



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Air Quality - Part 70 Operating Permit Amendment

Facility Name: LJR Forest Products
Facility Address: 1377 Old Nunez Road
Swainsboro, GA 30401 Emanuel County
Mailing Address: 1377 Old Nunez Road
Swainsboro, GA 30401
Parent/Holding Company: LJR Forest Products, LLC
Facility AIRS Number: 04-13-107-00030

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued an amendment to the Part 70 Operating Permit for:

Update to the emission factors listed in Section 6 of the Permit.

This Permit Amendment is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Amendment and Permit No. 2499-107-0030-V-04-0. Unless modified or revoked, this Amendment expires simultaneously with Permit No. **2499-107-0030-V-04-0**. This Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in App No. 899226 dated December 30, 2024; any other applications upon which this Amendment or Permit No. 2499-107-0030-V-04-0 are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **9** pages.



Jeffrey W. Cown, Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION

1.3 Process Description of Modification

On December 30, 2024, LJR Forest Products (hereinafter “facility”) submitted Application No. 899226 requesting an update to the emission factors listed in Section 6 of the current Permit. No other equipment or processes at the facility will be modified.

PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

3.5 Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit**MODIFIED CONDITION:**

3.5.2 The Permittee shall not process any wood chips in the Dryer DY2 unless:
[40 CFR 52.21 - PSD Avoidance]

- a. The three-hour rolling average of the wood dryer inlet gas temperature is at or below the temperature established during the most recent performance test and;
- b. The three-hour rolling average of the burner outlet gas temperature is at or above the temperature established during the most recent performance test and;
- c. The three-hour rolling average of the recycle airflow damper position is at or above the position established during most recent performance test.

PART 4.0 REQUIREMENTS FOR TESTING

4.2 Specific Testing Requirements

MODIFIED CONDITION:

4.2.6 [Deleted.]

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)**5.2 Specific Monitoring Requirements**

MODIFIED CONDITIONS:

- 5.2.1 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the damper position in the recycle duct to Burner (BU1). The Permittee shall record the recycle damper position on a continuous basis and determine each three-hour rolling average damper position. If the three-hour rolling average of the damper percent open position is below the position established during most recent performance test, the Permittee shall record this in a log, as an exceedance, and take action to bring the damper open position above the established range. This action and the results shall be recorded in the log. This log shall be available for submission or inspection by Division personnel, upon request. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 5.2.3 The Permittee shall install, calibrate, maintain, and operate monitoring devices to continuously measure and record the temperature at burner outlet gas temperature and determine each three-hour rolling average temperature. If the three-hour average is below the operating temperature determined by the most recent performance testing established per Condition 4.2.1, the Permittee shall record this in a log, as an excursion per Condition 6.1.7c., and take action to bring the temperature up to the established temperature. This action and the results shall be recorded in the log. This log shall be available for submission or inspection by Division personnel, upon request.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 5.2.11 The Permittee shall install, calibrate, maintain, and operate monitoring devices to continuously measure and record the temperature at the inlet of Dryer (DY2) and determine each three-hour rolling average temperature. If the three-hour average is above the operating temperature determined by the most recent performance testing established per Condition 4.2.1, the Permittee shall record this in a log, as an excursion per Condition 6.1.7c., and take action to bring the temperature down to the established temperature. This action and the results shall be recorded in the log. This log shall be available for submission or inspection by Division personnel, upon request.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS

MODIFIED CONDITIONS:

6.1 General Record Keeping and Reporting Requirements

MODIFIED CONDITION

6.1.7 For the purpose of reporting excess emissions, exceedances, or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

None required to be reported in accordance with Condition 6.1.4.

- b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)

- i. Any 12-month rolling total of VOC emissions equal to or exceeding 249 tons.
- ii. Any 12-month rolling total of CO emissions equal to or exceeding 249 tons.
- iii. Any 12-month rolling total of any single HAP emissions equal to or exceeding 10 tons.
- iv. Any 12-month rolling total of total HAP emissions equal to or exceeding 25 tons.
- v. Any 12-month rolling total of PM emissions equal to or exceeding 249 tons.

- c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)

- i. Any instance in which any pressure drop readings, required by Condition 5.2.2, are outside of the range established.
- ii. Any instance in which the visible emissions are observed per Condition 5.2.6.
- iii. Any three-hour average Dryer (DY2) recycle air damper position measured and recorded as required by Condition 5.2.1 is less than the open position established during most recent performance test.

- iv. Any three-hour average temperature at the inlet of Dryer (DY2) measured and recorded as required by Condition 5.2.11 is above the temperature established during most recent performance test.
- v. Any three-hour average temperature at the burner outlet gas temperature measured and recorded as required by Condition 5.2.3 is below the temperature established during most recent performance test.
- vi. Any two consecutive opacity readings from fugitive emission sources above 10 percent as required by Condition 5.2.12.

6.2 Specific Record Keeping and Reporting Requirements

MODIFIED CONDITIONS

- 6.2.2 The Permittee shall calculate the monthly Particulate Matter (filterable plus condensable) emissions from the Dryer Exhaust (Stack A), Pelleting Process A (Stack BH1) (Hammermill HMD1, Pellet Mills PM1-3, PM7 and PM8, Pellet Cooler CO1, and Aspirator ASP1) and Pelleting Process B (Stack BH2) (Hammermill HMD2, Pellet Mills PM4-6, PM9 and PM10, Pellet Cooler CO2, and Aspirator ASP2) and the Fuel Hammermill using the records from Condition 6.2.1 and the following equation(s). All emission factors and calculations shall be kept as part of the monthly records, available for inspection or submittal.

Then determine the tons of pollutant per month using the following equation:

$$E_{PM} = [(ED_{PM}) * (DY2) + (EPPA_{PM}) * (PPA) + (EPPB_{PM}) * (PPB) + (EH_{PM}) * (HM)] / 2000$$

Where:

E_{PM}	=	Monthly PM emission in tons
ED_{PM}	=	Emission Factor lb PM/ODT at the Dryer exhaust (Stack A)
DY2	=	Monthly Product from Dryer in oven dried tons
$EPPA_{PM}$	=	Emission Factor lb of PM/ton at Pelleting Process A exhaust (Stack BH1)
PPA	=	Monthly Production from Pelleting Process A in tons
$EPPB_{PM}$	=	Emission Factor lb of PM/ton at Pelleting Process B exhaust (Stack BH2)
PPB	=	Monthly Production from Pelleting Process B in tons
EH_{PM}	=	Emission Factor lb of PM/ton at the Fuel Hammermill bin vent outlet
HM	=	Monthly Production from Fuel Hammermill in tons

The Permittee shall calculate PM emissions with the most recent performance test results obtained in accordance with Condition 4.2.2 and the equation provided in this condition.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- 6.2.3 The Permittee shall calculate the monthly VOC, formaldehyde, acetaldehyde, and methanol emissions from the Dryer Exhaust (Stack A), Pelleting Process A (Stack BH1) (Hammermill HMD1, Pellet Mills PM1-3, PM7 and PM8, Pellet Cooler CO1, and Aspirator ASP1), Pelleting Process B (Stack BH2) (Hammermill HMD2, Pellet Mills PM4-6, PM9 and PM10, Pellet Cooler CO2, and Aspirator ASP2), Fuel Hammermill and storage/handling using the records from Condition 6.2.1 and the following equation(s). All emission factors and calculations shall be kept as part of the monthly records, available for inspection or submittal, upon request.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

The Permittee shall calculate WPP1 VOC emissions including formaldehyde, and methanol emissions using EPA Modified OTM-26.

$$\text{VOC} = [\text{Method 25A VOC}_{(\text{as propane})}] + \text{Methanol} + \text{Formaldehyde} - 0.65[\text{Methanol}_{(\text{as propane})}]$$

The Permittee shall use the following equation to calculate monthly WPP1 VOC emissions.

$$E_{\text{VOC}} = [(ED_{\text{VOC}})(DY2) + (EPPA_{\text{VOC}})(PPA) + (EPPB_{\text{VOC}})(PPB) + (ES_{\text{VOC}})(SH)]/2000$$

Where:

- E_{VOC} = Monthly VOC emission in tons
- $ED_{\text{VOC}}^{\dagger}$ = Emission Factor lb VOC/ODT at the Dryer exhaust (Stack A), using the most recent performance test results determined in accordance with Condition 4.2.1a (or using the uncontrolled emission factors as specified below).
- $DY2$ = Monthly Product from Dryer in oven dried tons
- $EPPA_{\text{VOC}}$ = Emission Factor lb of VOC/ton at Pelleting Process A exhaust (Stack BH1), using the most recent performance test results determined in accordance with Condition 4.2.1b.
- PPA = Monthly Production from Pelleting Process A in tons
- $EPPB_{\text{VOC}}$ = Emission Factor lb of VOC/ton at Pelleting Process B exhaust (Stack BH2), using the most recent performance test results for Pelleting Process A exhaust determined in accordance with Condition 4.2.1b.
- PPB = Monthly Production from Pelleting Process B in tons
- ES_{VOC} = Emission Factor lb of VOC/ton for storage and handling, 0.40 lb/ODT.
- SH = Monthly Product handled for storage and handling in tons

The Permittee shall use the following equation to calculate monthly HAP emissions.

$$E_{\text{HAP}} = [(ED_{\text{HAP}})(DY2) + (EPPA_{\text{HAP}})(PPA) + (EPPB_{\text{HAP}})(PPB) + (ES_{\text{HAP}})(SH)]/2000$$

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Where:

- E_{HAP} = Monthly HAP emission in tons
- ED_{HAP}^{\dagger} = Emission Factor lb Pollutant/ODT at the Dryer exhaust (Stack A) for methanol, formaldehyde, acetaldehyde, using the most recent performance test (after-control) results determined in accordance with Condition 4.2.1a. After-controlled emission factor for other HAPs is 0.05 lb/ODT. The uncontrolled emission factors specified in the table below must be used when any of the conditions specified in Paragraphs a. through c. of this Condition is met.
- DY2 = Monthly Product from Dryer in oven dried tons
- $EPPA_{HAP}$ = Emission Factor lb pollutant/ton at Pelleting Process A exhaust (Stack BH1) for methanol, formaldehyde, and acetaldehyde, using the most recent performance test results determined in accordance with Condition 4.2.1b.
- PPA = Monthly Production from Pelleting Process A in tons
- $EPPB_{HAP}$ = Emission Factor lb Pollutant/ton at Pelleting Process B exhaust (Stack BH2) for methanol, formaldehyde, and acetaldehyde, using the most recent performance test results for Pelleting Process A exhaust determined in accordance with Condition 4.2.1b.
- PPB = Monthly Production from Pelleting Process B in tons
- ES_{HAP} = Emission Factor lb Pollutant/ton from storage and handling for methanol (0.001 lb/ODT), formaldehyde (0.002 lb/ODT), and acetaldehyde (0.001 lb/ODT).
- SH = Monthly Product handled by Storage and handling system in tons

\dagger For the Burner/Dryer exhaust, the uncontrolled VOC and HAP emission factors (provided in table below) shall be used instead of the controlled emission factors in the following cases:

- a. The three-hour rolling average of the wood dryer inlet gas temperature is above the temperature established during the most recent performance test, or;
- b. The three-hour rolling average of the burner outlet gas temperature is below the temperature established during the most recent performance test, or;
- c. The three-hour rolling average of the recycle airflow damper position is below the position established during the most recent performance test;

Emission Point <i>Stack A values expressed in lb/ODT, all other values in lb/ton</i>	VOC Emission Factor	Methanol Emission factor	Formaldehyde Emission Factor	Acetaldehyde Emission Factor	Other HAPs <i>includes Acrolein, Benzene, Cumene, MIBK, Xylene, Phenol, Toluene</i>
Wood Burner/ Dryer exhaust (Stack A) Uncontrolled	6.00	0.11	0.14	0.11	0.10

- 6.2.10 The Permittee shall calculate the monthly carbon monoxide (CO) emissions from the Dryer Exhaust (Stack A) using the records from Condition 6.2.1 and the following equation. All emission factor and calculations shall be kept as part of the monthly records, available for inspection or submittal. The Permittee shall calculate CO emissions with the most recent performance test results obtained in accordance with Condition 4.2.3 and the equation provided in this condition.

The Permittee will determine the tons of pollutant per month using the following equation.

$$E_{CO} = [(ED_{CO}) * (DY2)] / 2000$$

Where:

E_{CO} = Monthly PM emission in tons
 ED_{CO} = Emission Factor lb CO/ODT at Dryer cyclone exhaust (Stack A)
 $DY2$ = Monthly Product from Dryer in oven dried tons