

Prevention of Significant Air Quality Deterioration Review

Final Determination

October 23, 2015

Facility Name: Georgia-Pacific Wood Products LLC (Warrenton Chip-N-Saw Facility)

City: Warrenton

County: Warren

AIRS Number: 04-13-301-00003

Application Number: TV-40117

Date Application Received: May 01, 2015



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

Karen Hays – Chief, Air Protection Branch

Stationary Source Permitting Program

Eric Cornwell
Manny Patel
Seetharaman Ganapathy

Planning & Support Program

Di Tian
Kim Yunhee

BACKGROUND

On May 1, 2015, Georgia-Pacific Wood Products LLC (Warrenton Chip-N-Saw Facility) (hereafter Warrenton CNS Facility) submitted an application for an air quality permit to construct and operate two direct-fired continuous dual path lumber drying kilns in a phased manner, retire the existing wood-fired boiler and three batch drying kilns in a phased manner and to operate a natural gas-fired boiler during the first phase of the project to provide steam to batch kilns 202 and 203. The facility is located at 331 Thomson Highway, NE in Warrenton, Warren County.

In Phase 1: the facility will Construct and Operate a natural gas-fired package boiler (400C), it will also raise steam coils in batch drying kiln 203, perform efficiency upgrades to batch drying kiln 202, Construct and Operate a new continuous direct-fired dual path kiln (204) and shut down wood-fired boiler (400B) after startup of boiler 400C and shut down batch drying kiln (201) after startup of continuous kiln 204.

In Phase 2 Georgia-Pacific will construct and operate a new continuous direct-fired dual path kiln (205), shut down the natural gas-fired package boiler (400C) and batch drying kilns (202) and (203).

On September 10, 2015, the Division issued a Preliminary Determination stating that the modifications described in Application No. TV- 40117 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 Georgia-Pacific place a public notice in a newspaper of general circulation in the area of the Warrenton CNS Plant notifying the public of the proposed construction and providing the opportunity for written public comment. Such public notice was placed in *Augusta Chronicle* (legal organ for Warren County) on September 19, 2015. The public comment period expired on October 19, 2015.

During the comment period, comments were received from the Facility and from EPA.

A copy of the final permit is included in Appendix A. A copy of written comments received during the public comment period is provided in Appendix B.

U.S. EPA REGION 4 COMMENTS

Comments were received from Eva Land at EPA, Engineer, U.S. EPA Region 4, by email on October 16, 2015. The comments are typed, verbatim, below and were the result of reviews by Heather Ceron and Lorinda Shepherd of U.S. EPA Region 4.

Comment 1

1. BACT for the natural gas-fired package boiler is the use of good combustion practices to obtain a VOC limit of 0.0054 pounds per million British thermal units (lb/MMBtu). As the applicant has identified in Table 5-13 of their application, there are BACT limits currently in natural gas-fired package boiler permits that are lower. The applicant and the permitting authority justified this higher emission limit by citing the limit's source, AP-42. While not prohibited, the use of AP-42 emission factors to calculate the project's emissions may not result in accurate emission estimates. These factors are averages, often based on limited data, and therefore are not a good representation of the emissions from a defined emissions unit used under different operating scenarios. These factors were designed for large scale, area-wide attainment demonstrations and inventories, and not source specific assessments. The EPA recommends that the applicant use AP-42 emission factors in the emission calculations as the last resort, or demonstrate that the estimates are conservative. Stack testing, manufacturer data, or test results from other comparable engines provide more representative factors than those found in AP-42. Therefore, a more accurate emission limit is one from a similar boiler that is already in use. For example, the Tenaska Alabama IV Partners, LP has a VOC limit of 0.004 lb/MMBtu. Based on a review of the information available, it appears that lower VOC limits have been included in a permit for similar facilities and should be considered in the BACT analysis for this facility.

EPD Response: EPD agrees that the AP-42 VOC emission factor for the temporary gas-fired boiler 400C may be less accurate than the lower VOC emission factors used in recent VOC BACT emission limits in recently issued PSD permits for the gas-fired boilers. EPD is amenable to using the lower VOC BACT emission factor for the gas-fired boiler. In the final PSD permit EPD has lowered the VOC BACT limit for the temporary natural gas-fired boiler 400C to 0.004 lb/MMBtu heat input in Condition 3.5.1. The revised Condition 3.5.1 is as below:

- 3.5.1 The Permittee shall not release or caused to be released to the atmosphere volatile organic compounds (VOC) in excess of 0.004 lb/MMBtu from the natural gas-fired boiler 400C. This condition is null and void after shut down of this boiler.
[391-3-1-.02(6)(b)1, VOC BACT Limit]

Warrenton CNS Facility COMMENTS

Comments were received from Ms. Cathy Hawk, Air Quality Manager Georgia-Pacific, by email on October 7, 2015.

Comment 1

We want to verify that the requirements in the permit amendment don't apply until the construction is complete for each phase/applicable unit. The concern is that some of the amended or deleted conditions replace or delete requirements for the existing boiler that will still be operational until Kiln 204 and the new natural gas boiler are brought online.

EPD Response: EPD agrees with Permittee's comments that all applicable requirements and permit conditions pertaining to emission units such as the wood-fired boiler (400B), the natural gas-fired temporary boiler (400C) and the batch drying kilns 201, 202 and 203 remain in the permit until the removal of these sources from the facility.

Therefore all permit conditions pertaining to the wood-fired boiler 400B will remain in the permit and be effective till the boiler is removed from the facility after startup of the natural gas-fired boiler 400C.

Similarly all existing permit conditions pertaining to the batch drying Kiln 201 will remain in effect till it is removed from the facility after the startup of the continuous Kiln 204.

All existing permit conditions pertaining to the batch drying Kilns 202 and 203 will remain in effect till they are removed from the facility after the startup of the continuous Kiln 205.

All permit conditions pertaining to the natural gas-fired boiler 400C will be in effect until this boiler is removed from the facility after removal of the batch drying kilns 202 and 203.

Thus in the final permit, language has been added to all amended conditions and conditions slated for removal as to when the conditions cease to be effective (wood-fired Boiler 400B, natural gas-fired Boiler 400C and batch drying Kilns 201, 202 and 203 remain in operation during various phases of the project).

Changed Final Permit Conditions

Footnotes have been added to the Emission Units Listing Table in Section 3.1.1 of the permit explaining that certain sources will be removed after startup of certain other sources.

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
400B**	Wood Waste Fired Boiler Babcock & Wilcox 85.7 MMBtu/hr, 1973	GA Rule 391-3-1-.02(2)(d)	3.3.1, 3.4.2, 4.2.1, 5.2.1, 5.2.2, 5.2.4, 5.2.5, 6.2.1	BC1	Multiclone

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
400C ⁺	Natural gas Package Boiler 39 MMBtu/hr (Removed in Phase 2)	40 CFR 52.21 PSD/BACT GA Rule 391-3-1-.02(2)(d) GA Rule 391-3-1-.02(2)(g) *40 CFR 60 Subparts A and Dc *40 CFR 63 Subparts A and 5D	3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.4.3, 3.5.1, 5.2.7, 6.2.4	None	None
201***	Drying Kiln No. 1 Indirect steam heated 1973	40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.4.1, 3.4.2	None	None
202 ⁺	Drying Kiln No. 2 Indirect steam heated 1973 (Removed in Phase 2)	40 CFR 52.21 PSD/BACT 40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.2.2, 3.3.1, 3.3.2, 3.3.4, 3.3.5, 3.3.6, 3.4.1, 3.4.2, 3.5.3, 6.2.5, 6.2.6 6.2.7, 6.2.8	None	None
203 ⁺	Drying Kiln No. 3 Indirect steam heated 1976 (Removed in Phase 2)	40 CFR 52.21 PSD/BACT 40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.2.2, 3.3.1, 3.3.4, 3.3.5, 3.3.6, 3.4.1, 3.4.2, 3.5.3, 6.2.5, 6.2.6, 6.2.7, 6.2.8	None	None
204	Drying Kiln No. 4 direct-fired dual path continuous kiln 120 MMBF/yr with up to 42 MMBtu/hr of heat input(Operational starting Phase 1)	40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD 40 CFR 52.21 PSD/BACT GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(g)	3.2.1, 3.3.1, 3.3.4, 3.3.5, 3.3.6, 3.4.1, 3.4.2, 3.5.3, 6.2.3, 6.2.5, 6.2.6, 6.2.7, 6.2.9	None	None
205	Drying Kiln No. 5 direct-fired dual path continuous kiln 120 MMBF/yr with up to 42 MMBtu/hr of heat input (Operational starting Phase 2)	40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD 40 CFR 52.21 PSD/BACT GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(g)	3.2.1, 3.3.1, 3.3.4, 3.3.5, 3.3.6, 3.4.1, 3.4.2, 3.5.3, 6.2.3, 6.2.5, 6.2.6, 6.2.7, 6.2.9	None	None
205B	Sawdust Fuel Silo	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.3.4, 3.3.5, 3.4.1, 3.4.2, 3.5.2, 6.1.7c.	SC1	sawdust fuel cyclone
102	High speed ring Debarker	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.3.4, 3.3.5, 3.4.1, 3.4.2.	None	None
103S	Big Chipper 1989	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 3.5.2, 6.1.7.c.	CC1	Cyclone
104S	Small Chippers 2015	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.3.4, 3.3.5, 3.4.1, 3.4.2.	None	None
105A	Chip Conveying and Loading 2015	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.3.4, 3.3.5, 3.4.1, 3.4.2, 3.5.2, 6.1.7c.	WC1 or AWC	Chip Rail/truck loading cyclone or Auxiliary loading cyclone
105C	Sawdust Conveying and Loading 2015	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.3.4, 3.3.5, 3.4.1, 3.4.2, 3.5.2, 6.1.7c.	SC1 or SC2	sawdust fuel cyclone or Sawdust truck loading cyclone
300	Planer Mill (235 tph) 2015	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.3.4, 3.3.5, 3.4.1, 3.4.2, 3.5.2.	PMC1 PMC2	Dual Shavings Cyclone

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
302P	Planer Mill Trim Hog with saw dust conveying 2015	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)			

* Potentially applicable regulation

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.

** Boiler 400B will be shut down after startup of Boiler 400C, *** Drying Kiln # 1 (201 will be shut down after startup of continuous drying Kiln 204, + Drying Kilns 202 and 203 will be shut down after startup of continuous Drying Kiln 205, + Boiler 400C will be removed from service after shut down of batch kilns 202 and 203.

3.2.2 The Permittee shall not dry more than 50 million board feet of lumber from the batch drying kilns 202 and 203 during any twelve consecutive months, **upon startup of drying kiln 204**. If required, the VOC emissions from the batch kilns **201, 202 and 203** shall be estimated using a VOC emission factor of 5.49 lb/MBF (WPP1). Upon notification that the batch kilns 202 and 203 are shut down, this condition is null and void.
[PSD/BACT, 40 CFR 52.21]

Response: In Condition 3.2.2 the ID of the drying kilns was changed to 202 and 203 instead of 204 and 205 in the draft permit and batch kiln 201 was added to the remaining batch kiln listing.

3.2.2 The Permittee shall not dry more than 50 million board feet of lumber from the batch drying Kilns 202 and 203 during any twelve consecutive months, upon startup of continuous drying Kiln 204. If required, the VOC emissions from the batch kilns 201, 202 and 203 shall be estimated using a VOC emission factor of 5.49 lb/MBF (WPP1). Upon notification that the batch Kilns 202 and 203 are shut down, this condition will become null and void.
[PSD/BACT, 40 CFR 52.21]

In Conditions 3.3.2 and 3.3.3 the language in the last line was changed to " This condition will be null and void after shut down of the batch drying Kilns 202 and 203." in the final permit.

3.3.2 The Permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR Part 63, in Subpart A – "General Provisions." and Subpart DDDDD – "National Emission Standards for Hazardous Air Pollutants: Industrial, Commercial, and Institutional Boilers and Process Heaters." For operation of natural gas-fired package boiler 400C. **This condition will be null and void after shut down of the batch drying Kilns 202 and 203.**
[40 CFR 63 Subpart 5D]

- 3.3.3 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart Dc - "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," for operation of the natural gas-fired package boiler 400C. **This condition will be null and void after shut down of the batch drying Kilns 202 and 203.**
[40 CFR 60 Subpart Dc]

In Conditions 3.4.1, 3.4.2 and 3.5.3 **Kiln 201** was added to list of kilns.

In Conditions **3.4.4, 3.4.5, 4.2.1, 4.2.2, 5.2.1, 5.2.2, 5.2.4, 5.2.5, 5.2.6, 6.2.1 and 6.2.2** the word "Condition deleted" was replaced with the respective condition and the sentence "**This condition will become null and void after shutdown of wood-fired Boiler 400B.**"

Amended Conditions

- 3.4.1 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the kilns (**201**, 202, 203, 204 and 205), planer mill (300), planer mill trim hog (302P), Chip Conveying (105A), sawdust conveying (105C), sawdust fuel silo (205B) and chippers (103S and 104S), any gases which exhibit visible emissions, the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)1.]

- 3.4.2 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the kilns (**201**, 202, 203, 204 and 205), planer mill (300), planer mill trim hog (302P), Chip Conveying (105A), sawdust conveying (105C), sawdust fuel silo (205B) and chippers (103S and 104S), each, particulate emissions in excess of the rate derived from:
[391-3-1-.02(2)(e)1.(i)]

$E = 4.1 * P^{0.67}$; for process input weight rate up to and including 30 tons per hour.

$E = 55 * P^{0.11} - 40$; for process input weight rate above 30 tons per hour.

where P equals process input weight rate in tons per hour and E equals the allowable emission rate in pounds per hour.

New Condition 3.4.8 was added in the final permit:

3.4.8 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the natural gas package boiler (400C), any gases which:

a. Contain particulate emissions in excess of the rate derived from $P = 0.5 * (10/R)^{0.5}$ where R equals heat input rate in million BTU per hour and P equals the allowable emission rate in pounds PM per million BTU.

[391-3-1-.02(2)(d)2.(ii)]

b. Exhibit visible emissions, the opacity of which is equal to or greater than twenty (20) percent opacity (6-minute average) except for one six minute period per hour of not more than twenty-seven (27) percent opacity.

[391-3-1-.02(2)(d)3, NSPS Subpart Dc]

This condition will be null and void after shut down of wood-fired Boiler 400C.

In Condition 3.5.3 in the final permit the **batch kiln 201** was added to other batch kilns in Condition 3.5.3 a.ii., c. iv, v and viii and d. ii. The term “**upon construction and operation of Kilns 204 and Kiln 205**” was added to the beginning of the first line.

In Condition 5.2.7 and 6.2.4 the last sentence was replaced with “**This condition will be null and void after shut down of wood-fired boiler 400B.**”

In Condition 6.1.7b.i. the last sentence was replaced with “**This condition will be null and void after shutdown of these batch kilns.**”

In Condition 6.2.5 the incorrect reference to Condition 3.2.4 in the last sentence was changed to Conditions **3.2.1 and 3.2.2.**

6.2.5 The Permittee shall maintain monthly records of the amount of the dried lumber processed through lumber drying kilns 202, 203 (after Kiln 204 commences operation) and in lumber drying kiln 204 and 205, separately for the continuous kilns 204 and 205, necessary to confirm compliance with the production limits in **Conditions 3.2.1 and 3.2.2.**

The records shall be retained in a permanent form suitable and available for inspection or submittal to the Division upon request. These records shall be retained for at least five years following the day of record. This condition will not apply to batch drying kilns 202 and 203 after they are shut down.

[391-3-1-.02(6)(b)1(i), 40 CFR 70.6(a)(3)(ii)(B) and 40 CFR 52.21]

The sentence ” **This condition will become null and void after batch drying Kilns 202 and 203 are shut down**” was added to the last sentence of Conditions 6.2.6 and 6.2.7

The last sentence of Condition 6.2.8 was replaced with “ **This condition will become null and void after the batch Kilns 202 and 203 are shut down.**” The reference to Condition 3.2.4 was changed to Condition 3.2.2 in this condition.

New Condition 7.14.1 rescinds draft Air Quality Permit No. 2421-301-0003-V-03-1 dated September 10, 2015.

APPENDIX A

AIR QUALITY PERMIT

2421-301-0003-V-03-2

Part 70 Operating Permit Amendment

Permit Amendment No.: 2421-301-0003-V-03-2 **Effective Date:**

Facility Name: **Georgia-Pacific Wood Products LLC
(Warrenton Chip-N-Saw Facility)**
331 Thomson Highway, NE
Warrenton, Georgia 30828 (Warren County)

Mailing Address: 331 Thomson Highway, NE
Warrenton, Georgia 30828

Parent/Holding Company: Georgia-Pacific LLC

Facility AIRS Number: 04-13-301-00003

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 a construction/operation permit for:

Phase 1: Construction and Operation of a natural gas-fired package boiler (400C), raising of steam coils in batch drying kiln 203, efficiency upgrades to batch drying kiln 202, Construction and Operation of a new continuous direct-fired dual path kiln (204) and shutting down of wood-fired boiler (400B) and batch drying kiln (201).

Phase 2: Construction and Operation of a new continuous direct-fired dual path kiln (205), shutting down of the batch drying kilns (202) and (203) and natural gas-fired package boiler (400C).

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. 2421-301-0003-V-03-0 Unless modified or revoked, this Permit Amendment expires upon issuance of the next Part 70 Permit for this source.

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. 40117 dated May 01, 2015 and updated modeling dated June 30, 2015; any other applications upon which this Permit Amendment or Permit No. 2421-301-0003-V-03-0 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 **20** pages, which pages are a part of this Permit Amendment, and which hereby become part of Permit No. 2421-301-0003-V-03-0.

Director
Environmental Protection Division

Table of Contents

PART 1.0	FACILITY DESCRIPTION	1
1.3	Process Description of Modification.....	1
PART 3.0	REQUIREMENTS FOR EMISSION UNITS	2
3.1.1	Emission Units	2
3.2	Equipment Emission Caps and Operating Limits	3
3.3	Equipment Federal Rule Standards	3
3.4	Equipment SIP Rule Standards	5
3.5	Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit	6
PART 4.0	REQUIREMENTS FOR TESTING.....	9
4.1	General Testing Requirements	9
4.2	Specific Testing Requirements.....	10
PART 5.0	REQUIREMENTS FOR MONITORING (RELATED TO DATA COLLECTION).....	10
5.2	Specific Monitoring Requirements	10
PART 6.0	OTHER RECORD KEEPING AND REPORTING REQUIREMENTS.....	14
6.1	General Record Keeping and Reporting Requirements	14
6.2	Specific Record Keeping and Reporting Requirements.....	16
PART 7.0	OTHER SPECIFIC REQUIREMENTS.....	19
7.14	Specific Conditions	19
PART 8.0	GENERAL PROVISIONS.....	19
8.26	Use of Any Credible Evidence or Information	19
8.27	Internal Combustion Engines	19
8.28	Boilers and Process Heaters	21

PART 1.0 FACILITY DESCRIPTION

1.3 Process Description of Modification

This modification consists of a plant expansion in a phased manner. In the first phase the wood-fired boiler 400B and associated ash handling system will be shut down after a natural gas-fired boiler 400C becomes operational. Batch drying kiln 201 will also be shut down after a new direct-fired continuous dual path kiln 204 becomes operational. The continuous kiln will be dual fueled (sawdust and/or natural gas) and will be equipped with one of the following: 1) a 35 MMBtu/hr sawdust gasifier burner, 2) a 35 MMBtu/hr natural gas burner or 3) a combination sawdust/natural gas burner comprised of a primary 35 MMBtu/hr sawdust burner with a supplemental 7 MMBtu/hr natural gas burner, for a total of 42 MMBtu/hr from both fuels. Boiler (400C) will provide steam (up to 30,000 lb/hr) for operating the existing improved batch kilns 202 and 203. The steam coils in batch kiln 203 will be raised for handling a larger charge. Efficiency upgrades will be made to the batch drying kiln 202. The continuous dual path kiln 204 will have a capacity of drying 120 MMBF/year. This phase will also have a new sawdust silo, bark screen, bark hog, bark truck loadout, two additional sizing saws, second small chipper and auto grader in the planer mill. In this phase existing trim saw, chipping edger, planer trim saw, small chipper and drum screen will be replaced with more efficient or larger capacity units. After addition of the direct-fired continuous kiln 204 the drying capacity of the facility will be 170 MMBF/year during Phase 1.

In the second phase a new direct-fired continuous dual path kiln 205 similar to 204 will be constructed and operated. After the direct-fired continuous kiln 205 becomes operational, the batch drying kilns 202 and 203 and the natural gas-fired package boiler 400C will be decommissioned and removed from the facility. In this phase the debarker, several interior sawmill saws, planer, planer mill cyclone and various material handling systems will be replaced with more efficient or larger capacity units. At the end of this phase maximum drying capacity of the kilns will be 240 MMBF/year.

Title V Permit Amendment

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 Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
400B**	Wood Waste Fired Boiler Babcock & Wilcox 85.7 MMBtu/hr, 1973	GA Rule 391-3-1-.02(2)(d)	3.3.1, 3.4.2, 4.2.1, 5.2.1, 5.2.2, 5.2.4, 5.2.5, 6.2.1	BC1	Multiclone
400C ⁺	Natural gas Package Boiler 39 MMBtu/hr (Removed in Phase 2)	40 CFR 52.21 PSD/BACT GA Rule 391-3-1-.02(2)(d) GA Rule 391-3-1-.02(2)(g) *40 CFR 60 Subparts A and Dc *40 CFR 63 Subparts A and 5D	3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.4.3, 3.5.1, 5.2.7, 6.2.4	None	None
201***	Drying Kiln No. 1 Indirect steam heated 1973	40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.3.1, 3.3.2, 3.4.1, 3.4.2	None	None
202 ⁺	Drying Kiln No. 2 Indirect steam heated 1973 (Removed in Phase 2)	40 CFR 52.21 PSD/BACT 40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.2.2, 3.3.1, 3.3.2, 3.3.4, 3.3.5, 3.3.6, 3.4.1, 3.4.2, 3.5.3, 6.2.5, 6.2.6, 6.2.7, 6.2.8	None	None
203 ⁺	Drying Kiln No. 3 Indirect steam heated 1976 (Removed in Phase 2)	40 CFR 52.21 PSD/BACT 40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.2.2, 3.3.1, 3.3.4, 3.3.5, 3.3.6, 3.4.1, 3.4.2, 3.5.3, 6.2.5, 6.2.6, 6.2.7, 6.2.8	None	None
204	Drying Kiln No. 4 direct- fired dual path continuous kiln 120 MMBF/yr with upto 42 MMBtu/hr heat input (Operational starting Phase 1)	40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD 40 CFR 52.21 PSD/BACT GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(g)	3.2.1, 3.3.1, 3.3.4, 3.3.5, 3.3.6, 3.4.1, 3.4.2, 3.5.3, 6.2.3, 6.2.5, 6.2.6, 6.2.7, 6.2.9	None	None
205	Drying Kiln No. 5 direct- fired dual path continuous kiln 120 MMBF/yr with upto 42 MMBtu/hr heat input (Operational starting Phase 2)	40 CFR 63 Subpart A 40 CFR 63 Subpart DDDD 40 CFR 52.21 PSD/BACT GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e) GA Rule 391-3-1-.02(2)(g)	3.2.1, 3.3.1, 3.3.4, 3.3.5, 3.3.6, 3.4.1, 3.4.2, 3.5.3, 6.2.3, 6.2.5, 6.2.6, 6.2.7, 6.2.9	None	None
205B	Sawdust Fuel Silo	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.3.4, 3.3.5, 3.4.1, 3.4.2, 3.5.2, 6.1.7c.	SC1	sawdust fuel cyclone
102	High speed ring Debarker	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.3.4, 3.3.5, 3.4.1, 3.4.2.	None	None
103S	Big Chipper 1989	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.4.1, 3.4.2, 3.5.2, 6.1.7.c.	CC1	Cyclone
104S	Small Chippers 2015	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.3.4, 3.3.5, 3.4.1, 3.4.2.	None	None

Title V Permit Amendment

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
105A	Chip Conveying and Loading 2015	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.3.4, 3.3.5, 3.4.1, 3.4.2, 3.5.2, 6.1.7c.	WC1 or AWC	Chip Rail/truck loading cyclone or Auxiliary loading cyclone
105C	Sawdust Conveying and Loading 2015	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.3.4, 3.3.5, 3.4.1, 3.4.2, 3.5.2, 6.1.7c.	SC1 or SC2	sawdust fuel cyclone or Sawdust truck loading cyclone
300	Planer Mill (235 tph) 2015	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)	3.3.4, 3.3.5, 3.4.1, 3.4.2, 3.5.2.	PMC1 PMC2	Dual Shavings Cyclone
302P	Planer Mill Trim Hog with saw dust conveying 2015	GA Rule 391-3-1-.02(2)(b) GA Rule 391-3-1-.02(2)(e)			

* Potentially applicable regulation

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.

** Boiler 400B will be shut down after startup of Boiler 400C, *** Drying Kiln # 1 (201 will be shut down after startup of continuous drying Kiln 204, + Drying Kilns 202 and 203 will be shut down after startup of continuous Drying Kiln 205, + Boiler 400C will be removed from service after shut down of batch kilns 202 and 203.

3.2 Equipment Emission Caps and Operating Limits

New Conditions

- 3.2.1 The Permittee shall not dry more than 120 million board feet of lumber from each continuous drying kiln 204 and 205 during any twelve consecutive months. If required, the VOC emissions from the continuous kilns 204 and 205 shall be estimated using a VOC emission factor of 5.49 lb/MBF (WPP1).
[PSD/BACT, 40 CFR 52.21]
- 3.2.2 The Permittee shall not dry more than 50 million board feet of lumber from the batch drying Kilns 202 and 203 during any twelve consecutive months, upon startup of continuous drying Kiln 204. If required, the VOC emissions from the batch kilns 201, 202 and 203 shall be estimated using a VOC emission factor of 5.49 lb/MBF (WPP1). Upon notification that the batch Kilns 202 and 203 are shut down, this condition will become null and void.
[PSD/BACT, 40 CFR 52.21]

3.3 Equipment Federal Rule Standards

Amended Condition

- 3.3.1 The Permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR Part 63, in Subpart A – “General Provisions.” and Subpart DDDD – “National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products.” For the operation of the drying kilns at the facility.
[40 CFR 63 Subpart A and DDDD]

Title V Permit Amendment

New Conditions

- 3.3.2 The Permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR Part 63, in Subpart A – “General Provisions.” and Subpart DDDDD – “National Emission Standards for Hazardous Air Pollutants: Industrial, Commercial, and Institutional Boilers and Process Heaters.” For operation of natural gas-fired package boiler 400C. This condition will be null and void after shut down of the batch drying Kilns 202 and 203.
[40 CFR 63 Subpart 5D]
- 3.3.3 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart Dc - "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," for operation of the natural gas-fired package boiler 400C. This condition will be null and void after shut down of the batch drying Kilns 202 and 203.
[40 CFR 60 Subpart Dc]
- 3.3.4 The Permittee shall construct and operate the source or modification as described in Application No. TV- 40117 that is subject to Georgia Rule 391-3-1-.02(7) in accordance with the application submitted pursuant to that rule. If the Permittee constructs or operates a source or modification not in accordance with the application submitted pursuant to that rule or with the terms of any approval to construct, the Permittee shall be subject to appropriate enforcement action.
[40 CFR 52.21(r)(1)]
- 3.3.5 Approval to construct source of modification as defined in Application No. TV- 40117 shall become invalid if construction of the first phase (Phase 1) is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Director may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.
[40 CFR 52.21(r)(2)]
- 3.3.6 The Permittee shall not burn fuel containing more than 2.5 percent sulfur, by weight, in any fuel burning source for the continuous Lumber Drying Kilns (204 and 205) unless otherwise specified by the Director.
[391-3-1-.02(2)(g)2]

3.4 Equipment SIP Rule Standards

Amended Conditions

3.4.3 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the kilns (201, 202, 203, 204 and 205), planer mill (300), planer mill trim hog (302P), Chip Conveying (105A), sawdust conveying (105C), sawdust fuel silo (205B) and chippers (103S and 104S), any gases which exhibit visible emissions, the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)1.]

3.4.4 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the kilns (201, 202, 203, 204 and 205), planer mill (300), planer mill trim hog (302P), Chip Conveying (105A), sawdust conveying (105C), sawdust fuel silo (205B) and chippers (103S and 104S), each, particulate emissions in excess of the rate derived from:
[391-3-1-.02(2)(e)1.(i)]

$E = 4.1 * P^{0.67}$; for process input weight rate up to and including 30 tons per hour.

$E = 55 * P^{0.11} - 40$; for process input weight rate above 30 tons per hour.

where P equals process input weight rate in tons per hour and E equals the allowable emission rate in pounds per hour.

3.4.4 In accordance with the provisions of 40 CFR Part 279 – Standards for the Management of Used Oil, Subpart B – Applicability, Section 279.11 – Used oil specifications, the fuels produced from used oil generated on site may be used, provided the constituents and properties in the specification shown below are not exceeded in the used oil:

Constituent	Allowable Level (ppm)
Arsenic	5
Cadmium	2
Chromium	10
Lead	100
Halogens	1000
PCBs	50

Used oil, which does not meet these specifications, is considered "off-specification" used oil and may not be burned. Off-specification used oil may not be diluted or blended in order to meet these specifications. Used oil meeting the above limitation on toxic metals and organics in used oil is generally considered exempt from RCRA

This condition will become null and void after shutdown of wood-fired Boiler 400B.

3.4.5 The Permittee shall not burn fuel containing more than 2.5 percent sulfur, by weight, in the boiler (ID No. 400B), unless otherwise specified by the Director. This condition will become null and void after shutdown of wood-fired Boiler 400B.
[391-3-1-.02(2)(g)2]

New Condition

- 3.4.9 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the natural gas package boiler (400C), any gases which:
- c. Contain particulate emissions in excess of the rate derived from $P = 0.5 * (10/R)^{0.5}$ where R equals heat input rate in million BTU per hour and P equals the allowable emission rate in pounds PM per million BTU.
[391-3-1-.02(2)(d)2.(ii)]
 - d. Exhibit visible emissions, the opacity of which is equal to or greater than twenty (20) percent opacity (6-minute average) except for one six minute period per hour of not more than twenty-seven (27) percent opacity.
[391-3-1-.02(2)(d)3, NSPS Subpart Dc]

This condition will be null and void after shut down of natural gas-fired Boiler 400C.

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

New Conditions

- 3.5.1 The Permittee shall not release or caused to be released to the atmosphere volatile organic compounds (VOC) in excess of 0.004 lb/MMBtu from the natural gas-fired boiler 400C. This condition is null and void after shut down of this natural gas-fired boiler.
[391-3-1-.02(6)(b)1, VOC BACT Limit]
- 3.5.2 For each week or portion of each week of operation of the planer mill (ID No. 300) and chippers (ID Nos. 104S), inspect the exterior of the cyclones (ID NOs. PMC1, PMC2, CC1 and CC2) for holes in the body or evidence of malfunction in the interior of the cyclone. Any adverse condition identified by the weekly inspection of the cyclones that is not corrected within 48 hours shall be recorded, as an excursion, in a maintenance log, along with a description of the corrective action and when it was completed. These records shall be kept a form suitable for inspection or submittal to the Division.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 3.5.3 Upon construction and operation of Kilns 204 and 205, the Permittee shall develop and implement a Work Practice and Preventive Maintenance Program for the Lumber Drying Kilns (201, 202, 203, 204 and 205) to assure that the provisions of Condition 8.17.1 are met. 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:

Title V Permit Amendment

- i. The lumber kiln drying operation target final moisture content will be 12% or greater based on a 12-month rolling average. Moisture content will be measured with a moisture meter at the infeed of the planer mill.
 - ii. The lumber kiln shall be operated following a wet bulb temperature set-point-drying schedule of 240°F or lower for steam batch kilns 201, 202 and 203 only.
 - iii. 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 systems (steam and direct-fired gasifier) are operating properly.
- e. Six Week 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 kilns 201, 202 and 203). Schedule repairs as needed.
 - v. Grease vent shafts or vents in internal linkages (batch kilns 201, 202 and 203).
 - vi. If necessary sweep out kiln to remove accumulated dust (batch kilns 201, 202 and 203).
 - vii. Inspect and repair as necessary external components of direct-fired gasifier.
 - viii. Inspect wet bulb socks and replace as needed. Replace a sock if it has a tendency to become hard. Check water flow to the wet bulb. (For Steam batch kilns 201, 202 and 203 only).
- d. Semi-annual Routine:
- i. Verify accuracy of the temperature measurement systems. Repair or replace components as necessary.

Title V Permit Amendment

- ii. Inspect steam supply mains and headers for steam leaks and insulation deficiencies. Repair as needed. Inspect steam traps for proper operation and replace/repair as needed. Stroke all steam valves. (batch kilns 201, 202 and 203)

- iii. During cold shutdown of continuous kilns 204 and 205, inspect and repair as necessary all internal components of kilns and direct-fired gasifiers. During this time the continuous kilns 204 and 205 and burners 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. If a problem discovered during daily inspection cannot be remedied within 48 hours of discovery, it shall be entered into the plant's Computerized Maintenance Management System (CMMS) as an excursion.

PART 4.0 REQUIREMENTS FOR TESTING**4.1 General Testing Requirements**

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 Section 3.4 are as follows:

- a. Method 1 for sample point locations.
- b. Method 2 for the determination of flow rate.
- c. Method 3 or 3A for the determination of stack gas molecular weight.
- d. Method 3B for the determination of the correction factor or excess air. Method 3A may be used as an alternative.
- e. Method 4 for the determination of stack moisture.
- f. Method 5 and/or 5T (as applicable) for the determination of particulate matter emissions.
- g. Method 9 and the Procedures of Section 1.3 of the above referenced document for the determination of opacity.
- h. Method 19 when applicable, to convert particulate matter concentrations (i.e., grains/dscf for PM), as determined using other methods specified in this section, to emission rates (i.e., lb/MMBtu).
- i. The procedures of NCASI Wood Products Protocol 1 shall be used to determine VOC concentration from the Lumber Drying Kilns

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)]

4.1.4 The Permittee shall submit performance test results to the US EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI) in accordance with any applicable NSPS or NESHAP standards (40 CFR 60 or 40 CFR 63) that contain Electronic Data Reporting Requirements. This Condition is only applicable if required by an applicable standard and for the pollutant(s) subject to said standard.

[391-3-1-.02(8)(a) and 391-3-1-.02(9)(a)]

4.2 Specific Testing Requirements

4.2.1 The Permittee shall, no later than May 4, 2014, conduct performance tests for particulate matter (PM) and visible emissions from the wood waste fired boiler (Emission Unit ID No. 400). The tests shall be conducted at the maximum anticipated production rate. The results of the performance test(s) shall be submitted to the Division within 60 days of the completion of testing. Following that performance test, the Permittee shall conduct PM tests on the boiler at 24-month intervals if the PM emissions for the boiler is more than fifty (50) percent of the applicable emissions limitations contained in Condition 3.4.3. Should the PM emissions for the boiler be less than fifty (50) percent of the applicable emissions limitations contained in Condition 3.4.3, the Permittee may request that testing be conducted at 48-month intervals. This condition will be null and void after the shutdown of wood-fired Boiler 400B.
[391-3-1-.02(6)(b) 1(i)]

4.2.2 Should the Permittee want to operate the wood waste fired Boiler (ID No. 400) in conjunction with operating the electrostatic precipitator (ID No. BEBP) with only one of the two fields energized, the Permittee shall conduct a performance test for particulate matter emissions and demonstrate compliance with the emissions limitation contained in Condition 3.4.3. The testing shall be conducted with the boiler operating at more than 85 percent of its designed maximum capacity. During the testing, the Permittee shall record both the total secondary voltage (kV) and current (ma), calculate the total secondary power (watt), and determine the average values for the total secondary power (watt) of the energized field at which compliance with the emissions limitation is achieved. This condition will be null and void after the shutdown of wood-fired Boiler 400B.
[391-3-1-.02(3) and 391-3-1-.02(6)(b)1.(i)]

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)

5.2 Specific Monitoring Requirements

5.2.1 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified below. 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)]

- a. A device for the measurement of total secondary voltage (kilovolts) of each field of the electrostatic precipitator (ID No. BEBP). The Permittee shall measure and record total secondary voltage (kilovolts) of each field once per hour of operation of the wood waste fired boiler (ID No. 400B).
- b. A device for the measurement of total secondary current (milliamps) of each field of the electrostatic precipitator (ID No. BEBP). The Permittee shall measure and record total secondary current (milliamps) of each field once per hour of operation of the wood waste fired boiler (ID No. 400B).

Title V Permit Amendment

- c. A device for the measurement of steam flow from the wood-waste fired boiler (ID No. 400B). Data shall be recorded once each hour or portion of each hour of operation.

This condition will become null and void after the shutdown of wood-fired Boiler 400B.

- 5.2.1 5.2.2 For each week or portion of each week of operation of the wood waste fired boiler (ID No. 400B), the Permittee shall perform the following operation and maintenance checks of the multiclone (ID No. BC1). A checklist or other similar log may be used for this purpose:

- a. Check exterior of the multiclone for holes in the body or evidence of malfunction in interior of the multiclone.
- b. Check hopper for bridging and plugging.
- c. Check screw conveyor (or other particulate transfer device) for proper operation to ensure dust removal.

Any adverse condition identified by the weekly inspection of the multiclone (ID No. BC1) that is not corrected within 8 hours shall be recorded, as an excursion, in a maintenance log, along with a description of the corrective action and when it was completed. These records shall be kept in a form suitable for inspection or submittal to the Division. This condition will become null and void after the shutdown of wood-fired Boiler 400B.

- 5.2.3 Condition moved to Section 3.5 as Condition 3.5.2.

- 5.2.4 The following pollutant specific emission unit(s) (PSEU) is/are subject to the Compliance Assurance Monitoring (CAM) Rule in 40 CFR 64.

Emission Unit	Pollutant
400B	PM

Permit conditions in this permit for the PSEU(s) listed above with regulatory citation 40 CFR 70.6(a)(3)(i) are included for the purpose of complying with 40 CFR 64. In addition, the Permittee shall meet the requirements, as applicable, of 40 CFR 64.7, 64.8, and 64.9. This condition will become null and void after the shutdown of wood-fired Boiler 400B.

Title V Permit Amendment

5.2.5 The Permittee shall comply with the performance criteria listed in the table below for the particulate matter emissions from the wood waste fired boiler (ID No. 400B).
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1 Visual Inspection of the Exterior of Multiclone BC1	Indicator No. 2 Total Secondary Power of the Electrostatic Precipitator BESP
A. Data Representativeness [64.3(b)(1)]	Visual external operation and maintenance inspections of multiclone, hoppers and screw conveyor.	Total secondary power is measured for each field and added to get the Total secondary power. Total secondary voltage and current are measured using the instrumentation provided by the ESP manufacturer. The minimum accuracy of the volt meter is +/- 4kV. The minimum accuracy of the current meter is +/- 5%.
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not applicable.	Not applicable.
C. QA/QC Practices and Criteria [64.3(b)(3)]	Visual indicators of operation and routine maintenance.	Confirm that the meter reads zero for both voltage and current when the unit is not operating. Annual calibration of volt/amp meters on each field.
D. Monitoring Frequency [64.3(b)(4)]	Once per week or portion of each week of operation.	The ESP Total secondary power is measured a minimum of once per hour.
Data Collection Procedures [64.3(b)(4)]	Weekly documented external operation and maintenance inspections of the multiclone.	Total Secondary voltage and current are recorded and used to calculate hourly ESP total secondary power using equations in Condition 6.2.3.
Averaging Period [64.3(b)(4)]	Any adverse condition discovered during the weekly documented external inspections of the multiclone that are not corrected within 8 hours shall be deemed an excursion.	Three hour rolling average

This condition will become null and void after the shutdown of wood-fired Boiler 400B.

Title V Permit Amendment

- 5.2.6 The Permittee shall, upon written request of the Division, analyze any used oil to be burned in Boiler 400. The sample(s) shall be obtained and analyzed using the following methods; [391-3-1-.02(6)(b)1(i)]
- a. The procedures described in U.S. Environmental Protection Agency document EPA-600/2-80-018 (Samplers and Sampling Procedures for Hazardous Waste Streams) shall be used to obtain the sample.
 - b. Method 6010B, contained in the SW-846 methods manual of U.S. Environmental Protection Agency's Office of Solid Waste, shall be used to determine concentrations of arsenic, cadmium, chromium, and lead.
 - c. SW-846 Method 9077 C shall be used to determine total halogens.
 - d. ASTM D 93 shall be used to determine flash point.
 - e. Polychlorinated Biphenyls (PCB) shall be determined using the test method described in U.S. Environmental Protection Agency Document EPA-600/4-81-045.

This condition will become null and void after the shutdown of wood-fired Boiler 400B.

New Condition

- 5.2.7 The Permittee shall install, calibrate, maintain and operate natural gas consumption meters on the natural gas-fired boiler (400C) subject to 40 CFR 60 Subpart Dc. As allowed by this NSPS, the Permittee may propose an alternative protocol for monitoring fuel usage. In lieu of installing fuel meter, the Permittee may maintain records of the total amounts of natural gas delivered to the facility each calendar month. This condition will be null and void after shut down of the natural gas-fired boiler 400C.
[NSPS Subpart Dc]

PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS

6.1 General Record Keeping and Reporting Requirements

Amended Conditions

- 6.1.4 The Permittee shall submit a written report containing any excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each semiannual period ending June 30 and December 31 of each year. All reports shall be postmarked by the 60th day following the end of each reporting period August 29th and February 28th respectively. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division’s Procedures for Testing and Monitoring Sources of Air Pollutants and shall contain the following: [391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)(A)]
- a. A summary report of excess emissions, exceedances and excursions, and monitor downtime, in accordance with Section 1.5(c) and (d) of the above referenced document, including any failure to follow required work practice procedures.
 - b. Total process operating time during each reporting period.
 - c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of occurrence.
 - d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.
 - e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

Title V Permit Amendment

- f. Certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- 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 Upon startup of continuous Kiln 204, any 12-consecutive month total lumber dried in batch Kilns 202 and 203 in excess of 50 million board feet. This condition will be null and void after shut down of these batch kilns.
- ii Any 12-consecutive month total lumber dried in continuous kiln 204 or 205 in excess 120 million board feet.
- 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 three-hour period during which the average total secondary power (P_1+P_2 , the arithmetic average of three contiguous one-hour periods) to the electrostatic precipitator (ID No. BEBP), as determined according to Condition 6.2.1, is less than 1,869 Watts, while operating at the steam flow from wood waste fired boiler that is less than or equal to 50,000 pounds per hour. This condition will become null and void after the shutdown of wood-fired Boiler 400B.

- ii. Any three-hour period during which the average total secondary power (P1+P2, arithmetic average of three contiguous one-hour periods) to the electrostatic precipitator (ID No. BESP), as determined according to Condition 6.2.1, is less than 2,961 Watts, while operating at the steam flow rate from wood waste fired boiler greater than 50,000 pounds per hour. This condition will become null and void after the shutdown of wood-fired Boiler 400B.
- iii. Any adverse condition discovered by the weekly inspections of the multiclone (ID No. BC1) that is not corrected within 8 hours as defined in Condition 5.2.2. This condition will become null and void after the shutdown of wood-fired Boiler 400B.
- iv. Any adverse condition discovered by the weekly inspections of the cyclones (ID Nos. PMC1, PMC2, CC1, and CC2) that is not corrected within 8 hours as defined in Condition 5.2.3. This condition will become null and void after the shutdown of wood-fired Boiler 400B.
- v. Any adverse condition discovered by the weekly inspections of the cyclones that is not corrected within 48 hours as per Condition 3.5.2.

6.2 Specific Record Keeping and Reporting Requirements

6.2.1 The Permittee, using the hourly records of total secondary voltage and secondary current for each field of the electrostatic precipitator (ID No. BESP) that are obtained in accordance with Condition 5.2.1, shall determine and record total secondary power for each field of the electrostatic precipitator (ID No. BESP) in accordance with the following equations:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

$$TP = P1 + P2$$

$$P1 = V1 * I1$$

$$P2 = V2 * I2$$

Where:

TP = Total secondary power of the electrostatic precipitator (ID No. BESP), in Watts.

Title V Permit Amendment

- P_1 = Total secondary power to first field of the electrostatic precipitator (ID No. BESP), in Watts
- P_2 = Total secondary power to second field of the electrostatic precipitator (ID No. BESP), in Watts
- V_1 = Total secondary voltage of the first field of the electrostatic precipitator (ID No. BESP), in kilovolts
- V_2 = Total secondary voltage of the secondary field of the electrostatic precipitator (ID No. BESP), in kilovolts
- I_1 = Total secondary current of the first field of the electrostatic precipitator (ID No. BESP), in milliamps
- I_2 = Total secondary current of the secondary field of the electrostatic precipitator (ID No. BESP), in milliamps

This condition will become null and void after the shutdown of wood-fired Boiler 400B.

- 6.2.2 The Permittee shall retain monthly records of all used oil burned (in gallons) in Boiler 400. The records shall be available for inspection or submittal to the Division. This condition will become null and void after the shutdown of wood-fired Boiler 400B.

New Conditions

- 6.2.3 The Permittee shall furnish the Division written notification of the actual date of initial startup of continuous lumber drying kilns (204 and 205) and the natural gas-fired boiler (400C), within 15 days after such date.
[391-3-1-.03(2)(c) and 40 CFR 60.49b(a)]
- 6.2.4 The Permittee shall retain records of the quantity of natural gas burned monthly in the natural gas-fired boiler 400C or maintain monthly records of the amounts of natural gas delivered to the facility. This condition will be null and void after shut down of the natural gas-fired boiler 400C.
[391-3-1-.03(2)(c) and NSPS Subpart Dc]
- 6.2.5 The Permittee shall maintain monthly records of the amount of the dried lumber processed through the batch Kilns 202 and 203 (after continuous Kiln 204 commences operation) and in continuous kilns 204 and 205 separately, necessary to confirm compliance with the production limits in Conditions 3.2.1 and 3.2.2.

The records shall be retained in a permanent form suitable and available for inspection or submittal to the Division upon request. These records shall be retained for at least five years following the day of record. This condition will become null and void after batch drying kilns 202 and 203 are shut down.

Title V Permit Amendment

[391-3-1-.02(6)(b)1(i), 40 CFR 70.6(a)(3)(ii)(B) and 40 CFR 52.21]

- 6.2.6 The Permittee shall calculate and record, each month, the 12 consecutive month total of lumber dried in batch drying Kilns 202 and 203 (after continuous Kiln 204 commences operation) and in continuous drying kilns 204 and 205 separately, using the monthly records required in Condition 6.2.5. A 12-consecutive month total shall be defined as the sum of a current month's total plus the totals for the previous eleven consecutive months. This condition will become null and void after batch drying kilns 202 and 203 are shut down.

[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i) and 40 CFR 52.21]

- 6.2.7 The Permittee shall submit a semiannual report of the 12-consecutive month totals of lumber dried (in million board feet) in batch Kilns 202 and 203 (after continuous Kiln 204 commences operation) and in lumber drying Kilns 204 and 205 separately by August 29 of the calendar year of record and by February 28 of the year following the calendar year of record, unless otherwise approved by the Division. The semiannual reporting periods shall be January 1 through June 30 and July 1 through December 31. The reports, submitted in a manner suitable to the Division and shall be prepared from records required by Condition 6.2.6 and contain six 12-consecutive month totals of lumber produced in the batch Kilns 202 and 203 and in the continuous drying Kilns 204 and 205 separately. This condition will become null and void after batch drying kilns 202 and 203 are shut down.

[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i) and 40 CFR 52.21]

- 6.2.8 The Permittee shall notify the Division in writing if the batch Drying kilns 202 and 203s production exceeds 4.16 million board feet during any calendar month(after startup of continuous Drying kiln 204). 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 production limit in Condition 3.2.2. This condition will become null and void after the batch kilns 202 and 203 are shut down.

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

- 6.2.9 The Permittee shall notify the Division in writing if the continuous Kilns (204 or 205) production exceeds 10 million board feet lumber during any calendar month. 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 production limit in Condition 3.2.1.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

PART 7.0 OTHER SPECIFIC REQUIREMENTS

New Condition

7.14 Specific Conditions

- 7.14.1 Air Quality Permit No. 2421-301-0003-V-03-1 dated September 10, 2015 is rescinded in its entirety.
[391-3-1-.03(10)(d)5 and 40 CFR 70.6(e)]

PART 8.0 GENERAL PROVISIONS

8.26 Use of Any Credible Evidence or Information

- 8.26.1 Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit, for the purpose of submission of compliance certifications or establishing whether or not a person has violated or is in violation of any emissions limitation or standard, nothing in this permit or any Emission Limitation or Standard to which it pertains, shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
[391-3-1-.02(3)(a)]

8.27 Internal Combustion Engines

- 8.27.1 For diesel-fired internal combustion engine(s) manufactured after April 1, 2006 or modified/reconstructed after July 11, 2005, the Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart III - "Standard of Performance for Stationary Compression Ignition Internal Combustion Engines." Such requirements include but are not limited to:
[40 CFR 60.4200, 391-3-1-.02(8)(b)77]

Title V Permit Amendment

- a. Equip all emergency generator engines with non-resettable hour meters in accordance with Subpart III.
 - b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division in accordance with Subpart III.
 - c. Conduct engine maintenance prescribed by the engine manufacturer in accordance with Subpart III.
 - d. Limit non-emergency operation of each emergency generator to 100 hours per year in accordance with Subpart III. Non-emergency operation other than maintenance and readiness testing is prohibited for engines qualifying as “emergency generators” for the purposes of Ga Rule 391-3-1-.02(2)(mmm).
 - e. Maintain any records in accordance with Subpart III
 - f. Maintain a list of engines subject to 40 CFR 60 Subpart III, including the date of manufacture.[391-3-1-.02(6)(b)]
- 8.27.2 The Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - “General Provisions” and 40 CFR 60 Subpart JJJJ - “Standard of Performance for Stationary Spark Ignition Internal Combustion Engines,” for spark ignition internal combustion engines(s) (gasoline, natural gas, liquefied petroleum gas or propane-fired) manufactured after July 1, 2007 or modified/reconstructed after June 12, 2006.
[40 CFR 60.4230, 391-3-1-.02(8)(b)79]
- 8.27.3 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR 63 Subpart A - “General Provisions” and 40 CFR 63 Subpart ZZZZ - “National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.”

For diesel-fired emergency generator engines defined as “existing” in 40 CFR 63 Subpart ZZZZ (constructed prior to June 12, 2006 for area sources of HAP, constructed prior to June 12, 2006 for <500hp engines at major sources, and constructed prior to December 19, 2002 for >500hp engines at major sources of HAP), such requirements include but are not limited to:

[40 CFR 63.6580, 391-3-1-.02(9)(b)118]

- a. Equip all emergency generator engines with non-resettable hour meters in accordance with Subpart ZZZZ.
- b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division in accordance with Subpart ZZZZ.
- c. Conduct the following in accordance with Subpart ZZZZ.
 - i. Change oil and filter every 500 hours of operation or annually, whichever comes first
 - ii. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first and replace as necessary
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary.
- d. Limit non-emergency operation of each emergency generator to 100 hours per year in accordance with Subpart ZZZZ. Non-emergency operation other than maintenance and readiness testing is prohibited for engines qualifying as “emergency generators” for the purposes of Ga Rule 391-3-1-.02(2)(mmm).
- e. Maintain any records in accordance with Subpart ZZZZ
- f. Maintain a list of engines subject to 40 CFR 63 Subpart ZZZZ, including the date of manufacture.

8.28 Boilers and Process Heaters

- 8.28.1 If the facility/site is an area source of Hazardous Air Pollutants, the Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - “General Provisions” and 40 CFR 63 Subpart JJJJJJ - “National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial and Institutional Boilers.”
[40 CFR 63.11193]
- 8.28.2 If the facility/site is a major source of Hazardous Air Pollutants, the Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - “General Provisions” and 40 CFR 63 Subpart DDDDDD - “National Emission Standards for

Title V Permit Amendment

Georgia-Pacific Wood Products LLC – Warrenton Plant

Permit No.: 2421-301-0003-V-03-2

Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.”
[40 CFR 63.7480]