
TITLE V SIGNIFICANT MODIFICATION (WITHOUT CONSTRUCTION) APPLICATION REVIEW

Facility Name: **LJR FOREST PRODUCTS**

City: Swainsboro

County: Emanuel

AIRS #: 04-13-107-00030

Application #: 899226

Date Title V Application Received: December 30, 2024

Permit No: 2499-107-0030-V-04-1

Program	Review Engineers	Review Managers
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Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and draft operating permit amendment. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Sections 391-3-1-.03(1) and 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public comment period and EPA review process will be described in an addendum to this narrative.

I. Facility Description

A. Existing Permits

Table 1 below lists the current Title V permit, and all administrative amendments, minor and significant modifications to that permit, and 502(b)(10) attachments.

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Description
2499-107-0030-V-04-0	December 20, 2021	Title V Renewal

B. Regulatory Status

1. PSD/NSR/RACT

Though the facility is potentially a major source under PSD/NSR regulations, the facility avoids any PSD/NSR requirements with a facility-wide limit of 249 tpy for VOC emissions.

In order to verify emissions and ensure PSD avoidance, carbon monoxide (CO) emissions and particulate matter (PM) emissions are also limited to less than 249 tpy.

The facility is located in Emanuel County, which is not on the list for any NO_x and VOC reasonably available control technology (RACT) rules. Therefore, the facility is not subject to any RACT requirements.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	YES	✓		
PM ₁₀	YES	✓		
PM _{2.5}	YES	✓		
SO ₂	YES			✓
VOC	YES	✓		
NO _x	YES			✓
CO	YES	✓		
TRS	NO			
H ₂ S	NO			
Individual HAP	YES		✓	

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Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
Total HAPs	YES		✓	
Total GHG	YES			✓

II. Proposed Modification

A. Description of Modification

On December 30, 2024, the facility submitted Application No. 899226 requesting to update the most recent test results in Section 6 of the Permit (2499-107-0030-V-04-0). The most recent performance tests (October 2022) indicate emission factors that differ from those currently being used in Section 6 of the current Permit.

The Division recently updated the policy for all pellet mills in order to align the emission calculation methodology with all other industry types. All pellet mills are now allowed to use the most recent performance test results, regardless of whether they are higher or lower than the current permit emission factors. Therefore, the requirements of the existing Condition 4.2.6 are no longer necessary and have been removed from the permit.

Although the original application that requested to update the tested results was assigned as a Title V minor modification without construction application, the facility requested the inclusion of the updated pellet mill policy, and, therefore, changed this application to a Title V significant modification without construction application.

B. Emissions Change

Table 3: Emissions Change Due to Modification

Pollutant	Is the Pollutant Emitted?	Net Actual Emissions Increase (Decrease) (tpy)	Net Potential Emissions Increase (Decrease) (tpy)
PM	YES	0	0
PM ₁₀	YES	---	---
PM _{2.5}	YES	---	---
SO ₂	YES	---	---
VOC	YES	0	0
NO _x	YES	0	0
CO	YES	0	0
TRS	NO	---	---
H ₂ S	NO	---	---
Individual HAP	YES	0	0
Total HAPs	YES	0	0

table values sourced from previous TV-R narrative memo, emissions not expected to change

C. PSD/NSR Applicability

The modification will not be subject to PSD requirements. The facility will continue to limit volatile organic compounds (VOC) emissions, carbon monoxide (CO) emissions and particulate matter (PM) emissions to less than 249 tpy in order to avoid PSD.

III. Facility-Wide Requirements

A. Emission and Operating Caps

There are no changes to the facility-wide emissions and operating caps

B. Applicable Rules and Regulations

There are no changes to the facility-wide rules and regulations due to this modification.

C. Compliance Status

Some of the recent tested VOC and PM emission rates are higher than the permit emission factors in existing Conditions 6.2.2 and 6.2.3. According to Condition 4.2.6, the facility must submit an application within 180 days of the test date (October 4 and 5, 2022). The current application was not submitted within the 180-day timeframe required by Condition 4.2.6. This non-compliance issue has been forwarded to the Division's Stationary Source Compliance Program for processing.

D. Permit Conditions

There are no changes to the facility-wide conditions for the modification.

IV. Regulated Equipment Requirements

Condition 3.5.2 was modified to remove specific operating temperatures for the burner and dryer and specific damper position, now referring only to parameters determined via the most recent performance test. The specific numeric temperature and damper position were used as temporary operating limits for the facility before the initial performance tests were conducted. Now that the testing has been completed, the facility will use the parameters determined in that test.

V. Testing Requirements (with Associated Record Keeping and Reporting)

Condition 4.2.6 was removed because Section 6 has been revised to allow the facility to use the most current tested emission rates to calculate their actual emissions (starting on the test dates). Removal of this condition reflects the Division's updated policy on emission factors at pellet mills.

VI. Monitoring Requirements (with Associated Record Keeping and Reporting)

Condition 5.2.1 was modified to remove any specific damper position in the recycle duct to Burner BU1, instead referring only to the damper position established during the most recent performance test.

Condition 5.2.3 was modified to remove any specific minimum operating temperature for the burner, instead referring only to the temperature determined via the most recent performance test.

Condition 5.2.11 was modified to remove any specific maximum operating temperature for the dryer, instead referring only to the temperature determined via the most recent performance test.

VII. Other Record Keeping and Reporting Requirements

Conditions 6.1.7c.iii. through c.v. were edited to remove the numeric thresholds and now only references the most recent performance-tested thresholds.

Condition 6.2.2 was edited to remove specific PM emission factors table, now only referencing the most recently tested emission factors (most recent PM factors as of current amendment listed below). The equation parameters have been revised for clarification.

Emission Point	Emission Factor of PM	Units
Wood Burner / Dryer exhaust (Stack A)	0.838	lb/ODT
Pelleting Process A exhaust (Stack BH1)	0.0461	lb/ton
Pelleting Process B exhaust (Stack BH2)	0.0409	lb/ton
Fuel Hammermill exhaust (Stack FHC)	0.254	lb/ton

Condition 6.2.3 was modified to fix the WPP1 VOC equation (removed acetaldehyde), remove the specific temperatures and damper position (now references the most recent performance-tested parameters), remove the VOC emission factors table, and change language to reference the most recently tested emission factors (see most recent VOC emission factors as of current amendment below). The equation parameters have been revised for clarification.

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
Wood Burner/Dryer exhaust (Stack A) Controlled	1.71	0.027	0.046	0.016
Pellet Process A (Stack BH1)	1.26	0.0241	0.00331	0.003
Pellet Process B (Stack BH2)	0.404	0.0222	0.00403	0.003

Condition 6.2.10 was changed to remove the CO emission factors table and reference instead the most recently tested emission factors (most recent CO emission factor as of current amendment listed below). The equation parameter has been revised for clarification.

Emission Point	Emission Factor of CO	Units
Wood Burner / Dryer exhaust (Stack A)	0.680	lb/ODT

Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//