

Facility Name: **Interfor U.S. Inc. – Preston Mill**
 City: Preston
 County: Webster
 AIRS #: 04-13-307-00001

Application #: TV-516175

Date Application Received: April 28, 2021

Permit No: 2421-307-0001-V-06-0

Program	Review Engineers	Review Managers
SSPP	S. Ganapathy	Jeng-Hon Su
ISMU	Anna Gray	Dan McCain
SSCP	Fred Francis	William Fleming
Toxics	N/A	N/A
Permitting Program Manager		Stephen Damaske

Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description

A. Facility Identification

1. Facility Name: Interfor U.S. Inc. – Preston Mill

2. Parent/Holding Company Name

Interfor U.S. Inc.

3. Previous and/or Other Name(s)

Tolleson Lumber Company, Inc. – Preston Mill till March 14, 2014

Interfor South U.S. LLC – Preston Mill March 2014 till December 2014

4. Facility Location

378 Tolleson Road

Preston, Georgia 31824 (Webster County)

5. Attainment, Non-attainment Area Location, or Contributing Area

Interfor U.S. Inc. – Preston Mill (hereinafter “facility”) is located in Webster County which is considered to be in "attainment" or “unclassifiable” for all criteria air pollutants.

B. Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

Permit Number and/or Off-Permit Change	Date of Issuance/Effectiveness	Purpose of Issuance
2421-307-0001-V-05-0	November 3, 2016	Renewal Title V permit

D. Process Description

1. SIC Codes(s)

2421 – Sawmills, Lumber Mills

The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

2. Description of Product(s)

The facility produces various sizes of planed southern yellow pine lumber. Other by products from the facility include bark, sawdust (green and dry), wood chips and wood shavings from the planer mill.

3. Overall Facility Process Description

Log preparation includes receiving the inbound logs by truck and stacking them prior to processing. The logs are retrieved and are cut to length, debarked and scanned for metal. Bark from the debarker is dropped into a chain conveyor and conveyed to a bark holding bin to be used as fuel for the kiln burners. The pieces of the log that are not utilized for lumber are chipped in a chipper and sold to paper mills. The cut-to-length, debarked log is sent into the sawmill for additional processing.

In the sawmill logs are cut into various sized rough lumber based on a grading device input to the saws. The sawmill equipment includes sets of twin band saws, a chipper edger, and a trimmer. The rough lumber is sorted and stacked prior to being sent to the drying kilns for additional processing. Trim blocks and edger strips are chipped and sold to paper mills as a fiber source.

The Preston sawmill currently has three direct-fired continuous drying kilns (ID Nos. DK-3, DK-4 and DK-5) that receive sorted and stacked green lumber for drying. The lumber is dried in one of the three kilns to approximately 16 percent moisture content. The dry rough lumber is planed in the planer mill prior to being graded, sorted, and stacked at the planer mill prior to being shipped. Each continuous kiln will have powered stacks at each end.

The Preston mill will also have a bark loadout system which consists of two hoppers, a bark hogger, a bark storage bin and a truck loadout operation.

By-products produced from the lumber mill consist of wood chips, sawdust, bark, and shavings. Wood chips are transported off-site and sold to a paper mill. Bark, sawdust (green and dried) and planer shavings are the kiln dryer burner fuel. Excess shavings, bark and sawdust are sold offsite.

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

E. Regulatory Status

1. PSD/NSR

The facility is a major source with regards to the prevention of significant deterioration (PSD) regulation because the potential to emit (PTE) for VOC is greater than the PSD major source threshold of 250 tons per year (ton/yr). Note that lumber mills are not one of the 28 named categories whose major source threshold is 100 ton/yr.

The facility is located in Webster County which has been designated by the U.S. EPA as “attainment” or “unclassifiable” for all criteria pollutants. Therefore, the facility is not subject to Non-attainment area New Source Review (NAA NSR) permitting 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			✓
Individual HAP (Methanol)	Yes	✓		
Total HAPs	Yes	✓		
Total GHG	Yes			✓

3. MACT Standards

The facility is a major source of hazardous air pollutants (HAPs) because the PTE for methanol is greater than 10 ton/yr, and the PTE for combined HAPs is greater than 25 tpy. Note that the drying kilns are subject to 40 CFR 63 Subpart DDDD “National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products.”

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	yes
Program Code 8 – Part 61 NESHAP	no
Program Code 9 - NSPS	no
Program Code M – Part 63 NESHAP	yes
Program Code V – Title V	yes

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

None applicable.

B. Applicable Rules and Regulations

Not applicable.

C. Compliance Status

The facility has not indicated any non-compliance.

D. Permit Conditions

None.

III. Regulated Equipment Requirements

A. Equipment List for the Process

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
DK-3	Drying Kiln No. 3 (Direct-fired 35 MMBtu/hr)	40 CFR 63, Subpart DDDD GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(g)2 40 CFR 52.21(j) (BACT)	N/A	N/A
DK-4	Drying Kiln No. 4 (Direct-fired, 36 MMBtu/hr)	40 CFR 63, Subpart DDDD GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(g)2 40 CFR 52.21(j) (BACT)	N/A	N/A
DK-5	Drying Kiln No. 5 (Direct-fired, 40 MMBtu/hr)	40 CFR 63, Subpart DDDD GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(g)2 40 CFR 52.21(j) (BACT)	N/A	N/A
PLN1	Planer Mill	GA Rule 391-3-1-.02(2)(b)1. GA Rule 391-3-1-.02(2)(e)1.(i)	PLC1	Shavings Bin Cyclone
KFN	Kiln Fuel Bin	GA Rule 391-3-1-.02(2)(b)1. GA Rule 391-3-1-.02(2)(e)1.(i)	KFCY KFCY2	Kiln Fuel Bin Cyclones

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards are intended as a compliance tool and may not be definitive.

B. Equipment & Rule Applicability

Rules and Regulations Assessment:

Since the two existing wood-fired boilers (ID Nos. B-1 and B-2) have been removed from the facility none of the rules and regulations that applied to the boilers are applicable any more. The associated conditions are no longer included in the proposed Title V renewal permit.

40 CFR 52.21 – Prevention of Significant Deterioration (PSD)

When the facility submitted Application No. TV-40720 in 2016 for the shutdown of the existing wood-fired boilers and two steam heated kilns (ID Nos. B-1, B-2, DK-1, and DK-2) and converting existing Kilns DK-3, DK-4, and DK-5 into a direct fired continuous kilns, the facility underwent a PSD review because the modification causes more than 40 tpy of VOC increases while the facility was already a PSD major source for VOC emissions. The approved VOC best available control technology (BACT) In Title V Permit Amendment No. 2421-307-0001-V-04-3 was proper operation and maintenance of the drying kilns without any numeric emission or throughput limits. In order to ensure proper operation and maintenance of the drying kilns, the facility is required to implement the Work Practice and Preventive Maintenance Program (WPPMP).

Please note that the WPPMP specified in existing Condition 3.3.4 of Title V Permit No. 2421-307-0001-V-05-0 includes monitoring of lumber target moisture content, which is more related to product quality rather than emission levels. In order to avoid including product quality related monitoring requirements in the permit and requiring associated record keeping and reporting requirements that

are not beneficial to preventing emission increases, the Division has been including a more generic language for the WPPMP requirement. Such requirement is now included in Condition 3.3.2 of the proposed Title V renewal permit.

40 CFR 63 Subpart DDDD – National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products

According to Table 2 of this Narrative, the facility is major for single HAP and combined HAP. According to 40 CFR 63.2231(a) and (b), the facility is subject to 40 CFR 63 Subpart DDDD, which is often referred to as the Plywood MACT, because it is a plywood and composite wood products (PCWP) manufacturing facility that manufactures kiln-dried lumber at a HAP major source. According to 40 CFR 63.2232(b), the drying kilns (ID Nos. DK-3, DK-4, and DK-5) are affected sources. Please note that the kilns are not subject to any compliance options specified in Tables 1A and 1B to Subpart DDDD, any operating requirements specified in Table 2 to Subpart DDDD, or any work practice requirements specified in Table 3 to Subpart DDDD. According to 40 CFR 63.2252, the facility is only subject to the initial notification requirements specified in 40 CFR 63.9(b). The initial notification requirements were already complied with; therefore, the facility is considered to be in full compliance with the Plywood MACT.

Georgia State Rules –

The drying kilns (ID Nos. DK-3, DK-4, and DK-5) emit PM, which are regulated by GA Rule 391-3-1-.02(2)(e) “Particulate Emissions from Manufacturing Processes”. The allowable PM emissions rate for new equipment with input rates up to and including 30 tons per hour (TPH) is expressed by the following equation:

$E = 4.1P^{0.67}$, where E equals the allowable PM emission rate in pounds per hour (lb/hr) and P equals the maximum process input weight in TPH.

The allowable PM emissions rate for new equipment with input rates above 30 TPH is expressed by the following equation:

$E = 55P^{0.11} - 40$, where E equals the allowable PM emission rate in lb/hr and P equals the maximum process input weight in TPH.

Based on the wet weight of green lumber of 5 lb/BF and a maximum production rate of 6.8 -11.4 MBF/hr through the kilns, the maximum process input weight for the larger kilns is 28.53 TPH. Therefore, the larger kilns are subject to a maximum PM allowable emissions rate as calculated below:

$$E = 4.1P^{0.67} = 4.1 (28.53)^{0.67} = 38.71 \text{ lb/hr}$$

PM emissions from the planer mill (ID No. PLN1) and fuel bin (ID No. KFN) are also subject to Georgia Rule (e).

All of the emission units subject to GA Rule (e) are also subject to GA Rule (b), which includes the visible emission limit of 40% opacity. The nature of the operation of those emission units, especially those equipped with cyclones, are expected to meet the GA Rule (b) and (e) emission limits.

In addition, the kilns must meet the 2.5 percent sulfur limit for fuel burning, as expressed in GA Rule 391-3-1-.02(2)(g)2. The kilns fire saw dust and shavings which are low in sulfur content and should easily comply with Georgia Rule (g)2.

Georgia Rule (n) governs fugitive emissions from the various operations such as sawing, bark load out, and roads. The Permittee is required to take steps to minimize fugitive emissions which are limited to 20% by this rule.

C. Permit Conditions

Condition 3.3.1 subjects all drying kilns (ID Nos. DK-3, DK-4, and DK-5) to 40 CFR 63 Subpart A and Subpart DDDD.

Condition 3.3.2 includes the WPPMP requirement for all three drying kilns, which is the only VOC BACT work practice standard of the 2016 PSD review.

Condition 3.4.1 includes the GA Rule (b) visible emission standard.

Condition 3.4.2 includes the GA Rule (e) PM emission standards.

Condition 3.4.3 specifies the fuel type for all three kilns. This subsumes the GA Rule (g) fuel sulfur content limit.

Condition 3.4.4 is the fugitive dust condition per Georgia Rule (n).

Condition 3.5.1 requires routine maintenance on all air pollution control devices.

Condition 3.5.2 requires the Permittee to operate all pollution control equipment whenever the associated emission units are in operation.

IV. Testing Requirements (with Associated Record Keeping and Reporting)**A. General Testing Requirements**

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

Not applicable.

V. Monitoring Requirements

A. General Monitoring Requirements

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

Condition 5.2.1 requires the Permittee to perform weekly inspection of all cyclones at the facility to make sure that the cyclones are not leaking any PM emissions.

Condition 5.2.2 requires the Permittee to monitor and record once per operating day the pressure drop across the shavings bin cyclone (ID No. PLC1, controlling the planer mill). The pressure drop monitoring is to ensure proper operation of the cyclone.

Please note that the fuel bin cyclones (ID Nos. KFCY and KFCY2) are more for material transport rather than emission control, although the Division has not made any determination whether they are process equipment. It is in the facility's best interest to properly operate the cyclones so that the loss of woody fuel would be minimized. Therefore, the Division only requires the weekly inspection, but not the daily pressure drop monitoring for those cyclones.

C. Compliance Assurance Monitoring (CAM)

An emission unit is subject to the provisions of 40 CFR 64, "Compliance Assurance Monitoring" because:

- It is located at a major source that is required to obtain a Title V Permit. [§64.2(a)]
- It is subject to an emission limitation or standard for the applicable pollutant (PM). [§64.2(a)(1)]
- The facility uses a control device to achieve compliance. [§64.2(a)(2)]
- Potential pre-controlled emissions of the applicable pollutant (particulate matter) from such emission unit are at least 100 percent of major source threshold. [§64.2(a)(3)]

Drying Kilns Dk-3, DK-4, and DK-5 are not equipped with any control devices, so they are not subject to any CAM requirements.

Although the planer mill (ID No. PLN1) and fuel bin (ID No. KFN) are equipped with cyclones (ID Nos. PLC1, KFCY, and KFCY2), the Division believes that the control devices are installed to reclaim material rather than for achieving compliance with the GA Rule (b) visible emission standard and GA Rule (e) PM emission standards. Without the control devices, the emission units are expected to have pre-control PM emissions less than 100 percent of the PM major source threshold due to the nature of the large size of PM generated by these sources. Therefore, the Division determines that those emission units are not subject to the CAM requirements. The CAM requirements in existing Conditions 5.2.4 and 5.2.6 of Title V Permit No. 2421-307-0001-V-05-0 are no longer necessary and are not included in the proposed Title V renewal permit.

VI. Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

B. Specific Record Keeping and Reporting Requirements

Condition 6.1.7 of the proposed Title V renewal permit includes the definitions of the following excursions:

- Subparagraph c.i. defines an excursion as any adverse condition discovered by the weekly inspections of the shavings bin cyclone (ID No. PLC1) and kiln fuel bin cyclones (ID Nos. KFCY and KFCY2), required in Condition 5.2.1, that is not corrected within 48 hours.
- Subparagraph c.ii. defines an excursion as any pressure drop across the shavings bin cyclone (ID No. PLC1), measured in accordance with Condition 5.2.2a., that is outside the proper range specified by the cyclone manufacturer.
- Subparagraph c.iii. defines an excursion as any adverse condition discovered by the inspection specified in the WPPMP required in Condition 3.2.2 that is not corrected promptly.

Condition 6.2.1 includes the general record keeping requirements for the monitored records.

Condition 6.2.2 includes the record keeping requirements demonstrating compliance with the GA Rule (n) limit.

VII. Specific Requirements

A. Operational Flexibility

Not applicable.

B. Alternative Requirements

Not applicable.

C. Insignificant Activities

See Permit Application on GEOS website.
See Attachment B of the permit

D. Temporary Sources

Not applicable.

E. Short-Term Activities

Not applicable.

F. Compliance Schedule/Progress Reports

Not applicable.

G. Emissions Trading

Not applicable.

H. Acid Rain Requirements

Not applicable.

I. Stratospheric Ozone Protection Requirements

The standard permit condition pursuant to 40 CFR 82 Subpart F has been included in the proposed Title V renewal permit. According to Applications No. 516175, the facility does not operate any equipment that is subject to Title VI of the 1990 Clean Air Act Amendments.

J. Pollution Prevention

Not applicable.

K. Specific Conditions

Not applicable.

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

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.//