STATE OF MISSISSIPPI
AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Georgia Pacific Wood Products, LLC – Taylorsville
Highway 28 West
Taylorsville, Smith County, Mississippi

has been granted permission to construct air emissions equipment to comply with the emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with 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.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

_____

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued:_____ **Permit No.: 2500-00002**

SECTION 1

A. GENERAL CONDITIONS

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

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

2. Any activities not identified in the application are not authorized by this permit.

   (Ref.: Miss. Code Ann. 49-17-29 1.b)

3. The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for operating without a valid permit pursuant to State Law.

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

4. It is the responsibility of the applicant / permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including, but not limited to, all required local government zoning approvals or permits.

   (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.(6).)

5. The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities.

   (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(7).)

6. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit, unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state.

   (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(15)(a).)

7. The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

   (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(15)(b).)

8. The permit does not convey any property rights of any sort, or any exclusive privilege.

   (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(15)(c).)

9. The permittee shall furnish to the MDEQ within a reasonable time any information the MDEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the MDEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to the MDEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

   (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(15)(d).)

10. *Design and Construction Requirements*: The stationary source shall be designed and constructed so as to operate without causing a violation of an Applicable Rules and Regulations, without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards, and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries.

    (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A.)

11. *Solids Removal*: The necessary facilities shall be constructed so that solids removed in the course of control of air emissions may be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits.

    (Ref.: Miss. Code Ann. 49-17-29)

12. *Diversion and Bypass of Air Pollution Controls*: The air pollution control facilities shall be constructed such that diversion from or bypass of collection and control facilities is not needed except as provided for in 11 Miss. Admin. Code Pt. 2, R. 1.10., "*Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants – Provisions for Upsets, Start-ups, and Shutdowns*".

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

13. *Fugitive Dust Emissions from Construction Activities*: The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum.

    (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A.(4).)

14. *Right of Entry*: The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives upon presentation of credentials:

    a) To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and

    b) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emissions.

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

15. *Permit Modification or Revocation*: After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to:

    a) Persistent violation of any of the terms or conditions of this permit;

    b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

    c) A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

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

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

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

17. *Permit Transfer*: This permit shall not be transferred except upon approval of the Permit Board.

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

18. *Severability*: The provisions of this permit are severable. If any provision of the permit, or the application of any provision of the permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby.

    (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.(7).)

19. *Permit Expiration*: The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance or if construction is suspended for 18 months or more.

    (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C.(1).)

20. *Certification of Construction*: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee.

    (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D.(3).)

21. *Beginning Operation*: Except as prohibited in Condition 24 of Section 1, after certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Permit or the application for issuance or modification of the State Permit to Operate, whichever is applicable, is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by 11 Miss. Admin. Code Pt. 2, R. 2.13.G.

    (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D.(4).)

22. *Application for a Permit to Operate*: Except as otherwise specified in Condition 24 of Section 1, the application for issuance or modification of the State Permit to Operate or the Title V Permit, whichever is applicable, is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing.

    (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D.(5).)

23. *Operating Under a Permit to Construct*: Except as otherwise specified in Condition 24 of Section 1, upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Operating Permit, whichever is applicable, the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate.

    (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D.(6).)

24. *Application Requirements for a Permit to Operate for Moderate Modifications*: For moderate modifications that require contemporaneous enforceable emissions reductions from more than one emission point in order to "*net*" out of PSD / NSR, the applicable Title V Permit to Operate or State Permit to Operate must be modified prior to beginning operation of the modified facilities.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D.(7).)

25. *General Duty*: All air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

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

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

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

27. *Compliance Testing*: Regarding compliance testing:

a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations 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).)

B. GENERAL NOTIFICATION REQUIREMENTS

1. Within fifteen (15) days of beginning actual construction, the permittee must notify the DEQ in writing that construction has begun.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C.(2).)

2. The permittee must notify the DEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C.(3).)

3. Upon the completion of construction or installation of an approved stationary source or modification, and prior to commencing operation, the applicant shall notify the Permit Board that construction or installation was performed in accordance with the approved plans and specifications on file with the Permit Board.

   (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D.(1) and (3).)

4. The Permit Board shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the Permit Board determines the changes are substantial, it may require the submission of a new application to construct with "as built" plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an "*as built*" application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law.

   (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D.(2).)

SECTION 2
EMISSION POINT DESCRIPTION

The permittee is authorized to construct / modify and operate, upon certification of construction, air emissions equipment, as described in the following table:

EMISSION POINT	DESCRIPTION
AA-000	Facility-Wide (Georgia Pacific Wood Products, LLC – Taylorsville)
AA-314	Glueline Operations (GP Ref. No. FS6) [includes one (1) **new** manual glue spreader and eight (8) existing automated spray booths]
AA-315	Plywood Press Operations (GP Ref. No. FS7) [includes three (3) **replacement** 40-opening presses]
AA-404	Veneer Drying Operation (GP Ref. No. M1) [includes the **new** No. 1 Veneer Dryer, the existing No. 2 Veneer Dryer, the existing No. 3 Veneer Dryer, and the existing No. 4 Veneer Dryer; the exhaust from all hot zones are routed to a regenerative thermal oxidizer (RTO) with three (3) low-NO_X burners (Max. Individual Heat Input Capacity: 4 MMBTU / Hour) (GP Ref. No. RTO-M1)]
AA-405	Veneer Dryer Cooling Vents [includes the cooling zone exhaust from the **new** No. 1 Veneer Dryer, the existing No. 2 Veneer Dryer, the existing No. 3 Veneer Dryer, and the existing No. 4 Veneer Dryer; the exhaust from all cooling zones are vented to the atmosphere]

SECTION 3
EMISSION LIMITATIONS AND STANDARDS

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Limitation(s) / Standard(s)
AA-000	40 CFR Part 63, Subpart DDDD – National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products 40 CFR 63.2231; Subpart DDDD	3.1	HAPs	Applicability
AA-315 AA-404	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.2	HAPs	New Process Unit Shakedown Requirements
		3.3		Existing Process Unit Decommission Requirements
AA-404	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.4	Opacity (Smoke)	40%
	11 Miss. Admin. Code, Pt. 2, Ch. 1, R. 1.3.B.	3.5	Opacity	
	11 Miss. Admin. Code Pt. 2, R.1.3.F.(1).	3.6	PM	$E = 4.1\ (p^{0.67})$
	40 CFR 63.2240(b); Subpart DDDD – Table 1B, Item 1	3.7	HAPs	90% Reduction Efficiency (for RTO)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	3.8		Establish a Minimum Firebox Temperature (for RTO)

3.1 Emission Point AA-000 (Facility-Wide) is subject to and shall comply with applicable requirements found in 40 CFR Part 63, Subpart DDDD – National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products.

(Ref.: 40 CFR 63.2231; Subpart DDDD)

3.2 For Emission Points AA-315 and AA-404, the permittee may execute a shakedown of the new No. 1 Veneer Dryer and the three (3) replacement 40-opening plywood presses that shall not exceed a period of one hundred eighty (180) days after the start-up of each process unit.

For the purpose of this condition, "*shakedown*" shall be defined as the period beginning with start-up and ending no later than the successful completion of performance testing (as applicable), during which the permittee may conduct operational and contractual testing / tuning to ensure the safe, efficient, and reliable operation of the new dryer and plywood presses.

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

3.3 For Emission Points AA-315 and AA-404, the permittee shall decommission the existing No. 1 Veneer Dryer and the four (4) existing 36-opening plywood presses no later than thirty (30) days after completing the respective shakedown period for the new No. 1 Veneer Dryer and the three (3) replacement 40-opening plywood presses.

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

3.4 For Emission Point AA-404, except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from the exhaust point of the regenerative thermal oxidizer (RTO) to the open air that exceeds forty percent (40%) opacity. However, start-up operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) start-ups per stack in any twenty-four (24) hour period.

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

3.5 For Emission Point AA-404, the permittee shall not discharge into the ambient air from exhaust point of the regenerative thermal oxidizer (RTO) any contaminant of such opacity as to obscure an observer's view to a degree in excess of forty percent (40%) opacity. This shall not apply to vision obscuration caused by uncombined water droplets.

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

3.6 For Emission Point AA-404, the permittee shall not cause or allow the emission of particulate matter (PM) in total quantities in any one (1) hour from the exhaust point of the regenerative thermal oxidizer (RTO) to exceed the amount determined by the relationship:

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

Where "*E*" is the emission rate in pounds per hour and "*p*" is the process weight input rate in tons per hour.

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

3.7 For Emission Point AA-404, upon start-up of the new No. 1 Veneer Dryer, the permittee shall operate the regenerative thermal oxidizer (RTO) in such a manner to reduce the total

hazardous air pollutant (HAP) emissions from the combined veneer dryer heated zones by at least ninety (90) percent [measured as total hydrocarbons (as carbon)].

(Ref.: 40 CFR 63.2233(a)(2) and 40 CFR 63.2240(b) – Table 1B, Item 1; Subpart DDDD)

3.8 For Emission Point AA-404, the permittee shall establish a minimum operational firebox temperature for the regenerative thermal oxidizer (RTO) to comply with the required hazardous air pollutant (HAP) percent reduction specified in Condition 3.7 no later than one hundred eighty (180) days after start-up of the new No. 1 Veneer Dryer.

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

SECTION 4
WORK PRACTICE STANDARDS

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Work Practice Standard(s)
AA-000	40 CFR 63.2250(b); Subpart DDDD 40 CFR Part 63, Subpart A – General Provisions 40 CFR 63.6(e)(1)(i); Subpart A	4.1	HAPs	General Duty Clause
AA-404	40 CFR 63.2241(a); Subpart DDDD – Table 3, Item 3	4.2		Minimize Fugitive Emissions

4.1 For Emission Point AA-000 (Facility-Wide), the permittee shall operate and maintain all emission sources (including associated air pollution control equipment and monitoring equipment) in a manner consistent with safety and good air pollution control practices for minimizing emissions at all times (including periods of start-up, shutdown, and malfunction).

During a period of start-up, shutdown, or malfunction, this general duty to minimize emissions requires that the permittee reduce emissions from an emission source to the greatest extent, which is consistent with safety and good air pollution control practices. However, the general duty to minimize emissions during a period of start-up, shutdown, or malfunction does not require the permittee to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved.

Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ that may include (but not limited to) monitoring results, review of operation and maintenance procedures (including the "*Start-up, Shutdown, and Malfunction Plan*" (SSMP) required in Condition 5.2), review of operation and maintenance records, and inspection of the emission source.

(Ref.: 40 CFR 63.2250(b); Subpart DDDD and 40 CFR 63.6(e)(1)(i); Subpart A)

4.2 For Emission Point AA-404, the permittee shall minimize fugitive emissions from all veneer dryer doors (through proper maintenance procedures) as well as the green end of each veneer dryer (through proper balancing of the heated zone exhausts).

(Ref.: 40 CFR 63.2241(a); Subpart DDDD – Table 3, Item 3)

SECTION 5
MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point(s)	Applicable Requirement(s)	Condition Number	Pollutant(s) / Parameter(s)	Monitoring / Recordkeeping Requirement(s)
AA-000	11 Miss. Admin. Code, Pt. 2, R. 6.3.A.(3)(b)(2).	5.1	Recordkeeping	Maintain Records for a Minimum of Five (5) Years
	40 CFR Part 52, Subpart A – General Provisions 40 CFR 52.21(r)(6)(iii); Subpart A	5.2	PM_{10} $PM_{2.5}$ VOCs	Calculate and Maintain Project-Related Emissions Increases
AA-404	40 CFR 63.2250(c); Subpart DDDD 40 CFR Part 63, Subpart A – General Provisions 40 CFR 63.6(e)(3); Subpart A	5.3	HAPs	Update the Start-Up, Shutdown & Malfunction Plan
	40 CFR 63.2282(a)(2); Subpart DDDD	5.4		Maintain Records Related to Periods of Start-Up, Shutdown, & Malfunction
	40 CFR 63.2262(a – e), (g), (h), (k) and 40 CFR 63.2282(a)(4); Subpart DDDD 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).	5.5	HAPs Firebox Temperature	Conduct a Performance Test Determine a Minimum Firebox Temperature for the RTO
	40 CFR 63.2269(a) and (b); Subpart DDDD	5.6	Firebox Temperature	Operate and Maintain Temperature Monitoring System
	40 CFR 63.2270(a – d) and (f); Subpart DDDD	5.7		Continuously Monitor and Maintain Firebox Temperature Data (3-Hour Block Average)
	40 CFR 63.2265; Subpart DDDD	5.8	HAPs	Update the Plan for Minimizing Fugitive Emissions
	40 CFR 63.2282(a)(3); Subpart DDDD	5.9		Maintain Records Related to the Approved Routine Control Device Maintenance Exemption

5.1 Except as otherwise specified or limited herein, the permittee shall retain all required records, monitoring data, supporting information, and reports for a period of at least five

(5) years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records, all original strip-chart recordings or other data from continuous monitoring instrumentation, and copies of all reports required by this permit. Copies of such records shall be submitted to the MDEQ as required by "Applicable Rules and Regulations" or this permit upon request.

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

5.2 For Emission Point AA-000 (Facility-Wide), the permittee shall monitor the emission of particulate matter less than 10 microns (µm) in diameter (PM_{10}), particulate matter less than 2.5 µm ($PM_{2.5}$), and volatile organic compounds (VOCs) that could increase as a result of the construction project proposed in the permit application received on September 20, 2018.

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)

5.3 For Emission Point AA-404, the permittee shall update and maintain on-site the "*Start-Up, Shutdown, and Malfunction Plan*" (SSMP) that describes, in detail, procedures for operating and maintaining the applicable emissions equipment during periods of start-up, shutdown, and malfunction, and a program of corrective action(s) for any malfunctioning equipment (i.e. air pollution control equipment, monitoring equipment, and/or process equipment) used to comply with 40 CFR Part 63, Subpart DDDD.

The purpose of the SSMP is to ensure the following actions:

(a) At all times, the permittee operates and maintains the affected source (including all associated air pollution control and monitoring equipment) in a manner which satisfies the general duty to minimize emissions established in Condition 4.1;

(b) The permittee is prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants (HAPs); and

(c) Reduce the reporting burden associated with periods of start-up, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

(Ref.: 40 CFR 63.2250(c); Subpart DDDD and 40 CFR 63.6(e)(3); Subpart A)

5.4 For Emission Point AA-404, the permittee shall maintain all records pertaining to information specified in 40 CFR 63.6(e)(3)(iii – v) for periods of start-up, shutdown, and malfunction.

(Ref.: 40 CFR 63.2282(a)(2); Subpart DDDD)

5.5 For Emission Point AA-404, upon completion of the shakedown period for the new No. 1 Veneer Dryer, the permittee shall determine a minimum operational firebox temperature in order for the regenerative thermal oxidizer (RTO) to comply with the hazardous air pollutant (HAP) reduction efficiency requirement specified in Condition 3.7 by conducting a performance test in accordance with the following provisions:

(a) PERFORMANCE TEST REQUIREMENTS:

(1) *Periods when performance tests must be conducted*: The permittee shall conduct the performance test only under representative operating conditions.

For the purpose of this section, "*representative operating conditions*" shall be defined as operation of the combined veneer dryers under conditions / rates that will be typical in the future.

(2) *Number of test runs:* The permittee shall conduct three separate test runs for the performance test in accordance with 40 CFR 63.7(e)(3); Subpart A. Each test run shall last at least one (1) hour.

(3) L*ocation of sampling sites*: Sampling sites must be located at the inlet and outlet of the RTO and prior to any releases to the atmosphere.

(4) *Collection of monitoring data*: The permittee shall collect operating parameter monitoring system or continuous emissions monitoring system (CEMS) data at least every fifteen (15) minutes during the entire performance test to determine the minimum operating chamber temperature for the RTO.

(5) *Non-detect data*: All non-detect data shall be treated as one-half of the method detection limit when determining an total hydrocarbon (THC) emission rate. However, the permittee may subtract methane emission data from any THC (as carbon) measurement.

For the purpose of this section, "*non-detect data*" shall be defined as any value this below the applicable method detection limit.

(6) *Calculation of percent reduction across the RTO*: When determining the reduction efficiency for the RTO during a performance test, the permittee shall calculate the percent reduction using Equation 1:

$$PR = CE\left(\frac{ER_{IN} - ER_{OUT}}{ER_{IN}}\right) \qquad \textbf{(Equation 1)}$$

Where:

PR = Percent reduction, percent;

CE = Capture efficiency, percent;

ER_{in} = Emission rate of THC in the inlet vent stream of the RTO, pounds per hour;

ER_{out} = Emission rate of THC in the outlet vent stream of the RTO, pounds per hour.

(7) The following EPA Methods shall be utilized to conduct the specified procedures of the performance stack test (as appropriate):

(i) *Select the sampling port's location and the number of traverse ports* – Method 1 or 1A in Appendix A of 40 CFR Part 60;

(ii) *Determine the velocity and volumetric flow-rate of the stack gas* – Method 2A, 2C, 2D, 2F, or 2G in Appendix A of 40 CFR Part 60;

(iii) *Conduct the gas molecular weight analysis* – Method 3, 3A, or 3B in Appendix A of 40 CFR Part 60;

(iv) *Measure the moisture content of the stack gas* – Method 4 in Appendix A of 40 CFR Part 60; or Method 320 in Appendix A of 40 CFR Part 63; or ASTM D6348-03;

(v) *Measure the emissions of total hazardous air pollutants (HAPs) as total hydrocarbon (THC)* – Method 25A in Appendix A of 40 CFR Part 60;

The permittee may measure methane emissions using Method 18 in appendix A of 40 CFR part 60 and subtract the methane emissions from the total HAP emissions (as THC).

(b) <u>DETERMINATION OF OPERATING TEMPERATURE REQUIREMENTS</u>:

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

(2) The permittee may establish a different minimum firebox temperature for the thermal oxidizer by conducting a repeat performance test that demonstrates compliance with the reduction efficiency requirement referenced in Condition 3.2 (in accordance with the requirements outlined in Parts (a) and (b)(1) of this condition).

(c) The permittee shall conduct the performance testing no later than one hundred eighty (180) days after start-up of the new No. 1 Veneer Dryer.

(d) The permittee shall maintain the results of any conducted performance test on-site.

(Ref.: 40 CFR 63.2262(a – e), (g), (h), (k) and 40 CFR 63.2282(a)(4); Subpart DDDD)
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(10).)

5.6 For Emission Point AA-404, upon establishing a minimum firebox temperature that demonstrates compliance with Condition 3.2, the permittee shall operate and maintain the temperature monitoring system in accordance to the following provisions:

(a) The 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 temperature monitoring system including (but not limited to) the parts necessary for routine repairs;

(c) The permittee shall record and maintain the results of each inspection, calibration, and validation check;

(d) The permittee shall utilize a sensor with a minimum accuracy of 4ºF or 0.75 percent of the minimum required firebox temperature (whichever is larger);

(e) If a chart recorder is utilized to maintain monitoring data, it shall have a sensitivity with minor divisions not more than 20ºF;

(f) The permittee shall perform an electronic calibration at least semiannually according to the procedures noted by the manufacturer's specifications. Following the electronic calibration, the permittee shall conduct a temperature sensor validation check, in

which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 30°F of the process temperature sensor's reading.

(g) The permittee shall conduct calibration and validation checks any time the noted sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(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)

5.7 For Emission Point AA-404, the permittee shall continuously monitor and maintain firebox temperature data during veneer dryer operations based on a 3-hour block average. The average shall be calculated after every 3 hours of veneer dryer operation as the average of the evenly spaced recorded temperature readings in the previous 3 operating hours.

For purposes of calculating data averages, the permittee shall have at least 75 percent of the required temperature readings during all periods, except the following:

(a) Monitored malfunctions, associated repairs, out-of-control periods, and required quality assurance / control activities [including (as applicable) calibration checks and required zero / span adjustments];

For the purpose of this section, a "*monitoring malfunction*" is any sudden, infrequent, not reasonably preventable failure of the temperature monitoring system 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 calculations constitutes a deviation from the monitoring requirements.

(b) Periods of start-up, shutdown, and malfunction;

(c) Periods of control device downtime covered in the approved routine control device maintenance exemption;

(Ref.: 40 CFR 63.2270(a – d) and (f); Subpart DDDD)

5.8 For Emission Point AA-404, upon certifying completion of construction, the permittee shall update the plan that details the minimization of fugitive emissions from the heated zones of all veneer dryers.

During the period in which the MDEQ reviews the plan for approval (as required by Condition 6.8), the permittee shall institute best management practices to minimize fugitive emissions from the heated zones of all veneer dryers to the greatest extent practical.

(Ref.: 40 CFR 63.2265; Subpart DDDD)

5.9 For Emission Point AA-404, the permittee shall maintain all required information outlined in Condition 6.7 that comprised the approved routine control device maintenance exemption request.

(Ref.: 40 CFR 63.2282(a)(3); Subpart DDDD)

SECTION 6
REPORTING REQUIREMENTS

Emission Point(s)	Applicable Requirement(s)	Condition Number	Reporting Requirement(s)
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.1	Submitted Documents Certified by a Responsible Official or Duly Authorized Representative
	40 CFR 52.21(r)(6)(v); Subpart A	6.2	Submit Calculated Annual Emissions
AA-315 AA-404	11 Miss. Admin. Code Pt. 2, R. 2.9.	6.3	Submit Notification of Initial Start-Up for New Process Units
		6.4	Submit Notification of Shakedown Period Completion
		6.5	Submit Notification of Completed Decommission Activities for Existing Process Units
AA-404	40 CFR 63.2280(c); Subpart DDDD 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	6.6	Submit Notification of Intent for Performance Testing
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11). 40 CFR 63.7(g) and 40 CFR 63.9(h)(1 – 6); Subpart A	6.7	Submit Performance Test Results
	40 CFR 63.2265; Subpart DDDD 11 Miss. Admin. Code Pt. 2, R. 2.9.	6.8	Submit Plan for Minimizing Fugitive Emissions from All Veneer Dryer Heated Zones
	40 CFR 63.2251(a) and 40 CFR 63.2280(e); Subpart DDDD	6.9	Submit Routine Control Device Maintenance Exemption Request
	40 CFR 63.2281(b) and (c); Subpart DDDD	6.10	Submit Semi-Annual Compliance Report
	40 CFR 63.2281(e); Subpart DDDD	6.11	Submit Semi-Annual Temperature Monitoring System Deviation Report

6.1 Any document required by this permit to be submitted to the MDEQ shall contain a certification signed by a responsible official or duly authorized representative stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

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

6.2 For Emission Point AA-000 (Facility-Wide), the permittee shall submit a report to the MDEQ no later than March 1st (or February 29th when applicable) of each year for the preceding 12-month calendar year if the calculated annual emissions specified in Condition 5.4 meet the following criteria:

(a) Exceed the baseline actual emissions documented in the pre-construction Prevention of Significant Deterioration (PSD) major modification applicability test by a "*significant*" [as defined by 40 CFR 52.21(b)(23); Subpart A] amount for the pollutants referenced in Condition 5.4; and

(b) Differ from the established pre-construction projected emissions presented in the permit application received on September 20, 2018.

The required report shall contain the following information:

(c) The name, address, and telephone number of the facility;

(d) The calculated annual emissions as specified in Condition 5.4; and

(e) 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)

6.3 For Emission Points AA-315 and AA-404, the permittee shall notify the MDEQ in writing of start-up for the new No. 1 Veneer Dryer and the three (3) replacement 40-opening plywood presses no later than ten (10) days after the respective start-up date.

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

6.4 For Emission Points AA-315 and AA-404, the permittee shall notify the MDEQ in writing of the completion of the shakedown period for the referenced process units no later than ten (10) days after the respective period ends.

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

6.5 For Emission Points AA-315 and AA-404, the permittee shall notify the MDEQ in writing on the completed decommission of the four (4) existing 36-opening plywood presses and the existing No.1 Veneer Dryer no later than ten (10) days after the respective completion date.

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

6.6 For Emission Point AA-404, the permittee shall submit a Notification of Intent that details all testing protocol to be applied during an impending performance test at least sixty (60) days before the event is scheduled to begin. Additionally, the permittee shall notify the MDEQ in writing no later than ten (10) days prior to the intended event date so that a representative from the MDEQ may be afforded the opportunity to observe a performance test.

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

6.7 For Emission Point AA-404, the permittee shall submit the results of any conducted performance test to the MDEQ no later than sixty (60) days after completing the testing event.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).)
(Ref.: 40 CFR 63.7(g) and 40 CFR 63.9(h)(1 – 6); Subpart A)

6.8 For Emission Point AA-404, the permittee shall submit the updated plan that addresses the minimization of fugitive emissions from the heated zones of all veneer dryers for review and approval by the MDEQ no later than sixty (60) days after certifying completion of construction.

(Ref.: 40 CFR 63.2265; Subpart DDDD and 11 Miss. Admin. Code Pt. 2, R. 2.9.)

6.10 For Emission Point AA-404, upon start-up of the No. 1 Veneer Dryer, the permittee shall submit a compliance report that encompasses an operational period of at least six (6) months (but does not exceed twelve (12) months) and ends on either June 30th or December 31st no later than July 31st (for a compliance period ending on June 30th) or January 31st (for a compliance period ending December 31st). Thereafter, the permittee shall subsequent semi-annual compliance reports no later than January 31st and July 31st of each calendar year for the previous six-month period.

Any required compliance report shall contain the following information:

(a) The company name and address;

(b) 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;

(c) A date for the specified report and the beginning / ending dates of the reporting period;

(d) The information specified in 40 CFR 63.10(d)(5)(i); Subpart A if a period of start-up, shutdown, or malfunction occurred during the reporting period and the permittee took actions consistent with the "*Start-Up, Shutdown, and Malfunction Plan*" (as outlined in Condition 5.2);

(e) A description of any maintenance performed on the regenerative thermal oxidizer (RTO) while the control device was offline and any veneer dryer(s) was still in operation that shall include the following information:

(1) The date and time when the RTO was shut down and restarted;

(2) Identification of the veneer dryers that were in operation and the number of hours that each operated while the RTO was offline;

(3) A statement of whether or not the noted RTO maintenance was included in the approved routine control device maintenance exemption request developed pursuant to Conditions 3.6 and 6.7. If the RTO maintenance was included in the approved routine control device maintenance exemption request, the permittee shall report the following information:

(i) The total amount of time that each veneer dryer during the semi-annual compliance period and during the previous semi-annual compliance period;

(ii) The amount of time that each veneer dryer operated while the RTO was down for maintenance covered under the routine control device maintenance exemption during the semi-annual compliance period and during the previous semi-annual compliance period;

(iii) A calculation of the annual percentage of veneer dryer operating uptime during which the RTO was offline for routine maintenance using Equation 2:

$$RM = \frac{DT_P + DT_C}{PU_P + PU_C} \qquad \textbf{(Equation 2)}$$

Where:

RM = The annual percentage of veneer dryer uptime during which the RTO is down for routine maintenance;

PU_p = The combined veneer dryer uptime for the previous semi-annual compliance period;

PU_c = The combined veneer dryer uptime for the current semi-annual compliance period;

DT_p = The RTO downtime claimed under the routine control device maintenance exemption for the previous semi-annual compliance period;

DT_c = The RTO downtime claimed under the routine control device maintenance exemption for the current semi-annual compliance period.

(f) The results of any performance tests conducted during the semi-annual reporting period;

(g) A statement that there were no deviations from any specified compliance options, operating requirements, or work practice requirements during the reporting period (if applicable); and

(h) A statement that there were no periods during which the temperature monitoring system was "*out-of-control*" (as defined in 40 CFR 63.8(c)(7); Subpart A) during the reporting period.

(Ref.: 40 CFR 63.2281(b) and (c); Subpart DDDD)

6.11 For Emission Point AA-404, the permittee shall submit a semi-annual report that details each deviation from a specified compliance option or operating requirement by the temperature monitoring system (including periods of start-up, shutdown, malfunction, and routine control device maintenance) no later than July 31st and January 31st of each calendar year for the previous six-month period.

Any required report shall contain the following information:

(a) The date and time that each malfunction started and stopped (if applicable);

(b) The date and time for each instance the temperature monitoring system was non-operational (except for zero (low-level) and high-level checks);

(c) The date, time, and duration for each instance the temperature monitoring system was "*out-of-control*" (as defined in 40 CFR 63.8(c)(7); Subpart A) including a description of any corrective actions taken;

(d) The date and time that each deviation started and stopped;

(e) The specified period during which each deviation occurred (i.e. start-up; shutdown; malfunction; a period of control device maintenance covered in the approved routine control device maintenance exemption request; another defined period);

(f) A summary of each deviation's total duration during a reporting period and the total duration as a percent of the combined veneer dryer operating time during the same reporting period;

(g) A breakdown of all deviations' total duration during a reporting period into those that are due to start-up, shutdown, control system problems, control device maintenance, process problems, other known causes, and other unknown causes;

(h) A summary of the total duration of temperature monitoring system's downtime during a reporting period and the total duration of the temperature monitoring system's downtime as a percent of the combined veneer dryer operating time during the same reporting period;

(i) A brief description of the veneer dryers;

(j) A brief description of the temperature monitoring system;

(k) The date of the latest temperature monitoring system certification or audit; and

(l) A description of any changes in the temperature monitoring system, the regenerative thermal oxidizer, the veneer drying process, or other controls since the last reporting period.

(Ref.: 40 CFR 63.2281(e); Subpart DDDD)