STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Jack Batte and Sons, Inc. 221 Smith County Road 35-9 Forest, Smith County, Mississippi

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with 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: November 10, 2015

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE () ' MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Modified: November 30, 2017: MAR 3 0 2020

Expires: October 30, 2020

Permit No.: 2500-00012

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APPENDIX A LIST OF ABBREVIATIONS USED IN THIS PERMIT

SECTION 1. GENERAL CONDITIONS

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

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

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

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

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

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

- 1.4 Prior to its expiration, this permit may be reopened in accordance with the provisions listed below.
 - (a) This permit shall be reopened and revised under any of the following circumstances:
 - (1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of three (3) or more years. Such a reopening shall be completed no later than eighteen (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 the 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) Re-openings shall not be initiated before a notice of such intent is provided to the Title V source by the MDEQ at least thirty (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 MDEQ within a reasonable time any information the MDEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the MDEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to the MDEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 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 MDEQ 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 6 – *Air Emissions Operating Permit Regulations for Purposes of Title V of the Federal Clean Air Act.*

For purposes of fee assessment and collection, the permittee shall elect for actual (a) 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 1st of each year. By July 1st 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 MDEQ by the first payment date of September 1st. 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 MDEQ 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 MDEQ, 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, emissionsrelated 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 Operating Permit (TVOP). If the permittee submits a timely and complete application, the failure to have a TVOP 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 MDEQ 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 timeframe as provided in other regulations for emergencies] and the notification includes the following:
 - (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 MDEQ declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in Mississippi Administrative Code, Title 11, Part 2, Chapter 3 (*Regulations for the Prevention of Air Pollution Emergency Episodes*) for the level of emergency declared.

(Ref.: 11 Miss. Admin. Code Pt. 2, 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 2 – *Permit Regulations for the Construction and/or Operation of Air Emissions Equipment*, and may require modification of this permit in accordance with Mississippi Administrative Code, Title 11, Part 2, Chapter 6 – *Air Emissions*

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Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act. Modification is defined as "any 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:
 - 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 51, Subpart I (or 40 CFR 51.166); or
- (f) Any change in ownership of the stationary source.

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

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, silvi-cultural 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 an Emergency Air Pollution Episode Alert imposed by the Executive Director of the MDEQ and must meet the following buffer zones.
 - (a) Open burning without a forced-draft air system must not occur within five hundred (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 fifty (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 non-compliance 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 Part (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 MDEQ within two (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, start-ups, 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 five (5) working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;
- (v) That as soon as practicable but no later than twenty-four (24) hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
- (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
- (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
- (b) Start-ups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) Start-ups and shutdowns are part of normal source operation. Emission limitations apply during start-ups and shutdowns unless source specific emission limitations or work practice standards for start-ups and shutdowns are defined by an applicable rule, regulation, or permit.
 - (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in this Mississippi Administrative Code, Title 11, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for start-ups and shutdowns. Source specific emission limitations or work practice standards established for start-ups and shutdowns are subject to the requirements prescribed in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.10.B.(2)(a) through (e).
 - (3) Where an upset as defined in Rule 1.2 occurs during start-up 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 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.)

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

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

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

| EMISSION POINT | DESCRIPTION |
|-------------------|--|
| AA-000 | Facility-Wide (Jack Batte and Sons, Inc.) |
| AA-002 | No. 1 Indirect-Fired Softwood Lumber Drying Kiln [Maximum Design Capacity: 3.8 Tons / Hour] |
| AA-003 | No. 1 Fuel Bin Cyclone [used to transfer sawdust from fuel bin to supply boiler] |
| AA-004 | Planer Shavings Cyclone [used to transfer planer shavings to silo for load-out] |
| AA-005 | No. 2 Fuel Bin Cyclone [used to transfer sawdust from fuel bin to supply boiler] |
| AA-006 | No. 2 Indirect-Fired Softwood Lumber Drying Kiln [Maximum Design Capacity: 4.8 Tons / Hour] |
| AA-007 | No. 3 Indirect-Fired Softwood Lumber Drying Kiln [Maximum Design Capacity: 7.6 Tons / Hour] |
| AA-008 | No. 1 Wood Chipper [used to chip wood waste produced from the end saw, chipping saw, and re-saw within the sawmill area] |
| AA-009 | Mobile Tub Grinder [used to grind wood waste being sent off-site] |
| AA-010 | Haul Roads |
| AA-011 | No. 4 Indirect-Fired Softwood Lumber Drying Kiln [Maximum Design Capacity: 7.6 Tons / Hour] |
| AA-012 | No. 2 Wood Chipper [used to chip wood waste produced from the edger within the sawmill] |
| AA-013 | Log Debarking Operations |
| AA-015 | Sawmill Operations |
| AA-020 | Wood Hog [used to trim ends off planer; equipped with a cyclone] |
| AB-001 | 26 MMBTU / Hour (600HP) Wood Waste-Fired Boiler [equipped with a multi-clone cyclone] |
| AB-002 | 22 MMBTU / Hour (350HP) Wood Waste-Fired Boiler [equipped with a high-efficiency cyclone] |

| EMISSION POINT | DESCRIPTION |
|-------------------|--|
| AB-021 | 28 MMBTU / Hour (600HP) Wood Waste-Fired Boiler [equipped with two soot boxes in series and an electrostatic precipitator (ESP)] |

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 or allow the emission of smoke from a point source into the open air from any manufacturing or industrial process, which exceeds forty percent (40%) opacity subject to the exceptions provided in Parts (a) and (b) below:
 - (a) Start-up operations may produce emissions, which exceed 40% opacity for up to fifteen (15) minutes per start-up in any one (1) hour and not to exceed three (3) start-ups per stack in any twenty-four (24) hour period.
 - (b) Emissions resulting from soot blowing operations (i.e. ash removal) shall be permitted provided such emissions do not exceed sixty percent (60%) opacity and provided that the aggregate duration of such emissions during any 24-hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any 1 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 or allow the discharge into the ambient air from any point source any air contaminant of such opacity as to obscure an observer's view to a degree in excess of forty percent (40%) opacity, equivalent to that provided in Condition 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets.

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

B.

EMISSION POINT SPECIFIC EMISSION LIMITATIONS & STANDARDS

| Emission Point(s) | Applicable Requirement(s) | Condition Number | Pollutant(s) / Parameter(s) | Limit(s) / Standard(s) |
|--|---|---------------------|--------------------------------|---|
| AA-000 | 11 Miss. Admin. Code Pt. 2, R. 1.3.F.(1). | 3.B.1 | PM (filterable only) | $E = 4.1 \ (p^{0.67})$ |
| AA-003 AA-004 AA-005 AA-020 AB-001 AB-002 AB-021 | 11 Miss. Admin Code Pt. 2, R. 2.2B.(10). | 3.B.2 | PM / PM ₁₀ | No Bypass of Air Pollution Control Equipment |
| AB-001 AB-002 AB-021 | 11 Miss. Admin. Code Pt. 2, R. 1.3.D.(2). | 3.B.3 | РМ | 0.30 Grains / Dry Standard Cubic Foot |
| | 11 Miss. Admin. Code Pt. 2, R 2.2.B.(10). | 3.B.4 | Fuel Restriction | Combust Virgin Wood Waste Only |
| | 11 Miss. Admin. Code Pt. 2, R. 1.4.A.(1). | 3.B.5 | SO_2 | 4.8 Pounds / MMBTU Heat Input |
| | 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial, Commercial, and Institutional Steam Generating Units 40 CFR 60.40c(a); Subpart Dc | 3.B.6 | PM SO ₂ | Applicability |
| | 40 CFR Part 63, Subpart JJJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources 40 CFR 63.11193; Subpart JJJJJJ | 3.B.7 | HAPs | Applicability |
| AB-021 | 40 CFR 63.11201(a); Subpart JJJJJJ – Table 1, Item 4 | 3.B.8 | PM (filterable only) | 0.070 Pounds / MMBTU Heat Input |

For Emission Point AA-000 (Facility-Wide), except as otherwise specified herein or 3.B.1 limited herein, the permittee shall not cause or allow the emission of particulate matter (PM) in total quantities in any one (1) hour from any manufacturing process (which includes any associated stacks, vents, outlets, or combination thereof) to exceed the amount determined by the following 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.

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

3.B.2 For Emission Points AA-003 through AA-005, AA-020, AB-001, AB-002, and AB-021 (Transfer Cyclones, Wood Hog, and Wood Waste-Fired Boilers), the permittee shall not allow emissions to bypass air pollution control equipment associated with a corresponding process unit. During any period when control equipment has fails and/or malfunctions, the permittee shall cease operations from the process unit that is directly associated with the corresponding control equipment.

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

3.B.3 For Emission Points AB-001, AB-002, and AB-021 (Wood Waste-Fired Boilers), except as otherwise specified or limited herein, the permittee may be allowed to emit particulate matter (PM) at a rate up to 0.30 grains per dry standard cubic foot.

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

3.B.4 For Emission Points AB-001, AB-002, and AB-021 (Wood Waste-Fired Boilers), the permittee shall only combust "virgin wood waste" within each boiler. For the purpose of this permit, "*virgin wood waste*" is defined as any by-product generated from processing harvested timber / dried lumber (i.e. sawdust, bark, wood chips, shavings, etc.) that does not possess an artificial coating or residue.

Additionally, the permittee may purchase virgin wood waste from third-party sources only if it meets the aforementioned definition.

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

3.B.5 For Emission Points AB-001, AB-002, and AB-021 (Wood Waste-Fired Boilers), except as otherwise specified or limited herein, the maximum discharge of sulfur oxides shall not exceed 4.8 pounds (measured as sulfur dioxide or SO₂) per million BTU (MMBTU) heat input from each boiler.

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

3.B.6 Emission Points AB-001, AB-002, and AB-021 (Wood Waste-Fired Boilers) are subject to and shall comply with applicable requirements found within 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial, Commercial, and Institutional Steam Generating Units.

(Ref.: 40 CFR 60.40c(a); Subpart Dc)

3.B.7 Emission Points AB-001, AB-002, and AB-021 (Wood Waste-Fired Boilers) are subject to and shall comply with applicable requirements found within 40 CFR Part 63, Subpart JJJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.

(Ref.: 40 CFR 63.11193; Subpart JJJJJJ)

3.B.8 For Emission Point AB-021 (28 MMBTU / Hour Wood Waste-Fired Boiler), the permittee shall limit the emission of filterable particulate matter (PM) to no more than 0.070 pounds per million BTU (MMBTU) heat input except during periods of boiler start-up and shutdown.

(Ref.: 40 CFR 63.11201(a); Subpart JJJJJJ – Table 1, Item 4)

| Applicable Requirement(s) | Condition Number | Pollutant(s) / Parameter(s) | Limit(s) / Standard(s) |
|---|---------------------|--------------------------------|------------------------|
| 11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(a). | 3.C.1 | РМ | 0.6 Pounds / MMBTU |
| 11 Miss. Admin. Code Pt. 2, R. 1.3.F.(1). | 3.C.2 | PM (filterable only) | $E = 4.1(p^{0.67})$ |
| 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1). | 3.C.2 | SO_2 | 4.8 Pounds / MMBTU |

C. INSIGNIFICANT AND TRIVIAL ACTIVITY EMISSION LIMITATIONS & STANDARDS

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

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

3.C.2 Except as otherwise specified herein or limited herein, the permittee shall not cause or allow the emission of particulate matter (PM) in total quantities in any one (1) hour from any manufacturing process (which includes any associated stacks, vents, outlets, or combination thereof) to exceed the amount determined by the following 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.

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

3.C.3 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 or SO₂) per million BTU heat input.

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

| Emission Point(s) | Applicable Requirement(s) | Condition Number | Pollutant(s) / Parameter(s) | Work Practice Standard(s) |
|----------------------------|--|---------------------|--------------------------------|--|
| AB-001 AB-002 AB-021 | 40 CFR 63.11205(a); Subpart JJJJJJ | 3.D.1 | HAPs | General Duty Clause |
| AB-001 AB-002 | 40 CFR 63.11223(b); Subpart JJJJJJ | 3.D.2 | CO HAPs | Conduct Biennial Performance Tune-Ups |
| AB-021 | 40 CFR 63.11223(b); Subpart JJJJJJ | 3.D.3 | CO HAPs | Conduct Initial / Subsequent Performance Tune-Ups |
| | 40 CFR 63.11214(d) and 63.11223(g); Subpart JJJJJJ | 3.D.4 | HAPs | Minimize the Start-Up and Shutdown Period |

D. WORK PRACTICE STANDARDS

3.D.1 For Emission Points AB-001, AB-002, and AB-021 (Wood Waste-Fired Boilers), the permittee shall operate and maintain each boiler (including associated air pollution control equipment and monitoring equipment) in a manner consistent with safety and good air pollution control practices for minimizing emissions at all times.

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 such operation and maintenance procedures are being used will be based on information available to the MDEQ 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 each boiler.

(Ref.: 40 CFR 63.11205(a); Subpart JJJJJJ)

- 3.D.2 For Emission Points AB-001 and AB-002 (26 MMBTU / Hour Wood Waste-Fired Boiler and 22 MMBTU / Hour Wood Waste-Fired Boiler), the permittee shall conduct a performance tune-up on each boiler biennially no later than twenty-five (25) months after the previously completed tune-up. Each tune-up shall conducted in accordance with the following provisions:
 - (a) Inspect the burner (as applicable) and clean / replace any components of the burner as necessary. A burner inspection may be delayed until the next boiler shutdown but shall not to exceed thirty-six (36) months after the previous inspection.
 - (b) Inspect the flame pattern (as applicable) and adjust the burner as necessary to optimize the flame pattern. An 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. An inspection may be delayed until the next boiler shutdown but shall not to exceed 36 months after the previous inspection.
- (d) Optimize total emissions of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications (if available) and with any nitrogen oxide (NO_X) requirement to which a boiler is subject.
- (e) Measure the concentrations in the effluent stream of CO in parts per million by volume (ppm_v) and oxygen (O₂) in volume percent (vol.%) before and after the adjustments are made. The measurements may be either on a wet or dry basis as long as the basis remains the same before and after the adjustments are made. The measurements may be taken using a portable CO analyzer.
- (f) The permittee shall document and maintain on-site the following information collected during a tune-up:
 - (1) The date of the tune-up;
 - (2) The procedures followed for the tune-up;
 - (3) The manufacturer's specifications to which the boiler was tuned;
 - (4) The concentration of CO in the effluent stream in ppm_v and O₂ in vol.% measured at high fire or the typical operating load before and after the tuneup of a boiler;
 - (5) A description of any corrective action taken as a part of the tune-up of a boiler; and
 - (6) The type and amount of fuel used over the last twelve (12) months prior to tune-up of a boiler but only if the unit was physically and legally capable of using more than one type of fuel during that period.
- (g) If a boiler is not operating on the required date for the tune-up, the permittee shall conduct the tune-up within thirty (30) days of start-up.

(Ref.: 40 CFR 63.11223(b) and 40 CFR 63.11225(c)(2)(i); Subpart JJJJJJ)

3.D.3 For Emission Point AB-021 (28 MMBTU / Hour Wood Waste-Fired Boiler), the permittee shall conduct an initial performance tune-up in accordance with the provisions specified in Condition 3.D.2(a) through (g) no later than twenty-five (25)

months after the initial start-up of the boiler.

Thereafter, the permittee shall conduct subsequent tune-ups no later than 25 months after the previously completed tune-up.

(Ref.: 40 CFR 63.11223(b); Subpart JJJJJJ)

3.D.4 For Emission Point AB-021 (28 MMBTU / Hour Wood Waste-Fired Boiler), the permittee shall minimize the boiler's start-up and shutdown periods following the manufacturer's recommended procedures (if available). If the manufacturer's recommended procedures are not available for the specified boiler, the permittee shall follow recommended procedures for a boiler of similar design for which manufacturer's recommended procedures are available.

(Ref.: 40 CFR 63.11214(d) and 63.11223(g); Subpart JJJJJJ)

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 31st for the preceding calendar year. Each compliance certification shall include the following:
 - (a) The identification of each term or condition of the permit that is the basis of the certification;
 - (b) The compliance status;
 - (c) Whether compliance was continuous or intermittent;
 - (d) The method(s) used for determining the compliance status of the source, currently and over the applicable reporting period; and
 - (e) Such other facts as may be specified as pertinent in specific conditions elsewhere in this permit.

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

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

A. <u>GENERAL MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS</u>

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 31st and January 31st 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.

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

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

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

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

B. <u>SPECIFIC MONITORING AND RECORDKEEPING REQUIREMENTS</u>

| Emission Point(s) | Applicable Requirement(s) | Condition Number | Pollutant(s) / Parameter(s) | Monitoring / Recordkeeping Requirement(s) |
|--|--|---------------------|--------------------------------|---|
| AA-003 AA-004 AA-005 AA-020 AB-001 AB-002 AB-021 | 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11). | 5.B.1 | PM / PM ₁₀ | Perform and Record Monthly Inspections / Maintenance Actions on Air Pollution Control Equipment |
| AA-003 AA-004 AA-005 AA-020 AB-001 AB-002 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(a)(2). | 5.B.2 | Opacity | Perform and Record Weekly Visible Emission Observations |
| AB-001 | 40 CFR 608.48c(g)(2); Subpart Dc | 5.B.3 | PM SO ₂ | Monitor and Record Quantity of Wood Waste Combusted (Monthly) |
| AB-002 AB-021 | 40 CFR 63.11225(c)(4) and (5); Subpart JJJJJJ | 5.B.4 | HAPs | Record Information Pertaining to Periods of Boiler Malfunction |
| | 40 CFR 63.11210(a) and (d); Subpart JJJJJJ – Table 4, Item 1 40 CFR 63.11212(a), (c), and (d); Subpart JJJJJJ | 5.B.5 | PM (filterable only) | Conduct Initial Performance Stack Test |
| | 40 CFR 63.11220(a) and (c)(3); Subpart JJJJJJ | 5.B.6 | | Conduct Subsequent Performance Stack Testing |
| AB-021 | 40 CFR 63.11221(b), (c) and 40 CFR 63.11224(d)(1), (3), (4); Subpart JJJJJJ | 5.B.7 | Total Secondary Power | Install, Operate, and Maintain a Continuous Parameter Monitoring System |
| | 40 CFR 63.11211(a)(2); Subpart JJJJJJ | 5.B.8 | PM (filterable only) | Establish an Average Minimum Total Secondary Power |
| | 40 CFR 63.11221(c), (d) and 40 CFR 63.11224(d)(2), (3); Subpart JJJJJJ | 5.B.9 | | Monitor and Record the Total Secondary Power (30-Day Rolling Average) |

| Emission Point(s) | Applicable Requirement(s) | Condition Number | Pollutant(s) / Parameter(s) | Monitoring / Recordkeeping Requirement(s) |
|----------------------|---|---------------------|--------------------------------|---|
| AB-021 | 40 CFR 63.11205(c) and 40 CFR 63.11224(c); Subpart JJJJJJ | 5.B.10 | Total Secondary Power | Develop and Maintain a Site-Specific Monitoring Plan |
| | 40 CFR 63.11225(c)(6); Subpart JJJJJJ | 5.B.11 | PM (filterable only) | Record Information Related to Monitoring / Inspection Events |

5.B.1 For Emission Points AA-003, AA-004, AA-005, AA-020, AB-001, AB-002, and AB-021 (Transfer Cyclones, Wood Hog, and Wood Waste-Fired Boilers), the permittee shall perform and record a monthly inspection of air pollution control equipment associated with each noted process unit to evaluate performance capability.

If a problem is noted with any air pollution control equipment during an inspection, the permittee shall perform the necessary maintenance to ensure operation as originally designed. Additionally, the permittee shall maintain on-site sufficient components as is necessary to repair air pollution control equipment.

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

5.B.2 For Emission Points AA-003, AA-004, AA-005, AA-020, AB-001, and AB-002 (Transfer Cyclones, Wood Hog, and Wood Waste-Fired Boilers), the permittee shall have an individual certified in EPA Test Method 9 (found in Appendix A of 40 CFR Part 60) perform and record a weekly visible emission observation using EPA Test Method 22 at the exhaust stack of each noted process unit.

If visible emissions are detected during an observation, a visible emission evaluation (VEE) in accordance with Method 9 shall then be performed and recorded. The overall observation period for a VEE shall consist of (at a minimum) eighteen (18) consecutive minutes. However, if visible emissions observed after an initial period of six (6) consecutive minutes are determined to be less than twenty percent (20%) opacity, the certified individual may discontinue the VEE.

In the event that a VEE required but is not performed accordingly, the permittee shall document an explanation as to why it was not possible to perform the Method 9 testing.

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

5.B.3 For Emission Points AB-001, AB-002, and AB-021 (Wood Waste-Fired Boilers), the permittee shall monitor and record the quantity (in pounds or tons) of virgin wood waste combusted within each boiler on a monthly basis.

(Ref.: 40 CFR 60.48c(g)(2); Subpart Dc)

- 5.B.4 For Emission Points AB-001, AB-002, and AB-021 (Wood Waste-Fired Boilers), the permittee shall record the following information for each boiler as it pertains to periods of malfunction:
 - (a) Any occurrence and the corresponding duration of each malfunction, or the associated air pollution control / monitoring equipment; and
 - (b) Any action(s) taken during periods of malfunction to minimize emissions in accordance with Condition 3.D.1, which includes corrective actions to restore the malfunctioning boiler or the associated air pollution control / monitoring equipment to its normal / usual manner of operation.

(Ref.: 40 CFR 63.11225(c)(4) and (5); Subpart JJJJJJ)

5.B.5 For Emission Point AB-021 (28 MMBTU / Hour Wood Waste-Fired Boiler), the permittee shall demonstrate initial compliance with the particulate matter (PM) emission limitation specified in Condition 3.B.8 by conducting a performance stack test on the boiler no later than one hundred eighty (180) days after the initial start-up of the boiler.

The testing shall be conducted in accordance with the following specifications:

- (a) The permittee shall conduct a performance test and develop a site-specific test plan in accordance with the requirements found in 40 CFR 63.7(c), (d), (f), and (h); Subpart A (as applicable).
- (b) The following EPA Test Methods shall be utilized to conduct specified procedures for the performance stack test:
 - (1) Select sampling port's location and the number of traverse points Method 1 in Appendix A-1 of 40 CFR Part 60;
 - (2) Determine velocity and volumetric flow-rate of the stack gas Method 2, 2F, or 2G in Appendix A-2 of 40 CFR Part 60;
 - (3) Determine oxygen (O₂) and carbon dioxide (CO₂) concentrations of the stack gas Method 3A or 3B in Appendix A-2 of 40 CFR Part 60, or ASTM D6522-00 (Reapproved 2005), or ANSI / ASME PTC 19. 10-1981;
 - (4) *Measure the moisture content of the stack gas* Method 4 in Appendix A-3 of 40 CFR Part 60;
 - (5) Measure the particulate matter emission concentration Method 5 in

Appendix A-3 of 40 CFR Part 60, or Method 17 in Appendix A-6 of 40 CFR Part 60, and a minimum of one (1) dry standard cubic meter of sample volume per run;

- (6) Convert emissions concentration to pounds per MMBTU heat input emission rates – Method 19 F-factor methodology in Appendix A-7 of 40 CFR Part 60.
- (c) The permittee shall conduct the performance stack test at representative operating load conditions. For the purpose of this section, "*representative load conditions*" shall be defined as the operation of the boiler under heat input rates that that will be typical in the future.
- (d) The permittee shall conduct a minimum of three (3) separate test runs for each performance stack test as specified in 40 CFR 63.7(e)(3); Subpart A.

(Ref.: 40 CFR 63.11210(a) and (d); Subpart JJJJJJ – Table 4, Item 1) (Ref.: 40 CFR 63.11212(a), (c), and (d); Subpart JJJJJJ)

- 5.B.6 For Emission Point AB-021 (28 MMBTU / Hour Wood Waste-Fired Boiler), the permittee shall conduct subsequent performance tests to demonstrate compliance with the particulate matter (PM) emission limitation specified in Condition 3.B.8 in accordance with the following specifications (as applicable):
 - (a) Subsequent performance tests shall conducted in accordance with the requirements outlined in Condition 5.B.5 (a) through (d).
 - (b) If the results from the previous performance test indicate that PM emissions are equal to / less than 0.0350 pounds per MMBTU heat input, the permittee may choose to conduct subsequent performance tests every fifth year. However, each performance test shall be conducted no more than sixty-one (61) months after the previously completed test.
 - (c) If the results from the previous performance test indicate that PM emissions are greater than 0.0350 pounds per MMBTBU heat input, the permittee shall conduct subsequent performance tests on a triennial basis. Additionally, each test shall be conducted no more than thirty-seven (37) months after the previously completed test.
 - (d) The permittee shall continue to comply with all applicable operating limits and monitoring requirements.

(Ref.: 40 CFR 63.11220(a) and (c)(3); Subpart JJJJJJ)

5.B.7 For Emission Point AB-021 (28 MMBTU / Hour Wood Waste-Fired Boiler), the

permittee install, operate, and maintain a continuous parameter monitoring system(s) (CPMS) to evaluate the total secondary power (as determined by the secondary voltage and secondary current) of the electrostatic precipitator in accordance to the following specifications:

- (a) The CPMS shall operate a minimum of one (1) cycle of operation every fifteen (15) minutes. The permittee shall maintain data values from a minimum of four (4) successive cycles of operation representing each of the four 15-minute periods in an hour or at least two 15-minute data values during an hour when continuous monitoring system (CMS) calibration, quality assurance (QA), or maintenance activities are being performed.
- (b) For the purposes of data collection, the permittee shall operate the CPMS and collect data at all required intervals at all times the boiler is operating, except for periods of monitoring system malfunctions or out-of-control periods [as specified by 40 CFR 63.8(c)(7); Subpart A], repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance / quality control (QA / QC) activities [which includes calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the site-specific monitoring plan (as applicable)].

A "*monitoring system malfunction*" is any sudden, infrequent, or not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. Additionally, the permittee is required to complete monitoring system repairs in response to monitoring system malfunctions / out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.

Additionally, the permittee shall record and maintain the results of each inspection, calibration, and validation check performed on the CPMS.

(Ref.: 40 CFR 63.11221(b) and 40 CFR 63.11224(d)(1), (3), (4); Subpart JJJJJJ)

5.B.8 For Emission Point AB-021 (28 MMBTU / Hour Wood Waste-Fired Boiler), during the initial performance test required by Condition 5.B.5, the permittee shall establish an average minimum total secondary power (as determined by the secondary voltage and the secondary current) for the electrostatic precipitator as an operating limit that shall correspond with the particulate matter (PM) emission limitation specified in Condition 3.B.8.

(Ref.: 40 CFR 63.11211(a)(2); Subpart JJJJJJ)

5.B.9 For Emission Point AB-021 (28 MMBTU / Hour Wood Waste-Fired Boiler), the permittee shall demonstrate continuous compliance with the particulate matter (PM)

emission limitation specified in Condition 3.B.8 by continuously monitoring and recording the total secondary power of the electrostatic precipitator (as determined by the secondary voltage and the secondary current) based on a 30-day rolling average.

The permittee shall calculate and record the hourly arithmetic averages from each hour of the continuous parameter monitoring system(s) (CPMS) evaluating the total secondary power data and determine the 30-day rolling average using the following equation:

$$SP = \frac{\sum_{i=1}^{n} (V_i)(A_i)}{n}$$
 [Eqn. 1]

Where:

- SP = the total secondary power over a 30-day rolling average, watts (W);
- V_i = the hourly secondary voltage average for hour *i*, volts;
- A_i = the hourly secondary current average for hour *i*, amperes; and
- n = the number of valid hourly values collected over thirty (30) days of boiler operation.

For purposes of calculating data averages, the permittee shall use data collected during all periods in demonstrating continuous compliance, except for the following circumstances:

- (a) Periods of boiler start-up and shutdown;
- (b) Monitoring system malfunctions or out-of-control periods;
- (c) Repairs associated with monitoring system malfunctions / out-of-control periods; and
- (d) Required monitoring system quality assurance / quality control (QA/QC) activities [including calibration checks, required zero and span adjustments, and scheduled continuous monitoring system (CMS) maintenance as defined in your site-specific monitoring plan (as applicable)].

The failure to collect monitoring data during any period not outlined in Part (a) through (d) of this condition shall constitute as a deviation of applicable monitoring requirements.

Additionally, operation above the established average minimum secondary power (as specified by Condition 5.B.7) shall constitute as a deviation, except during a

performance stack test conducted to either determine compliance with the particulate matter (PM) emission limitation specified in Condition 3.B.8 or to establish a new minimum average secondary power [i.e. the minimum average secondary power (as determined by the minimum average secondary voltage and the minimum average secondary current) shall be either confirmed or reestablished during performance stack tests].

(Ref.: 40 CFR 63.11221(c – d) and 40 CFR 63.11222(a)(2); Subpart JJJJJJ) (Ref.: 40 CFR 63.11224(d)(2 – 3); Subpart JJJJJJ)

- 5.B.10 For Emission Point AB-021 (28 MMBTU / Hour Wood Waste-Fired Boiler), the permittee shall develop and maintain a site-specific monitoring plan that addresses (at a minimum) the following details for the use of a continuous parameter monitoring system(s) (CPMS) within the electrostatic precipitator:
 - (a) Installation of a continuous monitoring system (CMS) sampling probe or other interface at a measurement location relative to the electrostatic precipitator (ESP) such that the measurement is representative of control of the exhaust emissions (*e.g.* on or downstream of the ESP);
 - (b) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;
 - (c) Performance evaluation procedures and acceptance criteria (*e.g.* calibrations);
 - (d) Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); Subpart A; and
 - (e) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i); Subpart A.

Upon development, the permittee shall conduct and record performance evaluations of the CPMS in accordance with the site-specific monitoring plan. Additionally, the permittee shall operate and maintain the CPMS in continuous operation in accordance with the site-specific monitoring plan.

Upon request by the MDEQ, the permittee shall make the site-specific monitoring plan available for approval at least sixty (60) days before conducting the initial performance evaluation.

(Ref.: 40 CFR 63.11205(c) and 40 CFR 63.11224(c); Subpart JJJJJJ)

5.B.11 For Emission Point AB-021 (28 MMBTU / Hour Wood Waste-Fired Boiler), the permittee shall record the following information for each inspection / monitoring event

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required by Conditions 5.B.7 and 5.B.10:

- (a) The date, place, and time of the inspection / monitoring event;
- (b) The name of the individual conducting the inspection/ monitoring event;
- (c) The technique or method used;
- (d) The operating conditions during the activity;
- (e) The results from the event, which shall include the date, time, and duration of the period (i.e. the time the monitoring indicated a problem to the time that the monitoring indicated proper operation); and
- (f) Any maintenance or corrective action taken (if applicable).

(Ref.: 40 CFR 63.11225(c)(6); Subpart JJJJJJ)

| Emission Point(s) | Applicable Requirement(s) | Condition Number | Pollutant(s) / Parameter(s) Monitored | Reporting Requirement (s) |
|--|--|---------------------|---|--|
| AA-003 AA-004 AA-005 AA-020 AB-001 AB-002 AB-021 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(c)(1). | 5.C.1 | РМ | Submit Semi-Annual Summary on Maintenance Actions |
| AB-001 AB-002 AB-021 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(c)(1). | 5.C.2 | РМ | Submit Semi-Annual Summary of Wood Waste Combusted in Each Boiler |
| AB-001 AB-002 | 40 CFR 63.11225(b)(1) and (2); Subpart JJJJJJ | 5.C.3 | HAPs | Submit Biennial Certification of Compliance |
| AB-021 | 40 CFR 60.48c(a)(1 – 3); Subpart Dc | 5.C.4 | SO ₂ PM | Submit Notification on Actual Boiler Start- Up |
| | 40 CFR 63.11225(b)(1 – 4); Subpart JJJJJJ | 5.C.5 | PM (filterable only) | Submit Biennial Certification of Compliance |
| | 40 CFR 11225(a)(3); Subpart JJJJJJ | 5.C.6 | | Submit Notification of Intent for Performance Testing |
| | 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11). 40 CFR 63.11225(a)(4)(i) and (e); Subpart JJJJJJ | 5.C.7 | | Submit Performance Test Results to the MDEQ and the EPA |

C. <u>SPECIFIC REPORTING REQUIREMENTS</u>

5.C.1 For Emission Points AA-003, AA-004, AA-005, AA-020, AB-001, and AB-002 (Transfer Cyclones, Wood Hog, and Wood Waste-Fired Boilers), the permittee shall submit a semi-annual report in accordance with Condition 5.A.4 that summarizes any maintenance actions conducted on air pollution control / monitoring equipment. Additionally, the permittee shall include in this report any period (in hours) in which air pollution control / monitoring equipment fails and / or malfunctions.

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

5.C.2 For Emission Points AB-001, AB-002, and AB-021 (Wood Waste-Fired Boilers), the

permittee shall submit a semi-annual report in accordance with Condition 5.A.4 that summarizes the monthly quantity (in pounds or tons) of virgin wood waste combusted within each boiler.

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

- 5.C.3 For Emission Points AB-001 and AB-002 (26 MMBTU / Hour Wood Waste-Fire Boiler and 22 MMBTU / Hour Wood Waste-Fired Boiler), the permittee shall prepare and submit a compliance certification by March 15th of the immediate year following the completion of a performance tune-up for each boiler. The report shall contain (at a minimum) the following information:
 - (a) The company name and address;
 - (b) A statement by the Responsible Official (which includes the official's name, title, phone number, e-mail address, and signature) that certifies the truth, accuracy, and completeness of this notification as well as a statement of whether a boiler has compiled with all the applicable standards and requirements found in 40 CFR Part 63, Subpart JJJJJJ.

Additionally, the notification shall also include the following certifications of compliance:

- (1) "This facility complies with the requirements in 40 CFR § 63.11223 to conduct a biennial tune-up each boiler unit";
- (2) "This facility complies with the requirement in 40 CFR 63.11214(d) and 40 CFR 63.11223(g) to minimize the boiler's time spent during start-up and shutdown and to conduct start-ups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if the manufacturer's recommended procedures are not available."

(Ref.: 40 CFR 63.11225(b)(1) and (2); Subpart JJJJJJ)

5.C.4 For Emission Point AB-021 (28 MMBTU / Hour Wood Waste-Fired Boiler), the permittee shall submit separate notifications that specify the date of construction for this boiler and the actual date of boiler start-up.

Additionally, the permittee shall include within each notification the following information:

(a) The design heat input capacity of the boiler and identification of fuels to be combusted in the boiler;

- (b) A copy of any federally-enforceable requirement found in Subpart Dc that limits the annual capacity factor for any fuel or mixture of fuels; and
- (c) The annual capacity factor at which the permittee anticipates operating the boiler based on all fuels fired and based on each individual fuel fired.

(Ref.: 40 CFR 60.48c(a)(1 – 3); Subpart Dc)

- 5.C.5 For Emission Point AB-021 (28 MMBTU / Hour Wood Waste-Fired Boiler), the permittee shall prepare and submit a compliance of certification by March 15th of the immediate year following the completion of a performance tune-up for each boiler. The report shall contain (at a minimum) the following information:
 - (a) The information specified in Parts (a) and (b) of Condition 5.C.3;
 - (b) A description of deviations, which shall include time periods (in hours) during which the deviations occurred and the corrective actions taken if the permittee experiences any deviations from the applicable requirements during a reporting period; and
 - (c) The following information as it pertains to the fuel source combusted within the boiler:
 - (1) The total usage (in pounds or tons) of the fuel source in each calendar month of a reporting period; and
 - (2) A description of the fuel source, including whether the fuel source has received a non-waste determination by the permittee or the EPA through a petition process and whether the fuel source was process from discarded non-hazardous secondary materials (as defined by 40 CFR 241.3; Subpart B).

(Ref.: 40 CFR 63.11225(b)(1-4); Subpart JJJJJJ)

5.C.6 For Emission Point AB-021 (28 MMBTU / Hour Wood Waste-Fired Boiler), the permittee shall submit a Notification of Intent to the MDEQ that details the testing protocol to be applied during a performance stack test at least sixty (60) days before a testing event is scheduled to begin.

(Ref.: 40 CFR 11225(a)(3); Subpart JJJJJJ)

5.C.7 For Emission Point AB-021 (28 MMBTU / Hour Wood Waste-Fired Boiler), the permittee shall submit the results of a performance stack test to the MDEQ no later than sixty (60) days after the completion of the testing event.

Additionally, the permittee shall submit the results of a performance stack test to the EPA under the same aforementioned deadline and in accordance with one of the following procedures:

(a) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on corresponding website (*https://www3.epa.gov/ttn/chief/ert/index.html*), the permittee shall submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*).

The performance test data shall be submitted in a file format generated through the use of the ERT or an alternate electronic file format that is consistent with the extensible markup language (XML) schema listed on the referenced ERT website.

If the permittee claims that some of the performance test information being submitted is confidential business information (CBI), the permittee shall submit a complete file generated through use of the ERT or an alternate electronic file consistent with the XML schema listed on the ERT website (including the information claimed to be CBI) on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to the following address:

U.S. EPA / OAQPS / CORE CBI Office Attention: Group Leader, Measurement Policy Group, MD C404-02 4930 Old Page Road Durham, North Carolina 27703.

The same ERT or alternate file with the CBI omitted shall also be submitted to the EPA via the referenced CDX website.

(b) For data collected using test methods that are not supported by the EPA's ERT as listed on the referenced ERT website at the time of the test, the permittee shall submit the results of the performance test to the EPA at following address:

Director of Air, Pesticides, and Toxics Management Division EPA Region IV Atlanta Federal Center, 61 Forsyth Street Atlanta, GA 30303-3104.

(Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).) (Ref.: 40 CFR 63.11225(a)(4)(i) and (e); Subpart JJJJJJ)

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 <u>http://www.ecfr.gov/</u> under Title 40, or DEQ shall provide a copy upon request from the permittee.

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

well as persons selling, offering for sale, and/or purchasing class I, class II, or non-exempt substitute refrigerants.

- 7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.
- 7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H Halon Emissions Reduction:
 - (a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;
 - (b) Any person disposing of halons;
 - (c) Manufacturers of halon blends; or
 - (d) Organizations that employ technicians who service halon-containing equipment.

Title V Operating Permit No. 1920-00012

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 |
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| 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 CEM CEMS CFR CO COM COMS DEQ EPA gr / dscf HP HAP Ibs / hr M or K MACT MM MMBTUH NA NAAQS NESHAP | Best Available Control Technology Continuous Emission Monitor Continuous Emission Monitoring System Code of Federal Regulations Carbon Monoxide Continuous Opacity Monitor Continuous Opacity Monitoring System Mississippi Department of Environmental Quality United States Environmental Protection Agency Grains Per Dry Standard Cubic Foot Horsepower Hazardous Air Pollutant Pounds per Hour Thousand Maximum Achievable Control Technology Million Million British Thermal Units per Hour Not Applicable National Ambient Air Quality Standards National Emissions Standards for Hazardous Air Pollutants, 40 |
| NMVOC NO $_{\rm X}$ NSPS O&M PM PM PM PM PM PM PM PM PM PM PM PM PM | CFR 61 or National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 CFR 63 Non-Methane Volatile Organic Compounds Nitrogen Oxides New Source Performance Standards, 40 CFR 60 Operation and Maintenance Particulate Matter Particulate Matter less than 10 µm in diameter Parts per Million Prevention of Significant Deterioration, 40 CFR 52 State Implementation Plan Sulfur Dioxide Tons per Year Total Reduced Sulfur Visible Emissions Evaluation Volatile Hazardous Air Pollutant Volatile Organic Compound |