Facility Name:	Huber Engineered	Woods, LLC
City:	Commerce	
County:	Jackson	
AIRS #:	04-13-15700014	
	Application #:	TV-47180
Date Ap	plication Received:	May 4, 2017
	Permit No:	2493-157-0014-V-4-0
D	D. '. E. '	D. '. 1

Program	Review Engineers	Review Managers
SSPP	Susan Jenkins	Heather Brown
ISMU	Anna Gray	Dan McCain
SSCP	Daniel Slade	Farhana Yasmin
Toxics	N/A	N/A
Permitting P	rogram Manager	Eric Cornwell

Introduction

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

I. Facility Description

- A. Facility Identification
 - 1. Facility Name: Huber Engineered Woods, LLC
 - 2. Parent/Holding Company Name

J.M. Huber Corporation

3. Previous and/or Other Name(s)

J.M. Huber Corporation – 1988 to 2006 Huber Engineered Woods, LLC – 2006 to Present

4. Facility Location

1442 Highway 334, Commerce, Jackson County, Georgia 30529

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

The facility is located in a county designed as attainment or unclassifiable for all applicable National Ambient Air Quality Standards. The facility is located in a county deemed to be contributing to Atlanta's ozone nonattainment per Georgia Rule 391-3-1-.03(8)(e).

B. Site Determination

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

C. Existing Permits

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

Table 1: List of Current Permits, Amendments, and Off-Permit Changes					
Permit Number and/or	Date of Issuance/	Purpose of Issuance			
Off-Permit Change	Effectiveness				
2493-157-0014-V-03-0	11/15/2012	Title V Renewal			
2493-157-0014-V-03-1	10/4/2013	Title V Administrative Amendment: Correct			
		typographical error in Condition 5.2.12.			
Off-Permit Change	8/13/2015	Like-kind replacement of baghouse BH04.			

Fable 1: List of Current Permits, Amendments, and Off-Permit Changes					
Permit Number and/or	Date of Issuance/	Purpose of Issuance			
Off-Permit Change	Effectiveness				
2493-157-0014-V-03-2	2/5/2016	<u>502(b)(10)</u> Permit: Authorizes upgrade to existing board conveyor, trim and grade, and sanding operations. HEW plans to decouple the sawing operations from the edging operations within the trim and grade process. The emissions from the existing tongue and groove operations will be routed to either existing baghouse BH05 or new baghouse BH04A.			
2493-157-0014-V-03-3	2/9/2018	502(b)(10) Permit: Authorizes replacement of			
		radially discharged baghouse BH05 with a non-			
		radially discharging baghouse BH05A.			

D. Process Description

1. SIC Codes(s): 2493

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

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

2. Description of Product(s)

The facility produces oriented strand board (OSB).

3. Overall Facility Process Description

Green End Processing

Green end processing at the facility includes green wood storage, debarkers, cut-to-length saws, flakers, wet flake storage, and wet flake metering bins. The debarked logs pass directly from the debarker via a transfer conveyor to the strander systems which then convert the logs into wood strands. The strands are then conveyed to wet storage bins that meter the strands to wet screens. There are two complete in-line strander systems from the debarker infeed to the strander outfeeds. Wet wood fuel from the debarkers is stored as fuel for the Wellons unit. This processing step is included in Attachment B of the Title V Renewal Permit.

Wellons Unit

A Wellons fixed-grate wood-fired furnace (referenced as "Wellons unit" ID No. WBNR) supplies direct-fired and indirect-fired heat energy for the processes at the Commerce mill. The direct-fired burners are capable of accommodating onsite generated materials (including wet wood fuel from the debarkers, residual wood-waste (fines and sander dust recycled from the process), and unburned fuel collected in the WESPs). The indirect-fired burners are capable of accommodating natural gas.

The heat energy from the direct-fired burners is sent to the rotary strand dryers and to the thermal oil heat transfer system. The thermal oil heat transfer system is used to provide heat energy to the board press. The indirect-fired burner is used to provide additional heat energy to the thermal oil transfer system.

The Wellons unit exhausts through the rotary strand dryers.

Rotary Strand Drying

The wet (or green) strands and wood fines are routed from the metering bins to one of three green rotary dryers (referenced as "dryers", ID Nos. DRY1, DRY2, and DRY3) which operate in parallel. After drying, the strands and wood fines are conveyed to the flake screening bins. The gases from the dryers are ducted to one of three wet electrostatic precipitators (ID Nos. WES1, WES2, and WES3) to control particulate matter (PM, PM_{10} , and $PM_{2.5}$) emissions. DRY1 is ducted to WES1, DRY2 is ducted to WES2, and DRY3 is ducted to WES3. The exhaust gases from the three WESPs are transferred to a common manifold. From this manifold, the gases are routed to the regenerative thermal oxidizers RTOs with ID Nos. HRTO, SRTO, and PRTO to control PM, PM_{10} , $PM_{2.5}$, carbon monoxide (CO), volatile organic compounds (VOC) and hazardous air pollutant (HAP) emissions. HEW typically operates two of the three RTOs at one time but requests the flexibility to operate all RTOs simultaneously.

Flake Screening Bin and Blender

After the strands and wood fines leave the dryers they enter one of three screening bins. One screening bin separates the fines and oversized pieces of wood from the strands that will make up the core of the OSB and the other two screening bins separate the fines and oversized pieces of wood from the strands that will make up the two surface layers. The fines are sent to the dry fuel storage silo where they will eventually be fed into the Wellons unit as fuel. The oversized pieces are either reclaimed as process material or as fuel for the Wellons unit.

Next, the dry wood strands travel to the blenders where resin is added via an atomizer to ensure optimal coating. The resonated (or coated) wood strands are transferred to dry bins which serve the forming line. Emissions from the screening and blending operations are vented through ductwork to baghouse BH01.

Forming and Mat Reject Operations

The resonated wood strands from the dry bins are transported to the forming line where they are separated into distribution bins. The resonated wood strands are dropped onto the conveyor in layers. The bottom layer is dropped onto the belt directly, lengthwise or parallel to the belt, and will make up one face of the board. Core layer strands are layered cross-wise or perpendicular to

the belt. The last layer is the top layer and will make up the other face of the board, dropped lengthwise similar to the first face layer.

After all of the layers are dropped onto the mat forming line, a saw moves along the line and cuts the continuous section of board into 25 foot long segments, referred to as master mats. A screen is pulled under each master mat to provide support until the mat exits the press. Should an operator need to reject a mat, there is a retractable section of the line that opens allowing the mat to fall prior to its placement on a screen. The mats that are rejected are either recycled back to the forming bins for reuse or burned as fuel in the Wellons furnace.

Emissions from the forming area are vented through the forming baghouse (BH23) for PM, PM_{10} , and $PM_{2.5}$ control.

Pressing

The pressing step is a batch process. This process consists of five main areas: the acceleration belt, pre-loader, loader, board press, and unloader. During pressing, the elevated temperatures cause the strands and binding resin to produce off-gases, including VOC. Off-gases accumulating within the press enclosure are exhausted via a fan to downstream treatment equipment. A portion of these off-gases are produced during the pressing cycle and a portion during the press unloading cycle. The pre-loader, unloader, and press are enclosed by a *wood products enclosure*, which has a design capture efficiency of one hundred (100) percent. The *enclosure* is designed such that all emission points are contained and are located a sufficient distance from any natural draft openings.

For emission control, the gases captured by the wood products enclosure are conveyed to RTO identified as DRTO for PM, PM_{10} , $PM_{2.5}$, CO, VOC and HAP removal prior to discharge to the atmosphere.

Finishing and Shipping

From the press unloader system, individual master panels are fed to the finishing end through a series of conveyors. The finishing process begins as the master mats exit the unloader onto the conveyor leading to the trimming saws. While on the conveyor, a density check is performed along the master mat and any areas with low density are marked with a small spot of ink. After the density check, the trim saw trims the edges and cuts the master mat to varying sizes based on customer specifications. As the boards leave the trim saw, they are sanded and or tongue and grooved for specialty applications. After all sanding, the boards receive a brand and stamp. Machinery stacks the boards for packaging before the edges are sealed to prevent the absorption of water. The coating is completed in enclosed booths equipped with air filters that vent inside the building. After edge sealing, the boards are sent to packaging where they are shipped via transport truck or rail.

The emissions from boarding trimming and finishing, sanding, and tongue and groove stations are controlled by baghouses BH04A, BH05, and/or BH05A. The paint booth emissions are captured inside the booth and vented through filters into the building.

Utilities

There is a 225-hp (167 kW) diesel fire pump situated next to a fire water reservoir at the site. There is also one 600 hp (447 kW) diesel-fired emergency generator on site to provide critical power in the event of a power failure. In addition, a propane tank is located southeast of the dryer RTOs to provide propane for mill equipment, such as forklifts.

Process Storage Tanks

The facility operates resin storage tanks, resin bulk containers, waste storage tanks, a release agent storage tank, release agent mix tank, and a large propane storage tank. The emissions from these tanks are minimal due to the low vapor pressure (< 1 psia) of the stored materials. All of the tanks have fixed roofs.

4. Overall Process Flow Diagram

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

E. Regulatory Status

1. PSD/NSR

Huber Engineered Woods, LLC ("HEW") is not classified as one the 28 named source categories in 40 CFR 52.21(b). Therefore the PSD major source emissions threshold is 250 tons per year of a regulated NSR pollutant. HEW is an existing PSD major source for CO, nitrogen oxides (NOx), VOCs, total PM, total PM₁₀, and total PM_{2.5} emissions.

Emissions of total PM, total PM_{10} , total $PM_{2.5}$, NOx, CO, and VOC are limited by PSD/BACT from the common exhaust of the Wellons unit and dryers and the unique exhaust point from the board press. Emissions of total PM, total PM_{10} , total $PM_{2.5}$, and VOC are limited by PSD/BACT from the common exhaust of the flake screening and blending operation, forming operation, trim and grade equipment, and sanding and tongue and groove equipment, each.

HEW operates under a PSD Avoidance limit for emissions of sulfur dioxide (SO₂) by limiting the amount of accelerant (i.e., ammonium sulfate accelerant) used in the blender.

2. Title V Major Source Status by Pollutant

Table 2 summarizes the Title V major source status of applicable pollutants.

Table 2: Title V Major Source Status						
	Is the	If emitted, what is the facility's Title V status for the pollutant?				
Pollutant	Pollutant Emitted?	Major Source Status	Major Source Requesting SM Status	Non-Major Source Status		
PM	\checkmark	✓ (~177 tpy)				
PM_{10}	\checkmark	✓ (~177 tpy)				

Table 2: Title V Major Source Status						
	Is the	If emitted, what is the facility's Title V status for the pollutant?				
Pollutant	Pollutant Emitted?	Major Source Status	Major Source Requesting SM Status	Non-Major Source Status		
PM _{2.5}	\checkmark			✓ (~66 tpy)		
SO ₂	\checkmark			✓ (~37 tpy)		
VOC	\checkmark	✓ (~831 tpy)				
NO _x	\checkmark	✓ (~730 tpy)				
СО	\checkmark	✓ (~333 tpy)				
TRS						
H_2S						
Individual HAP	✓	✓ (~98 tpy)				
Total HAPs	\checkmark	✓ (~190 tpy)				

3. MACT Standards

HEW is subject to 40 CFR 63 Subpart DDDD – National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products and 40 CFR 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

4. Program Applicability (AIRS Program Codes)

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

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

None applicable.

B. Applicable Rules and Regulations

The facility is subject to all applicable provisions of 40 CFR 63 Subpart A – *General Provisions*, and 40 CFR 63 Subpart DDDD – *Plywood and Composite Wood Products*.

C. Compliance Status

Not applicable.

D. Permit Conditions

Table 3 provides an overview of permit conditions in Section 2 of HEW's Title V Renewal Permit.

Table 3: Section 2 Permit Conditions					
New Permit	Existing Permit Description				
Condition No.	Condition No.				
2.2.1	2.2.1	No change: Establishes 40 CFR 63 Subpart A as an			
		applicable requirement.			
2.2.2	2.2.2	No change: Establishes 40 CFR 63 Subpart DDDD			
		as an applicable requirement.			

III. Regulated Equipment Requirements

A. Equipment List for the Process

The equipment list is updated to clarify which emission units exhaust through which control devices per HEW's Title V Renewal Permit Application. This update in no way modifies existing requirements.

Table 4: Significant Emissions Units						
Emission Units		Specific Limitati	Air Pollution Control Devices			
Group ID	Emission Unit ID No.	Description	Applicable Requirements/ Standards	Corresponding Permit Conditions	ID No.	Description
DRYR	DRY1 DRY2 DRY3	Rotary strand dryers	40 CFR 52.21 40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD 391-3-102(2)(b) 391-3-102(2)(e)	3.2.1, 3.3.9, 3.3.15, 3.3.17, 3.3.18, 3.3.19, 3.3.20, 3.4.1, 3.4.2, 3.5.2, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.6, 4.2.8, 5.2.1, 5.2.2, 5.2.4, 5.2.5, 5.2.10, 5.2.12, 5.2.13, 5.2.14, 6.1.7, 6.2.6, 6.2.7, 6.2.8, 6.2.9, 6.2.10, 6.2.12, 6.2.13, 6.2.14, 6.2.15	WES1 WES2 WES3 SRTO HRTO PRTO	WESP WESP WESP RTO RTO RTO
	SYS1	Flake Screening, Bin and Blending, and Weigh Belt	40 CFR 52.21 40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD 391-3-102(2)(b) 391-3-102(2)(e)	3.3.11, 3.3.17, 3.3.18, 3.4.1, 3.4.2, 3.5.1, 3.5.2, 4.2.1, 5.2.3, 5.2.6, 5.2.7, 5.2.10, 5.2.16, 6.1.7, 6.2.8, 6.2.13, 6.2.14	BH01	Baghouse
WBNR	WBNR	Wellons fixed grate wood burner and thermal oil heat transfer system	40 CFR 52.21 40 CFR 60, Subpart A 40 CFR 60, Subpart Db 40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD 391-3-102(2)(d) 391-3-102(2)(g)	3.2.3, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.9, 3.3.17, 3.3.18, 3.3.19, 3.3.20, 3.4.3, 3.4.4, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.6, 4.2.8, 5.2.2, 5.2.3, 5.2.10, 5.2.11, 5.2.12, 5.2.13, 5.2.14, 6.1.7, 6.2.1, 6.2.2, 6.2.4, 6.2.5, 6.2.8, 6.2.13, 6.2.14	N/A ¹	N/A
SYS23 Forming and Mat Reject 40 CFR 52.21 40 CFR 63, Su 40 CFR 63, Su 391-3-102(2) 391-3-102(2)		40 CFR 52.21 40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD 391-3-102(2)(b) 391-3-102(2)(e)	3.3.12, 3.3.17, 3.3.18, 3.4.1, 3.4.2, 3.5.1, 3.5.2, 4.2.1, 5.2.3.b, 5.2.6, 5.2.7, 5.2.10, 5.2.17, 6.1.7, 6.2.8, 6.2.13, 6.2.14	ВН23	Baghouse	
BDFN	ВР	Board Press	40 CFR 52.21 40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD 391-3-102(2)(b) 391-3-102(2)(e)	3.2.2, 3.2.4, 3.2.5, 3.3.10, 3.3.15, 3.3.17, 3.3.18, 3.3.19, 3.3.21, 3.4.1, 3.4.2, 3.5.2, 4.2.1, 4.2.3, 4.2.5, 4.2.6, 4.2.7, 4.2.9, 4.2.10, 4.2.11, 5.2.2, 5.2.2, 5.2.4, 5.2.5, 5.2.10, 5.2.15, 6.1.7, 6.1.7, 6.2.6, 6.2.7, 6.2.8, 6.2.9, 6.2.10, 6.2.12, 6.2.13, 6.2.14, 6.2.15	DRTO	RTO

Table 4: Significant Emissions Units						
	Emission	Units	Specific Limitations/Requirements		Air Pollution Control Devices	
Group ID	Emission Unit ID No.	Description	Applicable Requirements/ Standards	Corresponding Permit Conditions	ID No.	Description
	SYS4	Board Trimming and Finishing	40 CFR 52.21 40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD 391-3-102(2)(b) 391-3-102(2)(e)	3.3.13, 3.3.17, 3.3.18, 3.4.1, 3.4.2, 3.5.1, 3.5.2, 4.2.1, 4.2.12, 5.2.3, 5.2.8, 5.2.10, 5.2.18, 6.1.7, 6.2.8, 6.2.13, 6.2.14	BH04	Baghouse
	SYS5	Sanding and Tongue and Groove	40 CFR 52.21 40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD 391-3-102(2)(b) 391-3-102(2)(e)	3.3.14, 3.3.17, 3.3.18, 3.4.1, 3.4.2, 3.5.1, 3.5.2, 4.2.1, 4.2.12, 4.2.13, 5.2.3, 5.2.3, 5.2.3, 5.2.6, 5.2.7, 5.2.8, 5.2.10, 5.2.18, 5.2.19, 6.1.7, 6.2.8, 6.2.13, 6.2.14, 6.2.16	BH04, and/or BH05, and/or BH05A	Baghouse Baghouse Baghouse
COAT	IA ES	Ink applicator Edge Sealing	40 CFR 52.21 40 CFR 63, Subpart A 40 CFR 63, Subpart DDDD 391-3-102(2)(b) 391-3-102(2)(e)	3.3.17, 3.3.18, 3.3.19, 3.3.22, 3.4.1, 3.4.2, 6.1.7.b.i, 6.2.11, 6.2.13, 6.2.14	N/A	N/A
GEP	GEP	Green end painting operations This unit does not exist at the facility. This unit is removed from Title V Renewal Permit	391 3 1 .02(2)(b) 391 3 1 .02(2)(e)	N/A	N/A	N/A
EG	EG	Emergency Generator	40 CFR 52.21 40 CFR 60 Subpart A 40 CFR 60 Subpart IIII 40 CFR 63 Subpart A 40 CFR 63 Subpart ZZZZ 391-3-102(2)(b) 391-3-102(2)(g)	3.2.6, 3.3.6, 3.3.16, 3.4.1, 3.4.4, 5.2.9, 6.1.7, 6.2.3	N/A	N/A
FP	FP	Fire Pump	40 CFR 52.21 40 CFR 63 Subpart A 40 CFR 63 Subpart ZZZZ 391-3-102(2)(b) 391-3-102(2)(g)	3.2.6, 3.3.6, 3.3.7, 3.3.8, 3.3.16, 3.4.1, 5.2.9, 6.1.7, 6.2.3	N/A	N/A

*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.

1. The Wellons unit exhausts through the dryer WESPs and RTOs, except during a bypass situation.

B. Equipment & Rule Applicability

A Review of Permit Amendments and Off-Permit Changes Since Issuance of Last Renewal

Title V Administrative Amendment 2493-157-0014-V-03-1 (based on App # 21800) was issued on October 4, 2013. HEW requested correction of a typographical error in Permit Condition No. 5.2.12. The QA/QC requirements of 40 CFR 64 (CAM) are specified in this permit condition. The language in question is *"The minimum operating power is established during performance tests conducted at least once every 24 months"*. This statement contains a typographical error and appears to be a "cut and paste" of the wrong language both in the existing permit and in the original PSD permit amendment. The correct QA/QC requirement should be written as follows: *"The minimum power is established in accordance with Permit Condition 4.2.9"*. Permit Condition No. 4.2.9 specifies the frequency of establishing the WESP's CAM parameters once the requirements of existing Permit Condition No. 4.2.4 are triggered.

An Off-Permit Change approval (based on App# 23425) was issued by the Division on August 13, 2015 for a like-kind replacement of baghouse BH04.

A 502(b)(10) Permit No. 2493-157-0014-V-03-2 (based on App# 23530) was issued by the Division on February 5, 2016. This Permit Amendment authorized the following:

- Upgrade to existing board conveyor, trim and grade, and sanding operations.
- Decouple the sawing operations from the edging operations within the trim and grade process.
- The emissions from the existing tongue and groove operations will be routed to either existing baghouse with ID No. BH05 or new baghouse BH04A.

The Division learned that the replacement of baghouse BH04 would be the replacement of a radially discharge baghouse with a non-radial discharge baghouse. Thus, the Division incorporated testing requirements for emissions of total PM, total PM_{10} , and total $PM_{2.5}$. New baghouse BH04A has a higher design volume flow rate in order to allow for ventilation of additional finishing operations.

Issuance of a 502(b)(10) Permit No. 2493-157-0014-V-03-3 (based on App # 26261) was issued by the Division on February 9, 2018. This Permit Amendment will authorize the replacement of baghouse BH05 with a new baghouse denoted as BH05A. The baghouse replacement will involve replacing a radially discharging baghouse with a non-radial discharging baghouse. The Division has incorporated testing requirements for emissions of total PM, total PM₁₀, and total PM_{2.5}.

FEDERAL REGULATIONS

40 CFR 52.21 – PSD/BACT Requirements: HEW was issued a PSD permit amendment in November 2011 authorizing an increase in production and an unlimited use of resins containing melamine-urea-phenol-formaldehyde ("MUPF"). HEW is authorized use of resins containing MUPF, methylene diphenyl di-isocyanate ("MDI"), and/or phenol formaldehyde ("PF"). Table 6 summarizes the PSD/BACT requirements.

Table 6 Summary of PSD – BACT Emissions Standards					
Emissions Unit	Control	Stack ID	Pollutant	PSD/BACT Standard, Per Stack	
	Device	No.		ID	
Wellons unit Rotary Strand Dryers	WES1 WES2 WES3 SRTO HRTO PRTO	S01 (SRTO) S02 (HRTO) S03 (PRTO)	Total PM (filterable and condensable)	0.432 lb/ODT not to exceed 21.60 lb/hr This standard applies to all three BTO exhausts on a combined basis	
			Total PM ₁₀ (filterable and condensable)	0.432 lb/ODT not to exceed 21.60 lb/hr This standard applies to all three RTO exhausts on a combined basis.	
			PM _{2.5} including all condensable PM	10.21 lb/hr This standard applies to all three RTO exhausts on a combined basis.	
			NOx	2.85 lb/ODT not to exceed142.55 lb/hrThis standard applies to all threeRTO exhausts on a combined basis.	
			СО	1.29 lb/ODT not to exceed64.30 lb/hrThis standard applies to all three	
			VOC	RTO exhausts on a combined basis. 0.858 lb/ODT not to exceed 42.89 lb/hr This standard applies to all three	
				RTO exhausts on a combined basis.	
		S04	VOC	90% destruction efficiency4.28 lb/hr as a 1-hr NO2 Modelingemission limit	
			NO ₂	This standard applies to all three RTO exhausts on a combined basis.	
			Total PM (filterable and condensable)	0.132 lb/MSF	
Board Press	DRTO		Total PM ₁₀ (filterable and condensable)	0.132 lb/MSF	
			PM _{2.5} including all condensable PM	0.0501 lb/MSF	

Table 6 Summary of PSD – BACT Emissions Standards					
Emissions Unit	Control	Stack ID	Pollutant	PSD/BACT Standard, Per Stack	
	Device	No.		ID	
			NOx	0.297 lb/MSF	
			СО	0.149 lb/MSF	
			VOC	0.132 lb/MSF	
			VOC	90% destruction efficiency	
			NO ₂	0.686 lb/hr as a 1-hr NO ₂ NAAQS Modeling emission limit	
			Total PM (filterable and condensable)	0.0038 gr/scf	
Flake Screening and Blending Operation	BH01	S05	Total PM ₁₀ (filterable and condensable)	0.0038 gr/scf	
(SYS1)			PM _{2.5} including all condensable PM	3.17E-04 gr/scf	
			VOC	0.229 lb/MSF	
Forming Operation (SYS23)	BH23	S06	Total PM (filterable and condensable)	0.0038 gr/scf	
			Total PM ₁₀ (filterable and condensable)	0.0038 gr/scf	
			PM _{2.5} including all condensable PM	3.17E-04 gr/scf	
			VOC	0.11 lb/MSF	
			Total PM (filterable and condensable)	0.0038 gr/scf	
Trim and Grade Equipment	BH04A	S07	Total PM ₁₀ (filterable and condensable)	0.0038 gr/scf	
(5154)			PM _{2.5} including all condensable PM	3.17E-04 gr/scf	
			VOC	0.165 lb/MSF	
			Total PM (filterable and condensable)	0.0038 gr/scf	
Sanding and Tongue & Groove	BH04A or BH05 or	S08(BH04A) S011 (BH05	Total PM ₁₀ (filterable and condensable)	0.0038 gr/scf	
(SYS5)	вноза	or BH05A)	PM _{2.5} including all condensable PM	3.17E-04 gr/scf	
			VOC	0.060 lb/MSF	
Utilities, FP and EG	N/A	S09 S10	Limit the operation of each engine for the purposes of testing and maintenance to the hours between 8:00 am and 5:00 pm for purposes of compliance with the 1-hr NO ₂ NAAOS modeling.		

Table 6 Summary of PSD – BACT Emissions Standards				
Emissions Unit	Control	Stack ID	Pollutant	PSD/BACT Standard, Per Stack
	Device	No.		ID
COAT	N/A	N/A	No PSD/BACT emiss	sions or work practice standards apply
			to the coating operation	ons and ink application systems.

40 CFR 60 Subpart Db – **Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units:** A Wellons fixed-grate wood-fired furnace (referenced as "Wellons unit" ID No. WBNR) supplies direct-fired and indirect-fired heat energy for the processes at the Commerce mill. The Wellons unit has a maximum heat input rate of 150 MMBtu/hr and the unit was constructed in 1988. The Wellons unit exhausts through the rotary strand dryers.

The direct-fired burners are capable of accommodating onsite generated materials (including wet wood fuel from the debarkers and residual wood-waste (fines and sander dust recycled from the process), and unburned fuel collected in the WESPs). In addition, HEW combusts very small amounts of diesel fuel mixed with fines in the Wellons unit. The direct-fired burners have a combined maximum heat input of 120 MMBtu/hr.¹ The indirect-fired burners are capable of accommodating natural gas and the combined maximum heat input of the indirect-fired capacity is approximately 30 MMBtu/hr.²

The heat energy from the direct-fired burners is sent to the rotary strand dryers for direct contact drying of wood strands or flakes. The thermal oil heat transfer system is used to heat thermal oil for the pressing operation and ancillary processes such as wax temperature control. The thermal oil heat transfer system receives indirect-fired heat energy inside the Wellons ductwork and a dedicated induced draft fan pulling hot gases over the heat exchanger provide heat for the thermal oil system. Heating thermal oil is fed back to the press and to the ancillary processes before continuing the cycle. The indirect-fired burner is used to provide additional heat energy to the thermal oil transfer system.

In accordance with the applicability definition and EPA applicability guidance, the Wellons unit is subject to the requirements of NSPS Db and the general provisions of 40 CFR 60 Subpart A.³

Table 7: NSPS Db Emission Standards for the Wellons Unit WBNR		
Legal Citation	Emission Standard	
40 CFR 60.42b – Std for SO ₂	No applicable standard because the Wellons unit is permitted, in part, to fire very low sulfur oil.	
<u>40 CFR 60.43b – Std for PM</u> 40 CFR 60.43b(c)(1)	0.10 lb PM/MMBtu, since the Wellons unit has an annual capacity factor greater than thirty (30) % for wood. The PM in this instance is the filterable PM portion.	

Table 7 summarizes the applicable emission standards of NSPS Db.

¹ Letter from HEW to Georgia EPD dated July 22, 2009.

² Letter from HEW to Georgia EPD dated July 22, 2009.

³ Letter from HEW to Georgia EPD dated July 22, 2009.

Table 7: NSPS Db Emission Standards for the Wellons Unit WBNR		
Legal Citation	Emission Standard	
40 CFR 60.43b(f)Visible emissions are limit to less than twenty (20)% minute average), except for one six-minute period per more than twenty-seven (27)% opacity.		
	These standards apply at all times, except during periods of startup, shutdown, and malfunction.	
40 CFR 60.44b(c) –	Oil and natural gas firing are limited to a 10% annual capacity	
Std for NOx	factor in the Wellons unit for avoidance of a NOx emissions limit.	

40 CFR 60 Subpart IIII-"Standards for Stationary Compression Ignition Internal Combustion Engines": This subpart applies to stationary compression ignition internal combustion engines for which construction commences after July 11, 2005 and which are manufactured after April 11, 2006, or are certified fire pump engines manufactured after July 1, 2006. The emergency fire pump located at this facility was manufactured in November 2006 and installed shortly thereafter at HEW. The fire pump engine manufacturer certified that the fire pump complies with the NSPS IIII requirements. The NSPS IIII requirements include firing only fuel with a sulfur content of 15 ppm or less per 40 CFR 60.4207(b).

HEW's emergency engine generator was manufactured in 1989 which is before the NSPS IIII applicability date of July 11, 2005. Therefore, the emergency engine generator is not subject to the requirements of this subpart.

40 CFR 63 Subpart DDDD – "Plywood and Composite Wood Products (PCWP)": The HEW-Commerce Mill meets the definition of a *PCWP manufacturing facility* in 40 CFR 63.2231 and HEW-Commerce is a major source of hazardous air pollutants (HAPs).

Table 8 – PO	Table 8 – PCWP NESHAP Emission Standards/Work Practice Standards			
Group ID	Emission Unit ID No.	Emission Standards or Work Practice Standards		
Green	Green-End Processes	Not subject to the compliance options or work practice		
		standards specified in 40 CFR 63.2240 and 63.2241.		
DRYR	Rotary Strand Dryers ⁴	Per 40 CFR 63.2240(b):		
	DRY1			
	DRY2	Table 1B: Compliance options for add-on control		
	DRY3	systems:		
		The add-on control systems are the RTOs identified as		
		SRTO, HRTO, and PRTO. The add-on control system		
		requirements do not apply to the WESPs.		
		(1) Reduce emissions of total HAP, measured as THC		

Table 8 specifies the applicable emission standards/work practice standards:

⁴ The dryers at HEW meet the definition of *rotary strand dryer* per 40 CFR 63.2292, namely, *a rotary strand dryer means a rotary dryer operated by applying heat and used to reduce the moisture of wood strands used in the manufacture of oriented strandboard, laminated strand lumber, or other wood strand-based products. A rotary strand dryer is a process unit.*

Table 8 – PCWP NESHAP Emission Standards/Work Practice Standards				
Group ID	Emission Unit ID No.	Emission Standards or Work Practice Standards		
		(as carbon), by 90% or more. <i>This includes emissions of total HAP from the Wellons unit</i> . Title V Renewal Permit is updated to clarify this point of fact.		
		<u>Table 2 – Operating Requirements:</u> Relates to the maintenance of the 3-hour block average temperature of the control device above the minimum temperature established during the performance test.		
		40 CFR 63.2241-Work Practice Standards: No work practice standards apply for <i>rotary strand</i> <i>dryers</i> or Wellons unit.		
	Flake Screening and Blending SYS1	Not subject to compliance options or work practice standards specified in 40 CFR 63.2240 and 63.2241.		
WBNR	Wellons Unit	The dryers include the Wellons unit because this unit's exhaust stream is routinely used to direct fire process unit(s).		
		The emissions from the Wellons unit are added to those of the dryers to verify compliance with 40 CFR $63.2240(b)$. ⁵		
	Forming and Mat Reject SYS23	Not subject to compliance options or work practice standards specified in 40 CFR 63.2240 and 63.2241.		
BDFN	BP-Board Press ⁶	Per 40 CFR 63.2240(b): <u>Table 1B: Compliance options for add-on control</u> <u>systems:</u> (5) Reduce emissions of formaldehyde by 90% or more. <u>Table 2 – Operating Requirements:</u> Relates to the		
		 <u>Able 2</u> operating requirements. Relates to the maintenance of the 3-hour block average temperature of the control device above the minimum temperature established during the performance test. <u>40 CFR 63.2241-Work Practice Standards:</u> No work practice standards apply for <i>reconstituted wood product presses</i>. 		
	Board Trimming and Finishing	Not subject to compliance options or work practice		
	SYS4	standards specified in 40 CFR 63.2240 and 63.2241.		

⁵ Because fuel gases from the Wellons unit pass through the dryers and come in direct contact with the drying material, the emissions are regulated as dryer emissions according to this NESHAP. According to 40 CFR 63.7491(l), any boiler and process heater specifically listed as an affected source in another standard under 40 CFR part 63 will not be subject to 40 CFR 63 Subpart DDDDD (Boiler MACT).

⁶ The board press meets the definition of *reconstituted wood product press* in 40 CFR 63.2292.

Table 8 – PCWP NESHAP Emission Standards/Work Practice Standards			
Group ID	Emission Unit ID No.	Emission Standards or Work Practice Standards	
	Sanding and Tongue and Groove SYS5	Not subject to compliance options or work practice standards specified in 40 CFR 63.2240 and 63.2241.	
COAT	<u>Group 1 Miscellaneous Coating</u> <u>Operations</u> -Ink Application System -Edge Sealing and Other Paint Booth Activities ⁷	<u>40 CFR 63.2241(a) – Comply with Table 3 item 5:</u> Use non-HAP coatings as defined in 40 CFR 63.2292. A <i>non-HAP coating</i> means a coating with HAP contents below 0.1 percent by mass for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4), and below 1.0 percent by mass for other HAP compounds, per 40 CFR 63.2292.	

40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE MACT): The emergency generator and emergency fire pump are classified as emergency stationary RICE under Subpart ZZZZ and therefore subject to the RICE MACT. The fire pump engine is classified as a new emergency stationary RICE, with a site rating less than 500 hp. The fire pump engine must meet the requirements of the RICE MACT (i.e., 40 CFR 63.6590(c)) which allows the operation fire pump to comply with the requirements of 40 CFR 60 NSPS IIII as the alternative.

The emergency generator has an input rate of 600 brake hp and is classified as an existing emergency RICE. So, in accordance with 40 CFR 63.6590(b)(3), it is not required to meet the requirements of 40 CFR 63 Subparts A and ZZZZ.

STATE RULES

Avoidance of 40 CFR 52.21 for SO₂ Emissions: HEW-Commerce accepted an operational limit on the mass of accelerant (i.e., ammonium sulfate) used in conjunction with the use of MUPF resin in order to maintain plantwide SO₂ emissions below the 40 tpy PSD significant emissions rate as part of the facility's PSD Permit Amendment in 2011. The accelerant is applied in the blender. HEW assumes that ninety (90) percent of the accelerant used is present in the final product OSB. The other ten (10) percent is assumed to be burned in the Wellons unit as part of the OSB mat reject used as fuel. The operational limit is 151 tons of accelerant used during any consecutive twelve months which serves to limit SO₂ emissions from the Wellons unit. This material usage limit is carried over to HEW's Title V Renewal Permit.

Table 9 summarizes SO_2 emissions from each source and shows total emissions to be under 40 tpy.

⁷ Note: HEW cites an insignificant activity as "Surface Coating Hoods with VOC Emissions less than 5 tpy" in their Title V Renewal Permit Application. This activity is brought to Section 3 of the Permit and included in Equipment Group COAT.

Table 9: Summary of SO2 Emissions from HEW			
Source	Basis of SO ₂ Emission Factor	Potential SO ₂ Emissions (tpy)	
Wellons Unit	AP-42 for wood combustion	16.43	
Wellons Unit	 <u>Assume</u> -Max. MUPF resin usage per yr. -Max. sulfur content by weight of 24% in any accelerant used at the facility. -100% of the sulfur in the ammonium sulfate accelerant is converted to SO₂. -10% of accelerant usage ends up being combusted in the Wellons unit as part of the mat reject residue used as fuel. -limit accelerant usage to 151 tons per year 	7.34	
Rotary Strand	AP-42 Section 10.6 ⁸ .	3.07	
Dryers			
Board Press	AP-42 Table 10.6.1-5, 0.04 lb SO ₂ /MSF	12.48	
Utilities	AP-42 Tables 3.3-1 and 3.3-2 for diesel fuel oil.	0.42	
	Total	39.74	

Georgia Rule 391-3-1-.03(2): This state rule citation is used for the regulatory purpose as stated in Table 10.

Table 10 – Miscellaneous Regulatory Requirements				
Equipment	Pollutant	Purpose/Reason		
Equipment Group		For compliance with the Georgia Air		
DRYR, in this	Formaldehyde \leq 5.98 lb/hr	Toxics Guideline.		
case the rotary				
strand dryers	Phenol \leq 3.84 lb/hr	Established in Permit No. 2493-157-		
		0014-V-02-3 issued 11/10/11.		
Board Press BP,		For compliance with the Georgia Air		
in Equipment	Formaldehyde \leq 4.34 lb/hr	Toxics Guideline.		
Group BDFN, in				
this case the board	Phenol \leq 3.04 lb/hr	Established in Permit No. 2493-157-		
press enclosure		0014-V-02-3 issued 11/10/11.		

⁸ Reconstituted Wood Products – Waferboard Oriented Strandboard

Table 10 – Miscellaneous Regulatory Requirements				
Equipment	Pollutant	Purpose/Reason		
Board Press Wood Products Enclosure:				
01 11 / /1 1				

-Shall meet the design specification of the definition of *wood products enclosure* in 40 CFR 63.2292, or

-Achieve a capture efficiency greater than or equal to 95% of exhaust from the board press.

Operate the wood products enclosure directing emissions from the board press to the applicable RTO such that the RTO inlet static pressure is at least negative 1 inches of water column.

Georgia Rule 391-3-1-.02(2)(e) – **Particulate Emission from Manufacturing Operations:** Each equipment group noted in Table 4 is subject to a PM emission limit (expressed in lb/hr) that is based on a process weight input rate rule. The PM emission limit includes filterable and condensable.

Georgia Rule 391-3-1-.02(2)(b) – **Visible Emissions:** Each equipment group noted in Table 4 is subject to a to a visible emissions limit of forty (40) percent, unless a more stringent limit applies.

Georgia Rule 391-3-1-.02(2)(d) – Fuel-burning Equipment: The Wellons Unit (WBNR) is subject to this state rule which limits PM emissions and opacity. The Wellons has a heat input rating of 150 MMBtu/hr. Therefore, the Wellons unit is subject to a PM emission limit of approximately 0.13 lb/MMBtu. The opacity is limited to not greater than twenty (20) percent, except for one sixminute period per hour of not more than twenty-seven (27) percent opacity.

Georgia Rule 391-3-1-.02(2)(g) – **Sulfur Dioxide:** Georgia Rule (g) limits the fuel sulfur content to no more than 2.5 weight percent for fuel combusted in the Wellons unit (direct-fired burner and indirect-fired burner), fire pump engine, and emergency generator.

Avoidance of Georgia Rule 391-3-1-.02(2)(mmm): The fire pump engine (ID No. FP) and emergency generator (ID No. EG) avoid the NOx emission standard under Georgia Rule (mmm) as long as HEW operate each of these IC engines less than 200 hours during any consecutive twelve month period.

D. Permit Conditions

Table 11 provides an overview of permit conditions in Section 2 of HEW's Title V Renewal Permit.

Table 11: Section 3 Permit Conditions		
New Permit Condition No.	Existing Permit Condition No.	Description
3.2.1	3.2.1	Updated Condition – Clarified which equipment in the DRYR equipment group is subject to the emissions limits per the Georgia Air Toxics Guideline. This update is based on a review of the origin of this permit condition in 2011.

Table 11: Section 3 Permit Conditions			
New Permit	Existing	Description	
Condition	Permit		
No.	Condition		
	No.		
3.2.2	3.2.2	No change – Georgia Air Toxics Guideline for Board Press BP	
3.2.3	3.2.4	Updated Condition – Pertains to the types of onsite generated waste	
		that can be combusted in the Wellons unit WBNR. Clarified that	
		onsite wet wood (bark) and dry fines are also allowed to be	
		combusted in this unit.	
3.2.4	3.2.7	Legal citation change – For operation of a wood products enclosure	
		of capture device on the board press. Legal citation changed from	
		PCWP NESHAP to 391-3-102.	
3.2.5	3.2.14	No change – PSD Avoidance requirement for SO ₂ emissions in the	
		form of a facility-wide usage limit for accelerant.	
3.2.6	N/A	New condition – Operational restriction on the fire pump engine and	
		emergency generator to avoid the requirements of Georgia Rule 391-	
		3-102(2)(mmm).	
3.3.1	3.3.1	No change – Establishes 40 CFR 60 Subparts A and Db as an	
	3.3.2	applicable requirement for the Wellons unit.	
3.3.2	3.3.5	Updated Condition – The term <i>fuel oil</i> is replaced with <i>oil</i> as HEW	
		combusts deminimis amounts of diesel fuel in the Wellons unit. In	
		addition, NSPS Db uses the term <i>oil</i> rather than <i>fuel oil</i> .	
3.3.3	3.3.3	No change – Establishes PM emission limit per 40 CFR 60 Subpart	
		Db for the Wellons unit.	
3.3.4	3.3.4	No change – Establishes opacity requirement per 40 CFR 60 Subpart	
		Db for the Wellons unit.	
3.3.5	3.3.6	No change – Establishes NOx avoidance requirement per 40 CFR 60	
		Subpart Db for the Wellons unit.	
3.3.6	3.3.7	Updated Condition – Establishes 40 CFR 63 Subpart ZZZZ as an	
		applicable requirement for the fire pump engine and the emergency	
0.0.7	2.2.0	generator. Added Part 63 Subpart A as an applicable requirement.	
3.3.7	3.3.8	No change – Establishes 40 CFR Subparts A and IIII for the fire	
2.2.0	2.2.0	pump engine.	
3.3.8	3.3.9	Legal Citation is Updated – Existing legal citation is 40 CFR	
		60.42/(b). This citation appears to be a typographical error. The	
220	2.2.10	correct citation is 40 CFR 60.4207(b).	
3.3.9.a	3.2.10.a.1	No change – PSD/BACT requirement for PM/PM ₁₀ emissions from	
2201	2 2 10 - 11	Common exhaust of the wellons unit and the dryers.	
3.3.9.0	3.2.10.a.11	No change – PSD/BAC1 requirement for PM _{2.5} emissions from	
220 c	2 2 1 1 2	No. abanga DSD/DACT requirement for NOv aministry from	
5.5.9.0	5.2.11.a	NO CHAILSE – PSD/BACT requirement for NOX emissions from	
2201	2 2 12 2	No change DSD/DACT requirement for CO emissions from	
5.5.9.U	5.2.12.a	approximation and the Wallong unit and the drawers	
		common exhaust of the Wellons unit and the dryers.	

Table 11: Section 3 Permit Conditions			
New Permit	Existing	Description	
Condition	Permit		
No.	Condition		
	No.		
3.3.9.e	3.2.13.a	No change – PSD/BACT requirement for VOC emissions from	
		common exhaust of the Wellons unit and the dryers.	
3.3.9.f	3.2.15.a	No change – PSD/NAAOS Modeling requirement for 1-hour NO ₂	
		NAAOS for common exhaust of the Wellons unit and the dryers.	
3.3.10.a	3.2.10.b.i	No change – PSD/BACT requirement for PM/PM ₁₀ emissions from	
		the board press.	
3.3.10.b	3.2.10.b.ii	No change – PSD/BACT requirement for PM_{25} emissions from the	
		board press.	
3.3.10.c	3.2.11.b	No change – PSD/BACT requirement for NOx emissions from the	
		board press.	
3.3.10.d	3.2.12.b	No change – PSD/BACT requirement for CO emissions from the	
		board press.	
3.3.10.e	3.2.13.b	No change – PSD/BACT requirement for VOC emissions from the	
		board press.	
3.3.10.f	3.2.15.b	No change – PSD/NAAQS Modeling requirement for 1-hour NO ₂	
		NAAQS for the board press.	
3.3.11.a	3.2.10.c.i	No change – PSD/BACT requirement for PM/PM ₁₀ emissions from	
		flake screening and blending ID No. SYS1.	
3.3.11.b	3.2.10.c.ii	No change – PSD/BACT requirement for PM _{2.5} emissions from flake	
		screening and blending ID No. SYS1.	
3.3.11.c	3.2.13.c	No change – PSD/BACT requirement for VOC emissions from flake	
		screening and blending ID No. SYS1.	
3.3.12.a	3.2.10.d.i	No change – PSD/BACT requirement for PM/PM ₁₀ emissions from	
		forming and mat reject operations ID No. SYS23.	
3.3.12.b	3.2.10.d.ii	No change – PSD/BACT requirement for PM _{2.5} emissions from	
		forming and mat reject operations ID No. SYS23.	
3.3.12.c	3.2.13.d	No change – PSD/BACT requirement for VOC emissions from	
		forming and mat reject operations ID No. SYS23.	
3.3.13.a	3.2.10.e.i	No change – PSD/BACT requirement for PM/PM ₁₀ emissions from	
		trim and grade equipment ID No. SYS4.	
3.3.13.b	3.2.10.e.ii	No change – PSD/BACT requirement for PM _{2.5} emissions from trim	
		and grade equipment ID No. SYS4.	
3.3.13.c	3.2.13.e	No change – PSD/BACT requirement for VOC emissions from trim	
		and grade equipment ID No. SYS4.	
3.3.14.a	3.2.10.f.i	No change – PSD/BACT requirement for PM/PM ₁₀ emissions from	
		sanding and tongue & groove equipment ID No. SYS5.	
3.3.14.b	3.2.10.f.ii	No change – PSD/BACT requirement for PM _{2.5} emissions from	
		sanding and tongue & groove equipment ID No. SYS5.	
3.3.14.c	3.2.13.f	No change - PSD/BACT requirement for VOC emissions from	
		sanding and tongue & groove equipment ID No. SYS5.	

Table 11: Section 3 Permit Conditions							
New Permit	Existing	Description					
Condition	Permit						
No.	Condition						
	No.						
3.3.15	3.2.17	No change – PSD/BACT requirement for destruction efficiency of					
		VOC emissions from each RTO at the facility.					
3.3.16	3.2.16	No change – PSD NAAQS Modeling Limit for 1-hour NO ₂					
		regarding the operation of the fire pump engine and the emergency					
		generator.					
3.3.17	N/A	New Condition - Plywood MACT general requirement.					
3.3.18	N/A	New Condition – Plywood MACT general requirement.					
3.3.19	6.2.2	Updated Condition – Clarified which emission units apply.					
3.3.20	3.2.5	Updated Condition – PCWP NESHAP requirement for the rotary					
		strand dryers and Wellons unit.					
3.3.21	3.2.6	No change – PCWP NESHAP requirement for board press.					
3.3.22	3.3.10	Updated Condition – PCWP NESHAP work practice requirement					
		for coatings. Grouped all surface coating activities found in the					
		existing permit (including those in the Insignificant Activities					
		section) into one new Equipment Group COAT.					
3.4.1	3.4.1	No change – Georgia Rule 391-3-102(2)(b) requirements.					
3.4.2	3.4.2	No change – Georgia Rule 391-3-102(2)(e) requirements.					
3.4.3	3.4.3	No change – Georgia Rule 391-3-102(2)(d) requirements.					
3.4.4	3.4.4	No change – Georgia Rule 391-3-102(2)(g) requirements.					
3.5.1	5.2.4	Updated Condition – Removed APCD ID numbers.					
3.5.2	6.2.1	Updated Condition – Routine maintenance and associated					
		recordkeeping.					
N/A	3.2.3	Deleted requirement-redundant with Section 6.1.7 of permit.					
N/A	3.2.9	Deleted requirement-redundant with Section 6.1.7 of permit.					

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

A. General Testing Requirements

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

Table 12 summarizes the updates to the general testing requirements.

Table 12: Section 4 – General Testing Permit Conditions						
New Permit	Existing	Description				
Condition	Permit					
No.	Condition					
	No.					
4.1.1	4.1.1	No Change				
4.1.2	4.1.2	No Change				
4.1.3.a	4.1.3.a	No Change-Method 1				
4.1.3.b	4.1.3.b	No Change-Method 2				
4.1.3.c	4.1.3.c	No Change-Method 3				
4.1.3.d	N/A	New Condition-Method 3B				
4.1.3.e	4.1.3.d	No Change-Method 4				
4.1.3.f	4.1.3.e	Updated Condition				
		-Added reference to Method 202				
		-Removed equipment references				
4.1.3.g	N/A	New Condition-Method 6				
4.1.3.h	4.1.3.g	Updated Condition				
		-Added Method 7E				
4.1.3.i	4.1.3.h	No Change-Method 9				
4.1.3.j	4.1.3.i	No Change-Method 10				
4.1.3.k	4.1.3.j	No Change-Method 18				
4.1.3.1	N/A	New Condition-Method 19				
4.1.3.m	4.1.3.k	No Change-Method 25 or 25A				
4.1.3.n	4.1.3.p	No Change-Method 25A				
4.1.3.0	4.1.3.f	Updated Condition				
		-Removed Method 5 for PM_{10} and $PM_{2.5}$				
		-Added Method 201 for PM ₁₀ and PM _{2.5}				
		-Added reference to Method 202				
4.1.3.p	4.1.3.q	Updated Condition				
		-Based on similar source subject to PCWP NESHAP				
4.1.3.q	4.1.3.0	No Change-Method 308				
4.1.3.r	4.1.3.n	No Change-Method 316				
4.1.3.s	4.1.3.m	No Change-Method 320				
4.1.3.t	N/A	New Condition -				
		-Based on similar source subject to PCWP NESHAP				
4.1.4	N/A	New Condition				

B. Specific Testing Requirements

FEDERAL REGULATIONS

40 CFR 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units: In accordance with the applicability definition and EPA applicability guidance, the Wellons unit is subject to the requirements of NSPS Db and the general provisions of 40 CFR 60 Subpart A. No additional testing requirements based on NSPS Db are imposed by this Title V Renewal Permit. Table 10 summarizes the testing results for the Wellons unit.⁹

Table 10 – NSPS Db Related Testing for Filterable PM per 40 CFR 60.8 and 40 CFR 60.46b(d)							
Test Date	NSPS Db	Approved Tested WESP Avg Total Power WESP Qu					
	Regulatory	Emission Rate	(Watts)	Temp (⁰ F)			
	Emission Limit						
02/20/2012	0.1 lb/MMBtu	0.039 lb/MMBtu	WESP1 = 1030.2	WESP1 = 154			
			WESP2 = 716.5	WESP2 = 155			
			WESP3 = 611.5	WESP3 = 156			
02/21/2012	0.1 lb/MMBtu	0.034 lb/MMBtu	WESP1 = 882.2	WESP1 = 154			
			WESP2 = 1194.5	WESP2 = 155			
			WESP3 = 1036.2	WESP3 = 156			

40 CFR 52.21 – PSD/BACT Requirements:

The existing PSD/BACT limits apply regardless of the type of resin used in the blenders. Verification of compliance with the various PSD/BACT limits via performance testing has not been triggered because HEW has not begun manufacturing OSB using MUPF resin.

40 CFR 63 Subpart DDDD – PCWP NESHAP: HEW conducted testing for purposes of the initial compliance demonstration for the PCWP NESHAP as summarized in Table 13.

HEW operates a *wood products enclosure* which has been determined to have a capture efficiency of approximately 100%, based on 2008 testing.

Table 13 – PCWP NESHAP Testing							
Test Data	Equipment/	RTO's					
1 est Date	Capacity						
	Wellons plus rotary strand dryers at approximately						
	42.0 ODT/hr, on a combined basis	SRTO: 1600 ⁰ F					
6/4/2010		HRTO: 1649 ⁰ F					
	Std: 90% Destruction Efficiency of THC	PRTO: 1590 ⁰ F					
	Division Approved Test Result: 91.243% to 98.5%						
	Board Press Enclosure						
	66.2 MSF/hr						
1/23/2008		$DRTO = 1625^{0}F$					
	Std. 90% Destruction Efficiency of Formaldehyde						
	Division Approved Test Result: 94.4%						

⁹ Testing required per Permit No. 2493-157-0014-V-02-3 issued November 10, 2011.

STATE RULES

Georgia Rule 391-3-1-.03(2):

<u>Georgia Air Toxics Guideline:</u> Emissions of formaldehyde and phenol are limited in HEW's existing permit for purposes of compliance with the Georgia Air Toxics Guideline. The existing testing requirements for the determination of formaldehyde and phenol emissions from the board press enclosure have not yet been triggered and are thus carried over to HEW's Title V Renewal Permit.

<u>Avoidance of 40 CFR 52.21 for Facility-Wide SO₂ Emissions:</u> Table 9 of this document clarifies the basis of computing the facility-wide SO₂ emissions. The Division incorporated a testing requirement for SO₂ emissions from the board press enclosure within 180 days of first using accelerant in the OSB manufacturing process as part of HEW's PSD permit amendment in 2011. As part of this testing requirement, the Division required that HEW use the Division-approved SO₂ emissions rate to verify the credibility that the accelerant usage along with other sources of potential SO₂ emissions is less than 40 tons per year. The Division incorporated this testing requirement in Title V Permit Renewal 2493-157-0014-V-03-0. HEW has yet to trigger the testing requirement.

The existing testing requirement is carried over to HEW's Title V Renewal Permit. In addition, the testing component of the existing requirement is separated from the requirement for HEW to verify that the Division approved tested emission rate from the board press enclosure along with the other sources of SO_2 have a potential to emit of less than 40 tons per year. The latter requirement is clarified to specify the criteria that needs to be triggered for the submittal of a written substantiation that the facility-wide SO_2 emissions are below 40 tons per year.

<u>Miscellaneous Testing Requirement – Existing Permit Condition No. 4.2.8</u>: HEW's existing Title V Permit does not require verification of compliance with the VOC destruction removal efficiency established for purposes of PSD/BACT. This conclusion is consistent with the PSD Permit Amendment that incorporated this requirement in 2011. Existing Permit Condition No. 4.2.8 establishes the criteria that must be triggered to require verification of compliance with the VOC destruction removal efficiency of each RTO. The existing criteria include the following:

- When the production rate from the rotary strand dryers (ID Nos. DRY1, DRY2, and DRY3) equal or exceed 48 ODT/hr, on a combined basis.
- When the production rate from the board press enclosure (ID No. BP) equals or exceeds 70 MSF/hr.
- If and when the Permittee intends to reduce the average RTO firebox temperature below 1500^{0} F.

This criteria is not an "absolute" mechanism for identifying when the Division might require testing of the VOC destruction removal efficiency. Therefore this existing permit condition is not carried over to the updated Title V Renewal Permit.

Permit Conditions: Table 14 summarizes Section 4.2 of the Title V Renewal Permit.

New Permit Condition No.Existing Permit Condition No.Description4.2.1N/ANew Condition: This condition establishes additional information to be included in subsequent test reports. This additional information will help the compliance program determine if and when additional testing is triggered.4.2.24.2.4Updated Condition: The testing scenario for the RTOs controlling the Wellons unit plus rotary strand dryers is incorporated as its own permit condition.4.2.34.2.4Updated Condition: The testing frequency for the RTOs controlling the Wellons unit plus rotary strand dryers and the board press enclosure is incorporated as its own permit condition.4.2.4N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure.4.2.64.2.6Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2 Dress enclosure.
Condition No.Condition No.4.2.1N/ANew Condition: This condition establishes additional information to be included in subsequent test reports. This additional information will help the compliance program determine if and when additional testing is triggered.4.2.24.2.4Updated Condition: The testing scenario for the RTOs controlling the Wellons unit plus rotary strand dryers is incorporated as its own permit condition.4.2.34.2.4Updated Condition: The testing frequency for the RTOs controlling the Wellons unit plus rotary strand dryers and the board press enclosure is incorporated as its own permit condition.4.2.4N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure.4.2.64.2.6Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2
4.2.1 N/A New Condition: This condition establishes additional information to be included in subsequent test reports. This additional information will help the compliance program determine if and when additional testing is triggered. 4.2.2 4.2.4 Updated Condition: The testing scenario for the RTOs controlling the Wellons unit plus rotary strand dryers is incorporated as its own permit condition. 4.2.3 4.2.4 Updated Condition: The testing frequency for the RTOs controlling the Wellons unit plus rotary strand dryers and the board press enclosure is incorporated as its own permit condition. 4.2.4 N/A New Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers. 4.2.5 N/A New Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers. 4.2.5 N/A New Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure. 4.2.6 4.2.6 Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2
4.2.2A.2.4Updated Condition: incorporated as its own permit condition.4.2.34.2.4Updated Condition: incorporated as its own permit condition.4.2.4N/AUpdated Condition: incorporated as its own permit condition.4.2.5N/ANew Condition: Requires computation permits to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.64.2.6Updated Condition: Condition Pertains to the common exhaust of the board press enclosure.4.2.64.2.6Updated Condition: Condition pertains to the compone exhaust of the board press enclosure.
4.2.24.2.4Updated Condition: The testing scenario for the RTOs controlling the Wellons unit plus rotary strand dryers is incorporated as its own permit condition.4.2.34.2.4Updated Condition: The testing frequency for the RTOs controlling the Wellons unit plus rotary strand dryers and the board press enclosure is incorporated as its own permit condition.4.2.4N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure.4.2.64.2.6Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2 up to the test results for NO2 to be taken if the Division approved test results for NO2 up to be atten if the Division approved test results for NO2 to be taken if the Division approved test results for NO2 to be taken if the Division approved test results for NO2 to be taken if the Division approved test results for NO2 to be taken if the Division approved test results for NO2 to be taken if the Division approved test results for NO2 to be taken if the Division approved test results for NO2 to be taken if the Division appro
4.2.24.2.4Updated Condition: The testing scenario for the RTOs controlling the Wellons unit plus rotary strand dryers is incorporated as its own permit condition.4.2.34.2.4Updated Condition: The testing frequency for the RTOs controlling the Wellons unit plus rotary strand dryers is incorporated as its own permit condition.4.2.34.2.4Updated Condition: The testing frequency for the RTOs controlling the Wellons unit plus rotary strand dryers and the board press enclosure is incorporated as its own permit condition.4.2.4N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.64.2.6Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2
4.2.24.2.4Updated Condition: The testing scenario for the RTOs controlling the Wellons unit plus rotary strand dryers is incorporated as its own permit condition.4.2.34.2.4Updated Condition: The testing frequency for the RTOs controlling the Wellons unit plus rotary strand dryers and the board press enclosure is incorporated as its own permit condition.4.2.4N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure.4.2.64.2.6Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2 Livit in the Division approved test results for NO2
4.2.2 4.2.4 Updated Condition: The testing scenario for the RTOs controlling the Wellons unit plus rotary strand dryers is incorporated as its own permit condition. 4.2.3 4.2.4 Updated Condition: The testing frequency for the RTOs controlling the Wellons unit plus rotary strand dryers and the board press enclosure is incorporated as its own permit condition. 4.2.3 4.2.4 Updated Condition: The testing frequency for the RTOs controlling the Wellons unit plus rotary strand dryers and the board press enclosure is incorporated as its own permit condition. 4.2.4 N/A New Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers. 4.2.5 N/A New Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure. 4.2.6 4.2.6 Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2
4.2.34.2.4Updated Condition: The testing frequency for the RTOs controlling the Wellons unit plus rotary strand dryers and the board press enclosure is incorporated as its own permit condition.4.2.4N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure.4.2.64.2.6Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2 be taken if the Division approved test results for NO2
4.2.34.2.4Updated Condition: The testing frequency for the RTOs controlling the Wellons unit plus rotary strand dryers and the board press enclosure is incorporated as its own permit condition.4.2.4N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure.4.2.64.2.6Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2 LUP AND AND AND AND AND AND AND AND
4.2.34.2.4Updated Condition: The testing frequency for the RTOs controlling the Wellons unit plus rotary strand dryers and the board press enclosure is incorporated as its own permit condition.4.2.4N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure.4.2.64.2.6Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2 LNO with the Division approved test results for NO2
A.2.4N/ANew Condition: New Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure.4.2.64.2.6Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2 ultion is proved test results for NO2
4.2.4N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure.4.2.64.2.6Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2 ulter of the Division approved test results for NO2
4.2.4N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure.4.2.64.2.6Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2 ultime to the common exhaust of the division approved test results for NO2
 4.2.4 N/A New Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers. 4.2.5 N/A New Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure. 4.2.6 4.2.6 Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO₂
4.2.5N/Abased on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers.4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure.4.2.64.2.6Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2 under the division approved test results for NO2
 4.2.5 N/A A.2.6 A.2.6 A.2.6 Compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the Wellons unit and rotary strand dryers. A.2.5 N/A New Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure. A.2.6
4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure.4.2.64.2.6Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2 her and the Division approved test results for NO2
4.2.5N/ANew Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure.4.2.64.2.6Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2 her and condition in the Division approved test results for NO2
 4.2.5 N/A New Condition: Requires computation of a parameter, based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure. 4.2.6 4.2.6 Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO₂
 4.2.6 4.2.6 based on Division approved testing, for purposes of compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure. 4.2.6 4.2.6
4.2.6 4.2.6 compliance with PSD Modeling assumption. This condition pertains to the common exhaust of the board press enclosure. 4.2.6 Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2
4.2.6 4.2.6 updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2
4.2.6 4.2.6 Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO2
4.2.6 4.2.6 Updated Condition: Clarifies the course of action to be taken if the Division approved test results for NO ₂
be taken if the Division approved test results for NO_2
and NOx emissions yield an NO ₂ /NOx ratio greater than
3%. HEW used a 3% ratio in the PVMRM modeling
technique for PSD modeling of NO ₂ emissions from the
applicable emissions units.
4.2.7 4.2.7 Updated Condition: Clarifies the course of action to
be taken by HEW if the Division approved test result for
SO_2 emissions is greater than the assumption used in the
avoidance of PSD for SO ₂ emissions.
4.2.8.a 4.2.4.a No Change: Testing for Total PM/PM ₁₀ emissions
from common exhaust from Wellons unit plus rotary
strand dryers.
4.2.8.b 4.2.4.b No Change: Testing for Total PM _{2.5} emissions from
common exhaust from Wellons unit plus rotary strand
drvers.
4.2.8.c 4.2.4.c No Change: Testing for NOx emissions from common
exhaust from Wellons unit plus rotary strand dryers
4.2.8.d 4.2.4.d No Change: Testing for CO emissions from common
exhaust from Wellons unit plus rotary strand dryers

Table 14: Section 4.2 Permit Conditions					
New Permit	Existing Permit	Description			
Condition No.	Condition No.				
4.2.8.e	4.2.4.e	No Change: Testing for VOC emissions from common			
		exhaust from Wellons unit plus rotary strand dryers.			
4.2.8.f	4.2.5	Updated Condition: Testing for NO ₂ emissions from			
	4.2.6	common exhaust from Wellons unit plus rotary strand			
		dryers. Incorporated this testing requirement as part of			
		the overall testing for these units because the NO_2 must			
		be determined concurrently with NOx, CO, and VOC			
		emissions.			
4.2.9.a	4.2.4.a	No Change: Testing for Total PM/PM ₁₀ emissions			
		from exhaust of board press enclosure.			
4.2.9.b	4.2.4.b	No Change: Testing for Total PM _{2.5} emissions from			
		exhaust of board press enclosure.			
4.2.9.c	4.2.4.c	No Change: Testing for NOx emissions from exhaust			
		of board press enclosure.			
4.2.9.d	4.2.4.d	No Change: Testing for CO emissions from exhaust of			
		board press enclosure.			
4.2.9.e	4.2.4.e	No Change: Testing for VOC emissions from exhaust			
		of board press enclosure.			
4.2.9.f	4.2.5	Updated Condition: Testing for NO ₂ emissions from			
	4.2.6	exhaust of board press enclosure. Incorporated this			
		testing requirement as part of the overall testing for this			
		unit because the NO ₂ must be determined concurrently			
		with NOx, CO, and VOC emissions.			
4.2.9.g	4.2.1.a.ii	Updated Condition: Testing for formaldehyde			
		emissions from exhaust of board press enclosure.			
		Incorporated this testing requirement as part of the			
		overall testing for this unit.			
4.2.9.h	4.2.1.a.i	Updated Condition: Testing for phenol emissions			
		from exhaust of board press enclosure. Incorporated this			
		testing requirement as part of the overall testing for this			
		unit.			
4.2.10	4.2.3	Updated Condition: Wording updated based on			
		similar Title V Permit.			
4.2.11	4.2.7	Updated Condition: Clarifies which exhaust point is			
		tested to determine SO_2 emissions.			
4.2.12	4.2.10	No Change: Testing requirements for baghouse			
		BH04A.			
4.2.13	4.2.11	Updated Condition: Clarified which emission units			
		need to be operating and exhausting through baghouse			
	1.2.2	BH05A.			
N/A	4.2.2	Deleted Condition: Condition introduces redundancy.			
N/A	4.2.8	Deleted Condition			
N/A	4.2.9	Deleted Condition			

V. Monitoring Requirements

A. General Monitoring Requirements

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

B. Specific Monitoring Requirements

FEDERAL REGULATIONS

40 CFR 60 Subpart Db – Wellons Unit: The Wellons unit (ID No. WBNR) is subject to a filterable PM emissions limit, opacity limit, and annual capacity limit on the combustion of natural gas and fuel oil. HEW operates a continuous opacity monitor (COMS) per 40 CFR 60.48b(a) in the stack of RTOs SRTO, HRTO, and PRTO. The existing requirement to calibrate, maintain, and operate a COMS in the stack of RTOs SRTO, HRTO, HRTO, and PRTO, and PRTO is carried over to HEW's updated Title V Renewal Permit.

HEW is required to install and operate a natural gas consumption meter. The frequency of recording natural gas usage <u>is increased</u> from monthly to daily per 40 CFR 60.49b(d). HEW is required to maintain a log for recording fuel oil consumption. The latter requirement is carried over to Section 6.2 of the updated Title V Renewal Permit.

40 CFR 63 Subpart DDDD – **PCWP NESHAP:** The Plywood NESHAP regulates emissions of total hydrocarbons from the combined exhaust of the Wellons unit and Rotary Strand Dryers. In addition, the NESHAP regulates emissions of formaldehyde from the board press enclosure. HEW operates continuing monitoring systems (CMSs) for the combustion zone temperature of each RTO per 40 CFR 63.2269, 40 CFR 63.2271, and Table 7 of the NESHAP. These monitoring requirements are carried over to HEW's updated Title V Renewal Permit.

HEW monitors the inlet static pressure into the dedicated RTO (ID No. DRTO) for the *wood products enclosure* (WPE) to provide a reasonable assurance of compliance that the WPE is being operated in accordance with 40 CFR 63.2292. Note: The existing permit incorporates redundant monitoring of this parameter and this redundancy is removed from the updated Title V Permit by removing the monitoring of the gas stream pressure at the inlet of the RTO.

40 CFR 52.21 – PSD/BACT Requirements: Wellons and Rotary Strand Dryers Common Exhaust- The Wellons unit (ID No. WBNR) exhausts through the rotary strand dryers (ID Nos. DRY1, DRY2, and DRY3) and is subject to a PSD/BACT emission standard for total PM, total PM_{10} , total $PM_{2.5}$, NOx, CO, and VOC. The common exhausts are also subject to an NO₂ emission standard for purposes of PSD modeling. HEW assumes that the use of a WESP operated in series with an RTO provides a reduction in emissions of total PM, total PM_{10} , and total $PM_{2.5}$. HEW assumes that the use of an RTO (in this case ID Nos. SRTO, HRTO, and PRTO) control emissions of CO and VOCs. HEW assumes that NOx (including NO₂) emissions are uncontrolled.

HEW's existing monitoring requirements are specified in Table 15. These requirements are updated in the Title V Renewal Permit as noted in this table.

Table 15: Monitoring Requirements for Control Devices Serving the Wellons unit and Rotary Strand Dryers						
Control Device	Parameter Monitored	Frequency of Recording	of Monitoring	and	Note(s)	
	Secondary amperage in milliamps for each field.	Continuous Recording	Monitoring	and	These monitoring requirements are carried over to the updated Title V	
WES1 WES2 WES3	Secondary voltage in kilovolts for each field.	Continuous Recording	Monitoring	and	Renewal Permit.	
11 203	Temperature of the gas stream at the outlet of the quench chamber of each WESP.	Continuous Recording	Monitoring	and		
	Combustion zone temperature	Continuous Recording	Monitoring	and	The monitoring of the gas stream pressure at the inlet of the RTO does not provide useful information, in this case, based on discussions with SSCP and	
SRTO HRTO PRTO	Existing: Gas stream pressure at the inlet of, or the pressure drop across each RTO.	Continuous Recording	Monitoring	and	HEW. HEW and SSCP use the pressure drop as one of the indicators of proper operation of the RTO.	
	across each RTO.				Remove monitoring of the gas stream pressure at the inlet of the RTO from the updated Title V Permit. This monitoring parameter does not provide useful information in this case.	

Proper operation within prescribed operational parameters as well as routine maintenance of the WESPs (ID Nos. WES1, WES2, and WES3) and the RTOs (ID Nos. SRTO, HRTO, and PRTO) is required by HEW's Title V Permit to provide a reasonable assurance of compliance with the PSD/BACT requirements.

40 CFR 52.21 – PSD/BACT Requirements – Board Press- The board press (ID No. BP) is subject to a PSD/BACT emission standard for total PM, total PM_{10} , total $PM_{2.5}$, NOx, CO, and VOC. The same atmospheric exhaust point is subject to a 1-hour NO₂ NAAQS modeling limit. HEW assumes

that the use of an RTO provides a reduction in emissions of total PM, total PM_{10} , total $PM_{2.5}$, CO, and VOC.

HEW's existing monitoring requirements are specified in Table 16. These requirements are updated in the Title V Renewal Permit as noted in this table.

ce onitored	Frequency	of Monitoring	and	
onitored	Frequency Becording	of Monitoring	and	
	NECOLUMY	8	anu	Note(s)
one	Continuous Recording	Monitoring	and	The monitoring of the gas stream pressure at the inlet of the RTO does not provide useful information, in this case, based on discussions with SSCP and HEW.
stream inlet of, or op across	Continuous Recording	Monitoring	and	HEW and SSCP use the pressure drop as one of the indicators of proper operation of the RTO.
sure drop FO. s Enclosure Permanent re. Monitor pressure to				Remove monitoring of the gas stream pressure at the inlet of the RTO from the updated Title V Permit. Maintain inlet static pressure monitoring
	stream inlet of, or op across ssure drop FO. ss Enclosure Permanent re. Monitor pressure to	DefenseContinuous Recordingstream inlet of, or op acrossContinuous Recordingssure drop FO.Image: Continuous Recordingssure drop FO.Image: Continuous Recordingssure drop FO.Image: Continuous Recordingssure drop FO.Image: Continuous Recordingssure drop FO.Image: Continuous Recordingssure drop FO.Image: Continuous Recordingssure drop PronueImage: Continuous Recordingssure	OneContinuous RecordingMonitoring Monitoringstream inlet of, or op acrossContinuous RecordingMonitoring Monitoringssure drop FO.Senclosure Permanent re. Monitor pressure toMonitoring Recording	OneContinuous RecordingMonitoring andstream inlet of, or cop acrossContinuous RecordingMonitoring and andssure drop FO.SecondingMonitoring resultAnd and and and resultssure drop FO.Seconding and <b< td=""></b<>

Proper operation within prescribed operational parameters as well as routine maintenance of the RTO (ID No. DRTO) is required by HEW's Title V Permit to provide a reasonable assurance of compliance with the PSD/BACT requirements.

40 CFR 52.21 – PSD/BACT Requirements – Miscellaneous Process Units – HEW operates a number of baghouses that control emissions from process equipment that is subject to a PSD/BACT emission standard for total PM, total PM_{10} , total $PM_{2.5}$, and VOCs. Table 17 summarizes the existing monitoring requirements for the various baghouses operated by HEW.

Table 17: Monitoring Requirements for purposes of verifying compliance with PSD/BACTFor Various Process Points						
Air Pollution	Operational Parameter	Discussion				
Control Device						
	Pressure Drop					
BH01 controlling SYS1	Visible Emissions Check	Baghouse is equipped with radial discharge.				
	\mathbf{PMP}^{10}					
	Pressure Drop					
BH23 controlling SYS23	Visible Emissions Check	Baghouse is equipped with radial discharge.				
	PMP^{10}					
	Pressure Drop					
BH04A controlling SYS4 and/or SYS5.	Bag Leak Detection Sys.	Baghouse is equipped with non-radial discharge.				
	PMP^{10}					
	Pressure Drop					
BH05 controlling SYS5.	Visible Emissions Check	Baghouse is equipped with a radial discharge.				
	PMP^{10}					
	Pressure Drop					
BH05A controlling SYS5.	Bag Leak Detection Sys.	Baghouse is equipped with a non-radial discharge.				
	PMP^{10}					

STATE RULES

Georgia Rule 391-3-1-.02(2)(e) for Particulate Emission from Manufacturing Processes: Georgia Rule (e) pertains to emissions of total PM from all facility-wide atmospheric exhaust points. HEW operates WESPs, RTOs, and/or baghouses to minimize emissions of total PM which provide a reasonable assurance of compliance.

Georgia Rule 391-3-1-.02(2)(b) for Visible Emissions: HEW operates WESPs, RTOs, and/or baghouses to minimize visible which provides a reasonable assurance of compliance.

Georgia Rule 391-3-1-.03(2)(c)-Georgia Air Toxics: HEW operates RTOs to minimize emissions for formaldehyde and phenol which provides a reasonable assurance of compliance.

Avoidance of 40 CFR 52.21 – Facility-wide SO₂ Emissions: No monitoring other than accelerant usage is required.

¹⁰ PMP stands for Preventative Maintenance Program.

Miscellaneous: HEW is required to calibrate, maintain, and operate sensors that identify if the combined exhaust from the Wellons unit and from the rotary strand dryers by-passes the WESP and RTOs. Also, HEW operates sensors that identify if the exhaust from the board press enclosure by-passes the RTO.

C. Compliance Assurance Monitoring (CAM)

The Division evaluated CAM applicability using emission rates submitted in HEW's PSD Permit Application # 19076 and Application # 19319. The emission rates submitted as part of these applications are on a control basis. Uncontrolled emission rates (short-term) were calculated and the short-term emission rates were scaled up using 8,760 hours per year. Based on this exercise, the Division has determined that HEW's existing Title V Permit does not address all of the applicable pollutants for several *pollutant specific emissions units (PSEUs)* at HEW.

In addition, the Division has determined that the Wellons unit (ID No. WBNR) is subject to CAM based on the filterable PM emission limit established by 40 CFR 60 Subpart Db as this emission limit was promulgated prior to November 1990. The applicable control device for the filterable PM is the WESPs (ID Nos. WES1, WES2, and WES3).

Table 18 summarizes the CAM applicability analysis and the associated control device and pollutant.

Table 18: CAM Applicability Table						
Emission Unit	Basis of Regulatory	Control	Pollutant	Subject to	Note(s)	
Description	Emissions Limit	Device		CAM?		
Wellons Unit	40 CFR 60 Subpart Db (NSPS Db)	WES1 WES2 WES3	Filterable PM	Yes	NSPS Db emission limit promulgated prior to November 1990. Therefore, the PSEU is not exempt from CAM. Uncontrolled PTE> 100 tpy Added filterable PM as pollutant and Wellons unit as a PSEU.	
Wellons Unit + Rotary Strand Dryers	PSD/BACT 391-3-102(2)(d) 391-3-102(2)(e)	WES1 WES2 WES3 SRTO HRTO PRTO	Total PM	Yes	Added Wellons Unit to existing CAM requirements. Pollutant referenced is changed from "PM" to "total PM".	

Table 18: CAM Applicability Table							
Emission Unit Description	Basis of Regulatory Emissions Limit	Control Device	Pollutant	Subject to CAM?	Note(s)		
	PSD/BACT	WES1 WES2 WES3 SRTO HRTO PRTO	Total PM ₁₀	Yes	Uncontrolled PTE > 100 tpy so add the pollutant and this PSEU.		
	PSD/BACT	WES1 WES2 WES3 SRTO HRTO PRTO	Total PM _{2.5}	Yes	Uncontrolled PTE > 100 tpy so add the pollutant and this PSEU.		
	PSD/BACT	SRTO HRTO PRTO	СО	Yes	Added Wellons Unit to existing CAM requirements. Large PSEU ¹¹ Pollutant is listed in existing permit.		
	PSD/BACT	SRTO HRTO PRTO	VOC	Yes	Added Wellons Unit to existing CAM requirements. Large PSEU ¹¹ Pollutant is listed in existing permit.		
	PSD/BACT	N/A	NOx	No	NOx is emitted uncontrolled. ¹²		
Board Press	PSD/BACT 391-3-102(2)(e)	DRTO	Total PM	Yes	Uncontrolled PTE > 100 tpy so add the pollutant and this PSEU. Pollutant referenced is changed from "PM" to "total PM".		
	PSD/BACT	DRTO	Total PM ₁₀	Yes	Uncontrolled PTE > 100 tpy so add the pollutant and this PSEU.		

¹¹ HEW must collect four or more data [monitored] values for each hour. In this case, the combustion zone temperature of the applicable RTO is continuously monitored. ¹² Based on the Division's Preliminary Determination issued in August 2011 based on App # 19076 and App# 19319.

Table 18: CAM Applicability Table						
Emission Unit Description	Basis of Regulatory Emissions Limit	Control Device	Pollutant	Subject to CAM?	Note(s)	
	PSD/BACT	DRTO	Total PM _{2.5}	Yes	Uncontrolled PTE > 100 tpy so add the pollutant and this PSEU.	
	PSD/BACT	DRTO	СО	Yes	Listed in existing permit.	
	PSD/BACT	DRTO	VOC	Yes	Listed in existing permit.	
	PSD/BACT	N/A	NOx	No	NOx is emitted uncontrolled. ¹²	
Forming and Mat Reject (SYS23)	PSD/BACT 391-3-102(2)(e)	BH23	Total PM	Yes	Pollutant referenced is changed from "PM" to "total PM".	
	PSD/BACT	BH23	Total PM ₁₀	Yes	Uncontrolled PTE > 100 tpy so add this pollutant and this PSEU.	
	PSD/BACT	BH23	Total PM _{2.5}	No	Uncontrolled PTE < 100 tpy.	
	PSD/BACT	N/A	VOC	No	VOC is emitted uncontrolled. ¹²	
Flake Screening, Bin and Blending, and Weigh Belt	PSD/BACT 391-3-102(2)(e)	BH01	Total PM	Yes	Pollutant referenced is changed from "PM" to "total PM".	
(SYS1)	PSD/BACT	BH01	Total PM ₁₀	Yes	Uncontrolled PTE > 100 tpy so add the pollutant and this PSEU.	
	PSD/BACT	BH01	Total PM _{2.5}	No	Uncontrolled PTE < 100 tpy.	
	PSD/BACT	N/A	VOC	No	VOC is emitted uncontrolled. ¹²	
Board Trimming and Finishing (SYS4)	PSD/BACT 391-3-102(2)(e)	BH04A, or BH05, or BH05A	Total PM	Yes	Pollutant referenced is changed from "PM" to "total PM".	
	PSD/BACT	BH04A, or BH05, or BH05A	Total PM ₁₀	Yes	Uncontrolled PTE > 100 tpy so add the pollutant and this PSEU.	
	PSD/BACT	BH04A, or BH05, or BH05A	Total PM _{2.5}	No	Uncontrolled PTE < 100 tpy.	
	PSD/BACT	N/A	VOC	No	VOC is emitted uncontrolled. ¹²	
Sanding and Tongue and Groove (SYS5)	PSD/BACT 391-3-102(2)(e)	BH05 or BH05A	Total PM	Yes	Pollutant referenced is changed from "PM" to "total PM".	

Table 18: CAM Applicability Table					
Emission Unit	Basis of Regulatory Control		Pollutant	Subject to	Note(s)
Description	Emissions Limit	Device		CAM?	
	PSD/BACT	BH05 or BH05A	Total PM ₁₀	Yes	Uncontrolled PTE > 100 tpy so add the pollutant and this PSEU.
	PSD/BACT	BH05 or BH05A	Total PM _{2.5}	No	Uncontrolled PTE < 100 tpy.
	PSD/BACT	N/A	VOC	No	VOC is emitted uncontrolled. ¹²

The requirements of CAM for each PSEU remain unchanged from HEW's existing Title V permit and the CAM monitoring is summarized in Table 19.

Table 19: CAM Requir	Table 19: CAM Requirements for each PSEU			
Emission Unit	Control	Pollutant	CAM Performance Criteria	
Description	Device			
	WES1 WES2 WES3	Total PM	Operate a CMS for secondary voltage in each field of WES1, WES2, WES3.	
		Total PM10	Operate a CMS for secondary current in each field of WES1, WES2, WES3.	
		Total PM2.5	Use data to compute the total WESP power for WES1, WES2, and WES3, each. Averaging period for total WESP power = three-hour rolling average ¹³	
Wellons Unit + Rotary Strand Dryers			Operate a CMS for gas stream temperature at the outlet of the quench chamber for WES1, WES2, and WES3, each. Averaging period for this operational parameter is a 12-hour block average.	
	CO SRTO HRTO PRTO VOC	СО	Operate a CMS for combustion zone temperature. Averaging period for this operational parameter is a 3- hour block average to be consistent with the PCWP NESHAP	
		Operate a CMS for pressure drop across the RTO. This parameter replaces <i>the gas stream inlet pressure at the</i> <i>duct plenum on the RTO inlet</i> as the later monitoring parameter is not related to the effectiveness of the RTO to destroy emissions. Averaging period for this operational parameter is a 12-hour block average.		
			SSCP and HEW concur with this decision.	

¹³ Added "rolling" to existing requirements.

Table 19: CAM Requirements for each PSEU				
Emission Unit	Control	Pollutant	CAM Performance Criteria	
Description	Device			
		Total PM Total PM10 Total PM2 5	Operate a CMS for combustion zone temperature. Averaging period for this operational parameter is a 3- hour block average to be consistent with the PCWP	
		CO	Operate a CMS for pressure drop across the RTO. This	
Board Press	DRTO	VOC	parameter replaces <i>the gas stream inlet pressure at the duct plenum on the RTO inlet</i> as the later monitoring parameter is not related to the effectiveness of the RTO to destroy emissions. Averaging period for this operational parameter is a 12-hour block average. SSCP and HEW concur with this decision. Add monitoring of the inlet static pressure to the RTO for purposes of verifying the integrity of the board press enclosure	
Forming and Mat Reject (SYS23)	BH23	Total PM Total PM ₁₀	-Operate a CMS for pressure drop across each baghouse -Implement a PMP.	
Flake Screening, Bin and Blending, and Weigh Belt (SYS1)	BH01	Total PM Total PM ₁₀	-Operate a CMS for pressure drop across each baghouse -Implement a PMP.	
Board Trimming and Finishing (SYS4)	BH04A	Total PM Total PM ₁₀	-Operate a CMS for pressure drop across each baghouse. -Implement a PMP.	
Sanding and Tongue and Groove (SYS5)	BH04A, BH05, or BH05A	Total PM Total PM ₁₀	-Operate a CMS for pressure drop across each baghouse. -Implement a PMP.	

Permit Conditions: Table 19 summarizes Section 5 of the Title V Renewal Permit.

Table 19: S	Table 19: Section 5 Permit Conditions			
New	Existing	Description		
Permit	Permit			
Condition	Condition			
No.	No.			
5.2.1.a	5.2.16	No change - NSPS Db COMS requirement for the Wellons unit.		
5.2.1.b				
5.2.1.c				
5.2.2.a	5.2.1.a	No change - WESP Monitoring		
5.2.2.b	5.2.1.a	No change – WESP Monitoring		

Table 19: Section 5 Permit Conditions			
New	Existing	Description	
Permit	Permit		
Condition	Condition		
No.	No.		
5.2.2.c	5.2.1.b	No change – WESP Monitoring	
5.2.2.d	5.2.1.c	Updated – Updated legal citation to include PCWP MACT reference.	
5.2.2.e			
5.2.2.f			
5.2.2.g			
5.2.2.h	5.2.1.d	Updated – RTO Monitoring	
5.2.2.i		-Removed redundant monitoring of the gas stream pressure at the inlet of	
5.2.2.j		the RTO. This parameter by itself serves no useful purpose in assessing	
5.2.2.k		proper operation of the RTO.	
		-Pressure drop monitoring is maintained.	
5.2.2.1	5.2.15	No change – Monitoring associated with the operation of the board press	
		enclosure as a "permanent total enclosure".	
5.2.2.m	5.2.1.e	Updated – Use of Abort Stacks	
5.2.2.n		-Added clarity by identifying the applicable emissions units.	
		-Added monitoring requirement for by-pass of RTO serving the board	
		press enclosure. The absence of this monitoring requirement may be due	
		to an oversight. The position of the by-pass sensor is tracked by existing	
		permit condition number 6.1.7.c.v.	
5.2.3.a	5.2.26	No change – Baghouse pressure drop monitoring requirement.	
5.2.3.b			
5.2.3.c			
5.2.3.d			
5.2.3.e			
5.2.3.f	5.2.17	Updated – Clarified NSPS Db monitoring requirements for natural gas	
		consumption by the Wellons unit.	
5.2.4	5.2.14	No change – PCWP NESHAP requirement	
5.2.5	5.2.27	New Condition – PCWP NESHAP requirement for each RTO.	
5.2.6	5.2.27	Updated – Clarified baghouse ID Nos. subject to VE checks.	
5.2.7	5.2.28	No change – PMP baghouse requirement	
5.2.8	5.2.29	No change – Bag leak detection system monitoring requirement for	
		BH04A and BH05A.	
5.2.9	5.2.3	No change – Hours of operation of IC engines.	

Table 19: Section 5 Permit Conditions				
New	Existing	Description		
Permit	Permit			
Condition	Condition			
No.	No.			
5.2.10	5.2.7	Updated Condition – CAM Condition		
		-Removed reference to Equipment Group		
		-Added emission unit ID No.		
		-Each row in table is for dedicated control device and stack. Current table		
		rows are for multiple control devices and stacks.		
		-Added Wellons unit (for filterable PM)		
		-Added Wellons unit to rotary strand dryer as the Wellons unit exhausts		
		through the dryers.		
		-Added total PM_{10} to Wellons unit plus dryers, board press enclosure,		
		flake screening and blending operations, forming and mat reject		
		operations, trim and grade sawing operations, and sanding and tongue &		
		groove operations.		
		-Added total $PM_{2.5}$ to Wellons unit plus dryers and to the board press		
		enclosure.		
		-Replace "PM" with "total PM"		
5.2.11	N/A	New Condition – CAM Condition for filterable PM from Wellons unit.		
5.2.12	5.2.12	Updated Condition – CAM Condition		
		-Added Wellons unit.		
		-Clarified the averaging period for total secondary power as a "rolling		
		average".		
		-Replaced "PM" with "total PM".		
		-Added total PM ₁₀		
5.2.12	5.2.10	-Added total PM _{2.5}		
5.2.13	5.2.19	Updated Condition – CAM Condition		
		- Clarified the secondary power parameter applies to each WESP as a		
5.2.14	5011	whole and not just each WESP field.		
5.2.14	5.2.11	Updated Condition – CAM Condition		
		-Added wellons unit. $\mathbf{D} = \mathbf{u}^{-1} \mathbf{c} = \mathbf{c} + \mathbf{u}^{-1} \mathbf{D} \mathbf{M}^{2}$		
		-Replaced "PM" with "total PM".		
		-Added total PM ₁₀		
		-Added total $PM_{2.5}$		
		-Averaging period for combustion zone temperature is revised to read 3-		
		1 nour block averaging period to be consistent with the PUWP NESHAP		
		-Replaced Indicator No. 2 from gas stream inlet pressure to pressure		

Table 19: Section 5 Permit Conditions			
New	Existing	Description	
Permit	Permit		
Condition	Condition		
No.	No.		
5.2.15	5.2.10	Updated Condition – CAM Condition	
		-Replaced "PM" with "total PM".	
		-Added total PM ₁₀	
		-Added total PM _{2.5}	
		-Averaging period for combustion zone temperature is revised to read "3-	
		hour block averaging period" to be consistent with the PCWP NESHAP.	
		-Replaced Indicator No. 2 from gas stream inlet pressure to pressure	
		drop.	
5.2.16	5.2.24	Updated Condition - CAM Condition	
		-Clarified the applicable PSEU.	
5.2.17	5.2.30	Updated Condition - CAM Condition	
		-Clarified the applicable PSEU and made the condition apply to one	
		unique control device/stack combination associated with the PSEU	
		SYS23.	
5.2.18	5.2.30	Updated Condition - CAM Condition	
		-Clarified the applicable PSEU and made the condition apply to one	
		unique control device/stack combination associated with the PSEU SYS4.	
5.2.19	5.2.30	Updated Condition - CAM Condition	
		-Clarified the applicable PSEU and made the condition apply to one	
		unique control device/stack combination associated with the PSEU SYS5.	

VI. Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

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

Table 20 summarizes the excess emissions, exceedances, and excursions.

Table 20: Section 6.1 Permit Conditions		
New Permit	Existing Permit	Description
Condition No.	Condition No.	
6.1.1	6.1.1	No change
6.1.2	6.1.2	No change
6.1.3	6.1.3	No change
6.1.4	6.1.4	No change

Table 20: Section 6.1 Permit Conditions			
New Permit	Existing Permit	Description	
Condition No.	Condition No.	•	
6.1.5	6.1.5	No change	
6.1.6	6.1.6	No change	
6.1.7.a.i	6.1.7.a.i	No change: Definition of an excess emissions for opacity	
		based on NSPS Db.	
		-Added legal citation.	
6.1.7.b.i	6.1.7.b.v	Updated Condition:	
		-Clarified the applicable operations subject to the PCWP	
		NESHAP requirement for Group 1 miscellaneous coating	
		operations.	
6.1.7.b.ii	6.1.7.b.ii	Updated Condition: Clarified the requirement imposed by	
		NSPS Db on the annual capacity factor for the combustion of	
		natural gas and fuel oil in the Wellons unit.	
		-Per 40 CFR 60.49b(d)(1), the annual capacity factor is based	
		on a consecutive twelve month rolling total.	
6.1.7.b.iii	6.1.7.b.iii	Updated Condition:	
		-Definition of an exceedance for accelerant usage.	
		-Updated legal citations	
6.1.7.b.iv	6.1.7.b.iv	Updated Condition: Defines daily hours in which HEW	
		<u>may not</u> operate the fire pump engine or emergency	
		generator for purposes of testing and maintenance.	
		-Updated legal citation.	
6.1.7.b.v	N/A	New Condition: Defines an hours of operation limit for	
		each IC engine for purposes of avoidance of the emission	
	27/1	standard specified by Georgia Rule 391-3-102(2)(mmm).	
6.1.7.b.vi	N/A	New Condition: Defines an exceedance pertaining to fuel	
	27/1	oil sulfur content per NSPS Db.	
6.1.7.b.vii	N/A	New Condition: Defines an exceedance pertaining to diesel	
		fuel sulfur content per NSPS IIII.	
6.1.7.c.i	6.1.7.c.i	Updated Condition:	
		-Applies to WESP #1 (WES1)	
		-Existing numerical value for defining an exceedance for	
		total WESP Power for WEST is added. This numerical value	
		is based on Division approved testing in 2012 and is 75% of	
(17	(17	a wESP average total power of 1030.2 watts.	
0.1./.C.11	0.1./.C.11	Updated Condition:	
		-Applies to WESP #1 (WES1) Existing numerical value for defining on exceedence	
		-Existing numerical value for defining an exceedance	
		remains unchanged.	

Table 20: Section 6.1 Permit Conditions			
New Permit	Existing Permit	Description	
Condition No.	Condition No.		
6.1.7.c.iii	6.1.7.c.i	Updated Condition:	
		-Applies to WESP #2 (WES2)	
		-Existing numerical value for defining an exceedance for	
		total WESP Power for WES2 is added. This numerical value	
		is based on Division approved testing in 2012 and is 75% of	
		a WESP average total power of 716.5 watts.	
6.1.7.c.iv	6.1.7.c.ii	Updated Condition:	
		-Applies to WESP #2 (WES2)	
		-Existing numerical value for defining an exceedance	
		remains unchanged.	
6.1.7.c.v	6.1.7.c.i	Updated Condition:	
		-Applies to WESP #3 (WES3)	
		-Existing numerical value for defining an exceedance for	
		total WESP Power for WES3 is added. This numerical value	
		is based on Division approved testing in 2012 and is 75% of	
		a WESP average total power of 611.5 watts.	
6.1.7.c.vi	6.1.7.c.ii	Updated Condition:	
		-Applies to WESP #3 (WES3)	
		-Existing numerical value for defining an exceedance	
		remains unchanged.	
6.1.7.c.vii	6.1.7.c.v	Updated Condition: - Use of Abort Stacks	
6.1.7.c.viii		-Clarified the applicable emission units.	
		-Applies to Wellons unit and rotary strand dryers.	
		-Removed reference to board press enclosure and made this a	
		new permit condition.	
6.1.7.c.ix	6.1.7.b.i	Updated Condition - Definition of excursion for combustion	
	3.2.3	zone temperature for SRTO.	
	3.2.8	-Listed as an excursion rather than an exceedance.	
		-Removed reference to a temperature value below 1500 ⁰ F.	
		-Existing numerical value of 1600°F is added based on	
		testing conducted on June 4, 2010 for purposes of verifying	
		compliance with the PCWP NESHAP and emission factor	
		testing using MDI resin. The dryers were operated with a	
		combined operating capacity of 42 ODT/hr.	
6.1.7.c.x	6.1.7.c.iv	Updated Condition – Definition of excursion for SRTO	
		-Removed reference to 12-hour block average induced	
		vacuum in the duct plenum immediately downstream of the	
		emission unit. This unit is no longer a parameter tracked by	
		the updated Title V Permit because it is redundant to the	
		monitoring of pressure drop.	
		Note: induced vacuum in the dust plenum, gas stream inlet	
		pressure, and inlet static pressure refer to the same thing.	

Table 20: Section 6.1 Permit Conditions			
New Permit	Existing Permit	Description	
Condition No.	Condition No.		
6.1.7.c.xi	6.1.7.b.i	Updated Condition- Definition of excursion for combustion	
	3.2.3	zone temperature for PRTO.	
	3.2.8	-Listed as an excursion rather than an exceedance.	
		-Removed reference to a temperature value below 1500 ⁰ F.	
		-Existing numerical value of 1590°F is added based on	
		testing conducted on June 4, 2010 for purposes of verifying	
		compliance with the PCWP NESHAP and emission factor	
		testing using MDI resin. The dryers were operated with a	
		combined operating capacity of 42 ODT/hr.	
6.1.7.c.xii	6.1.7.c.iv	Updated Condition – Definition of excursion for PRTO	
		-Removed reference to 12-hour block average induced	
		vacuum in the duct plenum immediately downstream of the	
		emission unit. This unit is no longer a parameter tracked by	
		the updated Title V Permit because it is redundant to the	
		monitoring of pressure drop.	
		Note: induced vacuum in the dust plenum, gas stream inlet	
		pressure, and inlet static pressure refer to the same thing.	
6.1.7.c.xiii	6.1.7.b.i	Updated Condition - Definition of excursion for combustion	
	3.2.3	zone temperature for HRTO.	
	3.2.8	-Removed reference to a temperature value below 1500 ^o F.	
		-Existing numerical value of 1649°F is added based on	
		testing conducted on June 4, 2010 for purposes of verifying	
		compliance with the PCWP NESHAP and emission factor	
		testing using MDI resin. The dryers were operated with a	
		combined operating capacity of 42 ODT/hr.	
6.1.7.c.xiv	6.1.7.c.iv	Updated Condition – Definition of excursion for HRTO	
		-Removed reference to 12-hour block average induced	
		vacuum in the duct plenum immediately downstream of the	
		emission unit. This unit is no longer a parameter tracked by	
		the updated little V Permit because it is redundant to the	
		monitoring of pressure drop.	
		Note: induced vacuum in the dust planum age stream inlet.	
		Note. induced vacuum in the dust pienum, gus stream inter	
617 c xy	617hi	Undeted Condition Definition of excursion for combustion	
0.1.7.C.XV	3.2.3	Zone temperature for DPTO	
	3.2.5	$_{\rm R}$ Removed reference to a temperature value below 1500 ⁰ F	
	5.2.0	Existing numerical value of 1576 ⁰ F is added based on	
		testing conducted on June 4, 2010 for purposes of verifying	
		compliance with the PCWP NFSHAP and emission factor	
		testing using MDI resin. The drivers were operated with a	
		combined operating capacity of 42 ODT/hr	

Table 20: Section 6.1 Permit Conditions			
New Permit	Existing Permit	Description	
Condition No.	Condition No.		
6.1.7.c.xvi	6.1.7.c.iv	Updated Condition – Definition of excursion for DRTO -Removed reference to 12-hour block average induced vacuum in the duct plenum immediately downstream of the emission unit. This unit is no longer a parameter tracked by the updated Title V Permit because it is redundant to the monitoring of pressure drop. Note: <i>induced vacuum in the dust plenum, gas stream inlet</i>	
		pressure, and inlet static pressure refer to the same thing.	
6.1./.c.xv11	6.1.7.c.v111	 Opdated Condition – Definition of an excursion operation of wood products enclosure as a an enclosure meeting the definition in the PCWP NESHAP. -Made its own condition. -Monitoring also serves to verify compliance of the board press enclosure with the PCWP NESHAP. -Added an averaging period. 	
6.1.7.c.xviii	6.1.7.c.ix	Updated Condition – Clarified the applicable baghouse.	
6.1.7.c.xix	N/A	New Condition - Definition of an excursion for pressure drop across baghouse BH01.	
6.1.7.c.xx	6.1.7.c.ix	Updated Condition – Clarified the applicable baghouse.	
6.1.7.c.xxi	N/A	New Condition - Definition of an excursion for pressure drop across baghouse BH01.	
6.1.7.c.xxii	N/A	New Condition - Definition of an excursion for pressure drop across baghouse BH04A.	
6.1.7.c.xxiii	6.1.7.c.x	No Change - Definition of an excursion for operation of the bag leak detection system for baghouse BH04A.	
6.1.7.c.xxiv	6.1.7.c.ix	Updated Condition – Clarified the applicable baghouse.	
6.1.7.c.xxv	N/A	New Condition - Definition of an excursion for pressure drop across baghouse BH05.	
6.1.7.c.xxvi	N/A	New Condition - Definition of an excursion for pressure drop across baghouse BH05A.	
6.1.7.xxvii	6.1.7.c.xii	No Change- Pertains to leak detection system for baghouse BH05A.	
N/A	6.1.7.c.iii	Deleted Condition – Pertains to definition of an excursion for the 12-hour block average induced vacuum in the duct plenum immediately downstream of the emissions unit as it pertains to SRTO, HRTO, DRTO, and PRTO. This parameter is no longer required to be monitored solely for purposes of verifying the direction of exhaust flow in the duct plenum.	
N/A	6.1.7.c.vii	Deleted Condition – Based on input from SSCP. Serves no useful purpose.	

B. Specific Record Keeping and Reporting Requirements

<u>PSD Avoidance for SO₂ Emissions</u>: HEW is required to keep monthly usage records of the mass of accelerant used in the production of OSB. In addition, HEW is required to use these monthly records to compute the consecutive twelve month rolling total of accelerant used. These requirements are carried over to HEW's Title V Renewal Permit.

<u>40 CFR 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam</u> <u>Generating Units</u>: HEW is required to compute the annual capacity factor individually for natural gas and fuel oil combusted in the Wellons unit per 40 CFR 60.49b(d). The annual capacity factor shall be determined on a twelve month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. These requirements are carried over to HEW's Title V Renewal Permit.

In addition, HEW is required to maintain daily usage records of natural gas and fuel oil combusted per 40 CFR 60.49b(d).

<u>40 CFR 63 Subpart DDDD – Plywood and Composite Wood Products (PCWP)</u>: HEW is subject to the record keeping and reporting requirements specified in 40 CFR 63.2281 and these requirements are carried over to HEW's Title V Renewal Permit.

Table 21: Section 6 Permit Conditions		
New Permit	Existing Permit	Description
Condition No.	Condition No.	
6.2.1	6.2.5	No change – Maintain monthly accelerant usage records.
6.2.2	6.2.6	Updated Condition – Maintain consecutive twelve- month rolling total mass of accelerant used. -Moved reporting requirements to a new permit condition.
6.2.3	6.2.7	Updated Condition – Utilities-Updated recordkeeping requirements used to verifycompliance with Avoidance of NOx emission standardin Georgia Rule 391-3-102(2)(mmm)Updated recordkeeping requirements used to verifycompliance with the PSD Modeling for 1-hour NO2NAAQS.
6.2.4 6.2.5	6.2.4	Updated Condition – NSPS Db recordkeeping-updated frequency of fuel usage records per NSPS Dbincluded requirement for HEW to maintain fuel oilsulfur content records.
6.2.6	N/A	New Conditions - PCWP NESHAP Recordkeeping
6.2.7	N/A	New Conditions - PCWP NESHAP Recordkeeping
6.2.8	N/A	New Conditions - PCWP NESHAP Recordkeeping
6.2.9	N/A	New Conditions - PCWP NESHAP Recordkeeping

Permit Conditions: Table 21 summarizes Section 6 of the Title V Renewal Permit.

Table 21: Section 6 Permit Conditions		
New Permit	Existing Permit	Description
Condition No.	Condition No.	
6.2.10	N/A	New Conditions - PCWP NESHAP Recordkeeping
6.2.11	N/A	New Conditions - PCWP NESHAP Recordkeeping
		-Maintain MSDSs or CPDS for each and every coating,
		sealant, and ink used at the facility in order to verify
		compliance with the NESHAP.
6.2.12	N/A	New Conditions - PCWP NESHAP Recordkeeping
6.2.13	6.2.3	Updated Condition – PCWP NESHAP Reporting
		requirement
		-Updated legal citation.
6.2.14	N/A	New Condition – PCWP NESHAP Reporting
		requirement
6.2.15	N/A	New Condition – PCWP NESHAP Reporting
		requirement
6.2.16	6.2.11	Updated Condition
		-Reporting requirements associated with commencement
		of construction and initial startup of baghouse BH05A.
N/A	6.2.8	Deleted Condition
		-HEW has satisfied this one time reporting requirement.
N/A	6.2.9	Deleted Condition
		-HEW has satisfied this requirement.
N/A	6.2.10	Deleted Condition
		-HEW has satisfied this requirement.

VII. Specific Requirements

A. Operational Flexibility

Not Applicable.

B. Alternative Requirements

Not Applicable.

C. Insignificant Activities

The insignificant activities at HEW are contained in Section C of the Title V Renewal application. The following facility operations are included in this section of the Title V Renewal Permit.

Cold Cleaners

The cold cleaners are not subject to Georgia Rule 391-3-1-.02(2)(ff) because the potential to emit of VOC emissions is less than 100 tpy.

Mill Process – Green End Handling

This equipment group consists of log handling, debarkers, stranders, and green bins. The emission units that comprise this equipment group are classified as insignificant activities and these units are listed in Appendix B-Generic Emission Groups of the Title V Permit because they do not belong in Appendix B – Insignificant Activities Based on Emission Levels (i.e., these emissions units are subject to a state rule).

Mill Process-Storage Tanks

The facility operates resin storage tanks, resin bulk containers, wax storage tanks, a release agent storage tank, release agent mix tank, and a large propane storage tank. All of these tanks have fixed roofs. The MDI resin is not normally exposed to the atmosphere because the MDI tanks are sealed with a dry compressed air blanket.

Surface Coating Hoods with VOC Emissions Less than 5 tpy

This activity is brought to Section 3 of the Permit under Equipment Group COAT as this process activity is an affected facility under 40 CFR 63 Subpart DDDD.

D. Temporary Sources

None applicable.

E. Short-Term Activities

None applicable.

F. Compliance Schedule/Progress Reports

None applicable.

G. Emissions Trading

None applicable.

H. Acid Rain Requirements

None applicable.

I. Stratospheric Ozone Protection Requirements

HEW operates air conditioners/refrigeration equipment that uses CFC's, HFC's or other stratospheric ozone-depleting substances listed in 40 CFR Part 82, Subpart A, Appendices A and B.

J. Pollution Prevention

None applicable.

K. Specific Conditions

None applicable.

VIII. General Provisions

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

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

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

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

Addendum to Narrative