STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Georgia Pacific Wood Products, LLC – Taylorsville
Highway 28 West
Taylorsville, 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: December 13, 2021

Effective Date: As Specified Herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Modified: [DATE]

Expires: November 30, 2026 Permit No.: 2500-00002

TABLE OF CONTENTS

SECTION 1.	GENERAL CONDITIONS	3
SECTION 2.	EMISSION POINTS & POLLUTION CONTROL DEVICES	14
SECTION 3.	EMISSION LIMITATIONS & STANDARDS	16
SECTION 4.	COMPLIANCE SCHEDULE	34
SECTION 5.	MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS	35
SECTION 6.	ALTERNATIVE OPERATING SCENARIOS	66
SECTION 7.	TITLE VI REQUIREMENTS	69
APPENDIX A	A LIST OF ABBREVIATIONS USED IN THIS PERMIT	
APPENDIX 1	B ROUTINE CONTROL DEVICE MAINTENANCE EXEMPTION	
APPENDIX (C COMPLIANCE ASSURANCE MONITORING (CAM) PLANS	
APPENDIX 1	D EPA-APPROVED CONTINUOUS MONITORING SYSTEM (CMS) PLAN	

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 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).)

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, 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.

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

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

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

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

- 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 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-000	Facility-Wide (Georgia Pacific Wood Products LLC, Taylorsville)
AA-000A	Studmill Operations [consisting of the emission sources listed below]
AA-000B	Plywood Mill Operations [consisting of the emission sources listed below]
AA-000A	Studmill Operations (106 Tons per Hour Capacity)
AA-403	Four (4) Steam-Heated, Indirect-Fired Lumber Drying Kilns (GP Ref. No. 1, 2, 3, and 4)
AA-409	Planer Mill Cyclone [collects shavings and controls particulate emissions from the Planer Building, which includes the planer, mainline trim saw, sorter re-trim saw, cutoff saw, rip saw, edge seal, and trim hog]
AA-410	The Green Chip Cyclone [collects green chips and controls particulate emissions from the green chip shaker screen]
AA-000B	Plywood Mill Operations (278 Tons per Hour Capacity)
AA-302	Plywood Finishing Operation [some plywood is oil coated and edge sealed at a spray booth]
AA-303	Wood Residuals Cyclone [collects wood waste and controls particulate emissions from the glue line hog, veneer pluggers, dry core saw, skinner saw, dry hog, green core saws, flying cutoff saw, fish tail saw, and the Studmill Operations]
AA-304	Particleboard Sander Cyclone [collects sander dust and collects particulate emissions from the particleboard sanders]
AA-305	Specialty Saw and Tongue and Groove Machine Baghouse [collects wood waste and controls particulate emissions]
AA-306	Top and Bottom Sander Baghouse [collects wood waste and controls particulate emissions from the top and bottom sander heads; controls the exhaust stream from Cyclone No. 10]
AA-310	Fugitive Emissions from the Debarking Operation [includes two (2) debarkers with 120 linear feet per minute capacity]
AA-314 ¹	Glueline and Lay-Up Operations [consists of eight (8) automated spray booths]
AA-315	Plywood Press Operations [consists of three (3) 40-opening presses and one (1) 36-opening press]
AA-319	Log Soaking Vats [debarked and cut-to-size logs are conditioned for peeling in hot water vats]
AA-320	208 HP (136 kW) Diesel-Fired Emergency Fire Water Pump Engine [constructed in 1985; total heat input: 1.42 MMBTU / hour]
AA-321	Plywood Chip Screen Cyclone [collects wood waste and controls particulate emissions from the Chip Shaker Screen]

Emission Point	Description			
AA-404	Four (4) Veneer Dryers [used to dry green veneer; emissions from the hot zones of each dryer are controlled by a regenerative thermal oxidizer (RTO) equipped with three (3) natural gas-fired, low NO _X burners; each burner has a maximum heat input rating of four (4) MMBTU / hour]			
AA-405	Veneer Dryer Cooling Vents [Eleven (11) vents; ambient air is used to cool the hot veneer prior to exiting the veneer dryers and exhausts to the atmosphere through these roof vents]			
AA-700	155 MMBTU / Hour No. 3 Dual-Fuel Fired Boiler [combusts wood waste and natural gas as fuel sources; equipped with a continuous oxygen trim system; equipped with a multi-clone to collect flyash and an electrostatic precipitator for control of particulate matter]			
AA-900	160 MMBTU / Hour (7,691 kW) Natural Gas-Fired Lean Premix Combustion Turbine with Heat Recovery Steam Generator (HRSG) [constructed in 2018; modified in September 2022]			
AA-901	Fugitive Emissions from Road Traffic (Studmill Operations and Plywood Mill Operations)			

¹ The facility was issued a Permit to Construct (PTC) Air Emissions Equipment on April 22, 2019 for a proposed project that included the addition of one (1) manual glue spreader (Emission Point AA-314), As of the issuance of this permit, the facility has not completed construction of the addition of the new manual spreader. Construction for other portions of the project [i.e. the installation of the two (2) 40-opening plywood presses] was completed in **June 2022**. However, the PTC is still active, as additional construction activities are still on-going.

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 (i.e. ash removal) shall be permitted provided such emissions do not exceed sixty percent (60%) 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
	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.B.1	PM (filterable)	$E = 4.1 \cdot (p^{0.67})$
AA-000	40 CFR Part 63, Subpart DDDD NESHAP for Plywood and Composite Wood Products 40 CFR 63.2231, 63.2232(a), (b),	3.B.2	HAPs	General Applicability
	and (e), and 63.2252; Subpart DDDD			
		Studmill O	perations	
AA-409 AA-410	11 Miss. Admin. Code, Pt. 2, R. 2.2.B(10)., as established in the Title V Operating Permit issued December 13, 2021	3.B.3	PM / PM ₁₀ (filterable)	Operational Requirement (Cyclones)
AA-409	11 Miss. Admin. Code Pt. 2, R 2.2.B(10)., as established in Permit to Construct issued October 22, 1999	3.B.4	PM / PM ₁₀ (filterable)	3.37 lb. / hour; 14.74 tpy (Rolling 12-Month Total)
	Ply	ywood Mill	Operations	
AA-303 through AA-306 AA-321	11 Miss. Admin. Code, Pt. 2, R. 2.2.B(10)., as established in the Title V Operating Permit issued December 13, 2021	3.B.5	PM / PM ₁₀ (filterable)	Operational Requirement (Air Pollution Control Devices)
AA-305	11 Miss. Admin. Code Pt. 2, R 2.2.B(10)., as established in Operating Permit issued November 18, 1986; modified February 10, 1987 and March 22, 1998	3.B.6	PM / PM ₁₀ (filterable)	4.0 lb. / hour; 10.0 tpy (Rolling 12-Month Total)
	11 Miss. Admin. Code Pt. 2, R 2.2.B(10)., as established in Permit to Construct issued April 22, 2019 and modified in Title V Operating Permit issued [DATE]	3.B.7	Operating	New Unit Shakedown Allowance
AA-315		3.B.8	Requirements	Existing Unit Decommissioning Requirements
	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.9	PM (filterable)	0.6 lb. / MMBTU
AA-320	40 CFR Part 63, Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines	3.B.10	HAPs	General Applicability
	40 CFR 63.6585(a) and (b), 63.6590(a)(1)(ii), and 63.6605, Subpart ZZZZ			

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-320	40 CFR 63.6640(f)(1) – (3), Subpart ZZZZ	3.B.11	HAPs	Operational Requirements
AA-404 AA-700	40 CFR Part 64 – Compliance Assurance Monitoring 40 CFR 64.2(a), CAM	3.B.12	VOCs PM / PM ₁₀	General Applicability
	11 Miss. Admin. Code Pt. 2, R 2.2.B(10)., as established in Permit to Construct issued January 21, 1998; modified June 29, 1998 and November 16, 1998	3.B.13	VOCs (as carbon)	90% Destruction Efficiency (Minimum)
AA-404	40 CFR 63.2240(b) and Table 1B, Subpart DDDD	3.B.14		90% Reduction Efficiency, Measured as Total Hydrocarbons (as Carbon) (for RTO)
	40 CFR 63.2240(b) and Table 2 (Item 1), Subpart DDDD	3.B.15	HAPs	Maintain 3-Hour Block Average Firebox Temperature (for RTO)
	40 CFR 63.2250(a) – (c), (f), and (g), Subpart DDDD	3.B.16		General Requirements
AA-700 AA-900	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.B.17	SO_2	4.8 lb. / MMBTU
	11 Miss. Admin. Code Pt. 2, R. 1.3.D(2).	3.B.18	PM (filterable)	0.30 grains / dscf
	11 Miss. Admin. Code Pt. 2, R 2.2.B(10)., as established in Operating Permit issued August 8, 1995; modified February 27, 1996 and January 2, 2001	3.B.19	Fuel Restriction	Combust Bark, Wood Residuals, and Natural Gas
		3.B.20	PM / PM ₁₀ (filterable)	122.8 lb. / hour; 537.9 tpy (Rolling 12-Month Total)
AA-700	40 CFR Part 63, Subpart DDDDD – NESHAP for Industrial- Commercial-Institutional Boilers and Process Heaters 40 63.7485, 63.7490(a)(1), (d), and	3.B.21	HAPs	General Applicability
	63.7499(h); Subpart DDDDD 40 CFR 63.7500(a)(1), (f), and Table 2 (Items 1 and 13); Subpart DDDDD	3.B.22	HC1	0.02 lb. / MMBTU of Heat Input; or
			Hg	0.023 lb. / MMBTU of Steam Output 5.4 × 10 ⁻⁶ lb. / MMBTU of Heat Input; or
				6.2×10^{-6} lb. / MMBTU of Steam Output
			СО	3,500 ppmvd at 3% Oxygen (based on 3-run average); or
				3.5 lb. / MMBTU of Steam Output (based on 3-run average)

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-700	40 CFR 63.7500(a)(1), (f), and Table 2 (Items 1 and 13); Subpart DDDDD	3.B.22	PM (filterable) [or TSM]	0.44 [or 0.00045] lb. / MMBTU of Heat Input; or 0.55 [or 0.00057] lb. / MMBTU of Steam Output
	40 CFR 63.7500(a)(2), (f), and Table 4 (Items 4.a. and 7); Subpart DDDDD	3.B.23	Oxygen Concentration Opacity Boiler Load	Maintain Operating Limits
AA-900	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.24	PM (filterable)	$E = 0.8808 \cdot (I^{-0.1667})$
	40 CFR Part 60, Subpart KKKK – Standards of Performance for Stationary Combustion Turbines 40 CFR 60.4305(a); Subpart KKKK	3.B.25	NO _X SO ₂	General Applicability
	40 CFR 60.4320(a) and Table 1, 60.4330(a)(2), and 60.4333(a); Subpart KKKK	3.B.26	NO _X	25 ppm at 15% oxygen (when combustion turbine is in operation); and 54 ppm at 15% oxygen (when HRSG operating independently)
			SO_2	0.060 lb. / MMBTU
	40 CFR Part 63, Subpart YYYY – NESHAP for Stationary Combustion Turbines 40 CFR 63.6085, 63.6090(a)(2); and 63.6095(d), Subpart YYYY	3.B.27	HAPs	General Applicability
	40 CFR 63.6100, 63.6175, and Table 1; Subpart YYYY	3.B.28	Formaldehyde	91 ppbvd at 15% Oxygen

3.B.1 For Emission Point AA-000 (Facility-Wide), except as otherwise specified, the permittee shall not cause or allow the emission from any manufacturing process in any one (1) hour, and from any point source, particulate matter (PM) in total quantities in excess of the amount determined by the relationship:

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

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 Point AA-000 (Facility-Wide), the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 63, Subpart DDDD – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Plywood and Composite Wood Products and the applicable requirements found in 40 CFR Part 63, Subpart A – General Provisions (as required in Table 10 of Subpart DDDD).

For purposes of this permit, Emission Points AA-315 and AA-403 are not subject to any emission standard, compliance option, or work practice requirement found in Subpart DDDD. Therefore, the noted process equipment are not subject to any other requirements found in Subpart DDDD.

(Ref.: 40 CFR 63.2231, 63.2232(a), (b), (e), and 63.2252; Subpart DDDD)

For Studmill Operations:

3.B.3 For Emission Points AA-409 and AA-410, the permittee shall not allow emissions from each process to bypass its associated cyclone. In the event that a cyclone malfunctions or becomes non-operational, the permittee shall cease operations at the corresponding process until such time when repairs can be made to return the cyclone to its normal operational state.

(Ref.: 11 Miss. Admin. Code, Pt. 2, R. 2.2.B(10)., as established in the Title V Operating Permit issued December 13, 2021)

3.B.4 For Emission Point AA-409, the permittee limit the emission of filterable particulate matter and particulate matter less than 10 microns (μm) in diameter (PM / PM₁₀) to no more than 3.37 pounds per hour and 14.74 tons per year (tpy) based on a 12-month rolling total basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued October 22, 1999)

For Plywood Mill Operations:

3.B.5 For Emission Points AA-303 through AA-306 and AA-321, the permittee shall not allow emissions from each process to bypass its associated air pollution control device. In the event that a control device malfunctions or becomes non-operational, the permittee shall cease operations at the corresponding process until such time when repairs can be made to return the control device to its normal operational state.

(Ref.: 11 Miss. Admin. Code, Pt. 2, R. 2.2.B(10)., as established in the Title V Operating Permit issued December 13, 2021)

3.B.6 For Emission Point AA-305, the permittee shall limit the emission of filterable particulate matter and particulate matter less than 10 µm in diameter (PM / PM₁₀) to more than 4.0 pounds per hour and 10.0 tons per year (tpy) based on a rolling 12-month total basis.

- (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Operating Permit issued November 18, 1986; modified February 10, 1987 and March 22, 1998)
- 3.B.7 For Emission Point AA-315, the permittee may shakedown a new replacement plywood press for a period not to exceed one hundred eighty (180) days after the start-up of the press.

For the purpose of this permit, "shakedown" is considered the period beginning with start-up of a press and ending once the safe, efficient, and reliable operation of a new plywood press has been achieved.

- (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Permit to Construct issued April 22, 2019 and modified in the Title V Operating Permit issued [DATE])
- 3.B.8 For Emission Point AA-315, the permittee shall decommission three (3) of the existing plywood presses no later than thirty (30) days after completing the respective shakedown periods for all new replacement presses.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued April 22, 2019 and modified in the Title V Operating Permit issued [DATE])
- 3.B.9 For Emission Point AA-320, the maximum permissible emission of particulate matter (PM) from an installation with a rate heat input capacity 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.B.10 For Emission Point AA-320, the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 63, Subpart ZZZZ –NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE) and the applicable found in 40 CFR Part 63, Subpart A General Provisions (as identified in Table 8 of Subpart ZZZZ).

For the purpose of this permit, Emission Point AA-320 is considered an "existing" emergency compression-ignition stationary RICE located at a major source of hazardous air pollutant (HAP) emissions.

The permittee shall operate and maintain the engine 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 Subpart ZZZZ have been achieved.

The determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ, which may include (but is not

limited to) monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspections of the engine.

(Ref.: 40 CFR 63.6585(a) and (b), 63.6590(a)(1)(ii), and 63.6605(b); Subpart ZZZZ)

- 3.B.11 For Emission Point AA-320, any operation of the engine for any reason other than emergency operation, maintenance and testing, and operation in non-emergency situations for fifty (50) hours per year is prohibited. If the engine is not operated in accordance with Parts (a) through (c) of this condition, the engine will not be considered an emergency engine under the referenced regulation and shall meet all requirements for a corresponding non-emergency engine.
 - (a) There is no time limit on the use of an engine in emergency situations.
 - (b) The permittee may operate an engine for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company accompanied with the engine. Maintenance checks and readiness testing of an engine is limited to a maximum of one hundred (100) hours per calendar year. The permittee may petition the MDEQ for approval of additional hours to be used for maintenance checks and readiness testing. However, a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of the engine beyond 100 hours per calendar year.
 - (c) The permittee may operate an engine for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 63.6640(f)(1) - (3); Subpart ZZZZ)

3.B.12 For Emission Points AA-404 and AA-700, the permittee is subject to and shall comply with all applicable requirements 40 CFR Part 64 – Compliance Assurance Monitoring (CAM).

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

3.B.13 For Emission Point AA-404, the permit shall limit the emission of volatile organic compounds (VOCs – as carbon) by operating a control device with a (at a minimum) ninety percent (90%) VOC destruction efficiency.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued January 21, 1998; modified June 29, 1998 and November 16, 1998)

3.B.14 For Emission Point AA-404, the permittee shall operate the regenerative thermal oxidizer (RTO) in such a manner as to reduce the emission of hazardous air pollutants (HAPs) in total by ninety (90) percent [measured as total hydrocarbons (as carbon)].

(Ref.: 40 CFR 63.2240(b) and Table 1B; Subpart DDDD)

3.B.15 For Emission Point AA-404, the permittee shall maintain the 3-hour block average firebox temperature of the RTO above the minimum temperature established during the most recent performance test demonstrates compliance with the HAP [measured as total hydrocarbons – as carbon] destruction efficiency standard specified in Condition 3.B.14.

(Ref.: 40 CFR 63.2240(b) and Table 2 (Item 1); Subpart DDDD)

3.B.16 For Emission Point AA-404, the permittee shall comply with the compliance options, operating requirements, and the work practice requirements found in Subpart DDDD when the applicable process unit(s) are operating, except during safety-related shutdowns conducted in accordance with the work practice requirements in Condition 3.D.4 (as applicable). However, the permittee shall minimize the length of time when compliance options and operating requirements are not met due to safety-related shutdowns.

Additionally, the permittee must always operate and maintain the veneer dryers (including air pollution control and monitoring equipment) in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by Subpart DDDD. 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.

The determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the MDEQ, which may include (but is not limited to) monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(Ref.: 40 CFR 63.2250(a), (b), (c), (f), and (g); Subpart DDDD)

3.B.17 For Emission Points AA-700 and AA-900, the permittee shall limit the maximum discharge of sulfur oxides from each process unit to more than 4.8 pounds (measured as sulfur dioxide or SO₂) per MMBTU heat input.

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

3.B.18 For Emission Point AA-700, the maximum discharge of filterable PM shall not exceed 0.30 grains per standard dry cubic foot.

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

- 3.B.19 For Emission Point AA-700, the permittee is authorized to combust bark, wood residuals, and natural gas as fuel sources within the boiler.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Operating Permit issued August 8, 1995; modified February 27, 1996 and January 2, 2001)
- 3.B.20 For Emission Point AA-700, the permittee limit the emission of filterable particulate matter and particulate matter less than 10 µm in diameter (PM / PM₁₀) to no more than 122.8 pounds per hour and 537.9 tons per year (tpy) based on a rolling 12-month basis.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Operating Permit issued August 8, 1995; modified February 27, 1996, and January 2, 2001)
- 3.B.21 For Emission Point AA-700, the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 63, Subpart DDDDD National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial-Commercial-Institutional Boilers and Process Heaters and 40 CFR Part 63, Subpart A General Provisions (as identified in Table 10 of Subpart DDDDD).
 - For purpose of this permit, Emission Point AA-700 is considered an existing boiler in the "hybrid suspension / grate units designed to burn biomass / bio-based solid" subcategory.
 - (Ref.: 40 CFR 63.7485, 63.7490(a)(1), (d), and 63.7499(h); Subpart DDDDD)
- 3.B.22 For Emission Point AA-700, except during periods of start-up and shutdown, the permittee shall at all times comply with the following emission standards:
 - (a) Hydrogen Chloride (HCl): no more than 0.02 pounds per MMBTU of heat input **or** 0.023 pounds per MMBTU of steam output);
 - (b) Mercury (Hg): no more than 5.4×10^{-6} pounds per MMBTU of heat input <u>or</u> 6.2×10^{-6} pounds per MMBTU of steam output;
 - (c) Carbon Monoxide (CO): no more than 3,500 parts per million by volume on a dry basis (ppmvd) corrected to three (3) percent oxygen (based on a 3-run average) or 3.5 pounds per MMBTU (based on a 3-run average); and
 - (d) Filterable PM: no more than 0.44 pounds per MMBTU of heat input <u>or</u> 0.55 pounds per MMBTU of steam output [or for Total Selected Metals (TSM): no more than 4.5×10^{-4} pounds per MMBTU of heat input <u>or</u> 5.7×10^{-4} pounds per MMBTU of steam output].
 - (Ref.: 40 CFR 63.7500(a)(1), (f), and Table 2 (Items 1 and 13); Subpart DDDDD)
- 3.B.23 For Emission Point AA-700, the permittee shall at all times (except during periods of

start-up and shutdown) comply with the following operating limits:

- (a) Maintain the oxygen concentration at or above the lowest hourly average oxygen concentration measured during the performance test that demonstrates compliance with the CO emission limit specified in Condition 3.B.22(c);
- (b) Maintain the opacity to less than or equal to either ten (10) percent or the highest hourly average opacity reading measured during the performance test that demonstrates compliance with the PM or Hg emission limit specified in Condition 3.B.22 (based on a daily block average); and
- (c) Maintain the rolling 30-day average boiler operating load such that it does not exceed 110% of the highest hour average operating load recorded during a performance test conducted to demonstrate compliance with an emission limit specified in Condition 3.B.22.

(Ref.: 40 CFR 63.7500(a)(2) and (f), 63.7525(a)(7), and Table 4 (Items 4.a. and 7); Subpart DDDDD)

3.B.24 For Emission Point AA-900, the maximum permissible emission of ash and/or particulate matter (PM) from the combustion turbine shall not exceed an emission rate as determined by the relationship:

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

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

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

3.B.25 For Emission Point AA-900, the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 60, Subpart KKKK – Standards of Performance for Stationary Combustion Turbines.

(Ref.: 40 CFR 60.4300 and 60.4305(a); Subpart KKKK)

- 3.B.26 For Emission Point AA-900, the permittee shall comply with the following emission limitations:
 - (a) Nitrogen Oxides (NO_X): 25 part per million (ppm) at fifteen (15) percent oxygen when the combustion turbine is in operation <u>and</u> 54 ppm at 15% oxygen when the heat recovery steam generating (HRSG) unit operates independent of the combustion turbine.
 - (b) Sulfur Dioxide (SO₂): burn no fuels that contain total potential sulfur emissions in excess of 0.060 pounds per MMBTU heat input.

The permittee shall operate and maintain the combustion turbine in a manner consistent with good air pollution control practices for minimizing emissions at all times (including during periods of start-up, shutdown, and malfunction).

(Ref.: 40 CFR 60.4320(a), 60.4330(a)(2), 60.4333(a), and Table 1; Subpart KKKK)

3.B.27 For Emission Point AA-900, the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 63, Subpart YYYY – NESHAP for Stationary Combustion Turbines, 40 CFR Part 63, Subpart A – General Provisions (as required in Table 7 of Subpart YYYY).

For the purpose of this permit, the combustion turbine is considered a "new lean pre-mix gas-fired, combined cycle stationary combustion turbine" that is not equipped with an oxidation catalyst.

(Ref.: 40 CFR 63.6080, 63.6085, 63.6090(a)(2), and 63.6095(d); Subpart YYYY)

3.B.28 For Emission Point AA-900, except during periods of start-up and shutdown, the permittee shall limit the concentration of formaldehyde emitted to no more than ninety-one (91) parts per billion by volume on a dry basis ("ppbvd") at fifteen (15) percent oxygen.

For the purpose of this condition, "start-up" ends either when the turbine has reached stable operation or after three (3) hours (whichever is less).

(Ref.: 40 CFR 63.6100, 63.6175, and Table 1; Subpart YYYY)

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 lb. / MMBTU
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2	SO_2	4.8 lb. / MMBTU

3.C.1 The maximum permissible emission of ash and/or particulate (PM) 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 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 MMBTU heat input.

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

D. WORK PRACTICE STANDARDS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-302	40 CFR 63.2241(a) and Table 3 (Item 5); Subpart DDDD	3.D.1	HAPs	Use Non-HAP Coatings
AA-320	40 CFR 63.6602, Table 2c (Item 1), and 63.6625(i); Subpart ZZZZ	3.D.2	HAPs	Conduct Routine Maintenance
	40 CFR 63.6625(e)(2), (h), and 63.6640(a); Subpart ZZZZ	3.D.3		Operational Requirements
AA-404	40 CFR 63.2241 and Table 3 (Item 3); Subpart DDDD	3.D.4	HAPs	Follow Safety-Related Shutdown Requirements; and Minimize Fugitive Emissions
AA-700	40 CFR 63.7500(a)(3); Subpart DDDDD	3.D.5	HAPs	General Duty Clause
	40 CFR 63.7500(a)(1), 63.7515(d), 63.7540(a)(10), (12), (13), and Table 3; Subpart DDDDD	3.D.6		Conduct Routine Tune-Ups
	40 CFR 63.7540(a)(12); Subpart DDDDD	3.D.7	Minimum Oxygen Concentration	Set the Oxygen Concentration Level on the Oxygen Trim System
	40 CFR 63.7500(f), 63.7540(d), Table 3 (Items 5 and 6); Subpart DDDDD	3.D.8	HAPs	Follow Start-Up and Shutdown Requirements
AA-900	40 CFR 63.6105(c); Subpart YYYY	3.D.9	HAPs	General Duty Clause

- 3.D.1 For Emission Point AA-302, the permittee shall use non-HAP coatings in all Group 1 miscellaneous coating operations (as applicable). For the purpose of this permit, the following terms are defined as such:
 - (a) A "non-HAP coating" is defined as a coating with a hazardous air pollutant (HAP) content below 0.1 percent by mass for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200 and below 1.0 percent by mass for other HAP compounds; and
 - (b) A "Group 1 miscellaneous coating operation" is defined as the application of edge seals, nail lines, logo (or other information) paint, shelving edge fillers, trademark / grade-stamp inks, and wood putty patches to plywood (including synthetic patches).

(Ref.: 40 CFR 63.2241(a) and Table 3 (Item 5); Subpart DDDD)

- 3.D.2 For Emission Point AA-320, except during periods of start-up, the permittee shall meet the following maintenance requirements:
 - (a) Change the oil and filter every five hundred (500) hours of operation or annually (whichever comes first);

The permittee has the option of utilizing an oil analysis program in order to extend the noted oil change requirement in accordance with the following provisions:

- (1) The oil analysis shall be performed at the same frequency specified for changing the oil as outlined in paragraph (a) of this condition;
- (2) The analysis program shall (at a minimum) analyze the Total Base Number, viscosity, and percent water content. The condemning limits for each noted parameter are as follows:
 - (i) Total Base Number is less than thirty percent (30%) of the Total Base Number of the oil when new;
 - (ii) Viscosity of the oil has changed by more than twenty percent (20%) from the viscosity of the oil when new; and
 - (iii) Percent water content (by volume) is greater than 0.5.

If none of the condemning limits are exceeded, the permittee is not required to change the oil. However, if any of the limits are exceeded, the permittee shall change the oil within two (2) business days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the permittee shall change the oil within two (2) business days or before commencing operation (whichever is later).

The permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. Additionally, the analysis program shall be part of the maintenance plan for the engine.

- (b) Inspect the air cleaner every one thousand (1,000) hours of operation or annually (whichever comes first), and replace as necessary; and
- (c) Inspect all hoses and belts every 500 hours of operation or annually (whichever comes first), and replace as necessary.

If the engine is operating during an emergency situation and it is not possible to perform the oil change on the required schedule or if performing the oil change on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the oil change can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The oil change should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The permittee shall report any failure to perform the oil change on the schedule required and the Federal, State, or local law under which the risk was deemed unacceptable.

(Ref.: 40 CFR 63.6602, Table 2c (Item 1), and 63.6625(i); Subpart ZZZZ)

- 3.D.3 For Emission Point AA-320, the permittee shall comply with one of the following options:
 - (a) Operate and maintain the engine and the after-treatment control device (if any) according to the manufacturer's emission-related written instructions; or
 - (b) Develop a site-specific maintenance plan, which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Additionally, the permittee shall minimize the time spent at idle during engine start-up and minimize the start-up time to a period needed for appropriate and safe loading of the engine, not to exceed thirty (30) minutes, after which time the non-startup emission limitations apply.

(Ref.: 40 CFR 63.6625(e)(2), (h), and 63.6640(a); Subpart ZZZZ)

- 3.D.4 For Emission Point AA-404, the permittee shall adhere to the following work practice standards:
 - (a) Follow documented site-specific safety-related shutdown procedures (i.e. the use of automated controls or other measures that have been developed to protect workers and equipment) to ensure that the flow of raw materials (such as furnish or resin), fuel, or process heat (as applicable) cease and that material is removed from the dryer(s) as expeditiously as possible given the system design to reduce air emissions.
 - (b) Minimize fugitive emissions from the dryer doors (through proper maintenance procedures) and the green end of the dryers (through proper balancing of the heated zone exhausts).

(Ref.: 40 CFR 63.2241 and Table 3 (Items 3 and 6); Subpart DDDD)

3.D.5 For Emission Point AA-700, the permittee shall at all times operate and maintain the boiler in a manner consistent with safety and good air pollution control practices for minimizing emissions. The 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 the boiler.

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

- 3.D.6 For Emission Point AA-700, the permittee shall conduct a tune-up of the boiler once every five (5) years and no more than sixty-one (61) months after the previous tune-up. Each tune-up shall be performed in accordance with the following specifications:
 - (a) Inspect the burner (as applicable) and clean or replace any components of the burner as necessary. The permittee may delay the burner inspection specified until the next scheduled or unscheduled unit shutdown. If the boiler produces electricity for sale, the permittee may delay the burner inspection until the first outage not to exceed seventy-two (72) months from the previous inspection.
 - At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspection, inspections are required only during planned entries into the storage vessel or process equipment.
 - (b) Inspect the flame pattern (as applicable) and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications (if available);
 - (c) Inspect the system controlling the air-to-fuel ratio (as applicable) and ensure that it is correctly calibrated and functioning properly. The permittee may delay the inspection until the next scheduled unit shutdown. If the boiler produces electricity for sale, the permittee may delay the burner inspection until the first outage not to exceed thirty-six (36) months from the previous inspection.
 - (d) Optimize the total emission of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications (if available) and with any nitrogen oxides (NO_X) requirement to which the unit is subject.
 - (e) Measure the concentrations in the effluent stream of CO in parts per million (by volume) and oxygen in volume percent before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

Additionally, the permittee shall maintain the following information for each boiler tuneup conducted:

(f) The concentrations of CO in the effluent stream in parts per million by volume and oxygen in volume percent, measured at high fire or the typical operating load, before and after the tune-up of a boiler;

- (g) A description of any corrective actions taken as a part of the tune-up; and
- (h) The type and amount of fuel used over the twelve (12) months prior to the tune-up, but only if the boiler was physically and legally capable of using more than one (1) type of fuel during that period.

If a boiler is not operating on the required date for a tune-up, the tune-up shall be conducted within thirty (30) calendar days of start-up.

(Ref.: 40 CFR 63.7500(a)(1), 63.7515(d), 63.7540(a)(10), (12), (13), and Table 3; Subpart DDDDD)

3.D.7 For Emission Point AA-700, the permittee shall set the oxygen level concentration on the oxygen trim system no lower than the concentration measured during the most recent performance test that demonstrates compliance with the CO emission limitation specified in Condition 3.B.22(c).

(Ref.: 40 CFR 63.7525(a)(7); Subpart DDDDD)

- 3.D.8 For Emission Point AA-700, the permittee shall operate the boiler in accordance with the following requirements during periods of start-up and shutdown (as applicable):
 - (a) For Periods of Start-Up:
 - (1) The permittee shall operate all continuous monitoring systems during startup.
 - (2) The permittee must use one (1) or a combination of the following clean fuels (as defined by Subpart DDDDD where applicable): natural gas; synthetic natural gas; propane; other Gas 1 fuels; distillate oil; syngas; ultra-low sulfur diesel; fuel oil-soaked rags; kerosene; hydrogen; paper; cardboard; refinery gas; liquefied petroleum gas; clean dry biomass; and any fuels meeting the appropriate HCl, mercury, and TSM emission standards by fuel analysis.
 - (3) Once a boiler starts firing a fuel that is not a clean fuel (i.e. non-clean and/or wet biomass), the permittee shall vent emissions to the appropriate main stack and engage all of the applicable control devices. Start-up ends when steam or heat is supplied for any purpose.
 - (b) For Periods of Shutdown:
 - (1) The permittee shall operate all continuous monitoring systems during shutdown.

- (2) When firing fuels that are not clean fuels during a shutdown, the permittee shall vent emissions to the appropriate main stack and operate all applicable control devices.
- (3) If another fuel must be used to support the shutdown process (in addition to the fuel used prior to initiation of shutdown), the additional fuel must be one (1) or a combination of the following clean fuels (as defined by Subpart DDDDD where applicable): natural gas; synthetic natural gas; propane; other Gas 1 fuels; distillate oil; syngas; ultra-low sulfur diesel; refinery gas; and liquefied petroleum gas.

(Ref.: 40 CFR 63.7500(f), 63.7540(d), and Table 3 (Items 5 and 6); Subpart DDDDD)

3.D.9 For Emission Point AA-900, the permittee shall at all times operate and maintain the turbine (include associated air pollution control equipment and monitoring equipment) in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard(s) have been achieved.

The 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 the turbine.

(Ref.: 40 CFR 63.6105(c); Subpart YYYY)

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 certification of compliance shall address each version of the permit. Each compliance certification shall include the following information:
 - (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), and (d).)

- 4.3 The following construction permit has been issued prior to the issuance and/or modification of this permit and contain applicable requirements for new and existing equipment at this facility. These requirements will become effective as outlined in the relevant construction permit. Additionally, these applicable requirements will be fully incorporated into this permit using the appropriate modification procedures as required in Mississippi Administrative Code, Title 11, Part 2, Chapter 6, Rule 6.4.E following submittal of the application as required in Mississippi Administrative Code, Title 11, Part 2, Chapter 2, Rule 2.D(5).:
 - Permit to Construct Air Emissions Equipment issued on April 22, 2019 the permittee has not completed construction on the addition of one (1) new manual glue spreader for Emission Point AA-314 and the replacement of three (3) existing 36-opening presses with three (3) new 40-opening presses for Emission Point AA-315.

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

A. GENERAL MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

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

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

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

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

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

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

5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 of each year for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with Mississippi Administrative Code, Title 11, Part 2, Chapter 6, Rule 6.2.E.

For applicable periodic reporting requirements in 40 CFR Parts 60, 61, and 63, the permittee shall comply with the deadlines in this condition for reporting conducted on a semi-annual basis. Additionally, any required quarterly reports shall be submitted by the end of the month following each calendar quarter (i.e. April 30, July 31, October 31, and

January 31) and any required annual reports shall be submitted by January 31 following each calendar year.

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

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, the monitoring, testing, recordkeeping, and reporting requirements of Section 5 herein supersede the requirements of any preceding Permit to Construct and/or Operate upon permit issuance.

(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	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement		
AA-000	40 CFR 52.21(r)(6)(iii); Subpart A	5.B.1	PM ₁₀ PM _{2.5} VOCs	Calculate and Maintain Project-Related Emissions Increases		
	Studmill Operations					
AA-409	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.2	Opacity	Perform a Visual Emission Observation Weekly		
AA-410		5.B.3	PM / PM ₁₀ (filterable)	Perform an Inspection on Each Cyclone Weekly		
AA-409	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.4	PM / PM ₁₀ (filterable)	Calculate and Maintain Emissions (Monthly; Rolling 12-Month Total)		
	Plywood Mill Operations					
AA-302 AA-404	40 CFR 63.2271(b)(4), 63.2282(a) – (b) and (f), and Table 8 (Items 3, 5, and 6); Subpart DDDD	5.B.5	HAPs	Recordkeeping Requirements		
AA-303 through	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.6	Opacity	Perform a Weekly Visual Emission Observation		
AA-306 AA-321		5.B.7	PM / PM ₁₀ (filterable)	Perform a Weekly Inspection on Each Air Pollution Control Device		
AA-305 AA-306	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.8	PM / PM ₁₀ (filterable)	Monitor the Differential Pressure Drop Across Each Baghouse Weekly		
AA-305 AA-700	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.9	PM / PM ₁₀ (filterable)	Calculate and Maintain Emissions (Monthly; Rolling 12-Month Total)		
	40 CFR 63.6625(f) and 63.6655(f)(1); Subpart ZZZZ	5.B.10	HAPs	Record Hours of Operation (Emergency and Non-Emergency)		
AA-320	40 CFR 63.6655(a)(1), (2), (4), and (5), and (e)(2); Subpart ZZZZ	5.B.11		General Recordkeeping Requirements		
AA-404 AA-700	40 CFR 64.7(b) and (c); CAM	5.B.12	Operation & Maintenance	Operation and Maintenance Requirements for Monitoring System(s)		
	40 CFR 64.7(d); CAM	5.B.13	Corrective Action	Perform Corrective Action Response to an Excursion / Exceedance of CAM Indicator		
	40 CFR 64.8; CAM	5.B.14	QIP	Develop a Quality Improvement Plan (QIP) (Upon Request)		

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
AA-404 AA-700	40 CFR 64.9(b); CAM	5.B.15	CAM Records	Record and Maintain CAM Records (As Specified)
AA-404	40 CFR 64.3(a), (b), and 64.6(c); CAM	5.B.16	Combustion Chamber Temperature	CAM Requirements: Continuous Temperature Monitoring of RTO
	40 CFR 63.2251; Subpart DDDD	5.B.17	HAPs	Maintain Documentation on RCDME Activities
	40 CFR 63.2262(a) – (h), Table 4 (Items 1 – 5), and Table 7 (Items 1 and 7); Subpart DDDD 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.18	HAPs VOCs (as carbon)	Conduct Routine Performance Testing
	40 CFR 63.2270(a) – (d), (f), 63.2271(b)(3), and Table 7 (Item 1); Subpart DDDD	5.B.19	Combustion Chamber Temperature	Continuous Compliance Requirements
	40 CFR 63.2269(a) and (b); Subpart DDDD	5.B.20	HAPs	Operate, Validate, and Maintain a Temperature Monitoring System
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.21	PM / PM ₁₀ (filterable)	Maintain an Operation and Maintenance Plan for the ESP
	40 CFR 63.7555(a) – (c), (d)(5) – (7), (9), (10), and 63.7560; Subpart DDDDD	5.B.22	HAPs	Recordkeeping Requirements
	40 CFR 63.7505(d), and 63.7520(a); Subpart DDDDD	5.B.23	HCl	Develop and Maintain Site-Specific Monitoring and Stack Testing Plans
			Hg	
			СО	
AA-700			PM (filterable)	
			Operating Limits	
	40 CFR 63.7505(c), 63.7515(a) – (c), 63.7520(b) – (e), and Table 5; Subpart DDDDD	5.B.24	HCl	
			Hg	Conduct Routine Performance Testing (Annually or Every Three Years – As
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).		CO PM (filterable)	Applicable)
	40 CFR 63.7525(d) and 63.7535; Subpart DDDDD	5.B.25	Oxygen Concentration Boiler Load	Continuous Compliance Requirements CMS Operational Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
AA-700	40 CFR 63.7525(a) and Table 7 (Items 4 and 5); Subpart DDDDD 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.26	Oxygen Concentration Boiler Load	Establish Operating Limits
	40 CFR 63.7525(c), 63.7540(a), Table 7, and Table 8; Subpart DDDDD	5.B.27	Opacity	Continuous Compliance Requirements
	40 CFR 64.3(a), (b), and 64.6(c); CAM	5.B.28		CAM Requirements: Continuous Opacity Monitoring of ESP
AA-900	40 CFR 60.4340(a) and 60.4400(a) – (b); Subpart KKKK	5.B.29	NO_X	Conduct Routine Performance Testing (Annual or Biennial)
	40 CFR 60.4365(a) and 60.4415(a); Subpart KKKK	5.B.30	SO_2	Sulfur Content Monitoring Exemption
	40 CFR 63.6115, 63.6120(a) – (d), and Table 3; Subpart YYYY 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.31	Formaldehyde	Conduct Annual Performance Testing
	40 CFR 63.6115, 63.6120(a) – (d), and Table 3; Subpart YYYY		Total Power Output	Establish the Operating Limit(s)
	40 CFR 63.6125(b), 63.6135, 63.6140, and Table 5 (Item 2); Subpart YYYY	5.B.32 5.B.33	Total Power Output	Continuous Compliance Requirements
	40 CFR 63.6125(e); Subpart YYYY			Develop, Implement, and Maintain a CMS Quality Control Program
	40 CFR 63.6155(a)(1), (2), (5) – (7), (b), and (c); Subpart YYYY	5.B.34	HAPs	Recordkeeping Requirements

5.B.1 For Emission Point AA-000 (Facility-Wide), as applicable, the permittee shall monitor the respective emission of PM₁₀, PM_{2.5}, and VOCs that could increase as a result of the construction project authorized under the Permit to Construct Air Emissions Equipment issued April 22, 2019.

The permittee shall calculate and record the respective pollutant emissions in tons per year (tpy) on a 12-month calendar year basis 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-409 and AA-410, the permittee shall perform and record a

weekly visible emission observation in accordance with EPA Test Method 22 on the exhaust of each cyclone during daylight hours and during representative operating conditions.

If visible emissions are detected during an observation, the permittee shall then immediately perform and record a visible emission evaluation (VEE) in accordance with EPA Test Method 9. In the event that a VEE is required but cannot be conducted, the permittee shall record and maintain a written explanation as to why it was not possible to perform the VEE immediately and shall conduct the VEE as soon as practicable.

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 the 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.3 For Emission Points AA-409 and AA-410, the permittee shall conduct and record a weekly inspection on each cyclone while in operation. If any problem is noted during an inspection, the permittee shall perform and record the necessary maintenance activities to ensure operation of the cyclone as originally designed. Additionally, preventative maintenance shall be performed (as necessary) to maintain proper operation of a cyclone.

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

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

5.B.4 For Emission Point AA-409, the permittee shall calculate and maintain the total emission of filterable particulate matter and particulate matter less than 10 μm in diameter (PM / PM₁₀) in tons both on a monthly basis and on a rolling 12-month total basis.

Unless otherwise specified herein, the permittee shall maintain all reference data and applicable documentation used to determine the calculated emissions (operational data, throughput data, applicable emission factors, engineering judgement determinations, performance testing, etc.).

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

5.B.5 For Emission Points AA-302 and AA-404, the permittee shall maintain documentation on the following information:

- (a) A copy of each notification and report submitted to comply with Subpart DDDD (including all supporting documentation);
- (b) Records in accordance with 40 CFR 63.2282(a)(2)(i) (iv), Subpart DDDD;
- (c) A copy of all documentation concerning the approved routine control device maintenance (RCDME);
- (d) The results for all performance tests and continuous monitoring system (CMS) performance evaluations;
- (e) Records that document the procedures to minimize fugitive emissions from the dryers are being followed;
- (f) Records that demonstrate only non-HAP coatings are being used in all Group 1 miscellaneous coating operations;
- (g) Records that demonstrate the requirements for a safety-related shutdown of a dryer and/or the RTO are being followed; and
- (h) The written CMS quality control procedures and program of corrective action [as specified in 40 CFR 63.8(d)(2), Subpart A] for the life of the process unit (or until the process unit is no longer subject to Subpart DDDD).

If the performance evaluation plan is revised, the permittee shall keep previous (i.e. superseded) versions of the performance evaluation plan on record to be made available for inspection for a period of five (5) years after each revision to the plan.

Instances when a safety-related shutdown is used [in accordance with Condition 3.D.4(a)] shall not be considered a deviation from (or violation of) the otherwise applicable work practice standard outlined in Condition 3.D.4(b) as long as the permittee does not exceed the minimum amount of time necessary for these events.

(Ref.: 40 CFR 63.2271(b)(4), 63.2282(a) – (b) and (f), and Table 8 (Items 3, 5, and 6); Subpart DDDD)

5.B.6 For Emission Points AA-303 through AA-306 and AA-321, the permittee shall perform and record a weekly visible emission observation in accordance with EPA Test Method 22 on the exhaust of each air pollution control device during daylight hours and during representative operating conditions.

If visible emissions are detected during an observation of exhaust from a control device, the permittee shall then immediately perform and record a visible emission evaluation (VEE) in accordance with EPA Test Method 9. In the event that a VEE is required but cannot be conducted, the permittee shall record and maintain a written explanation as to

why it was not possible to perform the VEE immediately and shall conduct the VEE as soon as practicable.

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 the 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.7 For Emission Points AA-303 through AA-306 and AA-321, the permittee shall conduct and record a weekly inspection on each air pollution control device while in operation. If any problem is noted during an inspection, the permittee shall perform and record the necessary maintenance activities to ensure operation of the control device as originally designed. Additionally, preventative maintenance shall be performed (as necessary) to maintain proper operation of a control device.

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

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

5.B.8 For Emission Points AA-305 and AA-306, the permittee shall monitor and record the differential pressure drop (in inches of water) across each baghouse weekly. If a monitored pressure drop is outside the manufacturer's recommended range for the baghouse (which shall also be maintained on-site), the permittee shall conduct and record any corrective measures taken to return the baghouse to the recommended pressure drop range.

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

5.B.9 For Emission Points AA-305 and AA-700, the permittee shall calculate and maintain the total emission of filterable particulate matter and particulate matter less than 10 μ m in diameter (PM / PM₁₀) from each process unit in tons both on a monthly basis and on a rolling 12-month total basis.

Unless otherwise specified herein, the permittee shall maintain all reference data and applicable documentation used to determine the calculated emissions (operational data, throughput data, applicable emission factors, engineering judgement determinations, performance testing, etc.).

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

5.B.10 For Emission Point AA-320, the permittee shall monitor and record (via a non-resettable hour meter) the hours of operation on a monthly basis for both emergency and non-emergency service. Additionally, the permittee shall detail what classified each occurrence as either an emergency or a non-emergency.

(Ref.: 40 CFR 63.6625(f) and 63.6655(f)(1); Subpart ZZZZ)

- 5.B.11 For Emission Point AA-320, the permittee shall maintain documentation that contains the following information (as applicable):
 - (a) A copy of each notification and report submitted to comply with Subpart ZZZZ (including all supporting documentation);
 - (b) Records on the occurrence and duration of each malfunction of the engine or monitoring equipment;
 - (c) Records on all required maintenance performed on the air pollution control and monitoring equipment;
 - (d) Records on the actions taken during periods of malfunction to minimize emissions, including corrective actions taken to restore equipment to its normal and usual manner of operation; and
 - (e) Records on all maintenance done on each engine in order to demonstrate that the engine was operated and maintained in accordance with the maintenance plan specified in Condition 3.D.4(b).

(Ref.: 40 CFR 63.6655(a)(1), (2), (4), (5), and (e)(2); Subpart ZZZZ)

- 5.B.12 For Emission Points AA-404 and AA-700, the permittee shall comply with the following requirements for the monitoring required by the approved CAM Plan:
 - (a) *Proper Maintenance*: The permittee shall maintain the monitoring, including (but not limited to) maintaining necessary parts for routine repairs of the monitoring equipment at all times.
 - (b) Continued Operation: Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities [including calibration checks and required zero adjustments, and required span adjustments (as applicable)], the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used [including in data averaging and calculations or in fulfilling a minimum data availability requirement (as applicable)].

The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

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

5.B.13 For Emission Points AA-404 and AA-700, upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

The response shall include minimizing the period of any start-up, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard (as applicable).

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

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

5.B.14 For Emission Points AA-404 and AA-700, in addition to the excursion threshold outlined in each CAM Plan, the MDEQ may require the permittee to develop and implement a Quality Improvement Plan (QIP) that contains the elements specified in 40 CFR 64.8(b).

The QIP shall be developed and implemented within one hundred eighty (180) days of written notification from the MDEQ that a QIP is required. The MDEQ may require the permittee make reasonable changes to the QIP if the QIP fails to address the cause of the control device performance problem or fails to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The implementation of a QIP shall not excuse the permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that applies.

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

5.B.15 For Emission Points AA-404 and AA-700, the permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to Condition 5.B.14 and any activities undertaken to implement a QIP, data used to document the adequacy of monitoring, and monitoring maintenance or corrective actions (as applicable).

As applicable, the records of monitoring data and monitoring performance data should include the date and time, who performed the analysis, analytical techniques or methods used, results and operating conditions at the time of the sampling or measurement. These records may be maintained in hard copy form or electronically, provided they are available for expeditious inspection and review.

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

5.B.16 For Emission Point AA-404, the permittee shall monitor the chamber combustion temperature in the regenerative thermal oxidizer (RTO) continuously in accordance with the CAM Plan found in Appendix C of this permit.

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

- 5.B.17 For Emission Point AA-404, the following maintenance activities have been approved by the MDEQ in response to the routine control device maintenance exemption (RCDME) outlined in Appendix B of this permit:
 - (a) Quarterly regenerative thermal oxidizer (RTO) safety checks;
 - (b) Annual preventive maintenance and internal inspections of the RTO;
 - (c) Routine bake-outs of the RTO (as needed);
 - (d) Routine washouts of the RTO (as needed); and
 - (e) The replacement and repair of corroded parts (either once per year or as needed).

The RTO is not subject to applicable compliance options and operating requirements when the maintenance activities listed above are being done. However, as specified in 40 CFR 63.2251(b)(2) — Subpart DDDD, the permittee shall limit the downtime of the RTO under this exemption to less than 0.5 percent of the annual operating up-time (based in a rolling 365-day total).

The permittee shall maintain detailed records on the control device downtime that occurs because of each of the approved maintenance activities.

(Ref.: 40 CFR 63.2251; Subpart DDDD)

5.B.18 For Emission Point AA-404, the permittee shall demonstrate compliance with both the VOC destruction efficiency standard specified in Condition 3.B.13 and the HAP destruction efficiency standard specified in Condition 3.B.14 by conducting routine performance testing no later than sixty (60) months after the previous test completed to demonstrate the HAP destruction efficiency.

Each performance test shall be conducted in accordance with the requirements outlined in 40 CFR 63.2262(a) - (h) and Table 4 (Items 1 - 5); Subpart DDDD.

During a performance test, the permittee shall continuously monitor the firebox temperature during each of the required 1-hour test runs. However, the permittee may measure the temperature in multiple locations (e.g. one location per burner) in the combustion chamber and calculate the average of the temperature measurements prior to reducing the temperature data to 15-minute averages for purposes of establishing the minimum firebox temperature.

The minimum firebox temperature shall be established as the average of the three (3) minimum 15-minute firebox temperatures monitored during the three (3) test runs. Multiple three-run performance tests may be conducted to establish a range of parameter values under different operating conditions.

The permittee may establish a different minimum firebox temperature for the RTO by conducting a repeat performance test (in accordance with the requirements specified in this condition) that demonstrates compliance with the HAP destruction efficiency standard.

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(Ref.: 40 CFR 63.2262(a) – (h), Table 4 (Items 1 – 5), and Table 7 (Items 1 and 7); Subpart DDDD)
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
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- 5.B.19 For Emission Point AA-404, the permittee shall demonstrate continuous compliance with the operating limit specified in Condition 3.B.15 by monitoring and collecting temperature data from the RTO in accordance with the following specifications:
 - (a) As appropriate, the permittee shall conduct all monitoring in continuous operation at all times the process unit is operating except during periods of monitor malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments as applicable).
 - (b) For purpose of calculating data averages, the permittee **shall** not use data recorded during periods of monitoring malfunction, associated repair, out-of-control periods, and required quality assurance / control activities. However, the permittee **may** not use data recorded during the following periods:
 - (i) Safety-related shutdown; and

(ii) Control device downtime covered in any approved routine control device maintenance exemption (RCDME) in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling in a minimum data availability requirement (if applicable).

Data collected during all other periods shall be used in assessing compliance and operation of the RTO.

For the purpose of this permit, a monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calibrations constitutes a deviation from the monitoring requirements.

- (c) The permittee shall determine the 3-hour block average of all recorded readings calculated after every three (3) hours of operation as the average of the evenly spaced recorded readings in the previous three (3) operating hours [excluding the periods described in paragraphs (a) and (b) of this condition].
- (d) To calculate the data averages for each 3-hour averaging period, the permittee shall have at least seventy-five percent (75%) of the required recorded readings for that period using only recorded readings that are based on valid data.

Additionally, deviations that occur during periods of control device maintenance covered by the approved RCDME are not violations if it is demonstrated to the EPA's satisfaction that the permittee was operating in accordance with the approved RCDME (as outlined in Appendix B of this permit).

(Ref.: 40 CFR 63.2270(a) – (d), (f), 63.2271(b)(3), and Table 7 (Item 1); Subpart DDDD)

- 5.B.20 For Emission Point AA-404, upon establishing a minimum firebox temperature for the RTO, the permittee shall operate and maintain the continuous temperature monitoring system in accordance to the following specifications:
 - (a) The continuous monitoring system shall be capable of completing a minimum one cycle of operation (i.e. sampling, analyzing, and recording) for each successive 15-minute period;
 - (b) The permittee shall maintain the equipment for the continuous monitoring system at all times including (but not limited to) the parts necessary for routine repairs of equipment;
 - (c) The permittee shall record and maintain the results of each inspection and validation check;

- (d) The permittee shall locate the temperature sensor in a position that provides a representative temperature;
- (e) The permittee shall use a temperature sensor with a minimum accuracy of 4°F or 0.75 percent of the minimum required firebox temperature (whichever is larger);
- (f) The permittee shall validate the temperature sensor's reading at least semi-annually in accordance with the requirements specified in 40 CFR 63.2269(b)(4)(i) (v), Subpart DDDD;
- (g) The permittee shall conduct validation checks using the procedures as specified in paragraph (f) of the condition any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor; and
- (h) The permittee shall inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosions at least quarterly.

(Ref.: 40 CFR 63.2269(a) and (b); Subpart DDDD)

- 5.B.21 For Emission Point AA-700, the permittee shall maintain an updated Operation and Maintenance Plan (OMP) for the electrostatic precipitator (ESP). The OMP shall be shall include (but not limited to) the following information:
 - (a) An operational checklist (i.e. fields energized, minimum voltage level);
 - (b) An outline of operational procedures; and
 - (c) Maintenance schedules and maintenance activity performed.

The permittee shall maintain records on any operational and/or maintenance activities associated with the OMP, and all records shall be available to MDEQ personnel upon request.

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

- 5.B.22 For Emission Point AA-700, the permittee must maintain documentation on the following information (as applicable):
 - (a) A copy of each notification and report submitted to comply with Subpart DDDDD, including all documentation supporting a Notification of Compliance Status or a submitted semi-annual compliance report;
 - (b) All performance tests, fuel analyses, other specified compliance demonstrations, and performance evaluations;

- (c) For each continuous monitoring opacity monitoring system (COMS) and/or continuous monitoring system (CMS), the permittee shall maintain the following information:
 - (1) Records described in 40 CFR 63.10(b)(2)(vii) (xi), Subpart A;
 - (2) Monitoring data for the COMS during a performance evaluation as required in 40 CFR 63.6(h)(7)(i) (ii), Subpart A;
 - (3) Previous versions of the performance evaluation plan as required by 40 CFR 63.8(d)(3), Subpart A; and
 - (4) Records on the date and time each deviation started and stopped.
- (d) All records required by Table 8 of Subpart DDDD, including documentation on all monitoring data and calculated averages for applicable operating levels (such as opacity and boiler operating load) to demonstrate continuous compliance with each applicable emission and/or operating limit;
- (e) The quantity of each fuel type combusted in the boiler on a monthly basis;
- (f) If the permittee chooses to conduct performance testing less frequently than that specified in Condition 5.B.24(c), the permittee shall maintain records that both demonstrate the results from the previous stack tests were less than 75% of the applicable emission limitation(s) and indicates that there was no change in source operations (including fuel composition and operation of the air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year);
- (g) Records on the occurrence and duration of each malfunction of either the boiler or the associated air pollution control and monitoring equipment;
- (h) Records on the actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions (including corrective actions to restore the malfunctioning boiler, air pollution control or monitoring equipment to its normal use or usual manner of operation);
- (i) Records on the calendar date, time, occurrence, and duration of each start-up and shutdown; and
- (j) Records on the type(s) and amount(s) of fuel used during each start-up and shutdown.

(Ref.: 40 CFR 63.7555(a) - (c), (d)(1), (5) - (7), (9), (10), and 63.7560; Subpart DDDDD)

5.B.23 For Emission Point AA-700, the permittee shall develop and maintain a site-specific monitoring plan in accordance with 40 CFR 63.7505(d)(1) – (4), Subpart DDDDD for the use of a continuous opacity monitoring system (COMS) or a continuous monitoring system (CMS).

The permittee shall also develop and maintain a site-specific stack test plan that includes a test program summary, a test schedule, data quality objectives, and both an internal and external quality assurance program. The data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.

(Ref.: 40 CFR 63.7505(d), and 63.7520(a); Subpart DDDDD)

- 5.B.24 For Emission Point AA-700, the permittee shall demonstrate compliance with the respective emission limits specified in Conditions 3.B.20 and 3.B.22 by conducting routine performance testing in accordance with the following specifications:
 - (a) All performance testing shall be performed in accordance with the requirements specified in 40 CFR 63.7520 and Table 5, Subpart DDDDD and at representative load conditions.
 - During each performance test, the permittee shall establish the operating limit(s) for each pollutant in accordance with Condition 3.B.23 and conduct CMS performance evaluations in accordance with 40 CFR 63.7525, Subpart DDDDD.
 - (b) Unless otherwise allowed herein in paragraph (c) of this condition, the permittee shall conduct each performance test annually and no later than thirteen (13) months after the previously completed test.
 - (c) If the performance test results for a specific pollutant are at or below 75% of the corresponding emission limitation for at least two consecutive years <u>and</u> there have been no changes to the operation of the boiler or air pollution control equipment that could increase emissions, the permittee may choose to conduct subsequent performance tests for the pollutant once every three (3) years and no later than thirty-seven (37) months after the previously completed test.
 - If a performance test results for a specific pollutant indicates that the emissions are in excess of 75% of the corresponding emission limitation, the permittee must resume annual testing in accordance with paragraph (b) of this condition until such time the performance tests over a two-year period fall below 75% of the emission limitation.
 - (d) In demonstrating compliance with the PM emission limit specified in Condition 3.B.22(d), the permittee shall also demonstrate compliance with the filterable PM / PM₁₀ emission limit specified in Condition 3.B.20.

(Ref.: 40 CFR 63.7505(c), 63.7515(a) - (c), 63.7520(b) - (e), and Table 5; Subpart

DDDDD)

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

- 5.B.25 For Emission Point AA-700, the permittee shall demonstrate continuous compliance with the operating limits specified in Condition 3.B.23(a) and (c) by operating and maintaining each CMS in such a manner that data is collected in accordance with the site-specific monitoring plan required in Condition 5.B.23 and the following specifications:
 - (a) The CMS must complete a minimum of one (1) cycle of operation every fifteen (15) minutes and have a minimum of four (4) successive cycles of operation to have a valid hour of data. Any 15-minute period for which a CMS is out-of-control and data are not available for a required calculation constitutes a deviation from the monitoring requirements.
 - (b) For the CMS associated with the boiler operating load, the permittee shall determine the 30-day rolling average from all recording readings.
 - (c) The permittee shall record and maintain the results of each inspection, calibration, and/or validation check performed on a CMS.
 - (d) The permittee shall operate monitoring systems and collect data at all required intervals at all times that the boiler is operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or control activities, including (as applicable) calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the site-specific monitoring plan.
 - A monitoring system malfunction is any sudden, infrequent, 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. The permittee is required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.
 - (e) The permittee may not use data recorded during periods of start-up and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels.
 - The permittee shall record and make available upon request the results of CMS performance audits and the date / duration of periods when the CMS is out-of-control to completion of the corrective actions necessary to return the CMS to operation consistent with the site-specific monitoring plan. The permittee must use all data collected during all other periods in assessing compliance and the operation of the control device and associated control system.

(f) Except during periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities, failure to collect required data is a deviation of the monitoring requirements.

In calculating monitoring results, do not use any data collected during periods of startup and shutdown, when the monitoring system is out-of-control as specified in the site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out-of-control, or while conducting required monitoring system quality assurance or quality control activities. The permittee must calculate monitoring results using all other monitoring data collected while the boiler is operating.

(Ref.: 40 CFR 63.7525(d) and 63.7535; Subpart DDDDD)

- 5.B.26 For Emission Point AA-700, the permittee shall establish values for the operating limits specified in Condition 3.B.23(a) and (c) by monitoring and recording the applicable data in accordance with the following specifications:
 - (a) The minimum oxygen concentration shall be established during each performance test performed to demonstrate compliance with the applicable CO emission limitation by collecting oxygen data every fifteen (15) minutes during the entire period of a performance test.
 - (b) The maximum boiler operating load shall be established during each performance test performed to demonstrate compliance with an emission limitation specified in Condition 3.B.22 by collecting either heat input data or steam generation data every fifteen (15) minutes during the entire period of a performance test.
 - (c) The permittee shall determine the hourly average oxygen concentration and/or the hourly average operating load by computing the hourly averages using all of the 15-minute readings taken during each performance test to determine either the minimum oxygen concentration or the maximum boiler operating load (which shall be the hourly average operating load multiplied by 1.1).
 - (d) For the oxygen analyzer system, the permittee shall operate maintain and calibrate this CMS in accordance with the manufacturer's recommendations. Additionally, the permittee shall maintain the manufacturer's recommendations for the system on-site.

(Ref.: 40 CFR 63.7525(a) and Table 7 (Items 4 and 5); Subpart DDDDD) (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.27 For Emission Point AA-700, the permittee shall demonstrate continuous compliance with the operating limit specified in Condition 3.B.23(b) by operating, certifying, and

maintaining a continuous opacity monitoring system (COMS) in accordance with sitespecific monitoring plan outlined in Condition 5.B.23 and the following specifications:

- (a) The permittee shall conduct a performance evaluation of the COMS in accordance with the requirements in 40 CFR 63.8(e), Subpart A and the Performance Specification 1 (found in Appendix B of 40 CFR Part 60).
- (b) The COMS must complete a minimum of one (1) cycle of sampling and analyzing for each successive 10-second period and one (1) cycle of data recording for each successive 6-minute period.
- (c) The COMS data must be reduced to 6-minute averages.
- (d) The site-specific monitoring plan (as required by Condition 5.B.23) must contain procedures and acceptance criteria for operating and maintaining each COMS in accordance with to the requirements of 40 CFR 63.8(d), Subpart A. At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of the COMS.
- (e) The permittee shall operate and maintain the COMS in accordance with the requirements in the monitoring plan and the requirements of 40 CFR 63.8(e), Subpart A. The permittee shall identify periods the COMS is out-of-control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or annual zero alignment audit. Any 6-minute period for which the monitoring system is out-of-control and data is not available for a required calculation constitutes a deviation from the monitoring requirements.
- (f) The permittee shall determine and record all 6-minute averages [and daily block averages (as applicable)] collected for periods during which the COMS is not out of control.

(Ref.: 40 CFR 63.7525(c), 63.7540(a), Table 7, and Table 8; Subpart DDDDD)

5.B.28 For Emission Point AA-700, the permittee shall monitor the opacity of emissions from the ESP continuously in accordance with the CAM Plan found in Appendix C of this permit.

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

5.B.29 For Emission Point AA-900, the permittee shall demonstrate compliance with the applicable nitrogen oxides (NO_X) emission limits specified in Condition 3.B.26(a) by conducting routine performance tests on an annual basis [and no later than fourteen (14) calendar months following the previous completed performance test]. The permittee shall conduct each test shall in accordance with the following specifications:

- (a) Each performance test shall be conducted in accordance with 40 CFR 63.4400(a)(1) (3); Subpart KKKK and done at any load condition within plus or minus twenty-five (25) percent of the maximum peak load (i.e. 100%). However, the permittee <u>may</u> conduct testing at the highest achievable load point if at least seventy-five (75) percent of the peak load cannot be achieved in practice.
- (b) Each performance test shall consist of three (3) separate test runs with a minimum time per run of twenty (20) minutes.
- (c) The permittee shall demonstrate compliance with the applicable NO_X emission limitation at each tested load level. Compliance shall be achieved if the three-run arithmetic average emission rate at each tested level meets the applicable emission limitation.
- (d) If the results from a performance test is less than or equal to 75% of the emission limitation, the permittee may reduce the frequency of subsequent performance tests to once every two (2) years and no later than twenty-six (26) calendar months following the previously completed performance test. However, if the results of any subsequent performance test exceeds 75% of the applicable NO_X emission limitation, the permittee shall resume performance testing on an annual basis and shall not to exceed fourteen (14) calendar months following the previously completed test.

(Ref.: 40 CFR 60.4340(a) and 60.4400(a), (b); Subpart KKKK)

5.B.30 For Emission Point AA-900, the permittee is exempt from routine performance testing to monitor the sulfur content of fuel combusted in the turbine if the maximum sulfur content is equal to or less than twenty (20) grains per one hundred (100) standard cubic feet.

The permittee shall confirm that a fuel combusted within the turbine meets with the noted sulfur content threshold by maintaining a current and valid purchase contract, a tariff sheet, or a transportation contract that contains the applicable information.

If the sulfur content of a fuel does not meet the noted threshold, the permittee shall conduct routine performance testing annually and no later than fourteen (14) months after the previously completed performance test in accordance with one (1) of the methodologies specified in 40 CFR 60.4415(a); Subpart KKKK.

(Ref.: 40 CFR 60.4365(a) and 60.4415(a); Subpart KKKK)

5.B.31 For Emission Point AA-900, the permittee shall demonstrate compliance with the formaldehyde emission limit specified in Condition 3.B.28 by conducting a performance test on an annual basis [and no later than fourteen (14) months after previously completed test].

The permittee shall conduct each compliance demonstration in accordance with the following requirements and the approved Continuous Monitoring System (CMS) Plan found in Appendix D of this permit (as applicable):

- (a) The permittee shall conduct each applicable performance test specified in Table 3 of Subpart YYYY.
- (b) Each performance test shall be conducted at "high load" (defined as $100\% \pm 10\%$). Additionally, each performance test shall be conducted under such conditions based on representative performance of the turbine for the period being tested.

For the purpose of this condition, "representative conditions" exclude periods of start-up and shutdown. However, the permittee <u>may not</u> conduct a performance test during a period of malfunction.

The permittee shall record the process information that is necessary to document operating conditions during a test and include in such records an explanation to support that such conditions represent normal operation.

- (c) The permittee shall conduct three (3) separate test runs for a performance test, and each test run shall last for at least one (1) hour.
- (d) During a performance test, the permittee shall continuously monitor the total power output in accordance with approved CMS Plan. Thereafter, in accordance with approved CMS Plan, the permittee shall establish the corresponding total power output operating limit(s) that indicates compliance with the formaldehyde limit specified in Condition 3.B.28 at the applicable production level(s).

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(Ref.: 40 CFR 63.6115, 63.6120(a) – (d), and Table 3; Subpart YYYY) (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)
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5.B.32 For Emission Point AA-900, the permittee shall demonstrate continuous compliance with the operating limit established in accordance with Condition 5.B.31(d) by continuously monitoring the total power output (in kilowatts) based on rolling 3-hour average.

The permittee shall monitor the total power output at all times the turbine is in operation except for periods of monitor malfunction, associate repair, and required quality assurance / quality control (QA / QC) activity [including (as applicable) calibration checks and required zero / span adjustments of the monitoring system].

For purpose of calculating data averages), the permittee shall <u>not</u> use data recorded during periods of start-up, shutdown, turbine malfunction, monitor malfunction, associated repair, and/or required OA / OC activity.

(Ref.: 40 CFR 63.6125(b), 63.6135, 63.6140, and Table 5 (Item 2); Subpart YYYY)

5.B.33 For Emission Point AA-900, the permittee shall develop, implement, and maintain a written CMS Quality Control Program in accordance with 40 CFR 63.8(d)(1) – (2); Subpart A. The permittee shall retain the written program on-site for the life of the turbine (or until the turbine is no longer subject to Subpart YYYY).

If the "performance evaluation plan" portion of the program is revised, the permittee shall maintain the previous (i.e. superseded) versions of the performance evaluation plan onsite for a period of five (5) years after each revision of the plan.

(Ref.: 40 CFR 63.6125(e); Subpart YYYY)

- 5.B.34 For Emission Point AA-900, the permittee shall maintain documentation that contains the following information:
 - (a) A copy of each notification and report submitted to comply with Subpart YYYY
 (including all documentation supporting a submitted semi-annual compliance
 report);
 - (b) Records on each performance test and performance evaluation as required by 40 CFR 63.10(b)(2)(viii), Subpart A;
 - (c) Records on all maintenance conducted on the air pollution control equipment as required by 40 CFR 63.10(b)(2)(iii), Subpart A;
 - (d) Records that detail the date, time, and duration of each start-up period;
 - (e) For each deviation, the permittee shall maintain the following information:
 - (1) The date, time, cause, and duration of the deviation;
 - (2) A list of the affected sources / equipment as well as an estimate of the quantity of formaldehyde emitted over the emission limit specified in Condition 3.B.28 and a description of the method used to estimate the emissions; and
 - (3) Records on any actions taken to minimize emissions in accordance with Condition 3.D.9 as well as any corrective actions taken to return the turbine to its normal and usual manner of operation.
 - (f) If the permittee combusts distillate oil as fuel source within the turbine, the permittee shall monitor and maintain the hours in which oil is combusted on a daily basis via a non-resettable hour meter; and
 - (g) All total power output monitoring data and calculated averages required by the approved CMS Plan.

(Ref.: 40 CFR 63.6155(a)(1), (2), (5) – (7), (b), and (c); Subpart YYYY)

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

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Reporting Requirement		
AA-000	40 CFR 52.21(r)(6)(v); Subpart A	5.C.1	PM ₁₀ PM _{2.5} VOCs	Submit Calculated Annual Emissions for Applicable Construction Project		
	Studmill Operations					
AA-409 AA-410	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.2	Opacity PM / PM ₁₀ (filterable)	Submit a Semi-Annual Monitoring Report on Applicable Data		
AA-409	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.3	PM / PM ₁₀ (filterable)	Submit a Semi-Annual Monitoring Report on Emissions		
	Plywood Mill Operations					
AA-302 AA-404	40 CFR 63.2271(b), 63.2281(a), (b)(1) – (4) and (6), (c) – (e), (h), and Table 9 (Item 1); Subpart DDDD	5.C.4	HAPs	Submit a Semi-Annual Compliance Report		
AA-303 through AA-306 AA-321	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.5	Opacity PM / PM ₁₀ (filterable)	Submit a Semi-Annual Monitoring Report on Applicable Data		
AA-305 AA-700	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.6	PM / PM ₁₀ (filterable)	Submit a Semi-Annual Monitoring Report on Emissions		
AA-315	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.C.7	Notification Requirement	Submit Notifications on Applicable Actions		
AA-320	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1). 40 CFR 63.6640(b), 63.6650(f), and Table 2c (Footnote 1); Subpart ZZZZ	5.C.8	HAPs	Submit Semi-Annual Monitoring Report on Hours of Operation and All Deviations From Applicable Operating Limitations		
	40 CFR 64.9(a); CAM	5.C.9	CAM Reporting	Submit Semi-Annual Monitoring Reports		
AA-404 AA-700	40 CFR 64.7(e); CAM	5.C.10	CAM Modification	Promptly Notify the MDEQ of Failure to Achieve Limit / Standard (Though No Excursion or Exceedance was Indicated by Approved Monitoring)		
AA-404	40 CFR 63.2280(g); Subpart DDDD	5.C.11	HAPs	Submit Notification on Change of Continuous Monitoring Parameter		

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Reporting Requirement
AA-404	40 CFR 63.2280(c); Subpart DDDD 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11) and 2.6.B(5).	5.C.12	HAPs VOCs (as carbon)	Submit a Notice of Intent for a Performance Test
	40 CFR 63.2281(a), (h) – (l), and Table 9; Subpart DDDD	5.C.13		Submit Performance Test Results and Applicable Reports
AA-700	40 CFR 63.7550(a), (b), (c)(1), (c)(3) – (c)(5)(i) – (ix), (xi) – (xiv), (xvii), (xviii), (d), (e), and Table 9; Subpart DDDDD	5.C.14	HAPs	Submit a Semi-Annual Compliance Report
	40 CFR 63.7545(d); Subpart DDDDD	5.C.15	HCl Hg	Submit a Notice of Intent for a Performance Test
	40 CFR 63.7550(h); Subpart DDDDD	5.C.16	CO PM (filterable)	Submit Performance Test Results and Applicable Reports
AA-900	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11) and 2.6.B(5).	5.C.17	NO _X	Submit a Notice of Intent for a Performance Test
	40 CFR 60.4375(b); Subpart KKKK	5.C.18		Submit Performance Test Results
	40 CFR 63.6150(a)(5), (b)(3) – (4), and (e); Subpart YYYY	5.C.19	HAPs	Submit a Semi-Annual Compliance Report
	40 CFR 63.6145(f) and 63.6150(f); Subpart YYYY	5.C.20	Formaldehyde	Submit Performance Test Results
	40 CFR 63.6150(g) – (i); Subpart YYYY	5.C.21	HAPs	EPA Reporting Requirements

- 5.C.1 For Emission Point AA-000 (Facility-Wide), the permittee shall submit an annual report to the MDEQ no later than March 1 (or February 29 when applicable) of each year for the preceding 12-month calendar year that contains the information specified in paragraphs (a) (c) of this condition <u>if</u> the calculated annual emissions required by Condition 5.B.1 either exceed the baseline actual emissions documented for PM₁₀ (filterable + condensable), PM_{2.5} (filterable + condensable), and VOCs in the preconstruction 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 preconstruction projected emission presented in the permit application received on September 20, 2018.
 - (a) The name, address, and telephone number of the facility
 - (b) The calculated annual emissions as specified in 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)

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

- 5.C.2 For Emission Points AA-409 and AA-410, the permittee shall submit a semi-annual monitoring report in accordance with Condition 5.A.4 that details the following information:
 - (a) Any occurrence when a required visible emission evaluation (VEE) was not conducted and an explanation as to why it was not performed; and
 - (b) Any maintenance action(s) performed on a cyclone and any periods of time (including date and duration) in which a cyclone was non-operational.

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

5.C.3 For Emission Point AA-409, the permittee shall submit a semi-annual monitoring report in accordance with Condition 5.A.4 that details the total emission of filterable particulate matter and particulate matter less than 10 μ m in diameter (PM / PM₁₀) in tons based on a rolling 12-month total basis.

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

- 5.C.4 For Emission Points AA-302 and AA-404, the permittee shall submit a semi-annual compliance report in accordance with Condition 5.A.4 that contains the following information:
 - (a) Each instance in which a compliance option, operating requirement, or work practice requirement in specified Tables 7 and 8 of Subpart DDDD was not met. This includes during a period of start-up, shutdown, malfunction, or a RTO maintenance period. These instances are deviations and must be reported in accordance with Condition 5.A.5.
 - (b) The company name and address.
 - (c) A statement by a responsible official (with that official's name, title, and signature) certifying the truth, accuracy, and completeness of the content of the report.
 - (d) The number of instances that a shutdown in accordance with Condition 3.D.4 is performed.

If the noted shutdown work practice is used for more than a total of one hundred (100) hours during a reporting period, the permittee shall report the date, time and duration of each instance when the shutdown work practice was used.

- (e) A description of any RTO maintenance performed while the RTO was off-line and one or more of the process units controlled by the RTO was operating, including the information specified below:
 - (1) The date and time when the RTO was shut down and restarted;
 - (2) The identification of the process units that were operating and the number of hours that each process unit operated while the RTO was off-line; and
 - (3) A statement of whether or not the RTO maintenance was included in the approved routine control device maintenance exemption (RCDME) found in Appendix B. If the RTO maintenance was included in the RCDME, the report shall include the information specified in 40 CFR 63.2281(c)(5)(iii)(A) (C); Subpart DDDD.
- (f) If there were no deviations from any compliance option or operating requirements, a statement that there were no deviations during the reporting period.
- (g) If there were no periods during which an applicable CMS was out-of-control, a statement that there were no periods during which the CMS was out-of-control during the reporting period.
- (h) For each deviation from a compliance option or operating requirement where a CMS is not used to comply, the report shall contain the information specified in paragraphs (a) (e) of this condition as well as sub-paragraphs (1) and (2) below. This includes periods of start-up, shutdown, malfunction, and routine RTO maintenance:
 - (1) The total operating time of each affected process unit during the reporting period; and
 - (2) Information on the number, duration, and cause of deviations (including any unknown cause if applicable) and the corrective action taken (as applicable).
- (i) For each deviation from a compliance option or operating requirement where a CMS is being used to comply, the report shall contain the information specified in paragraphs (a) (e) of this condition as well as sub-subparagraphs (1) (13) below. This includes periods of start-up, shutdown, malfunction, and routine RTO maintenance:
 - (1) The date and time that each malfunction started and stopped;

- (2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks;
- (3) The date, time, and duration that each CMS was out-of-control, including the information specified in 40 CFR 63.8(c)(8), Subpart A.
- (4) The date and time that each deviation started and stopped as well as whether each deviation occurred during one (1) of the following periods:
 - (i) A period of start-up, shutdown, or malfunction;
 - (ii) A period of RTO maintenance covered in the approved RCDME; or
 - (iii) During another period.
- (5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.
- (6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control system problems, control device maintenance, process problems, other known causes, and other unknown causes.
- (7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.
- (8) A brief description of the process units.
- (9) A brief description of the CMS.
- (10) The date of the latest CMS certification or audit.
- (11) A description of any changes in CMS, processes, or controls since the last reporting period.
- (12) For any failure to meet the compliance option in Condition 3.B.14, provide an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.
- (13) The total operating time of each affected source during the reporting period.

In addition to submitting the semi-annual compliance reports to the MDEQ, the permittee shall also submit semi-annual compliance reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) no later than one (1) year after the reporting

template specific to Subpart DDDD has been available. CEDRI can be accessed through the EPA's CDX (https://cdx.epa.gov) and the appropriate reporting template (if available) can be found on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri). Do not use CEDRI to submit any information claimed to be "confidential business information" (CBI).

If the reporting form for the semi-annual compliance report specific to Subpart DDDD is not available in CEDRI at the time that this report is due, the permittee shall submit the report to the EPA at the appropriate address listed in 40 CFR 63.13, Subpart A. Additionally, the permittee shall refer to 40 CFR 63.2281(h), Subpart DDDD for additional requirements pertaining to the electronic submittal of a semi-annual compliance report (including CBI).

(Ref.: 40 CFR 63.2271(b), 63.2281(a), (b)(1) - (4) and (6), (c) - (e), (h), and Table 9 (Item 1); Subpart DDDD)

- 5.C.5 For Emission Points AA-303 through AA-306 and AA-321, the permittee shall the permittee shall submit a semi-annual monitoring report in accordance with Condition 5.A.4 that details the following information:
 - (a) Any occurrence when a required visible emission evaluation (VEE) was not conducted and an explanation as to why it was not performed; and
 - (b) Any maintenance action(s) performed on an air pollution control device and any periods of time (including date and duration) in which a control device was non-operational during active operations.

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

5.C.6 For Emission Points AA-305 and AA-700, the permittee shall submit a semi-annual monitoring report in accordance with Condition 5.A.4 that details the total emission of filterable particulate matter and particulate matter less than 10 μm in diameter (PM / PM₁₀) from each process unit in tons based on a rolling 12-month total basis.

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

- 5.C.7 For Emission Point AA-315, the permittee shall notify the MDEQ on the following events no later than ten (10) days after the actual corresponding date:
 - (a) The date of the initial start-up of each new plywood press;
 - (b) The date in which the shakedown period for each new plywood press is completed; and
 - (c) The date in which three (3) of the existing plywood presses are successfully

decommissioned.

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

5.C.8 For Emission Point AA-320, the permittee shall submit a semi-annual monitoring report in accordance with Condition 5.A.4 that details the hours of operation for the engine. The report shall include how many hours are spent for emergency operation, what classified the operation as an emergency, how many hours are spent for non-emergency operation, and the reason for the non-emergency operation.

This report shall also include a detail of all deviations from any applicable operating limitation, which shall include any failure to perform the work practice on the required schedule. In the event a work practice is delayed because the engine is operating during an emergency or if performing the work practice on the required work schedule posed an unacceptable risk under federal, state, or local law, the permittee shall include in the report the reason for the delay.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).) (Ref.: 40 CFR 63.6640(b), 63.6650(f), and Table 2c – Footnote 1; Subpart ZZZZ)

- 5.C.9 For Emission Points AA-404 and AA-700, the permittee shall submit a semi-annual monitoring report in accordance with Condition 5.A.4 with the following information (as applicable):
 - (a) Summarized information on the number, duration, and cause [including an unknown cause, if applicable)] of excursions or exceedances (as applicable) and the corrective actions taken;
 - (b) Summarized information on the number, duration, and cause [including unknown cause (if applicable)] for monitor downtime incidents [other than downtime associated with zero and span or other daily calibration checks (if applicable)];
 - (c) A description of the actions taken to implement a QIP during the reporting period as specified in Condition 5.B.14. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

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

5.C.10 For Emission Points AA-404 and AA-700, if the permittee identifies a failure to achieve compliance with the emission limitation or standard for which the approved CAM monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the permit

to address the necessary monitoring changes.

Such a modification may include (but is not limited to) reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or monitoring additional parameters.

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

5.C.11 For Emission Point AA-404, the permittee shall notify the MDEQ in writing at least thirty (30) days before changing a continuous monitoring parameter or the value / range of values for a continuous monitoring parameter.

(Ref.: 40 CFR 63.2280(g); Subpart DDDD)

5.C.12 For Emission Point AA-404, the permittee shall submit a written notification of intent to conduct a performance test required by Condition 5.B.18 at least sixty (60) days before the performance test is scheduled to begin. The notification shall detail the procedures and test methods to be implemented during the actual testing.

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

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

(Ref.: 40 CFR 63.2280(c); Subpart DDDD) (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11) and 2.6.B(5).)

5.C.13 For Emission Point AA-404, the permittee shall submit the results of a performance test required by Condition 5.B.20 to the MDEQ no later than sixty (60) days after the date the performance test was completed.

Additionally, the permittee shall submit any performance test report, compliance report, and/or CMS performance evaluation required by Subpart DDDD via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) website [https://cdx.epa.gov/]. Each electronic submittal shall completed in accordance with 40 CFR 63.2281(h) – (l), Subpart DDDD.

(Ref.: 40 CFR 63.2281(a), (h) – (l), and Table 9; Subpart DDDD)

- 5.C.14 For Emission Point AA-700, the permittee shall submit a semi-annual compliance report in accordance with Condition 5.A.4 that contains the following information:
 - (a) The company (and facility name, if applicable) and the address;

- (b) Information on the process unit, applicable emission limitations, and applicable operating parameter limitations;
- (c) The total operating time during the operating period;
- (d) For each COMS and CMS the monitoring equipment manufacturer(s), the model number(s), and the date of the last CMS certification or audit;
- (e) The total fuel use by the boiler during the reporting period including (but not limited to) a description of the fuel and the total fuel usage amount with units of measure;
- (f) If the permittee is conducting a performance test once every three (3) years [as allowed in Condition 5.B.24(c)], report the date of the last two (2) performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions;
- (g) A statement indicating no new types of fuel were burned in the boiler. If a new type of fuel was burned, the permittee shall submit the required hydrogen chloride (HCl) and mercury (Hg) information in accordance with 40 CFR 63.7550(c)(5)(viii), Subpart DDDDD;
- (h) If the permittee intends to burn a new type of fuel that is non-compliant with the maximum chlorine or mercury input operating limitations, the permittee shall include a statement indicating the intent to conduct a new performance test no later than sixty (60) days after starting to burn the new fuel;
- (i) If there are no deviations from applicable emission limitations or operating limitations, include a statement that there were no deviations from the emission or operating limitations during the reporting period;
- (j) If there were no deviations from monitoring requirements (including no periods during which a CMS or COMS was out of control), include a statement that there were no deviations and no periods during which the monitoring system was out of control during the reporting period;
- (k) If a malfunction occurred during the reporting period, the report shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused / may have caused any applicable emission limitation to be exceeded;
 - The report must also include a description of any action(s) taken during a malfunction of the boiler, the associated RTO, or the CMS to minimize emissions (including actions taken to correct the malfunction);

- (l) The date of the most recent tune-up, including the date of the most recent burner inspection (if delayed until the next scheduled unit shutdown);
- (m) For each instance of start-up or shutdown, include the information required to be monitored, collected, or recorded;
- (n) If there is a deviation from an emission limit, operating limit, or work practice standard for periods of start-up and shutdown where a CMS **is not** used to demonstrate compliance, the compliance report shall also contain the following information:
 - (1) A description of the deviation and from which emission limit, operating limit, or work practice standard was deviated;
 - (2) Information on the number, duration, and cause of deviations (including any unknown cause, as applicable), and the corrective action taken; and
 - (3) If the deviation occurred during an annual performance test, provide the date the annual performance test was completed.
- (o) If there is a deviation from an emission limit, operating limit, or monitoring requirement where a CMS <u>is</u> used to demonstrate compliance, the compliance report shall also contain the following information:
 - (1) The date and time each deviation started and stopped and description of the nature of the deviation;
 - (2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks;
 - (3) The date, time, and duration that each CMS was out of control, including the information in 40 CFR 63.8(c)(8), Subpart A;
 - (4) A summary of the total duration of the deviation during a reporting period and the total duration as a percent of the total source operating time during that reporting period;
 - (5) A characterization of the total duration of the deviations during a reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;
 - (6) A summary of the total downtime duration for the CMS during a reporting period and the total duration of the CMS downtime as a percent of the total source operating time during that reporting period;
 - (7) A brief description of the source for which there was a deviation; and

(8) A description of any changes in the CMS, the processes, or controls since the last reporting period for the source for which there was a deviation.

(Ref.: 40 CFR 63.7550(a), (b), (c)(1), (c)(3) – (c)(5)(i) – (ix), (xi) – (xiv), (xvii), (xviii), (d), (e), and Table 9; Subpart DDDDD)

5.C.15 For Emission Point AA-700, the permittee shall submit a notification of intent to conduct a performance test required by Condition 5.B.24 to the MDEQ at least sixty (60) days before the performance test is scheduled to begin.

(Ref.: 40 CFR 63.7545(d); Subpart DDDDD)

5.C.16 For Emission Point AA-700, the permittee shall submit the results from any performance test required by Condition 5.B.24 to the MDEQ and EPA no later than sixty (60) days after completing each test.

Additionally, the permittee shall submit any performance test report, compliance report, and/or COMS performance evaluation required by Subpart DDDDD to the EPA via the CEDRI. CEDRI can be accessed through the EPA's Central Data Exchange (CDX) website [https://cdx.epa.gov/]. Each electronic submittal shall completed in accordance with 40 CFR 63.7550(h), Subpart DDDDD.

(Ref.: 40 CFR 63.7550(h); Subpart DDDDD)

5.C.17 For Emission Point AA-900, the permittee shall submit a notification to the MDEQ at least thirty (30) days prior to any performance test required by Condition 5.B.29 or 5.B.31 to afford the MDEQ an opportunity to have an observer present.

If there is a delay for a scheduled performance test, the permittee shall notify the MDEQ as soon as possible of any delay of the original test date by providing a notice at least seven (7) days prior to the rescheduled date of the performance test, or arrange a rescheduled date with the MDEQ.

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

5.C.18 For Emission Point AA-900, the permittee shall submit the results from any performance test required by Condition 5.B.29 to the MDEQ no later than sixty (60) days after the completion of the testing event.

(Ref.: 40 CFR 60.4375(b); Subpart KKKK)

- 5.C.19 For Emission Point AA-900, the permittee shall submit a semi-annual compliance report in accordance with Condition 5.A.4 that details the following information (as applicable):
 - (a) A "excess emissions and CMS performance" report completed in accordance with

40 CFR 63.10(e)(3), Subpart A;

(b) For each deviation:

- (1) The start date and time, duration, cause, and corrective action(s) taken [as applicable];
- (2) A list of equipment, an estimate on the quantity of formaldehyde emitted over the emission limit specified in Condition 3.B.28 as well as the method used to estimate the emissions;
- (3) Information on the number, duration, cause for monitor downtime incidents [including an unknown cause (if applicable) other than downtime associated with zero / span and other daily calibration checks], and the corrective action taken; and
- (4) The total operating time of the turbine.
- (c) If the permittee combusts distillate oil within the turbine during a reporting period, the permittee shall include the following information:
 - (1) The number of hours in which distillate oil was combusted; and
 - (2) Any problems or errors suspected with the meter(s).

(Ref.: 40 CFR 63.6150(a)(5), (b)(3) - (4), and (e); Subpart YYYY)

5.C.20 For Emission Point AA-900, the permittee shall submit the results of any performance test required by Condition 5.B.31 and a corresponding "Notification of Compliance Status" to the MDEQ and EPA no later than sixty (60) days after completing each test.

For the submission to the EPA, the permittee shall utilize the applicable method outlined in 40 CFR 63.616150(f), Subpart YYYY and Condition 5.C.21.

(Ref.: 40 CFR 63.6145(f) and 63.6150(f); Subpart YYYY)

5.C.21 For Emission Point AA-900, the permittee shall submit any performance test and/or compliance report required by Subpart YYYY to the EPA via the CEDRI. CEDRI can be accessed through the EPA's Central Data Exchange (CDX) website [https://cdx.epa.gov/]. Each electronic submittal shall completed in accordance with 40 CFR 63.6150(g) – (i), Subpart YYYY.

(Ref.: 40 CFR 63.6150(g) – (i); Subpart YYYY)

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

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

MDEQ 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

Part 61 or National Emission Standards for Hazardous Air Pollutants

for Source Categories, 40 CFR Part 63

NMVOC Non-Methane Volatile Organic Compounds

NO_X Nitrogen Oxides

NSPS New Source Performance Standards, 40 CFR 60

O&M Operation and Maintenance

PM Particulate Matter

 PM_{10} Particulate Matter less than 10 μ m in diameter

ppm Parts per Million

PSD Prevention of Significant Deterioration, 40 CFR Part 52

SIP State Implementation Plan

SO₂ 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

Routine Control Device Maintenance Exemption (RCDME)





HALEY BARBOUR GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

TRUDY D. FISHER, EXECUTIVE DIRECTOR

December 17, 2007

Ms. Rachael Bergeron, Plant Manager Georgia Pacific Wood Products, LLC PO Box 555 Taylorsville, MS 39168

Dear Ms. Bergeron:

Re:

Georgia Pacific Wood Products, LLC

Taylorsville Plywood Plant

Routine Control Device Maintenance Exemption

Facility No. 2500-00002

Smith County

We have completed our review of the referenced facility's request for an exemption from compliance during routine control maintenance events as allowed in §63.2251 of Subpart DDDD and have determined the request has merit and the exemption will be granted.

As we understand it, this exemption is necessary due to the level of maintenance required to keep the RTO/RCO on the softwood veneer dryer operating efficiently. Based on the information submitted in your request, the following maintenance activities will be allowed under this exemption:

- 1) RTO/RCO safety checks (quarterly);
- 2) preventive maintenance and internal inspections of the RTO/RCO (annual);
- 3) routine bakeouts of the RTO/RCO (as needed);
- 4) routine washouts of the RTO/RCO (as needed);
- 5) catalytic media sampling (once/year);
- 6) media replacement (once every seven years); and,
- 7) replacement and repair of corroded parts (once/year or as needed).

While the compliance options and operating requirements will not apply to the RTO/RCO when the activities listed above are being done, please be advised that §63.2251(b)(2) limits the total downtime of the control device allowed under this exemption to less than 0.5 percent of the annual operating uptime. Since the time necessary to perform all of the activities would likely exceed the annual limit allowed under the exemption, it appears most of these activities will have to be scheduled to coincide with normal process outages.

913 REV20070001

Ms. Bergeron Page 2 December 17, 2007

As a result, the facility should keep a detailed record of the control device downtime that occurs as a result of one of the maintenance activities listed above during process uptime. This information should be maintained on a 365-day rolling total and should be summarized and reported semi-annually in accordance with the reporting requirements of each facility's Title V Operating Permit (TVOP). Additionally, in accordance with §63.2251(c), the maintenance exemption request and our approval will be incorporated into an appendix of the facility's TVOP.

If you have any questions, please feel free to call me at 601-961-5675.

John Cole

Air Toxics Branch

Air Division

cc: Paul Vasquez, Georgia-Pacific Joe Flick, Georgia-Pacific

Scott Hodges, EPD Tim Aultman, ECED

APPENDIX C

Compliance Assurance Monitoring (CAM) Plans

Compliance Assurance Monitoring Plan

Regenerative Thermal Oxidizer for Volatile Organic Compound Control

I. Background

A. Emissions Unit

Description: Veneer Dryer No. 1, 2, 3, and 4 Hot Zones

Capacity: 491,436 MMsf / Year Board (3/8" basis)

Facility: Taylorsville Plywood Plant

Highway 28 West

Taylorsville, MS 39168

B. Applicable Regulation, Emissions Limit, and Monitoring Requirements

Requirement: Permit to Construct Air Emissions Equipment issued January

21, 1998 (modified on June 29, 1998 and November 16, 1998)

Emissions Limit: 90% Destruction Efficiency (VOC Emissions)

C. Control Technology

Description: Regenerative Thermal Oxidizer (RTO)

Manufacturer: Smith

Capacity (Input Volume): 93,000 acfm

II. Monitoring Approach

<u>Parameter to Monitor</u>: The combustion chamber temperature will measure the RTO performance. No monitoring of gaseous flow is required by CAM. The proposed monitoring approach is summarized in Table A.

TABLE A. MONITORING APPROACH

I. Indicator	Combustion Chamber Temperature
Measurement Approach	Two thermocouples inside the combustion chamber measure the chamber temperature.
II. Indicator Range	Any observations of the chamber temperature yielding a 12-hour average below 1476°F (or the average combustion temperature determined during performance testing) indicate abnormal performance.
III. Performance Criteria	
A. Data Representativeness	GP used the RTO manufacturer recommendations to set the chamber temperature set point.
B. Verification of Operational Status	1. The Environmental Coordinator or his representative(s) checks operational status of the RTO and the temperature gauges at least once throughout each shift. A parametric monitoring report is reviewed daily that summarizes the operating conditions of the RTO including the temperature.
	2. Visual and audible alarms are triggered when there is a malfunction with the RTO. RTO installation complete and operational.
	3. Last source test indicated compliance with emission standard.
C. QA/QC Practices and Criteria	1. Weekly report review.
	 Calibrate the thermocouples at least annually. Maintenance schedule of daily, weekly, monthly, quarterly and annual activities.
	4. Audible and visual alarms are checked annually during annual maintenance down periods.
D. Monitoring Frequency	The temperature is measured continuously.
E. Data Collection Procedures	The RTO is equipped with a Programmable Logic Controller (PLC) with the capability of controlling and monitoring the temperature. Recordkeeping and reporting of the parameter are managed using a dedicated computer equipped with a relational database (such as Wonderware's Industrial SQL Server Software).
	Additionally, the unit is equipped with a chart recorder that continuously records the temperature as a backup in the event of upset or failure of the monitoring computer database.
F. Averaging period	12-hour rolling averages are computed and reported each operating day.
G. QIP (Quality Improvement Plan) Threshold	A QIP will be developed if the RTO operates with exceedances or excursions exceeding five (5) percent duration of the RTO operating hours per semi-annual period

MONITORING APPROACH JUSTIFICATION

I. Background

The emissions unit consists of four veneer dryers with hot and cool zones. The process consists of veneer feeders, dryers, hot zone stacks, cool zone stacks, outfeed conveyors, and related ductwork. The dryer hot zones operate continuously when the plant is in normal operation. Green veneer is fed into the hot zones, where it is dried by steam heating. Exhaust gases from the hot zones pass through the RTO. The RTO is pressurized by an induced-draft fan, which pushes the exhaust gases through the system.

Since the RTO is equipped with variable speed drives on the single induced draft (ID) fans, and each dryer is equipped with an isolation damper, the air flow to the RTO may fluctuate depending on the number of dryers on-line. At any given time, the RTO may receive the exhaust flow from all or none of the four dryers in the Plant. Although the RTO design flow rate is 80,000 acfm, the unit is capable of accommodating all four dryers while operating at a higher volumetric flowrate and maintaining a VOC destruction efficiency greater than 90% as demonstrated during a December 11, 2004 compliance test.

II. Rationale for Selection of Performance Indicator

The RTO is used to destroy VOC and HAP emissions from part of the plywood manufacturing process. Emissions from the four (4) dryers are ducted to the RTO. The veneer drying processes are continuous operations, but the production rate varies slightly with species of wood, veneer thickness, customer demand, etc. VOCs from pine veneer are combustible. The fraction of VOCs that combust increases with rising temperature. VOC emissions will be reduced to acceptable levels based on a minimum operating temperature. The temperature monitors are located inside the RTO combustion chamber.

III. Rationale for Selection of Indicator Ranges

GP determined during the performance tests that VOC destruction efficiencies of 90% could be achieved in the 1500°F range. GP proposes to maintain the minimum limit at 1476°F, where it is set currently. However, should future performance tests indicate that VOC destruction efficiency of 90% is achieved at lower operating temperature, the new chamber temperature observed during these tests will become the new "Indicator Range".

CAM Plan for Boiler No. 3 (Emission Point AA-700)

Electrostatic Precipitator (ESP) for PM Control

I. Background

A. Emissions Unit

Description: Wood Waste-Fired Boiler No. 3

Manufacturer: Keeler, Type MK

Capacity: 155 MMBTU / Hour

Facility: Taylorsville Plywood Plant

Highway 28 West

Taylorsville, MS 39168

B. Applicable Regulation, Emissions Limit, and Monitoring Requirements

The Electrostatic Precipitator (ESP) controls particulate emissions from wood-fired Boiler No. 3. Boiler No. 3 has potential particulate emissions greater than the major source level prior to control and thus is potentially subject to CAM under CFR Part 64.

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

Emissions Limit: 0.30 Grains / Dry Standard Cubic Foot (PM)

Current Monitoring Requirements: Triennial Compliance Tests

Weekly Inspections of Equipment

Recording of Opacity by COMS

C. Control Technology

Description: Electro-static Precipitator (ESP)

Manufacturer: PPC Industries 2-cell, Model 23R1230-2712S

Capacity: 100,000 ACFM

II. Monitoring Approach

The key elements of the monitoring approach, including the indicator to be monitored, indicator range, and performance criteria are presented in Table A.

TABLE A. MONITORING APPROACH

I. Indicator	Opacity
Measurement Approach	Opacity measurement by an in-stack opacity meter.
II. Indicator Range	An excursion is defined as opacity greater than 10% as a 24-hour average. Excursions trigger an investigation, corrective action, and a reporting requirement.
III. Performance Criteria	
A. Data Representativeness	Opacity is measured using a Durag D-R 290 AG Opacity Meter
B. Verification of Operational Status	Opacity meter and ESP installation complete and operational. Last source test indicated compliance with emission standard.
C. Q/A/QC Practices and Criteria	Confirm opacity meter is calibrated by quarterly calibrations, and an annual off-stack calibration. Calibrate and adjust if necessary.
D. Monitoring Frequency	The opacity is measured every 10-seconds and rolled into 6-minute averages and then the daily average.
Data Collection Procedures	The opacity measurements are recorded on a continuous basis by a data acquisition system.
Averaging Period	24-hours
E. QIP (Quality Improvement Plan) Threshold	A QIP will be developed if the control equipment operates with exceedances or excursions exceeding five (5) percent duration of the Boiler No. 3 operating hours per semi-annual period.

MONITORING APPROACH JUSTIFICATION

I. **Background**

The pollutant-specific emissions unit is a 2-field ESP controlling particulate matter emissions from Boiler No. 3. Boiler No. 3 is rated at 100,000 pounds of steam per hour. This boiler is subject to 40 CFR Part 63, Subpart DDDDD (Boiler MACT) but is not subject to any New Source Performance Standard (NSPS). Boiler No. 3 typically operates twelve (12) months per year. The boiler supplies steam to three (4) veneer dryers. This unit is classified as a "large pollutant-specific emissions unit" as defined at 40 CFR 64.5(a) (e.g. post-control PM emissions are greater than 100 tons per year). As such, the performance criteria listed at 40 CFR 64.3(b)(4)(ii) require that "...the owner or operator shall collect four or more values equally spaced over each hour and average the values...".

II. Rationale for Selection of Performance Indicators

In an ESP, electrical fields are established by applying a direct-current voltage across a pair of electrodes, a discharge electrode and a collection electrode. Particulate matter (PM) suspended in the gas stream is electrically charged by passing through the electrical field around each discharge electrode (negatively charged electrode). The negatively charged particles then migrate toward the positively charged collection electrodes. The particulate matter is separated from the gas stream by retention on the collection electrode. PM is removed from the collection plates by shaking or rapping the plates.

Opacity is the measurement that will be used for CAM performance evaluation. A COMS (Continuous Opacity Measurement System) will be used to measure opacity. A COMS is an instrument that continuously measures opacity, which is a measure of the amount of light attenuated by particulate matter in effluent emissions. The percentage of visible light attenuated is defined as the opacity of the emissions. Transparent stack emissions that do not attenuate light will have a transmittance of 100 percent or an opacity of zero percent. Opaque stack emissions that attenuate all of the visible light will have a transmittance of zero percent or an opacity of 100 percent. Opacity often is used as an indicator of the degree of particulate matter emissions.

A Durag D-R 290 AG Opacity Meter is used to measure opacity. The opacity meter uses a transceiver to transmit a beam of light across the diameter of the stack. On the opposite side of the stack, that beam of light is reflected back by a mirrored reflector to a receiver across the stack.

A logical monitoring indicator for boilers combusting a variety of biomass materials (bark, dust, etc.) is opacity. This is also consistent with the Boiler MACT Rule, which states that opacity serves as a surrogate parameter of PM emissions.

Measured opacity readings are sent to a data acquisition system every 10-seconds, and then rolled into 6-minute averages, and then the daily average.

III. Rationale for Selection of Indicator Ranges

The indicator range is based on the Boiler MACT, which defines the operating limit as 10% opacity over a 24-hour average. The opacity standard will not apply to the ESP during periods of startup and shutdown. Start-up periods may last for several hours following a cold start. The time period for a shutdown is typically 1 hour, but may be longer. The periods of start-up/shutdown time will be documented.

APPENDIX D EPA-Approved Subpart YYYY Continuous Monitoring System (CMS) Plan



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960

July 26, 2022

Mr. Scott Hankins Plywood Plant Manager Georgia-Pacific Wood Products LLC P.O. Box 555 Taylorsville, Mississippi 39168

Dear Mr. Hankins:

This is in response to your letter dated May 27, 2022, to the Mississippi Department of Environmental Quality, Office of Pollution Control, requesting approval of a continuous monitoring system (CMS) plan petition for Title 40, Code of Federal Regulation (CFR), Part 63, Subpart YYYY - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines, as it applies to Georgia-Pacific Wood Product's (GP) combustion turbine AA-900 located at GP's Plywood Plant in Taylorsville, Mississippi. Due to the nature of the request and delegation of authority, the MDEQ informed you that it is necessary for the EPA to provide a response to you. On June 13, 2022, you electronically transmitted your CMS plan petition to EPA.

The EPA requested additional information from your contact, Mr. Jeff Bonkoski, Environmental Manager, on June 29, 2022, June 30, 2022, July 1, 2022, July 6, 2022, and July 11, 2022, and received information on June 29, 2022, June 30, 2022, July 6, 2022, July 7, 2022, July 11, 2022, and July 13, 2022. Based on our review of all available information, including additional information provided by Mr. Bonkoski, your proposed CMS plan is acceptable. Details regarding the CMS Plan and the bases for our determination are provided in the remainder of this letter.

<u>Description of Combustion Turbine Unit AA-900</u>

Emission point AA-90 (ID EQPT23) is a 7,691 kilowatt (kW) Solar Model Taurus 70 natural gas-fired lean premix combustion turbine (turbine) using a SoLoNOx Dry Low Emissions Combustion System. The turbine is equipped with a heat recovery steam generator. Since the turbine was constructed in 2018, it is a new affected source (constructed after July 14, 2003) under Subpart YYYY. The unit is not equipped with an oxidation catalyst to control emissions of formaldehyde.

Description of GP's CMS Petition

GP proposes to continuously monitor and record turbine power output (kW) and indication of leanpremix mode operation to ensure compliance with the formaldehyde emission standard. To establish the operating limits range for turbine power output, GP proposes to conduct formaldehyde emission standard compliance testing at two turbine operating power output levels to determine the operating limit range for power output: maximum operating power output (high-power output) (100% capacity, \pm 10%) and low-power output (anticipated at 20-50% of maximum power output).

GP affirms ambient air temperature, pressure, and humidity are not measured and used as process control inputs to the programmable logic controllers governing turbine operation but affirms power output of the turbine is affected these parameters. GP noted Solar Turbines Inc. product information letter(s) and intended design product literature which depict the correlation of ambient air temperature and specified turbine power output. The turbine operates to maintain flame temperature in the combustion zone, rather than relying on the input of ambient air temperature, pressure, and humidity as process control parameters. The turbine's designed operating range, by specification, is 0 degrees Fahrenheit (°F) – 121 °F. GP proposes to monitor the turbine system's lean-premix mode indication sensor (On/Off, True/False, Enables/Disabled, or equivalent) which indicates that the turbine is operating in the lean-premix mode, which is also the SoLoNOx mode. The lean-premix mode of operation ensures good combustion practices are being achieved during operation of the turbine and is only indicated during normal operations. GP has identified the operation and maintenance manual for the power output meter, which describes the recommended operation and maintenance procedures, to include meter verification procedures. Eaton, the manufacturer of the power output meter, verified that the instrument is factory calibrated using a National Institute of Standards (NIST) protocol and does not require periodic calibration, only periodic accuracy verification.

GP proposes to: 1) monitor turbine power output and lean-premix mode indication at a minimum frequency of at least once every 15 minutes during formaldehyde emission standard compliance demonstration testing at low-power output and high-power output operations, and 2) determine the power output hourly average of the 15-minute readings and three-hour rolling-averages from the hourly averages, to establish the power-output range operating limits to indicate compliance with the formaldehyde emission standard during non-testing period. After testing, GP proposes to continuously monitor and record the rolling three-hour average turbine power output to indicate compliance with the operating limit range established by the formaldehyde emission standard testing. Also, following testing, GP proposes to monitor and record lean-premix mode of operation at a minimum frequency of at least once every 15-minutes to verify the turbine's lean-pre-mix mode of operation.

EPA's Review of Subpart YYY Standards and CMS Petition Requirements

Under 40 CFR § 63.6085, owners and operators are subject to Subpart YYYY if they own or operate a stationary combustion turbine located at a major source of HAP emissions. Under 40 CFR § 63.6090(a)(2), a stationary combustion turbine is a new source if construction commenced after January 14, 2003. Under 40 CFR § 63.6095(a)(3), new lean-premix gas-fired stationary combustion turbines which start operation on or before March 9, 2022, must comply with the emissions limitations and operating limitations in this subpart no later than March 9, 2022. Under 40 CFR § 63.6100, each new lean-premix gas-fired stationary combustion turbine must comply with the emission limitations and operating limitations in Table 1 and Table 2 of Subpart YYYY, respectively. Table 1 of Subpart YYY limits the concentration of formaldehyde to 91 parts-per-billion by volume, dry basis (ppbvd) or less at 15-percent O₂ for new lean-premix gas-fired stationary combustion turbines, except during turbine startup, shutdown, and malfunction events. Table 2 of Subpart YYYY requires owners/operators to maintain operating limitations approved by the Administrator to continuously demonstrate compliance with the emission limit during non-testing periods.

Under 40 CFR § 63.6105(a), after September 8, 2020, owners/operators must comply with the applicable emission limitations, operating limitations, and other requirements of Subpart YYYY. Under 40 CFR § 63.6105(c), after September 8, 2020, owners/operators must always operate and maintain any affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions.

Under 40 CFR § 63.6110(a), owners/operators must conduct the initial performance tests or other initial compliance demonstrations in Table 4 to Subpart YYYY that apply within 180 calendar days after the compliance date specified (*e.g.*, by September 5, 2022) for affected source stationary combustion turbines according to the provisions in 40 CFR § 63.7(a)(2) unless a historical test may be accepted according to the provisions of 40 CFR § 63.6110(b). Under 40 CFR § 63.6115, subsequent performance tests must be performed on an annual basis as specified in Table 3 to Subpart YYYY.

Under 40 CFR § 63.6125(b), for stationary combustion turbine not using an oxidation catalyst to comply with the formaldehyde emission limit, owners/operators must continuously monitor any parameters specified in your approved petition to the Administrator, to comply with the operating limitations in Table 2 to Subpart YYYY, and as specified in Table 5 to Subpart YYYY.

Under 40 CFR § 63.6120(f), for stationary combustion turbines not equipped with an oxidation catalyst, owners/operators may petition the Administrator for approval of operating limitations to demonstrate compliance with the formaldehyde emission limitation during non-testing periods. In these cases, the petition must include:

- (1) Identification of the specific parameters you propose to use as additional operating limitations;
- (2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters and how limitations on these parameters will serve to limit HAP emissions;
- (3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
- (4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
- (5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

Under 40 CFR § 63.6125(e), after September 8, 2020, for owners/operators using a CMS to indicate compliance with the formaldehyde emissions standard during non-testing periods, a CMS quality control program must be developed and implemented which includes written procedures for the CMS according to § 40 CFR § 63.8(d)(1-2). Additionally, a program of corrective action should be included in the plan required under 40 CFR § 63.8(d)(2).

Under 40 CFR § 63.6135(a), except for monitor malfunctions, associated repairs, and required applicable quality assurance or quality control activities, owners/operators must always conduct all parametric monitoring when the stationary combustion turbine is operating.

Under 40 CFR § 63.6120(e), when a CMS petition is required to be submitted to the Administrator, owners/operators must not conduct the initial performance test until after the petition has been approved or disapproved by the Administrator.

The EPA's Determination for GP's CMS Plan Petition

Based on supporting and available information, the following CMS plan is acceptable to the EPA:

- i.) The normal power output operating limit range must be established by the conduct of formaldehyde emission standard compliance demonstration testing events. GP must conduct testing at high-power output (regulatory requirement @ 100% power output capacity, \pm 10%) and minimum-power output (low-power output) (GP's discretion, subject to lean-premix mode of operation) to successfully demonstrate compliance with the emission standard at the low-power and high-power output production levels. Testing, for the purposes of this approval, must not include data from startup, shutdown, or malfunction events.
- ii.) Turbine power output and lean-premix mode indication shall be monitored and recorded at a minimum frequency of at least once every 15 minutes during testing conducted to successfully demonstrate compliance with the formaldehyde emission standard promulgated in 40 CFR § 63.6100 and Table 1 to Subpart YYYY.
- iii.) The hourly low-power output for the turbine shall be determined by computing hourly averages using all 15-minute readings taken during the low-power output formaldehyde emission standard compliance demonstration testing event. The three-hour rolling-average low-power output for the turbine shall be determined by computing the three-hour average using all hourly averaged readings taken during the low-power output formaldehyde emission standard compliance testing event. The three-hour rolling-average low-power output must be used to establish the low-power output operating limit for the turbine's power output operating range.
- iv.) The hourly high-power output for the turbine shall be determined by computing hourly averages using all 15-minute readings taken during the high-power output formaldehyde emission standard compliance demonstration testing event. The three-hour rolling-average high-power output for the turbine shall be determined by computing the three-hour average using all hourly averaged readings taken during the high-power output formaldehyde emission standard compliance testing event. The three-hour rolling-average high-power output must be used to establish the high-power output operating limit for the turbine's power output operating range.
- v.) Indication of lean-premix mode operation must be continuously monitored and recorded at a minimum frequency of at least once every 15 minutes during low-power output and high-power output formaldehyde emission standard compliance testing events, respectively, and continuously thereafter.
- vi.) The turbine power output operating limit range must be established by (iii) and (iv). The three-hour rolling-average turbine power output must be maintained within the operating range determined by testing which successfully demonstrates compliance with the formaldehyde emission standard.
- vii.) Except for startup, shutdown, and malfunction events, the turbine must be operated in the lean-premix mode of operation to ensure compliance with this approval.

- viii.) Following formaldehyde emission compliance demonstration testing, the three-hour rolling-average turbine power output must be continuously monitored and recorded. However, data collected during startup, shutdown, and malfunction events must not be included in the calculations for the three-hour rolling-average power output determination used to indicate compliance with the formaldehyde emission standard during normal operation (*e.g.*, lean-premix indication operation).
- ix.) GP must verify the turbine power output meter's accuracy once annually according to the manufacturer's recommend procedures and maintain records of the annual verifications for inspection purposes.
- x.) In addition to annual formaldehyde emission standard compliance demonstration testing required under 40 CFR § 63.6115 for the turbine high-power output operation, GP must also conduct testing for the turbine low-power output operation annually to verify, or adjust, the turbine power output limit range to assure GP maintains proper maintenance of the power output operating limits range for CMS plan purposes.

The EPA's approval of GP's CMS plan is based on information provided in the original submission, information provided by GP in response to EPA's additional information requests, discussions with GP, and research conducted by the EPA. The EPA's approval is contingent on successful demonstration of formaldehyde emission standard compliance demonstration testing events. Should GP change the operating conditions of the turbine to an operation which is different than the operating conditions represented in this approval such that formaldehyde emissions increase because of the change, GP must submit a revised CMS plan petition to address the change(s).

Nothing in this CMS plan approval excludes the EPA from reopening this CMS plan approval to adjust its conditions, if needed, for enhancement of emission standard compliance assurance. Finally, if GP discovers an additional parameter, or additional parameters, which indicate additional parametric monitoring operating limits are necessary to assure compliance with the formaldehyde emission standard, GP must submit a revised CMS plan petition to the EPA to revise the CMS plan and incorporate the additional operating limit(s) based on the discovery.

Please note that our approval does not alter GP's obligations to meet all other applicable NESHAP, including, but not limited to, the following NESHAP General Provisions:

- The requirement to maintain and operate affected facilities and associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions, per §63.453(q) and
- The prohibition against concealing emissions which would otherwise constitute a violation of an applicable standard, including the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere, per §63.4.

This CMS petition approval was coordinated with the EPA's Office of Enforcement and Compliance Assurance and Office of Air Quality Planning and Standards. If you have any questions about this CMS petition conditional approval, please contact Tracy Watson at (404) 562-8998, or by email at watson.marion@epa.gov.

Sincerely,

CAROLINE FREEMAN

Digitally signed by CAROLINE FREEMAN Date: 2022.07.26 17:42:23 -04'00'

Caroline Y. Freeman Director Air and Radiation Division

cc: Sara Ayres, EPA OECA Melissa Fortenberry, MDEQ Melanie King, OAQPS