# STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

#### THIS CERTIFIES THAT

Rex Lumber Brookhaven, LLC 810 W. L. Behan Road Brookhaven, Lincoln 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: December 28, 2021

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: November 30, 2026 Permit No.: 1620-00005

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#### SECTION 1. GENERAL CONDITIONS

1.1 The permittee must comply with all conditions of this permit. Any permit non-compliance 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 Mississippi Department of Environmental Quality (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".
  - (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 MDEQ 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).)

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, 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 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 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 Part 51, Subpart I (or 40 CFR 51.166); or
- (f) Any change in ownership of the stationary source.

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

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.)

- 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 non-compliance, 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-100	Facility-Wide [Rex Lumber Brookhaven, LLC]				
AA-001	Direct-Fired Continuous Lumber Drying Kiln No. 1 [equipped with 40 MMBTU / hour wood-fired burner]				
AA-002	Direct-Fired Continuous Lumber Drying Kiln No. 2 [equipped with 30 MMBTU / hour wood-fired burner]				
AA-003	Fuel Silo Cyclone for No. 2 Kiln [Emission Point AA-002]				
AA-004	Fuel Silo Cyclone for No.1 Kiln [Emission Point AA-001]				
AA-005	Planer Shavings Cyclone				
AA-007	Planer Hog Cyclone				
AA-008	Chipper Cyclone				
AA-010	Haul Roads [fugitive]				
AA-011	Sawmill [fugitive]				
AA-012	Debarking Operations [fugitive]				
AA-013	Direct-Fired Continuous Lumber Drying Kiln No. 3 [equipped with 30 MMBTU / Hour wood or natural gas-fired burner]				
AA-014	Fuel Silo Cyclone for No.3 Kiln [Emission Point AA-013]				

#### 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, industrial, commercial or waste disposal process that exceeds forty percent (40%) opacity subject to the exceptions provided 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 shall be permitted provided such emissions do not exceed sixty (60) percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one (1) hour.

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

3.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 40% opacity equivalent to that provided in Condition 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets.

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

- 3.A.3 The permittee shall not cause or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.
  - (a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner, which allows or may allow unnecessary amounts of particulate matter to become airborne.
  - (b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gas-borne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

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

#### B. <u>EMISSION POINT SPECIFIC EMISSION LIMITATIONS & STANDARDS</u>

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-100 (Facility- Wide)	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.B.1	PM (filterable)	$E = 4.1(p^{0.67})$
AA-001	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to	3.B.2	VOCs (as WPP1)	4.804 Pounds / MBF; 293.04 tpy (Rolling 12-Month Total)
	Construct issued April 29, 2011 and modified February 18, 2014 (PSD BACT Limits)		Lumber Throughput	122,000.0 MBF / Year (Rolling 12-Month Total)
AA-002	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to	3.B.3	VOCs (as WPP1)	4.804 Pounds / MBF; 180.15 tpy (Rolling 12-Month Total)
	Construct issued June 20, 2014 (PSD BACT Limits)		Lumber Throughput	75,000.0 MBF / Year (Rolling 12- Month Total)
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued October 16, 2017  (PSD BACT Limits)	3.B.4	VOCs (as WPP1)	4.804 Pounds / MBF; 144.20 tpy (Rolling 12-Month Total)
AA-013			Lumber Throughput	60,018.0 MBF / Year (Rolling 12- Month Total)
	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.5	PM	$E = 0.8808(I^{-0.1667})$
AA-001 AA-002 AA-013	40 CFR Part 63, Subpart DDDD  - NESHAP: Plywood and Composite Wood Products  40 CFR 63.2231(a), (b), 63.2233(a)(2), and 63.2252; Subpart DDDD	3.B.6	HAPs	General Applicability
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permits to Construct issued April 29, 2011, June 20, 2014, and October 16, 2017  (PSD BACT Standard)	3.B.7	Fuel Source Restriction	Only Combust Uncontaminated Wood Waste or Natural Gas (As Applicable)
		3.B.8	VOCs (as WPP1)	Perform Good Work Practices and Maintain an Inspection / Maintenance Plan
AA-003 AA-004 AA-005 AA-007 AA-008 AA-014	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Title V Operating Permit issued December 28, 2021	3.B.9	PM / PM <sub>10</sub> / PM <sub>2.5</sub> (filterable only) Operational Requirements (Cyclor	

3.B.1 For Emission Point AA-100 (Facility-Wide), 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. 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.2 For Emission Point AA-001, the permittee shall limit the emission of volatile organic compounds (VOCs) as Wood Products Protocol 1 (WPP1) to no more than 4.804 pounds per thousand board feet (MBF) dried and no more than 293.04 tons per year (tpy) based on a rolling12-month total basis. Additionally, the permittee shall limit the throughput of lumber dried within the kiln to no more than 122,000.0 MBF per year based on a rolling 12-month total basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued April 29, 2011 and modified February 18, 2014 – PSD BACT Limits)

3.B.3 For Emission Point AA-002, the permittee shall limit the emission of VOCs as WPP1 to no more than 4.804 pounds per MBF dried and no more than 180.15 tpy based on a rolling 12-month total basis. Additionally, the permittee shall limit the throughput of lumber dried within the kiln to no more than 75,000.0 MBF per year based on a rolling 12-month total basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 20, 2014 – PSD BACT Limits)

3.B.4 For Emission Point AA-013, the permittee shall limit the emission of VOCs as WPP1 to no more than 4.804 pounds per MBF dried and no more than 144.20 tpy based on a rolling 12-month total basis. Additionally, the permittee shall limit the throughput of lumber dried within the kiln to no more than 60,018.0 MBF per year based on a rolling 12-month total basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued October 16, 2017 – PSD BACT Limits)

3.B.5 For Emission Point AA-013, when burning fossil fuel, the maximum emission of ash and/or particulate matter (PM) shall not exceed an emission rate as determined by the relationship:

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

where "E" is the emission rate in pounds per million BTU (MMBTU) per hour input and "I" is heat input in MMBTU per hour.

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

3.B.6 For Emission Points AA-001, AA-002 and AA-013, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 63, Subpart DDDD – National Emission Standard for Hazardous Air Pollutants (NESHAP): Plywood and Composite Wood Products and 40 CFR Part 63, Subpart A – General Provisions (as outlined in Table 10 of Subpart DDDD).

For the purpose of this permit, Emission Points AA-001, AA-002, and AA-013 are only subject to an initial notification requirement, and there are no further applicable requirements under this subpart.

(Ref.: 40 CFR 63.2231(a), (b), 63.2233(a)(2), and 63.2252; Subpart DDDD)

- 3.B.7 For Emission Points AA-001, AA-002, and AA-013, the permittee shall only combust the following fuel sources (as applicable):
  - (a) For Emission Point AA-001 and AA-002, the permittee shall combust uncontaminated wood waste.
  - (b) For Emission Point AA-013, the permittee shall combust either uncontaminated wood waste or natural gas.

For the purpose of this permit, "uncontaminated wood waste" is defined as any byproduct 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 uncontaminated wood waste from third-party sources if the material meets the aforementioned definition.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permits to Construct issued April 29, 2011, June 20, 2014, and October 16, 2017 – PSD BACT Standard)

3.B.8 For Emission Points AA-001, AA-002, and AA-013, the permittee shall perform good work practices that includes periodic inspections and maintenance on the kilns, any associated equipment involved in the lumber drying process, and any associated process control equipment as outlined in the maintenance and inspection plan found in Appendix B.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in the PSD Permits to Construct issued April 29, 2011, June 20, 2014, and October 16, 2017 – PSD BACT Standard.)

3.B.9 For Emission Points AA-003, AA-004, AA-005, AA-007, AA-008, and AA-014, the permittee shall operate at all times each cyclone during active operation of the associated process unit(s) to minimize the emission of filterable particulate matter. In the event that a cyclone fails, the permittee shall cease operation of the corresponding process unit(s) until such time that repairs are made and the cyclone is functioning at the proper efficiency.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Title V Operating Permit issued December 28, 2021)

#### C. INSIGNIFICANT AND TRIVIAL ACTIVITY EMISSION LIMITATIONS & STANDARDS

Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.C.1	PM	0.6 lbs. / MMBTU
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2	$SO_2$	4.8 lbs. / MMBTU

3.C.1 The maximum permissible emission of ash and/or particulate matter (PM) from fossil fuel burning installations of less than ten (10) 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 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 MMBTU heat input.

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

#### SECTION 4. COMPLIANCE SCHEDULE

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

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

# SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

- A. GENERAL MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS
- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.

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

- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
  - (a) The date, place as defined in the permit, and time of sampling or measurements;
  - (b) The date(s) analyses were performed;
  - (c) The company or entity that performed the analyses;
  - (d) The analytical techniques or methods used;
  - (e) The results of such analyses; and
  - (f) The operating conditions existing at the time of sampling or measurement.

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

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

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

5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with 11 Miss. Admin. Code Pt. 2, R. 6.2.E. 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 basis. Additionally, any required quarterly reports shall be submitted by the end of the month following each calendar quarter (i.e., April 30th, July 31st, October 31st, and January 31st), and any required annual reports shall be submitted by January 31st following each calendar year.

(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. The 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 in Section 4, 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	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement	
AA-100 (Facility- Wide)	40 CFR 52.21(r)(6)(iii); Subpart A	5.B.1	PM <sub>10</sub> / PM <sub>2.5</sub> (filterable + condensable)	Calculate and Maintain Project-Related Emissions Increases	
AA-001 AA-002 AA-013	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.2	Lumber Throughput VOCs	Monitor Throughput and Calculate Emissions from Each Kiln (Monthly and Rolling 12-Month Total)	
		5.B.3	VOCs	Maintain Records on the Inspections / Maintenance Actions Performed on the Kilns	
AA-003 AA-004 AA-005 AA-007 AA-008 AA-014	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.4	Opacity	Perform and Record Visible Emission Observations / Evaluations Once Every Two Weeks	
		5.B.5	PM	Perform and Record Monthly Inspections / Maintenance on Cyclones	

5.B.1 For Emission Point AA-100 (Facility-Wide), the permittee shall monitor the respective emission increase of particulate matter less than 10 microns (μm) in diameter (PM<sub>10</sub>; filterable + condensable) and particulate matter less than 2.5 μm in diameter (PM<sub>2.5</sub>; filterable + condensable) as a result of the construction project proposed in the permit application received on May 22, 2017.

The permittee shall calculate and record the respective pollutant emissions in tons per year (tpy) on a 12-month calendar year basis from all sources affected by the proposed construction project for a duration of five (5) years following the resumption of regular operations after the permitted modifications in accordance with 40 CFR 52.21(r)(6)(i)(c); Subpart A.

(Ref.: 40 CFR 52.21(r)(6)(iii); Subpart A)

5.B.2 For Emission Points AA-001, AA-002, and AA-013, the permittee shall monitor the throughput of dried lumber for each kiln in thousand board feet (MBF) based on both a monthly and rolling 12-month total basis. The permittee shall use the lumber throughput and the emission factor of 4.804 pounds of VOCs per MBF to calculate the emission of VOCs from each kiln on both a monthly and a rolling 12-month total basis.

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

5.B.3 For Emission Points AA-001, AA-002 and AA-013, the permittee shall use Good Work Practice, as specified in the maintenance and inspection plan in Appendix B. If any problem is noted during an inspection, the permittee shall perform the necessary

maintenance to ensure the operation of the affected source as originally designed. All inspections and maintenance actions shall be conducted on the specified schedule as required by the plan.

Additionally, the permittee shall maintain records that detail the results of each inspection and maintenance action (preventative or unscheduled) performed on a kiln.

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

5.B.4 For Emission Points AA-003, AA-004, AA-005, AA-007, AA-008, and AA-014, the permittee shall demonstrate compliance with the opacity limitation outlined in Condition 3.A.2 by performing visible emissions observation once every two-week period in accordance with EPA Test Method 22 on the exhaust from each cyclone during daylight hours and during representative operating conditions. Each observation shall be conducted for a minimum period of six (6) consecutive minutes.

If visible emissions are detected during an observation, the permittee shall perform and record a visible emission evaluation (VEE) in accordance with EPA Test Method 9 for (at a minimum) a duration of six (6) consecutive minutes. In the event that a VEE is required but cannot be conducted, the permittee shall record a written explanation as to why it was not possible to perform the VEE. The VEE shall be performed by a person who is certified as a visible emission reader by the MDEQ or an equivalent agency qualified for such services.

The permittee shall maintain all documentation and information specified by EPA Test Method 22 and/or EPA Test Method 9, any corrective actions taken to prevent or minimize emissions as a result of an evaluation, and the date / time when each observation / evaluation was conducted.

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

5.B.5 For Emission Points AA-003, AA-004, AA-005, AA-007, AA-008, and AA-014, the permittee shall perform a monthly inspection on each cyclone. If any problem is noted during an inspection, the permittee shall perform and record the necessary maintenance activities to ensure operation of a device as originally designed.

Additionally, preventative maintenance shall be performed as necessary to maintain proper operation of a cyclone and the permittee shall maintain on hand at all times sufficient equipment necessary to repair and/or overhaul a cyclones.

The permittee shall maintain documentation that details the date / time each inspection is performed, any noted problem experienced, any maintenance (either corrective or preventative) performed to return a device to operation as originally designed, and any periods of time (including date and duration) in which a device was non-operational.

(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	Pollutant / Parameter Monitored	Reporting Requirement
AA-100 (Facility- Wide)	11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(c)(1).	5.C.1	VOCs PM	Submit a Semi-Annual Monitoring Report
	40 CFR 52.21(r)(6)(v); Subpart A  11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.C.2	PM <sub>10</sub> / PM <sub>2.5</sub> (filterable + condensable)	Submit Calculated Annual Emissions (As Applicable)

- 5.C.1 For Emission Point AA-100 (Facility-Wide), the permittee shall submit a semi-annual monitoring report (SMR) in accordance with Condition 5.A.4 that contains the following information:
  - (a) For Emission Points AA-001, AA-002 and AA-013, the permittee shall report the following information:
    - (1) The throughput (in thousand board feet) of lumber dried by each kiln on a rolling 12-month total basis;
    - (2) The emission of volatile organic compounds (VOCs) from each kiln on a rolling 12-month total basis; and
    - (3) Any changes made to the existing maintenance / inspection plan for the kilns.
  - (b) For Emission Points AA-001, AA-002, AA-003, AA-004, AA-005, AA-007, AA-008, AA-013, and AA-014, the permittee shall report the following information:
    - (1) Any occurrence when a visible emissions evaluation (VEE) was necessary but not conducted and an explanation as to why it was not performed;
    - (2) A summary of any maintenance conducted on the cyclones; and
    - (3) Any period of time (in hours) when the cyclone malfunctioned
  - (c) (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(c)(1).)
- 5.C.2 For Emission Point AA-100 (Facility-Wide), the permittee shall submit an annual report to the MDEQ no later than March 1 (or February 29 when applicable) for the preceding 12-month calendar year that contains the information in paragraphs (a)-(c) below <u>if</u> the calculated annual emissions required by Condition 5.B.1 either exceed the baseline actual emissions documented for the noted pollutants in the pre-construction Prevention of Significant Deterioration (PSD) major modification applicability test by a "significant" amount [as defined in 40 CFR 52.21(b)(23); Subpart A] or differ from the

established pre-construction projected emissions presented in the revised permit application received on May 22, 2017:

- (a) The name, address, and telephone of the facility;
- (b) The calculated annual emissions as required by Condition 5.B.1; and
- (c) Any other information that the permittee wishes to include in the report (e.g. an explanation as to why the emissions differ from the established pre-construction projections).

Otherwise, the permittee shall include a statement in the second semi-annual monitoring report, as required in Condition 5.C.1, that the calculated annual emissions did not exceed the baseline actual emissions by a "significant" amount or differed from the established pre-construction projected emissions presented in the permit application.

(Ref.: 40 CFR 52.21(r)(6)(v); Subpart A)

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

#### **SECTION 6. ALTERNATIVE OPERATING SCENARIOS**

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 <a href="http://www.ecfr.gov/">http://www.ecfr.gov/</a> 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.

#### **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 lb/hr Pounds per Hour

M or K Thousand

MACT Maximum Achievable Control Technology

MM Million

MMBTUH Million British Thermal Units per Hour

NA Not Applicable

NAAQS National Ambient Air Quality Standards

NESHAP National Emissions Standards for Hazardous Air Pollutants, 40

CFR 61 or National Emission Standards for Hazardous Air

Pollutants for Source Categories, 40 CFR 63

NMVOC Non-Methane Volatile Organic Compounds

NO<sub>x</sub> Nitrogen Oxides

NSPS New Source Performance Standards, 40 CFR 60

O&M Operation and Maintenance

PM Particulate Matter

PM $_{10}$  Particulate Matter less than 10  $\mu$ m 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**

MAINTENANCE AND INSPECTION PLAN FOR EMISSION POINTS AA-001, AA-002, AND AA-013



## **VOC BACT GOOD WORK PRACTICES PLAN**

Rex Lumber, Brookhaven LLC Brookhaven, Lincoln County, Mississippi

#### 1.0 Introduction

The Mississippi Department of Environmental Quality (MDEQ) issued construction permits authorizing the construction of continuous direct-fired lumber kilns at Rex Lumber, Brookhaven, LLC. These permits were issued under the Prevention of Significant Deterioration (PSD) regulations and required Best Available Control Technology (BACT) review for Volatile Organic Compounds (VOC). It was determined that the addition of pollution control equipment to the CDK was infeasible and BACT was determined to be proper maintenance and operating procedures.

The CDK emission rate achievable under good operating and maintenance practices was determined to be 4.804 lb-VOC/MBF expressed as WPP1 under the "Wood Products Protocol." Compliance with this emission rate is presumed if the good operating and maintenance practices are carried out.

#### 2.0 Proper Maintenance

Rex Lumber, Brookhaven, LLC maintains a preventative maintenance (PM) database system which tracks the required maintenance for the kilns. Work orders contained in Attachment A identify the individual items and maintenance frequency.

#### 3.0 Proper operating Procedures

VOCs are emitted from the lumber kilns because of compounds being released from the wood during the drying process. VOC emissions from drying releases depend on several factors, including the type of wood being dried, the size of the wood, the season of the year, kiln operating conditions, and the original and final moisture contents of the wood. The main type of VOC emitted from the wood is in the form of terpenes, primarily alpha-pinene, from southern yellow pine.

Proper operation of the kiln is necessary to maintain product quality and profitability and helps to minimize VOC emissions during the drying process. Over drying is known to be a significant factor contributing to excess VOC emissions, and is also a major factor contributing to off spec and reduced quality lumber production from the kiln. To control and optimize the drying process, the facility employs kiln management software programs with the associated sensors and instrumentation. The kiln is operated in accordance with manufacturers recommendations.

Set point information provided to the management system includes push timing, push distance, kiln dry bulb temperature, kiln wet bulb temperature, and desired lumber moisture content. One or more moisture sensors are inserted in each pack of lumber prior to entering the kiln. As the lumber travels through the kiln, adjustments are automatically made to the push distance, to maintain the desired drying profile and to reach the desired final moisture content.

The kiln control system records and stores the measured operating parameters during each kiln operating cycle. Reports are generated which allow for refinement and optimization of operations when evaluating historical kiln operating parameters in relation the moisture content of the feed and product lumber.

Following is a discussion of specific operating parameters that are expected to directly impact the VOC emissions from the kiln, and how they are controlled to minimize emissions:

• Kiln Temperature- To avoid the potential for over-drying, the kiln dry bulb set point is the minimum temperature (based on operating results) that results in adequate moisture removal to meet product

specifications while minimizing re-dry requirements. To facilitate operation at minimum kiln temperatures, kiln components are maintained to provide for uniform temperatures and airflow throughout the kiln (baffles, fans, vents, kiln controls, etc.). Periodically, as practical, the air flow direction in the kiln is reversed to improve uniformity of drying and reduce over-drying. In addition, each stack of lumber is carefully prepared using proper spacer stick placement to provide for adequate air flow throughout the charge.

- Lumber Moisture Content- As previously stated, it is not desirable to reduce the lumber moisture content below the product specification, since it would be detrimental to product quality and increases VOC emissions. Therefore, the target lumber moisture content is set at the highest value possible that will not result in an unacceptable re-dry rate when considering industry lumber grade requirements and/or customer required moisture content. Moisture sensors located in each pack of lumber provide feedback to the kiln control system during the drying process, so that real time adjustments are made as necessary to the push distance to reach the desired moisture content without over-drying.
- Lumber Push Rate- To minimize kiln VOC emissions, it is desirable to maintain the lumber at elevated temperatures for only the time necessary to reduce the moisture content of the charge to the desired level. The time the lumber is in the kiln and at elevated temperatures is determined by the frequency of pushing, and the distance that the lumber is pushed during each pushing event. The control system is programmed with push intervals and push distances that have been found from experience to be suitable for the type and quantity of lumber being dried. The kiln operating program will automatically adjust the push distance during the drying process as needed, based on the feedback from moisture sensors placed in each lumber pack. If the lumber is drying faster than the expected drying profile, the push distance is increased as necessary to avoid potential over-drying.

# Attachment A Preventative Maintenance Work Orders

			Perform	Period
PM Schedule	Description	WO Type	Every	UOM
RBHDK-CDK-001	CDK #1 WEEKLY INSPECTION	Preventive maintenance	1	Weeks
RBHDK-CDK-004	CDK #2 WEEKLY INSPECTION	Preventive maintenance	1	Weeks
RBHDK-INSP-013	CDK #3 WEEKLY INSPECTION	Preventive maintenance	1	Weeks
RBHDK-CDK-006	CDK 1 & 2 - GREASE BEARINGS ON EXHAUST HOODS MONTHLY - 8 SHOTS	Preventive maintenance	1	Months
RBHDK-CDK-007	CDK1 - INSPECT UNLOADER RATCHET HPU	Preventive maintenance	1	Months
RBHDK-CDK-05	CDK #2 DAMPER GREASING	Preventive maintenance	1	Months
RBHDK-INSP-05	DK - CDK # 1 BURNER AA001 MONTHLY VISUAL EMISSION OBSERVATION	Preventive maintenance	1	Months
RBHDK-INSP-08	DK- CDK #2 BURNER AA002 MONTHLY VISUAL EMISSION OBSERVATION	Preventive maintenance	1	Months
RBHDK-INSP-010	DK - CDK # 3 BURNER AA-013 MONTHLY VISUAL EMMISION OBSERVATION	Preventive maintenance	1	Months
RBHDK-LUB-02	CDK 1 RECIRCULATION FAN LUBRICATION	Preventive maintenance	3	Months
RBHDK-LUB-01	CDK 2 RECIRCULATION FAN LUBRICATION	Preventive maintenance	3	Months
RBHDK-LUB-055	CDK 3 RECIRCULATION FAN LUBRICATION	Preventive maintenance	3	Months
RBHSM-INSP-029	DK - CDK # 1 BURNER AA001 MONTHLY INSPECTION	Preventive maintenance	1	Months
RBHYD-INSP-001	DK - CDK #2 BURNER AA002 MONTHLY INSPECTION	Preventive maintenance	1	Months
RBHDK-INSP-011	DK - CDK #3 BURNER AA-013 MONTHLY INSPECTION	Preventive maintenance	1	Months
RBHDK-LUBE-09	CDK FAN LUBRICATION - MONDAY & FRIDAY	Preventive maintenance	1	Weeks
RBHDK-INSP-07	BI-WEEKLY CDK PUSHER INSPECTION	Preventive maintenance	2	Weeks
RBHDK-CLEAN-OO7	CDK RECIRCULATION FANS 1-2-3 - CLEAN EXCESS GREASE OFF DRIVE BEARINGS	Preventive maintenance	2	Months
RBHDK-CDK-009	CDK 1-2-3 BURNER & FUEL DRIVE CHAIN INSPECTION	Preventive maintenance	2	Weeks
RBHDK-CDK-010	CDK 1-2-3 PUSHER INSPECTION	Preventive maintenance	1	Weeks
RBHDK-CDK-003	CDK BI-WEEKLY WALK THROUGH	Preventive maintenance	_	
RBHDK-CDK-008	CDK - WASH OUT AIR COMPRESSOR RADIATORS WEEKLY	Preventive maintenance	1	Weeks