

Prevention of Significant Air Quality Deterioration Review

Final Determination

July 12, 2016

Facility Name: Interfor U.S. Inc. – Swainsboro Sawmill

City: Swainsboro

County: Emanuel

AIRS Number: 04-13-107-00011

Application Number: TV-40453

Date Application Received: November 12, 2015



State of Georgia
Department of Natural Resources
Environmental Protection Division
Air Protection Branch

Karen D Hays – Chief, Air Protection Branch

Stationary Source Permitting Program

Eric Cornwell
Manny Patel
S. Ganapathy

Planning & Support Program

Di Tian
Yan Huang

BACKGROUND

On November 12, 2015, Interfor's Swainsboro Sawmill (hereafter Swainsboro) submitted an application for an air quality permit to increase the production capacity of the direct-fired batch drying kiln DK08. The facility is located at 8796 GA Hwy 297 in Swainsboro, Emanuel County. The proposed project will increase production from the existing batch drying kiln DK08 to 85 MMBF/year by improvements in lumber stacking and by changing the product mix. Interfor has also proposed to add a stack at each end of the existing direct-fired continuous drying kiln DK09. The overall drying capacity of the facility is expected to increase to 195 MMBF/year.

On May 26, 2016, the Division issued a Preliminary Determination stating that the modifications described in Application No. TV-40453 should be approved. The Preliminary Determination contained a draft Air Quality Permit for the construction and operation of the modified equipment.

The Division requested that Swainsboro sawmill place a public notice in a newspaper of general circulation in the area of the existing facility notifying the public of the proposed construction and providing the opportunity for written public comment. Such public notice was placed in "*The Forest Blade*" (legal organ for Emanuel County) on June 1, 2016. The public comment period expired on July 1, 2016.

There were no comments received from the U.S. EPA region IV or the general public. Comments were received from Interfor and were addressed in the final permit.

A copy of the final permit is included in Appendix A.

Interfor U.S. Inc. Comments

Comments were received from Mr. Joe Robinson, EHS Manager, by letter on June 29, 2016.

Comment 1: Footnote for DK10 in Section 3.1.1

Interfor requested that Kiln DK10 footnote in the source listing table in Section 3.1.1 be removed for consistency with removal of DK10 in the summary table.

EPD Response: The footnote has been removed per Interfor's request. This action does not alter the permit.

Comment 2: Permit Condition 3.5.3.a.i – Change the target final moisture content to 12% or greater instead of 15% in the draft permit since current operations at the Swainsboro sawmill does not utilize a final moisture content of 15% based on the type of lumber produced. Operational issues could occur if Interfor has to meet the 15% average moisture content.

EPD Response: EPD has reviewed Interfor's comment on the target final moisture content of the lumber produced and has changed the 15% limit to 12% as requested, the current operating target for the Swainsboro sawmill.

Comment 3: Permit Condition 3.5.3.e. - Interfor requests removal of the last sentence in Condition 3.5.3.e. This sentence required any problem identified during a daily inspection and not corrected in 48 hours be entered and reported as an excursion. Interfor states that this requirement is not feasible. Furthermore, not every issue can be resolved in 48 hours if a part of the kilns(s) system must be taken off-line. Interfor contends that not addressing immediately (within 48 hours) is acceptable if the maintenance needed is not required to ensure reduction of emissions and environmental harm. Finally, by not completing the maintenance within 48 hours, Interfor does not agree with EPD that the timeframe for completion should result in an excursion with this condition or non-compliance identified in the Title V permit annual compliance certification.

Therefore, Interfor requests that the CMMS entry as an excursion be removed for enabling Interfor to address each specific maintenance need in timeframe that ensures no increased emissions as well as meets their operation needs.

EPD Response: EPD agrees that all maintenance issues that are not corrected within 48 hours may not result in excess emissions to be recorded and reported as an excursion. EPD feels such events could be recorded and reported as equipment downtime rather than excursion. The term "excursion" in Condition 3.5.3.e. is changed to equipment downtime in the final permit.

Comment 4: Permit Condition 4.1.3.i - Interfor requests removal of kiln DK08 since the kiln is a batch kiln and not a continuous kiln.

EPD Response: EPD has reviewed Interfor's request and has removed batch kiln DK08 in this condition.

APPENDIX A

AIR QUALITY PERMIT

2421-107-0011-V-04-1

Part 70 Operating Permit Amendment**Permit Amendment No.: 2421-107-0011-V-04-1 Effective Date:****Facility Name: Interfor U.S. Inc. - Swainsboro Sawmill****Facility Address** 8796 GA Highway 297
Swainsboro, Georgia 30401 (Emanuel County)**Mailing Address:** 8796 GA Highway 297
Swainsboro, Georgia 30401**Parent/Holding Company:** International Forest Products Limited**Facility AIRS Number:** 04-13-107-00011

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:

Increase production from existing direct-fired batch drying Kiln DK08 to 85 MMBF per year, add a powered stack to each end of existing direct-fired continuous drying kiln DK09 and to increase the sawmill capacity to 195 MMBF per year.

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 Permit Amendment and Permit No. 2421-107-0011-V-04-0. Unless modified or revoked, this Permit Amendment expires simultaneously with Part 70 Permit No. 2421-107-0011-V-04-0.

This Permit 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 Application No. TV-40453 dated November 10, 2015, update of May 17, 2016; any other applications upon which this Permit Amendment or Permit No. 2421-107-0011-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 Permit Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached Error! Bookmark not defined. pages.

Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION

1.3 Process Description of Modification

The Permittee has decided to not convert lumber drying kiln DK08 to a continuous drying kiln (DK-10). The Permittee has requested a production increase for the batch drying kiln DK08 to 85 MMBF/year. The sawmills permitted production will also increase to 195 million BF/year. The facility will also add a powered stack to each end of the direct-fired continuous kiln DK09.

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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.

3.1.1 Revised Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
DK08	Existing lumber drying kiln (batch), direct heated by green sawdust fired gasifier (85 MMBF/year capacity)	40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	3.2.1, 3.3.1, 3.4.1, 3.4.2, 3.4.3, 6.1.7, 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.5, 7.14.1, 7.14.2	N/A	None
DK09	Continuous type lumber drying kiln, direct heated by green sawdust fired gasifier (110 MMBF/yr capacity)	40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	3.2.1, 3.2.2, 3.3.1, 3.4.1, 3.4.2, 3.4.3, 6.1.7, 6.2.1, 6.2.2, 6.2.3, 6.2.4	N/A	None
DK10	Proposed Continuous type lumber drying kiln, direct heated by green sawdust fired gasifier (110 MMBF/yr capacity)	40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	3.2.1, 3.2.2, 3.3.1, 3.4.1, 3.4.2, 3.4.3, 6.1.7, 6.2.1, 6.2.2, 6.2.3, 6.2.4, 6.2.5	N/A	None
PM01	Planer Mill	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 3.5.1, 3.5.2, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 6.1.7, 6.2.4	PMC1	Planer Mill Baghouse

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

3.2 Equipment Emission Caps and Operating Limits

Amended Condition

3.2.1 The Permittee shall not dry more than the following specified board feet of lumber per any twelve consecutive months in the lumber drying kilns, under the indicated scenarios.

[PSD/BACT, 40 CFR 52.21 and 391-3-1-.03(2)(c)]

- a. The Permittee shall not dry more than 195 million board feet total from both drying kilns DK08 and DK09 or more than 85 million board feet in drying kiln DK08 per any twelve consecutive months.

3.2.2 Condition deleted.

3.4 Equipment SIP Rule Standards

Amended Condition

3.4.1 The Permittee shall not cause, let, suffer, permit, or allow the emission from each lumber drying kilns DK08 and DK09 or the planer mill PM01, any gases which contain particulate matter equal to or exceeding the allowable rate as calculated using the applicable equation below, unless otherwise specified in this Permit.
[391-3-1-.02(2)(e)]

- a. $E = 4.1P^{0.67}$ for process input weight rate up to and including 30 tons per hour;
- b. $E = 55P^{0.11} - 40$ for process input weight rate in excess of 30 tons per hour.

Where:

E = allowable PM emission rate in pounds per hour;

P = process input weight rate in tons per hour.

3.4.2 The Permittee shall not cause, let, suffer, permit or allow emissions from any lumber drying kilns DK08 and DK09 or the planer mill baghouse PMC1, the opacity of which is equal to or greater than forty percent.
[391-3-1-.02(2)(b)1]

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

New Condition

3.5.3 The Permittee shall develop and implement a Work Practice and Preventive Maintenance Program for the lumber drying kilns (D08 and DK09) within 120 days from the issuance of this permit. The program shall be subject to review and modification by the Division. At a minimum, the following operational and maintenance checks shall be made and a record of the findings and corrective actions taken, shall be kept in electronic or manual maintenance logs:
[391-3-1-.02(6)(b)1, 40 CFR 52.21, and 40 CFR 70.6(a)(3)(i)]

- a. General Work Practice Standards for Wood-Drying Kiln Operation:
 - i. The lumber kiln drying operation target final moisture content will be 12% or greater based on a 12-month rolling average. Moisture

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content will be measured with a moisture meter at the outfeed of the planer mill.

- ii. Routines for periodic preventative maintenance are detailed in paragraphs b, c, d and e of this condition. With future equipment changes or modifications, these preventative maintenance activities can be modified pending approval from EPD.
- b. Daily Routine:
- i. Make certain all fans are running properly. If one “trips out” frequently or becomes inoperable, investigate to determine the reason and then document the corrective actions.
 - ii. Check to verify that the kiln heating system (direct-fired gasifier) is operating properly.
- c. Quarterly Routine:
- i. Grease fan motors, shafts and bearings and inspect fan blades for damage. Check fan clearances, rotation, tension and replace belts if required.
 - ii. Inspect kiln walls, doors and baffles for deterioration and schedule repairs as needed.
 - iii. Inspect temperature monitoring systems for proper operation.
 - iv. Inspect vents and linkages (batch kiln DK08). Schedule repairs as needed.
 - v. If necessary sweep out kiln to remove accumulated dust (batch kiln DK08).
 - vi. Inspect and repair as necessary external components of direct-fired gasifier of continuous kiln DK09 and batch kiln DK08.
- d. Semi-annual Routine:
- i. Verify accuracy of the temperature measurement systems. Repair or replace components as necessary.
 - ii. During cold shutdown of continuous kiln DK09, inspect and repair as necessary all internal components of kilns and direct-fired gasifiers.

During this time the continuous kiln DK09 and burner should be thoroughly cleaned of accumulated dust.

- e. Any adverse condition discovered by this inspection shall be corrected in the most expedient manner possible. The Permittee shall record problems discovered in a maintenance log/checklist or the plant's Computerized Maintenance Management System (CMMS), indicating the corrective action(s) taken, and date of the required maintenance completion. If a problem during inspection cannot be remedied within 48 hours of discovery and if the problem does not result in excess emissions, it shall be entered into the plant's Computerized Maintenance Management System (CMMS) as equipment downtime.

PART 4.0 REQUIREMENTS FOR TESTING

4.1 General Testing Requirements

Amended Condition

- 4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 are as follows:
 - a. Method 1 for the determination of sample point locations.
 - b. Method 2 for the determination of stack velocity and volumetric flow rate.
 - c. Method 3 or 3A for the determination of stack gas molecular weight.
 - d. Method 3B for the determination of the emission rate correction factor or excess air.
 - e. Method 4 for the determination of stack gas moisture content.
 - f. Method 5 in conjunction with Method 202 for the determination of Total Particulate Matter concentration (filterable + condensable).
 - g. Method 9 and the procedures contained in Section 1.3 of the above reference document for the determination of opacity.

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- h. ASTM D129, D2622 or D4294 for the determination of fuel sulfur content.
- i. The procedures of the NCASI Wood Products Protocol 1 shall be used to determine the VOC concentration from the continuous drying kiln DK09.

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.

[391-3-1-.02(3)(a)]

PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS

6.1 General Record Keeping and Reporting Requirements

Amended 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 twelve consecutive month period during which more than 195 million board feet of lumber are dried in the lumber drying kilns DK08 and DK09 and/or more than 85 million board feet in drying kiln DK08.

- ii. Deleted.

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Interfor U.S. Inc. – Swainsboro Sawmill

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- 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 adverse condition(s) discovered by the weekly inspections, as required in Condition No. 5.2.2, of the planer mill shaving system cyclone and baghouse PMC1.
 - iii. Any two consecutive required daily determinations of visible emissions from the same source requiring action by Condition 5.2.3.

6.2 Specific Record Keeping and Reporting Requirements

Amended Condition

- 6.2.2 The Permittee shall notify the Division in writing if the amount of dried lumber processed through all drying kilns exceeds the following specified limits. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with the limit in Condition No. 3.2.1.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
 - a. 16.25 MMBF, during any calendar month, through drying kilns DK08 and DK09 combined or 7.08 MMBF during any calendar month, through drying kiln DK08.
 - b. condition deleted.
- 6.2.5 Condition deleted.

APPENDIX B

**WRITTEN COMMENTS
RECEIVED DURING
COMMENT PERIOD**

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Interfor U.S. Inc. – Swainsboro Sawmill

Permit Amendment No.: 2421-107-0011-V-04-1



INTERFOR

June 22, 2016

Mr. Manny Patel
Georgia Environmental Protection Division Air Protection Branch 4244 International Parkway,
Suite 120 Atlanta, Georgia 30354

RECEIVED

JUN 29 2016

Air Protection

Certified Mail # 70133020000205617995 Branch

**RE: *Interfor U.S. Inc. - Swainsboro Sawmill
PSD Permit - Comments on Draft Permit No. 2421-107-0011-11-04-1***

Dear Mr. Patel:

Interfor U.S. Inc. (Interior) is providing the following comments on the draft PSD Permit No. 2421-1070011-V-04-1 issued by the Georgia Environmental Protection Division (EPD) on May 26, 2016 for the Swainsboro Sawmill. The updated PSD permit application (EPD Application No. 40453) was submitted May 17, 2016. The public comment period for the draft permit commenced on June 1, 2016, and concludes on July 1, 2016.

The following sections outline Interfor's comments during this public comment period including requested changes to the draft PSD permit. Specific permit condition language requested to be removed is identified in bold strikethrough text, and added language is identified in bold italic text. The MS Word® version of the draft permit provided by EPD with requested changes identified in Track Changes will be provided separately, via email to EPD.

Requirements for Emission

Units *Permit Condition 3.1.1*

DK10*	Proposed Continuous type	40 CFR 63 Subpart A	5.11, 5.2.2, 5.5.1, 5.1.1,	N/A	None
		40 CFR 63 Subpart	3.4.2, 3.4.3, 6.1.7, 6.2.1,		

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heated by green fired gasifier (T T O M M I D I / V I C A P A C I T Y)	-sawdust 391 3 1 .02(2)(c) 391 3 1 .02(2)(e)	DDD1=1 391 3 1 .02(2)(b)	6.2.2, 6.2.3, 6.2.1, 6.2:		
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** Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.*

**** Kiln DK10 is the ID for the kiln DK08 that was to be converted from a batch kiln to a continuous kiln. This conversion was authorized but never carried out and there is no plan for the conversion of the batch Kiln DK08.***

Interfor requests that the Kiln DK10 footnote associated with the emission units summary table in Permit Condition 3.1.1 be removed for consistency with removal of DK10 in the summary table.

Interfor U.S. Inc.	700 Westpark Drive, Suite 100 Peachtree City, GA 30269	tel: (770) 282-3260 fax: (770) 486-6837	Interforcom
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Mr. Manny Patel - Page 2 June 22,
2016

Equipment Standards

Permit Condition 3.5.3.a.i

*The lumber kiln drying operation target final moisture content will be **45% 12%** or greater based on a 12-month rolling average. Moisture content will be measured with a moisture meter at the outfeed of the planer mill.*

Interfor's current operations at the Swainsboro Sawmill does not utilize a final moisture content of 15% based on the type of lumber produced. Operational issues could occur if Interfor has to meet 15% average moisture content identified in Permit Condition 3.5.3.a.i. Therefore, Interfor requests the monitoring requirements be changed to maintain a moisture content of 12%, which is the current operating target at the Swainsboro Sawmill.

Permit Condition 3.5.3.e

*Any adverse condition discovered by this inspection shall be corrected in the most expedient manner possible. The Permittee shall record problems discovered in a maintenance log/checklist or the plant's Computerized Maintenance Management System (CMMS), indicating the corrective action(s) taken, **and date of required maintenance completion.***

The permit condition requirement to identify discovered maintenance issues not corrected (within 48 hours of discovery) into the CMMS as an excursion is not feasible regarding set-up of the current system utilized for maintenance and repairs at the Swainsboro Sawmill. Furthermore, based on the type of maintenance needed to be completed, not every issue can be resolved in 48 hours if a part of the kiln(s) system must be taken offline. Interfor contends that not addressing immediately (within 48 hours) is acceptable if the maintenance needed is

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not required to ensure reduction of emissions and environmental harm. Finally, by not completing the maintenance within 48 hours, Interfor does not agree with EPD that the timeframe for completion should result in an excursion with this condition or non-compliance identified in the Title V permit annual compliance certification,

Therefore, Interfor requests that the CMMS entry as an excursion be removed for enabling Interfor to address each specific maintenance need in a timeframe that ensures no increased emissions as well as meets their operation needs.

Testing Requirements

Permit Condition 4.1.3.i

The procedures of the NCASI Wood Products Protocol 1 shall be used to determine the VOC concentration from the continuous drying kilns-DK-08-er DK09.

Interfor requests that DK08 be removed from reference in Permit Condition 4.1.3.i, if VOC emissions testing is required for the continuous kilns at the Swainsboro Sawmill. DK08 is a batch fired kiln, and therefore, not needed to be listed for VOC concentration determination for continuous kilns.

Mr. Manny Patel - Page 3
June 22, 2016

Interfor appreciates the opportunity to provide comments to EPD regarding the draft PSD permit for the Swainsboro Sawmill during the public comment period as well as EPD's diligence in the development of this draft permit. Please do not hesitate to contact me at (770) 282-3184 with any questions or comments concerning the above comments and requested changes.

Sincerely,

INTE FOR U.S. INC.

A handwritten signature in black ink, appearing to read 'JR', with a long horizontal line extending to the right.

Joe Robinson
EHS Manager, U.S. Operations