of VOC (tons) from each type of coating, assuming all of the VOCs are emitted; and
- (e) The 12-month rolling total VOC emissions (tpy) from all coating usage from AA-504, AA-505, AA-506, AA-507, and AA-509 combined.

The permittee may utilize data supplied by the manufacturer, or analysis of VOC content by EPA Test Method 24 found in 40 CFR Part 60, Appendix A.

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

5.B.34 For Emission Points AA-600a and AA-600b, the permittee shall keep a copy of each notification and report submitted to comply with 40 CFR 63, Subpart DDDDD. The permittee must keep all records readily available for review. The permittee shall keep records in a form suitable and readily available for expeditious review, according to 40

CFR 63.10(b)(1). Records must be kept for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records must be kept on site, or they must be accessible from onsite (for example, through a computer network), for at least two (2) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). Records may be kept off site for the remaining three (3) years.

(Ref.: 40 CFR 63.7555(a)(1) and 63.7560, Subpart DDDDD)

- 5.B.35 For Emission Point AA-600c, the permittee shall install a non-resettable hour meter prior to startup of the engine and keep records of the hours of operation of the engine in emergency and non-emergency service recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time.

(Ref.: 40 CFR 60.4209(a) and 60.4214(b), Subpart IIII)

- 5.B.36 For Emission Points AA-103, AA-600a, AA-600b, and AA-600h, the permittee shall install burners with a manufacturer's guarantee at or below the respective NO<sub>x</sub> BACT limit (as expressed in ppmvd @ 3% O<sub>2</sub> or lb/MMBtu). Records of the manufacturer's guarantees shall be maintained on-site for the life of the burner and made readily available for review by DEQ personnel upon request.

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

- 5.B.37 The permittee shall conduct the following monitoring in accordance with the CAM Plans found in Appendix C of the permit.
- (a) For Emission Point AA-101, monitor SO<sub>2</sub>, NO<sub>x</sub>, and CO directly with the CEMS and a bag leak detector as an indicator for filterable PM<sub>10</sub>, and PM<sub>2.5</sub>.
  - (b) For Emission Point AA-102, continuously monitor the secondary voltage and secondary current of Zones 1 and 2 of the WESP and calculate a daily average for each as an indicator for filterable and condensable PM<sub>10</sub>, and PM<sub>2.5</sub>.
  - (c) For Emission Point AA-105, check for visible emissions daily as an indicator for filterable PM<sub>10</sub>, and PM<sub>2.5</sub>.
  - (d) For Emission Point AA-503, continuously monitor the differential pressure across the baghouse and calculate the daily average as an indicator for filterable PM<sub>10</sub>, and PM<sub>2.5</sub>.
  - (e) For Emission Point AA-509, inspect filters daily for those days the Spray Paint Cabin is operated as an indicator for filterable PM<sub>10</sub>, and PM<sub>2.5</sub>.

(Ref.: 40 CFR 64.3(a) and (b), 64.6(c), Compliance Assurance Monitoring)

5.B.38 For Emission Points AA-101, AA-102, AA-105, AA-503, and AA-509, the permittee shall comply with the following requirements for the monitoring required by the approved CAM Plan:

- (a) *Proper maintenance.* At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- (b) *Continued operation.* Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used, including in data averaging and calculations or in fulfilling a minimum data availability requirement, as applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(Ref.: 40 CFR 64.7(b) and (c), Compliance Assurance Monitoring)

5.B.39 For Emission Points AA-101, AA-102, AA-105, AA-503, and AA-509, upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(Ref.: 40 CFR 64.7(d), Compliance Assurance Monitoring)

- 5.B.40 For Emission Points AA-101, AA-102, AA-105, AA-503, and AA-509, based on the results of a determination made under Condition 5.B.39 the permittee shall develop and implement a Quality Improvement Plan (QIP) containing the elements specified in 40 CFR 64.8(b) if the accumulation of excursions exceed 5% of the operating time during a given semiannual period. For excursions determined on a daily basis, the permittee shall evaluate each day an excursion is noted compared to each day the emission unit operated during the semiannual period. The QIP shall be developed and implemented within 180 days from the end date of the semiannual period (i.e., June 30<sup>th</sup> or December 31<sup>st</sup>) indicating excursions in excess of 5%. The DEQ may require the permittee make reasonable changes to the QIP if the QIP fails to address the cause of the control device performance problem or fails to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Implementation of a QIP shall not excuse the permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that applies.

(Ref.: 40 CFR 64.8, Compliance Assurance Monitoring)

- 5.B.41 For Emission Points AA-101, AA-102, AA-105, AA-503, and AA-509, the permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to Condition 5.B.40 and any activities undertaken to implement a QIP, data used to document the adequacy of monitoring, and monitoring maintenance or corrective actions, as applicable. As applicable, records of monitoring data and monitoring performance data should include date and time, who performed the analysis, analytical techniques or methods used, results and operating conditions at the time of the sampling or measurement. These records may be maintained in hard copy form or electronically, provided they are available for expeditious inspection and review.

(Ref.: 40 CFR 64.9(b), Compliance Assurance Monitoring)

- 5.B.42 For Emission Points AA-504, AA-505, AA-506, and AA-600h, the permittee shall conduct an initial inspection and tune-up of each burner within one (1) year of permit issuance and every 61 months after the previous tune-up thereafter. The permittee shall conduct the inspections and tune-ups of the burners in accordance with the manufacturer's recommendations or with standard operating procedures developed by the permittee. The permittee shall maintain records of the inspections and tune-ups, including the date, person conducting the inspection and tune-up, and any adjustments or maintenance conducted as a result of the inspection and tune-up. The inspection and tune-up records, as well as the procedures used to conduct the inspection and tune-up shall be maintained on-site and made available for review by DEQ personnel upon request.

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





C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Reporting Requirement
AA-000 (Facility-wide)	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).	5.C.1	Performance Testing	Submittal of test protocol, notification of test date, and submittal of test reports
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.2	Control Equipment	Semiannual report of inoperable control device
AA-101, AA-102, AA-103, AA-107, AA-111, AA-112, AA-503, AA-504, AA-506, AA-509	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.3	Visible Emissions	Semiannual report of monthly visible emissions observations and Method 9 VEEs
AA-101, AA-102, AA-103, and AA-118, and AA-500	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.4	CO <sub>2e</sub>	Semiannual report of 12-month rolling total CO <sub>2e</sub>
AA-101	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.5	NO <sub>x</sub> , CO, SO <sub>2</sub>	Semiannual excess emissions and monitoring system performance report
AA-101, AA-102, AA-103	40 CFR 63.1191(d) and (e), Subpart DDD	5.C.6	HAP	Notification of performance tests and compliance status
	40 CFR 63.1193(a), (c), (e), (f), and (g), Subpart DDD	5.C.7	HAP	Reporting requirements
AA-103, AA-107, AA-504, AA-506	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.8	PM, PM <sub>10</sub> , PM <sub>2.5</sub> (filterable)	Submit logs of monitoring/inspections
AA-109, AA-305, AA-510, AA-603	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.9	Fugitive Dust	Submit Fugitive Dust Management Plan within 180 days of permit issuance
AA-111, AA-112, AA-116	40 CFR 60.676(f) and (i), Subpart OOO	5.C.10	PM (filterable)	Performance test reports and initial notification
AA-103, AA-119	40 CFR 63.3400(c), Subpart JJJJ	5.C.11	Organic HAP	Semiannual compliance report
AA-304	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.12	Hours of Operation	Annual summary of daily hours of operation and calendar year total
AA-501, AA-502	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.13	VOC	Semiannual report of VOC content of glues and monthly and 12-month rolling total VOCs

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Reporting Requirement
AA-504, AA-505, AA-506, AA-507, AA-509	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.14	VOC	Semiannual report of VOC content of coatings and monthly and 12-month rolling total VOCs
AA-600a, AA-600b	40 CFR 63.7550(a), (b), and (c)(1), and Table 9, Subpart DDDDD	5.C.15	HAP	Five-year compliance reports
AA-600c	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.16	Hours of Operation	Annual report of emergency and non-emergency hours of operation
AA-101, AA-102, AA-105, AA-503, AA-509	40 CFR 64.9(a), CAM	5.C.17	CAM Reporting	Semiannual reporting requirements
	40 CFR 64.7(e), CAM	5.C.18	CAM Modification	Promptly notify DEQ of failure to achieve limit/standard though no excursion or exceedance was indicated by approved monitoring
AA-504, AA-505, AA-506, AA-600a, AA-600b, AA-600h	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.19	Tune-ups	Date of most recent inspection and tune-up and due date of subsequent inspection and tune-up

5.C.1 For any performance testing required herein, the permittee shall submit the following notifications and/or reports:

- (a) 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 DEQ. After the first successful submittal of a written test protocol in conjunction with a compliance test, the permittee may request that the resubmittal of the testing protocol be waived for subsequent testing by certifying in writing at least thirty (30) days prior to subsequent testing that all conditions for testing remain unchanged such that the original protocol can and will be followed.
- (b) A notification of the scheduled test date(s) should be submitted ten (10) days prior to the scheduled test date(s) so that an observer may be afforded the opportunity to witness the test(s).
- (c) The results from each performance test shall be submitted to the DEQ within sixty (60) days following the completion of the test(s).

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

5.C.2 For Emission Point AA-000 (*Facility-wide*), in accordance with Condition 5.A.4, the permittee shall submit a summary of periods when a control device was not operating while the respective emission unit was venting emissions to it. The summary shall contain the

emission point, date, time, duration, and any corrective actions taken to restore control of the emission unit.

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

- 5.C.3 In accordance with Condition 5.A.4, the permittee shall submit reports of the monthly visible emissions observations and any Method 9 VEEs required Condition 5.B.1.

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

- 5.C.4 For Emission Points AA-101, AA-102, AA-103, AA-118, and AA-500, in accordance with Condition 5.A.4, the permittee shall submit reports of the monthly and 12-month rolling total emissions of CO<sub>2</sub>e for each line.

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

- 5.C.5 For Emission Point AA-101, in accordance with Condition 5.A.4, the permittee shall submit an excess emissions and monitoring system performance report semiannually for the NO<sub>x</sub>, SO<sub>2</sub>, and CO CEMS. This report shall contain the applicable information required by 40 CFR 60.7(c) and (d).

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

- 5.C.6 For Emission Points AA-101, AA-102, and AA-103, the permittee shall submit the following notifications:

- (a) Notification of a performance test at least 60 calendar days before the performance test is scheduled to begin, according to 40 CFR 63.9(e).
- (b) Notification of compliance status, according to 40 CFR 63.9(h).

(Ref.: 40 CFR 63.1191(d) and (e), Subpart DDD)

- 5.C.7 For Emission Points AA-101, AA-102, and AA-103, the permittee shall submit the following reports:

- (a) Within 60 days after the date of completing each performance test required by 40 CFR 63, Subpart DDD, the permittee shall submit the results of the performance tests, including any associated fuel analyses, through EPA's Compliance and Emissions Data Reporting Interface (CEDRI), as outlined in 40 CFR 63.1193(a)(1), or to the appropriate EPA office if the test method is not supported by CEDRI. **All performance test results shall also be submitted to the DEQ.**
- (b) A semiannual report as required by 40 CFR 63.10(e)(3) if measured emissions exceed the applicable standard or a monitored parameter varies from the level

established during performance testing. The report must contain the information specified in 40 CFR 63.10(c), as well as the relevant records required by 40 CFR 63.1192(b) of this subpart.

- (c) A semiannual report stating that no excess emissions or deviations of monitored parameters occurred during the reporting period as required by 40 CFR 63.10(e)(3)(v) if no deviations have occurred.
- (d) All reports required by this subpart not subject to the requirements in paragraph (a) of this section must be sent to the DEQ. If acceptable to the DEQ and the permittee of a source, these reports may be submitted on electronic media. The DEQ retains the right to require submittal of reports subject to paragraph (a) of this section in paper format.

(Ref.: 40 CFR 63.1193(a), (c), (e), (f), and (g), Subpart DDD and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1))

- 5.C.8 For Emission Points AA-103, AA-107, AA-504, and AA-506, in accordance with Condition 5.A.4, the permittee shall submit a copy of the logs required by Conditions 5.B.16 through 5.B.19.

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

- 5.C.9 For Emission Points AA-109, AA-305, AA-510, and AA-603, within 180 days of permit issuance, the permittee shall submit the Fugitive Dust Management Plan required by Condition 5.B.22. Subsequent revisions of the Plan do not have to be submitted to DEQ, though DEQ reserves the right to comment on and request changes to the Plan.

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

- 5.C.10 For Emission Points AA-111, AA-112, and AA-116, the permittee shall submit the following reporting requirements:

- (a) Written reports of the results of all performance tests conducted to demonstrate compliance with the applicable standards set forth in Conditions 3.B.21 and 3.B.22, including reports of opacity observations made using Method 9.
- (b) A notification of the date of initial startup of each affected facility postmarked within 15 days after such date.

(Ref.: 40 CFR 60.676(f) and (i), Subpart OOO)

- 5.C.11 For Emission Points AA-103 and AA-119, the permittee shall submit a semiannual compliance report in accordance with Condition 5.A.4. The compliance report must contain the following information:

- (a) Company name and address.
- (b) Statement by a responsible official with that official's name, title, and signature certifying the accuracy of the content of the report.
- (c) Date of report and beginning and ending dates of the reporting period.
- (d) If there are no deviations from any emission limitations (emission limit or operating limit) that apply, a statement that there were no deviations from the emission limitations during the reporting period.
- (e) For each deviation from an emission limitation (emission limit or operating limit) that applies, the compliance report must contain the following information:
  - (1) The total operating time of the web coating line(s) during the reporting period.
  - (2) Information on the number, duration, and cause of deviations (including unknown cause), if applicable, and the corrective action taken.
  - (3) An estimate of the quantity of each regulated pollutant emitted over the applicable emission limit for each monthly period covered in the report if the source failed to meet an applicable emission limit of this subpart.

(Ref.: 40 CFR 63.3400(c), Subpart JJJJ)

- 5.C.12 For Emission Point AA-304, the permittee shall provide an annual summary of the daily hours of operation of the portable rock crusher and total hours of operation for the calendar year. This summary shall be submitted with the semiannual report due January 31<sup>st</sup>, as required by Condition 5.A.4.

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

- 5.C.13 For Emission Points AA-501 and AA-502, in accordance with Condition 5.A.4, the permittee shall submit a summary of the following for each glue used:

- (a) Quantity used;
- (b) The density, if quantity is tracked by volume and not mass;
- (c) The VOC content, expressed as gram per kilogram;
- (d) The monthly emissions of VOC (tons) from each type of glue, assuming all of the VOCs are emitted; and

- (e) The 12-month rolling total VOC emissions (tpy) from AA-501 and AA-502 combined.

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

5.C.14 For Emission Points AA-504, AA-505, AA-506, AA-507, and AA-509, in accordance with Condition 5.A.4, the permittee shall submit a summary of the following for each coating used:

- (a) Quantity used;
- (b) The density, if quantity is tracked by volume and not mass;
- (c) The VOC content, expressed as gram per kilogram;
- (d) The monthly emissions of VOC (tons) from each type of coating, assuming all of the VOCs are emitted; and
- (e) The 12-month rolling total VOC emissions (tpy) from AA-504, AA-505, AA-506, AA-507, and AA-509 combined.

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

5.C.15 For Emission Points AA-600a and AA-600b, the permittee shall submit a compliance report by postmarked or submitted by January 31, 2020, and every five years thereafter, which covers the five-year period from January 1 through December 31. The compliance report must contain the following information:

- (a) Company and Facility name and address.
- (b) Process unit information, emissions limitations, and operating parameter limitations.
- (c) Date of report and beginning and ending dates of the reporting period.
- (d) Include the date of the most recent tune-up for each unit according to Condition 3.D.5. Include the date of the most recent burner inspection if it was not done on a five-year period and was delayed until the next scheduled or unscheduled unit shutdown.
- (e) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(Ref.: 40 CFR 63.7550(a), (b), and (c)(1), and Table 9, Subpart DDDDD)

- 5.C.16 For Emission Point AA-600c, the permittee shall report the annual hours each engine operated in emergency use, including what constituted the emergency, and the annual hours operated in non-emergency use. These annual hours shall be submitted for each calendar year in the semiannual report due January 31<sup>st</sup> of each year.

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

- 5.C.17 For Emission Points AA-101, AA-102, AA-105, AA-503, and AA-509, the permittee shall submit reports in accordance with Condition 5.A.4 of the following information, as applicable:

- (a) Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- (b) Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- (c) A description of the actions taken to implement a QIP during the reporting period as specified in Condition 5.B.41. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

(Ref.: 40 CFR 64.9(a), Compliance Assurance Monitoring)

- 5.C.18 For Emission Points AA-101, AA-102, AA-105, AA-503, and AA-509, if the permittee identifies a failure to achieve compliance with the emission limitation or standard for which the approved CAM monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or monitoring additional parameters.

(Ref.: 40 CFR 64.7(e), Compliance Assurance Monitoring)

- 5.C.19 For Emission Points AA-504, AA-505, AA-506, AA-600a, AA-600b, and AA-600h, in each semiannual report required by Condition 5.A.4, the permittee shall provide a log of the date of the most recent burner inspection and tune-up and due date for the subsequent inspection and tune-up for each burner.

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



## 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:
- (e) All containers in which a class I or class II substance is stored or transported;
  - (f) All products containing a class I substance; and
  - (g) 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:
- (h) Servicing, maintaining, or repairing appliances;
  - (i) Disposing of appliances, including small appliances and motor vehicle air conditioners; or
  - (j) 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:
- (k) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;
  - (l) Any person disposing of halons;
  - (m) Manufacturers of halon blends; or
  - (n) 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
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
NM VOC	Non-Methane Volatile Organic Compounds
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M	Operation and Maintenance
PM	Particulate Matter
PM <sub>10</sub>	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 <sub>2</sub>	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOC	Volatile Organic Compound

## APPENDIX B

### LIST OF REGULATIONS REFERENCED IN PERMIT

The full text of the regulations referenced in this permit may be found on-line at <http://www.deq.state.us.us> and <http://ecfr.gpoaccess.gov>, or the Mississippi Department of Environmental Quality (MDEQ) will provide a copy upon request. A list of regulations referenced in this permit is shown below:

11 Miss. Admin. Code Pt. 2, Ch. 1, Mississippi Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants (Amended December 14, 2011)

11 Miss. Admin. Code Pt. 2, Ch. 2, Permit Regulations for the Construction and/or Operation of Air Emissions Equipment (Amended July 28, 2005)

11 Miss. Admin. Code Pt. 2, Ch. 6, Mississippi Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Air Emissions Operating Permit Regulations for the Purpose of Title V of the Federal Clean Air Act (Amended December 14, 2011)

40 CFR Part 82 – Title VI of the Clean Air Act (Stratospheric Ozone Protection)

40 CFR Part 60, Subpart A – General Provisions

40 CFR Part 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing

40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

40 CFR Part 63, Subpart A – General Provisions

40 CFR Part 63, Subpart DDD – NESHAP for Mineral Wool Production

40 CFR Part 63, Subpart JJJ – NESHAP for Paper or Other Web Coating

40 CFR Part 63, Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines

40 CFR Part 63, Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters

40 CFR Part 64 – Compliance Assurance Monitoring

# APPENDIX C

## 40 CFR 64 – COMPLIANCE ASSURANCE MONITORING PLANS

## CAM Plan for Emission Point AA-101 – Line 1 Melting Furnace

Pollutants: SO <sub>2</sub> , CO, NO <sub>x</sub>	Indicator No. 1
<b>Indicator</b>	Emissions in lb/hr
<b>Measurement Approach</b>	Continuously measure NO <sub>x</sub> , CO, and SO <sub>2</sub> concentration and flow to calculate a mass rate in lb/hr
<b>Monitoring Method and Location</b>	Multicomponent analysis system installed downstream of the final control device (i.e., the fabric filter)
<b>Indicator Range (including the corrective action taken for an excursion)</b>	<p>An excursion is defined as a 30-day rolling average exceeding the emission limit established in the permit:</p> <ul style="list-style-type: none"> <li>• SO<sub>2</sub> – 78.77 lb/hr</li> <li>• CO – 13.29 lb/hr</li> <li>• NO<sub>x</sub> – 32.75 lb/hr</li> </ul> <p>Excursions trigger an inspection, corrective action, and deviation reporting.</p>
<b>Monitoring Frequency</b>	Continuous (at least once every 15 minutes)
<b>Data Collection/ Recordkeeping Procedures</b>	The data acquisition system (DAS) collects data continuously and reduces it to a daily average emission rate and a 30-day rolling average, which are recorded and archived for at least five years.
<b>Averaging Period</b>	30-day rolling average
<b>QA/QC Practices</b>	Follow QA/QC procedures in 40 CFR Part 60, Appendix F and 40 CFR 60.13. In lieu of RATA/RAA requirements in App. F, 5.1.1., 5.1.3, and 5.1.4, the RATA or RAA may be conducted every three years. Calibrate, maintain, and operate the CEMS according to the manufacturer's recommendations.

**CAM Plan for Emission Point AA-101 – Line 1 Melting Furnace Second Baghouse**

<b>Pollutants: Filterable PM/PM<sub>10</sub>/PM<sub>2.5</sub></b>	<b>Indicator No. 1</b>
<b>Indicator</b>	Baghouse leaks as indicated by triboelectric signal (expressed as percentage)
<b>Measurement Approach</b>	A triboelectric monitor uses the principles of frictional electrification and charge transfer to measure electrical charge, with an increasing charge indicating increase particle mass loading, and a possible bag leak.
<b>Monitoring Method and Location</b>	The triboelectric monitor is installed inside the baghouse exhaust duct to provide a signal generally proportional to the amount of particulate in the exhaust.
<b>Indicator Range (including the corrective action taken for an excursion)</b>	An excursion is defined as a triboelectric signal greater than 80% of scale for 15 seconds (i.e., an “alarm” condition).  Excursions trigger corrective action and reporting. Corrective action is taken according to the Mineral Wool MACT OMM Plan.
<b>Monitoring Frequency</b>	Continuous, when operating
<b>Data Collection/ Recordkeeping Procedures</b>	Continuous data is displayed on the control room monitor and recorded at 3-second intervals. When an alarm occurs (i.e., an excursion), it is logged electronically. All signal readings and alarms are archived.
<b>Averaging Period</b>	N/A
<b>QA/QC Practices</b>	Maintain and operate triboelectric monitor according to the manufacturer’s specifications and ROCKWOOL standard operating procedures as outlined in the Mineral Wool MACT OMM Plan.



**CAM Plan for Emission Point AA-102 – Line 1 Spinning Chamber WESP**

Pollutants: PM/PM <sub>10</sub> /PM <sub>2.5</sub>	Indicator No. 1
<b>Indicator</b>	Power to WESP Zone 1 and Zone 2
<b>Measurement Approach</b>	Monitor secondary voltage and secondary current to Zones 1 and 2
<b>Monitoring Method and Location</b>	One digital voltmeter in each zone and one ammeter in each zone, integrated with existing WESP instrumentation.
<b>Indicator Range (including the corrective action taken for an excursion)</b>	<p>An excursion is defined as both Zones 1 and 2 falling below the parameters as follows (when Spinning Chamber is operating):</p> <ol style="list-style-type: none"> <li>1) Zone 1: daily average secondary voltage &lt; 51.3 kV <u>and</u> daily average secondary current of &lt; 1,219 mA (excluding periods of flushing); <u>AND</u></li> <li>2) Zone 2: daily average secondary voltage &lt; 51.9 kV and daily average secondary current of &lt; 1,235 mA (excluding periods of flushing).</li> </ol> <p>Excursions trigger an inspection and corrective action, as needed.</p>
<b>Monitoring Frequency</b>	Continuous
<b>Data Collection/ Recordkeeping Procedures</b>	Daily average secondary voltage and current is recorded at least once per day for each zone.
<b>Averaging Period</b>	Daily (24-hr average)
<b>QA/QC Practices</b>	Maintain and operate voltmeters and ammeters according to the manufacturer's specifications and ROCKWOOL standard operating procedures.

### CAM Plan for Emission Point AA-105 – Line De-dusting Baghouse

Pollutants: PM/PM <sub>10</sub> /PM <sub>2.5</sub>	Indicator No. 1
<b>Indicator</b>	Visible Emissions/Opacity
<b>Measurement Approach</b>	Monitor visible emissions from the baghouse exhaust
<b>Monitoring Method and Location</b>	While operating, perform visible emissions observations and visible emissions evaluations (VEE) according to Permit Condition 5.B.1(a)-(b).
<b>Indicator Range (including the corrective action taken for an excursion)</b>	An excursion is defined as a VEE of $\geq 10\%$ opacity. An excursion triggers an inspection of the baghouse and corrective action, as needed, followed by another VEE to confirm success of corrective action(s).
<b>Monitoring Frequency</b>	Daily, when operating
<b>Data Collection/ Recordkeeping Procedures</b>	Visible emissions observation recorded manually, including emission point, date and time of observation, observer, results of observations, and any corrective actions. VEE observation recorded using Method 9 form or equivalent.
<b>Averaging Period</b>	None for visible emissions observation. Six-minute average for VEE opacity reading.
<b>QA/QC Practices</b>	See Permit Condition 5.B.1(d).

## CAM Plan for Emission Point AA-503 – De-dusting Baghouse

Pollutants: PM/PM <sub>10</sub> /PM <sub>2.5</sub>	Indicator No. 1
<b>Indicator</b>	Differential pressure
<b>Measurement Approach</b>	Measure pressure at inlet and exhaust of baghouse to determine the differential pressure. A differential pressure lower than the minimum established may indicate a leak or tear in filter or missing, broken, or lose filter.
<b>Monitoring Method and Location</b>	Pressure gauges are installed at the baghouse inlet and exhaust to determine the pressure difference across the baghouse.
<b>Indicator Range (including the corrective action taken for an excursion)</b>	An excursion is defined as a daily average differential pressure below 20 Pascals (Pa). An excursion triggers an inspection, corrective action, and a reporting requirement.
<b>Monitoring Frequency</b>	Differential pressure is measured continuously and a daily average value is recorded once per day when operating.
<b>Data Collection/ Recordkeeping Procedures</b>	The daily average differential pressure is recorded once per day when operating.
<b>Averaging Period</b>	Daily
<b>QA/QC Practices</b>	Maintain and operate pressure differential gauges according to the manufacturer's specifications and ROCKWOOL standard operating procedures.

### CAM Plan for Emission Point AA-509 – Spray Paint Cabin Filters

Pollutants: PM/PM <sub>10</sub> /PM <sub>2.5</sub>	Indicator No. 1
<b>Indicator</b>	Filter Inspection
<b>Measurement Approach</b>	Conduct daily filter inspection on those days the Spray Paint Cabin is operated
<b>Monitoring Method and Location</b>	Visual inspection of filters controlling overspray for missing filters, filters outside the housing, and damaged filters (e.g., holes, tears)
<b>Indicator Range (including the corrective action taken for an excursion)</b>	An excursion is defined as an inspection showing the Spray Paint Cabin was operated without proper filtration (i.e., a missing filter, filter outside the housing, or damaged filter). An excursion triggers corrective action, including proper installation or replacement of the filter, and reporting.
<b>Monitoring Frequency</b>	Daily, when the Spray Paint Cabin is operating
<b>Data Collection/ Recordkeeping Procedures</b>	A daily log indicating whether the Spray Paint Cabin is in operation and the results of the inspection for those days it is in operation, including the results of the inspection and any corrective action taken. A log of routine filter changes is also maintained.
<b>Averaging Period</b>	N/A
<b>QA/QC Practices</b>	Qualified personnel perform inspections using an inspection checklist.

# **APPENDIX D**

## **EPA APPROVAL OF ALTERNATIVE TEST METHOD FOR AA-102 AND AA-103 UNDER NESHAP SUBPART DDD**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
RESEARCH TRIANGLE PARK, NC 27711

OCT 27 2015

Mr. Kenneth Cammarato  
Vice President, General Counsel & General Manager  
Roxul USA, Inc.  
4594 Cayce Rd.  
Byhalia, MS 38611

OFFICE OF  
AIR QUALITY PLANNING  
AND STANDARDS

Dear Mr. Cammarato,

This letter is in response to your letter dated October 7, 2015, for review and approval of alternative testing procedures to be applied to your combined vertical collection/curing operations at locations AA-102 and AA-103 of your Roxul USA, Inc. (Roxul) mineral wool production facility in Byhalia, Mississippi. You state that your facility is subject to 40 CFR part 63, Subpart DDD, National Emissions Standards for Hazardous Air Pollutants for Mineral Wool Production, and, in particular, that Roxul must conduct initial and subsequent performance testing for formaldehyde, methanol, and phenol, using Method 318 (40 CFR 63.1189).

As an alternative to Method 318, you have requested to use NCASI Method CI/WP-98.01 for several reasons. First, you note that the use of a wet electrostatic precipitator at your facility will likely result in water being a source of interference when analyzing for phenol, formaldehyde, and methanol. You also note low concentrations required to achieve compliance (~ 3ppmv for phenol). You also state that at these levels, FTIR interference issues may limit Roxul USA's ability to achieve the most accurate results, given the minimum practical detection limit of 1.5 ppm specified in Method 318. Additionally, you state that as a self-validating method, and one that been validated for sources similar to yours, NCASI Method CI/WP-98.01 need not be evaluated using Method 301 (40 CFR part 63, Appendix A) prior to application at your facility.

We have reviewed your request and the associated rule language. With this letter, we are approving the use of NCASI Method CI/WP-98.01 in lieu of Method 318 on a site-specific basis for facility locations AA-102 and AA-103 at Roxul USA, Inc., in Byhalia, Mississippi. Additionally, we are granting the requested Method 301 waiver. These approvals are contingent upon the following caveats:

- Sections 2.4.5.1 – 2.4.5.3 from NCASI Method CI/WP-98.01 (NCASI Southern Research Center, August 1998, [www.ncasi.org/Downloads/Download.ashx?id=4242](http://www.ncasi.org/Downloads/Download.ashx?id=4242)) must be replaced with section 2.4.2 of NCASI Method ISS/FP-A105.01 (NCASI Southern Research Center, December 2005, [www.ncasi.org/Downloads/Download.ashx?id=4261](http://www.ncasi.org/Downloads/Download.ashx?id=4261)). All QA/QC criteria of section 2.4.2 of NCASI Method ISS/FP-A105.01 must be carried out and passed. Where section 2.4.2 of NCASI Method ISS/FP-A105.01 calls for an o-

benzylhydroxylamine (BHA) solution, a deionized water solution should be used instead, in order to be consistent with the solutions used throughout NCASI Method CI/WP-98.01. Also, as hexane is used only in NCASI Method ISS/FP-A105.01, it should be omitted in Roxul's use of NCASI Method CI/WP-98.01 and substituted with deionized water.

- A breakthrough of no greater than 10 percent must be achieved for phenol, formaldehyde, and methanol, where breakthrough is determined by comparison of the mass in the last water impinger to the total mass in the impinger train. To this end, the addition of impingers, beyond that specified in NCASI Method CI/WP-98.01, to the sampling train is allowed. Breakthrough must be calculated according to Equation 30B-2 in section 12.3 of EPA method 30B.
- Sections 2.4.5.4 – 2.4.5.6 of NCASI Method CI/WP-98.01 must be completed, recorded, and reported.
- A copy of this approval letter must be included with test plans and test reports required in conjunction with 40 CFR part 60, Subpart DDD.

If you have any questions or need any further assistance regarding this matter, please contact David G. Nash of my staff at (919) 541-9425 or [nash.dave@epa.gov](mailto:nash.dave@epa.gov).

Sincerely,



Steffan M. Johnson, Group Leader  
Measurement Technology Group

cc:

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