



Mullins, Robert A <robert.a.mullins@wv.gov>

RE: R30-00700016-2024(SM01)

1 message

Jesse Hanshaw <jhanshaw@slrconsulting.com>
To: "Mullins, Robert A" <robert.a.mullins@wv.gov>

Thu, Sep 26, 2024 at 7:13 AM

Thanks RA,

Hope you are doing well. We will review and get back to you with any questions or comments.

Have a great day!

Jesse Hanshaw

Principal Engineer - Air Quality

D 681-205-8969 **O** 681-205-8949
M 304-545-8563 **E** jhanshaw@slrconsulting.com

SLR International Corporation
8 [Capitol Street Suite 300, Charleston, WV, United States 25301](#)



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From: Mullins, Robert A <robert.a.mullins@wv.gov>

Sent: September 25, 2024 2:53 PM

To: Timothy.Sagraves@wy.com; Matthew.Rutherford@wy.com; Jesse Hanshaw <jhanshaw@slrconsulting.com>

Subject: R30-00700016-2024(SM01)

Attached is the Pre-Draft Title V Significant Modification and Factsheet for Weyerhaeuser NR Company's Sutton OSB Mill. Please Review the Changes in blue and respond with any questions or comments by October 4, 2024 so that I can address any question or comment before sending the permit out to notice.

Thanks,

--

Robert Mullins

WV Department of Environmental Protection

Division of Air Quality

[601 57th Street, SE](#)

[Charleston, WV 25304](#)

Phone: (304)926-0499 ext. 41286



Mullins, Robert A <robert.a.mullins@wv.gov>

Completeness Determination, Sutton OSB Mill, Application No.: R30-00700016-2024(SM01)

1 message

Mullins, Robert A <robert.a.mullins@wv.gov>

Tue, Apr 16, 2024 at 10:45 AM

To: Timothy.Sagraves@wy.com, Matthew.Rutherford@wy.com, Jesse Hanshaw <jhanshaw@slrconsulting.com>

Your combined application for an NSR permit and a Title V significant permit modification for the above referenced facility was received by this Division on March 14, 2024. After review of said application, it has been determined that the Title V significant permit modification is **incomplete**. Pursuant to Section 4.1.b of 45CSR30, a complete application must contain sufficient information for the Secretary to evaluate the subject source and its application and to determine all applicable requirements. Since the changes requested under the Title V significant permit modification are dependent upon the applicable requirements which will be included in the approved NSR permit currently under review, it is not possible for the Secretary to determine all applicable requirements. Since all other elements of the Title V significant permit modification were included, this application shall automatically be deemed to be complete on the date the NSR permit is approved.

In accordance with Section 4.1.a.2 of 45CSR30, an applicant shall file a complete application to obtain a Title V significant permit modification within twelve (12) months after commencing operation. Where an existing Title V operating permit would prohibit such construction or change in operation, the source must obtain a permit revision before commencing operation. If the applicant submitted a timely and complete application and is not required under Section 4.1.a.2 of 45CSR30 to obtain a permit revision before commencing operation, the source's ability to operate without a Title V significant permit modification shall be in effect from the date of startup of the proposed changes until the final permit modification is issued. If during the processing of this application it is determined that additional information is necessary to evaluate or take final action on this application, a request for such information will be made in writing with a reasonable deadline for a response. If the applicant fails to submit any additional information identified as being needed to process the application by the deadline specified in writing, this protection to operate without a Title V significant permit modification shall cease to apply.

The applicant has the duty to supplement or correct the application. An applicant who fails to submit any relevant facts or who has submitted incorrect information in any permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft significant permit modification.

This completeness determination applies only to the Title V significant permit modification. The NSR permit application will undergo a separate completeness review. Should you have any questions regarding this determination, please contact me.

Sincerely,

--

Robert Mullins

WV Department of Environmental Protection

Division of Air Quality

601 57th Street, SE

Charleston, WV 25304

Phone: (304)926-0499 ext. 41286



Mink, Stephanie R <stephanie.r.mink@wv.gov>

WV DAQ Title V Permit Application Status for Weyerhaeuser NR Company; Heaters

4 messages

Mink, Stephanie R <stephanie.r.mink@wv.gov> Thu, Mar 14, 2024 at 3:21 PM
To: Timothy.Sagraves@wy.com, "Matthew.Rutherford@Weyerhaeuser.com" <Matthew.Rutherford@weyerhaeuser.com>, Jesse Hanshaw <jhanshaw@slrconsulting.com>
Cc: Carrie McCumbers <carrie.mccumbers@wv.gov>, Robert A Mullins <robert.a.mullins@wv.gov>

RE: Application Status

Weyerhaeuser NR Company

Heaters

Facility ID No. 007-00016

Application No. R30-00700016-2024 (SM01)

Dear Mr. Sagraves,

Your application for a Title V Significant Modification Permit for Weyerhaeuser NR Company's Heaters facility was received by this Division on March 14, 2024, and was assigned to Robert "R.A."Mullins.

Should you have any questions, please contact the assigned permit writer, Robert "R.A."Mullins, at 304-926-0499, extension 41286, or Robert.A.Mullins@wv.gov .

--

Stephanie Mink

Environmental Resources Associate

West Virginia Department of Environmental Protection

Division of Air Quality, Title V & NSR Permitting

601 57th Street SE

Charleston, WV 25304

Phone: 304-926-0499 x41281

Jesse Hanshaw <jhanshaw@slrconsulting.com>
To: "stephanie.r.mink@wv.gov" <stephanie.r.mink@wv.gov>

Thu, Mar 14, 2024 at 4:55 PM

Your message

To: Jesse Hanshaw

Subject: WV DAQ Title V Permit Application Status for Weyerhaeuser NR Company; Heaters

Sent: Thursday, March 14, 2024 3:21:46 PM (UTC-05:00) Eastern Time (US & Canada)

was read on Thursday, March 14, 2024 4:55:19 PM (UTC-05:00) Eastern Time (US & Canada).

Jesse Hanshaw

D 681-205-8969 **O** 681-205-8949
M 304-545-8563 **E** jhanshaw@slrconsulting.com

SLR International Corporation
8 [Capitol Street Suite 300, Charleston, WV, United States 25301](#)



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McCumbers, Carrie <carrie.mccumbers@wv.gov>
To: stephanie.r.mink@wv.gov

Thu, Mar 14, 2024 at 5:00 PM

Your message

To: McCumbers, Carrie
Subject: WV DAQ Title V Permit Application Status for Weyerhaeuser NR Company; Heaters
Sent: 3/14/24, 3:21:46 PM EDT

was read on 3/14/24, 5:00:08 PM EDT

Mullins, Robert A <robert.a.mullins@wv.gov>
To: stephanie.r.mink@wv.gov

Fri, Mar 15, 2024 at 8:28 AM

Your message

To: Mullins, Robert A
Subject: WV DAQ Title V Permit Application Status for Weyerhaeuser NR Company; Heaters
Sent: 3/14/24, 3:21:46 PM EDT

was read on 3/15/24, 8:28:02 AM EDT

Division of Air Quality Permit Application Submittal

Please find attached a permit application for :

[Company Name; Facility Location]

- DAQ Facility ID (for existing facilities only):
- Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only):

- Type of NSR Application (check all that apply):
 - Construction
 - Modification
 - Class I Administrative Update
 - Class II Administrative Update
 - Relocation
 - Temporary
 - Permit Determination
- Type of 45CSR30 (TITLE V) Revision (if any)**:
 - Title V Initial
 - Title V Renewal
 - Administrative Update
 - Minor Modification
 - Significant Modification
 - Off Permit Change

****If any box above is checked, include the Title V revision information as ATTACHMENTS to this application.**

- Payment Type:
 - Credit Card (Instructions to pay by credit card will be sent in the Application Status email.)
 - Check (Make checks payable to: WVDEP – Division of Air Quality)

Mail checks to:
WVDEP – DAQ – Permitting
Attn: NSR Permitting Secretary
601 57th Street, SE
Charleston, WV 25304

Please wait until DAQ emails you the Facility ID Number and Permit Application Number. Please add these identifiers to your check or cover letter with your check.

- If the permit writer has any questions, please contact (all that apply):

Responsible Official/Authorized Representative

- Name:
- Email:
- Phone Number:

Company Contact

- Name:
- Email:
- Phone Number:

Consultant

- Name:
- Email:
- Phone Number:



Weyerhaeuser



Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Facility ID: 007-00016

Permit ID: R13-1761L

Weyerhaeuser NR Company

3601 Gauley Turnpike, Heaters, WV 25301

Prepared by:

SLR International Corporation

West Virginia (WV):

SLR Project No.: 116.00687.00106

March 2024

Executive Summary

Weyerhaeuser NR Company owns and operates Sutton OSB Mill (facility) located off of Rt. 19 near Heaters in Braxton County, WV. The facility is classified as a major source under Title V of the Clean Air Act and WV 45 CSR 30, and operates under permit R30-00700016-2024, issued January 8, 2024. The facility wide Potential to Emit (PTE) is greater than 100 TPY of NO_x, CO, and VOC, but less than 250 TPY for all criteria pollutants, and since the facility is not a listed source under 45-14-2.43, it is not a major stationary source under WV 45 CSR 14 and not subject to Prevention of Significant Deterioration (PSD) regulation.

The applicant herein proposes to modify the Sutton OSB Mill by removing the Biofilter control device and utilizing the recently installed Wet Electrostatic Precipitator (WESP) as the replacement end control device for Energy Cells 1 & 2, Dryers 1, 2, 3, 4, and the OSB Press. Weyerhaeuser also proposes replacing the Main Stack, existing Emission Point (EP) 23, with the existing WESP Bypass Stack, EP 21A, future new Main Stack, EP 21A. If approved, and the WESP becomes the only control device for the units named above, the previously permitted Routine Control Device Maintenance Exemption (RCDME) will no longer be needed. The applicant proposes to remove the RCDME conditions from the permit. When the WESP is shutdown for maintenance, the emission units controlled by the WESP will also be shutdown. The facility's PTE VOC and Hazardous Air Pollutants (HAPs) will decrease when the RCDME is removed. The proposed modification will not affect the facility's PTE of other regulated pollutants, or change its status under the Title V or PSD programs. Attachment S is included to address the proposed modifications' impact to the facility's Title V, R30 Permit.



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Appendix A Application Form

Attachments

- Attachment A: Business Certificate**
- Attachment B: Map(s)**
- Attachment C: Installation and Start Up Schedule**
- Attachment D: Regulatory Discussion**
- Attachment E: Plot Plan**
- Attachment F: Detailed Process Flow Diagram(s)**
- Attachment G: Process Description**
- Attachment H: Safety Data Sheets (MSDS)**
- Attachment I: Emission Units Table**
- Attachment J: Emission Points Data Summary Sheet**
- Attachment K: Fugitive Emissions Data Summary Sheet (Not Applicable)**
- Attachment L: Emissions Unit Data Sheet(s) (Not Applicable)**
- Attachment M: Air Pollution Control Device Sheet(s)**
- Attachment N: Supporting Emissions Calculations**
- Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans**
- Attachment P: Public Notice**
- Attachment Q: Business Confidential Claims (Not Applicable)**
- Attachment R: Authority Forms (Not Applicable)**
- Attachment S: Title V Permit Revision Information**
R30-00700016-2024 Permit Markup



1.0 Facility Information

Known permitting history for the Sutton OSB Mill is shown below:

Table A: Sutton OSB Mill Permit History

Permit	Permit Type	Activity #	Complete Date	Issuance Date	Summary of Action
R13-1761	Initial			10/24/94	Construction
R13-1761R	Modification			6/5/97	As-built Design Changes
R13-1761A	Modification			6/17/98	Increase resin usage
R13-1761B	Modification			12/2/99	Increase in Formaldehyde
R13-1761C					Removal of RCOs on the wood flake dryers
R13-1761D				2/16/06	Withdrawn
R13-1761E	Modification			6/22/07	Increase Emission Limits
R13-1761F	Modification			7/23/08	Install two RTOs/RCOs to comply with PCWP MACT, remove pine processing limit
R13-1761G	Class II Admin Update			3/12/09	Add RCDME & alternate operating scenarios
R13-1761H				10/11/12	Withdrawn
R13-1761I				8/5/16	Install Biofilter, update PTE
R13-1761J	Class I Admin Update			10/18/18	Remove RCOs
R13-1761K				5/24/23	Incorporate CO-R34-E-2020-10
R13-1761L	Modification			10/13/23	Replace WESPs with new WESP, revise Methanol/VOC/HAP PTE, modify PB 1 & 3 EP.

1.1 Facility Location

The Sutton OSB Mill is located off of Rt. 19, near Heaters, in Braxton County, WV. The GPS coordinates in decimal degrees are: Lat 38.76245, Long -80.65324.



1.2 Process Description

Weyerhaeuser's Sutton OSB Mill is an OSB production facility with the potential to make a maximum of 80,250 ft² of 3/8 inch board per hour. The Oriented Strand Board (OSB) is produced primarily from hardwood and is made with methylene diphenyl diisocyanate (MDI) resin, phenol-formaldehyde (PF) resin, wood strands, wax, and other additives to form the surface and core layers of the composite board. Major processing areas at the facility are: Log Intake and Storage, Flaking and Screening, Strand Drying, Mat Preparation, Pressing, Board Finishing, and Shipping.

Cut logs are unloaded and stored at the site. During the winter months, the logs are conditioned and thawed. The logs are debarked, cut to length and flaked into thin strands approximately 0.025 inches thick, 0.75 inches wide, and 3.0 inches long. The removed bark material is used in the hog feed system to fire two energy cells.

The wood strands are stored in a bin, and during production are fed into one of four rotary dryers. The 175 mmBtu/hour wood-waste fired energy cells (with natural gas backup primarily used during start-up and designed at a heat input of 29 mmBtu/hour) provide the heat to the dryers in the form of direct contact with the flue gases. In the dryers, the moisture in the flakes is reduced from a range of 40 to 60 percent to 2 to 4 percent. Currently, the dryers, during normal operation, exhaust through the WESP and the Biofilter for control of particulate matter and hydrocarbons prior to exhaust into the air. With Department approval, the Biofilter will be removed and only the WESP will control future dryer exhaust. The facility is currently permitted to run in several other operating modes:

- “Idle run mode” - defined as those times when the Energy Cells are operating at idle, no material is being dried in the dryers, gases are vented through the operating Multi-clones, and emitted from Emission Points 10 and 11;
- “Energy Cell Only Mode” - defined as those times when the Energy Cells are operating, no material is being dried in the dryers, gases are vented through the operating WESP, and emitted from Emission Point 21A; and
- “RCDME” – the maintenance exemption was previously defined as those times when the Energy Cells were operating, material was being dried in the dryers, and gases were vented through the WESP while the Biofilter was undergoing maintenance. The applicant proposes to remove the RCDME from the permit in this modification. The Energy Cells, Dryers, and OSB Press will not be operated if the WESP is shutdown.

The dried wood strands are screened into three classifications: surface, core, and fines or fuel. Larger strands are used for the surface layers of the OSB, while the core layers contain the intermediate sizes. The fines contain very small flakes or dust that cannot be used in the OSB. The larger flakes are blended with resins and wax and formed into mats that contain two surface layers and two core layers. These mats are trimmed and loaded into a sixteen-slotted press. In the press, mats are heated up to 425 degrees Fahrenheit under a pressure of 750 pounds per square inch. This process cures the thermosetting resin and forms the sheets of OSB.



The press discharges the sheets onto a sawline conveyor system. The fumes from the press and the handling operations are routed to the energy cells as part of the feed air for combustion. This arrangement takes advantage of the preheated press vent exhaust (which facilitates efficient combustion), and it acts to oxidize the volatile organic compounds, carbon monoxide, and hazardous air pollutants in the press vent exhaust.

Each of the four separate dryers is designed to process up to 28,000 lb/hr of dried wood flakes, for a total facility process rate of 111,000 lb/hr of dried flakes. When combined with resins and wax, which will average approximately 7.3 percent of total weight of the product, the press will handle up to 120,800 lb/hr and 450,000 tons/year of commercial OSB.

Table B: Emission Units

Emission Unit ID	Description	Control
1S	Flaking and Screening System	4313-00-10 Fabric Filter
3S	Dry Flake Area	4333-00-10 Fabric Filter
4S	Mat Trim System	4345-00-10 Fabric Filter
5S	Rough Trim System	4353-00-10 Fabric Filter
6S	Tongue & Groove and Sawing System	4363-00-10 Fabric Filter
7S	Sander Dust System	4374-00-10 Fabric Filter
9S	Dry Waste System	4397-00-10 Fabric Filter
3800-00-10 3816-00-11	Energy Cell No. 1 ⁽²⁾	3820-00-10 Multiclone 4200-00-10 WESP ⁽¹⁾
3900-00-10 3916-00-11	Energy Cell No. 2 ⁽²⁾	3920-00-10 Multiclone 4200-00-10 WESP
3130-00-11	Dryer No. 1	4200-00-10 WESP
3230-00-11	Dryer No. 2	
3330-00-11	Dryer No. 3	
3430-00-11	Dryer No. 4	
4700-00-10	OSB Press	4200-00-10 WESP
27S	Emergency Diesel Generator	None
31S	Liquid Phenolic Resin Tank #1	None
32S	Liquid Phenolic Resin Tank #2	None
33S	Liquid Phenolic Resin Tank #3	None
34S	Liquid Phenolic Resin Tank #4	None
35S	MDI Tank #1	None
36S	MDI Tank #2	None
37S	Wax Tank #1	None
38S	Wax Tank #2	None



Emission Unit ID	Description	Control
40S/41S	Paint Booth No.1	Filters
42S/43S	Paint Booth No.2	Filters
44S/45S	Paint Booth No.3	Filters
46S	Liquid Phenolic Resin Tank #5	None
47S	Liquid Phenolic Resin Tank #6	None

1.3 Control Device Overview & History

Following issuance of Permit R13-1761I in August of 2016, Weyerhaeuser executed its plan to upgrade the PWCP MACT HAP control system to incorporate a biological oxidation scrubber, commonly referred to as a biofilter, at the Sutton OSB Mill. The biofilter was installed in the winter of 2016 to replace the two regenerative catalytic oxidizers (RCOs) as a means of controlling HAPs from the Mill. The Rule 13 permit was updated to R13-1761J, October 18, 2018, to completely remove the old RCO units from the facility. Subsequently, the Title V permit was renewed and amended under R30-00700016-2018(MM01, 5/7/2019). After successful demonstration, the biofilter is currently operating as the Mill’s primary HAP emission control device.

Following failure of the biofilter’s process fan the Title V Permit was modified under Permit R30-00700016-2018(SM01, 9/7/2021), and the Rule 13 Permit under Permit R13-1761K (5/24/2021), to incorporate conditions of DAQ Consent Order Number CO-R34-E-2020-10 relating to operation and maintenance of the biofilter fan wheel.

The Title V Permit was recently renewed under Permit R30-00700016-2024, issued January 8, 2024, and included a new WESP, Control Device ID: 4200-00-10, constructed and permitted under R13-1761L, that replaced the two old WESP’s. Changes to the facility that were covered under the R13-1761L permitting action included:

- Replacement of two WESPs with one new WESP and update of associated emission points;
- Construction of the new WESP Bypass Stack, EP # 21A, and removal of the old bypass stack, EP # 21;
- Revision of the potential-to-emit (PTE) of the methanol emissions emitted from the Biofilter (Control Device ID: 4800-00-10) to account for a change in compliance with the emission standards given under 40 CFR 63, Subpart DDDD, and revision of emissions from EP # 23 and 24; and
- Modification of the emission points associated with Paint Booths No. 1 and 3, that now vent inside the building.



1.4 Proposed Modification

Weyerhaeuser now proposes to remove the existing biofilter and replace it with the recently permitted WESP, CD ID: 4200-00-10. The applicant estimates the WESP will be at least as effective as the level of control efficiency claimed from the existing combination of the WESP and biofilter, and the facility’s PTE will not increase from the proposed modification. After removing the RCDME, the potential to emit VOC and HAPs at the facility will decrease.

Table C: Change in Facility-Wide PTE (TPY)

Pollutant	R13-1761L	Proposed	Change
CO	108.60	108.60	0.00
NOx	222.90	222.90	0.00
PM2.5	87.70	87.70	0.00
PM10	95.30	95.30	0.00
PM	95.40	95.40	0.00
SO2	17.90	17.90	0.00
VOCs	181.80	177.40	-4.40
Total HAPs	67.80	66.01	-1.79

2.0 Regulatory Discussion

As a result of the modification proposed in this application, the removal of the Biofilter and utilization of the recently installed WESP as an end control device for Energy Cells 1 & 2, Dryers 1, 2, 3, 4, and the OSB Press, and replacing the Main Stack with the existing WESP Bypass Stack, EP # 21A, the OSB Mill will retain its status as a major source under WV R30 and Title V, and remain below the R14 and PSD thresholds. The applicant does not propose to increase the facility’s PTE. The facility-wide PTE will decrease slightly as a result of removing the RCDME. Since the WESP will become the primary and regulated end control device, a wet add on control device, applicable requirements under the Plywood and Composite Wood Products (PCWP) MACT must be re-evaluated. Rule applicability is further discussed in Attachment D.



Appendix A Application for NSR Permit and Title V Permit Revision

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024





WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY

601 57th Street, SE
Charleston, WV 25304
(304) 926-0475
www.dep.wv.gov/daq

**APPLICATION FOR NSR PERMIT
AND
TITLE V PERMIT REVISION
(OPTIONAL)**

PLEASE CHECK ALL THAT APPLY TO **NSR (45CSR13)** (IF KNOWN):

- CONSTRUCTION MODIFICATION RELOCATION
 CLASS I ADMINISTRATIVE UPDATE TEMPORARY
 CLASS II ADMINISTRATIVE UPDATE AFTER-THE-FACT

PLEASE CHECK TYPE OF **45CSR30 (TITLE V)** REVISION (IF ANY):

- ADMINISTRATIVE AMENDMENT MINOR MODIFICATION
 SIGNIFICANT MODIFICATION

IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS **ATTACHMENT S** TO THIS APPLICATION

FOR TITLE V FACILITIES ONLY: Please refer to "Title V Revision Guidance" in order to determine your Title V Revision options (Appendix A, "Title V Permit Revision Flowchart") and ability to operate with the changes requested in this Permit Application.

Section I. General

1. Name of applicant (as registered with the WV Secretary of State's Office): Weyerhaeuser NR Company		2. Federal Employer ID No. (FEIN): 263481257	
3. Name of facility (if different from above): Sutton OSB Mill		4. The applicant is the: <input type="checkbox"/> OWNER <input type="checkbox"/> OPERATOR <input checked="" type="checkbox"/> BOTH	
5A. Applicant's mailing address: 3601 Gauley Pike Heaters, WV 26627		5B. Facility's present physical address: 3601 Gauley Pike Heaters, WV 26627	
6. West Virginia Business Registration. Is the applicant a resident of the State of West Virginia? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO – If YES, provide a copy of the Certificate of Incorporation/Organization/Limited Partnership (one page) including any name change amendments or other Business Registration Certificate as Attachment A . – If NO, provide a copy of the Certificate of Authority/Authority of L.L.C./Registration (one page) including any name change amendments or other Business Certificate as Attachment A .			
7. If applicant is a subsidiary corporation, please provide the name of parent corporation:			
8. Does the applicant own, lease, have an option to buy or otherwise have control of the <i>proposed site</i> ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO – If YES, please explain: The applicant owns the site. – If NO, you are not eligible for a permit for this source.			
9. Type of plant or facility (stationary source) to be constructed, modified, relocated, administratively updated or temporarily permitted (e.g., coal preparation plant, primary crusher, etc.): Engineered Wood Products Facility producing Oriented Strand Board (OSB)		10. North American Industry Classification System (NAICS) code for the facility: 321219	
11A. DAQ Plant ID No. (for existing facilities only): 007-00016		11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only): R30-00700016-2024 R13-1761L	

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

12A.

- For **Modifications, Administrative Updates** or **Temporary permits** at an existing facility, please provide directions to the *present location* of the facility from the nearest state road;
- For **Construction** or **Relocation permits**, please provide directions to the *proposed new site location* from the nearest state road. Include a **MAP** as **Attachment B**.

Traveling along I-79, exit at Flatwoods (Exit 67) and navigate towards U.S. Rt 19. Travel North on U.S. Rt. 19 for approximately five (5) miles and the facility will be located on your left.

12B. New site address (if applicable): N/A	12C. Nearest city or town: Heaters	12D. County: Braxton
---	---------------------------------------	-------------------------

12.E. UTM Northing (KM): 4,290.213	12F. UTM Easting (KM): 529.939	12G. UTM Zone: 17N
------------------------------------	--------------------------------	--------------------

13. Briefly describe the proposed change(s) at the facility:
Weyerhaeuser proposes to remove the existing Biofilter, Control Device ID 4800-00-10; remove the existing Main Stack, Emission Point 23; and utilize the recently installed WESP, Control Device ID 4200-00-10, to replace the Biofilter as the primary control device for Energy Cells No. 1 and 2, Dryers No. 1, 2, 3, 4, and the OSB Press, and utilize the existing WESP Bypass Stack, Emission Point 21A, as the proposed new Main Stack. The applicant also proposes to update the emission points for the above-named Energy Cells, Dryers, and OSB Press to Emission Point 21A.

14A. Provide the date of anticipated installation or change: - Following permit issuance and Department approval, the Biofilter and associated Main Stack will be removed from operation. WESP 4200-00-10 is currently operating as a secondary control device.	14B. Date of anticipated Start-Up if a permit is granted: NA
--	---

14C. Provide a **Schedule** of the planned **Installation** of/**Change** to and **Start-Up** of each of the units proposed in this permit application as **Attachment C** (if more than one unit is involved).

15. Provide maximum projected **Operating Schedule** of activity/activities outlined in this application:
Hours Per Day 24 Days Per Week 7 Weeks Per Year 52

16. Is demolition or physical renovation at an existing facility involved? **YES** **NO**

17. **Risk Management Plans.** If this facility is subject to 112(r) of the 1990 CAAA, or will become subject due to proposed changes (for applicability help see www.epa.gov/ceppo), submit your **Risk Management Plan (RMP)** to U. S. EPA Region III.

18. **Regulatory Discussion.** List all Federal and State air pollution control regulations that you believe are applicable to the proposed process (*if known*). A list of possible applicable requirements is also included in Attachment S of this application (Title V Permit Revision Information). Discuss applicability and proposed demonstration(s) of compliance (*if known*). Provide this information as **Attachment D**.

Section II. Additional attachments and supporting documents.

19. Include a check payable to WVDEP – Division of Air Quality with the appropriate **application fee** (per 45CSR22 and 45CSR13).

20. Include a **Table of Contents** as the first page of your application package.

21. Provide a **Plot Plan**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as **Attachment E** (Refer to **Plot Plan Guidance**) .
- Indicate the location of the nearest occupied structure (e.g. church, school, business, residence).

22. Provide a **Detailed Process Flow Diagram(s)** showing each proposed or modified emissions unit, emission point and control device as **Attachment F**.

23. Provide a **Process Description** as **Attachment G**.

– Also describe and quantify to the extent possible all changes made to the facility since the last permit review (if applicable).

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

24. Provide **Material Safety Data Sheets (MSDS)** for all materials processed, used or produced as **Attachment H**.

– For chemical processes, provide a MSDS for each compound emitted to the air.

25. Fill out the **Emission Units Table** and provide it as **Attachment I**.

26. Fill out the **Emission Points Data Summary Sheet (Table 1 and Table 2)** and provide it as **Attachment J**.

27. Fill out the **Fugitive Emissions Data Summary Sheet** and provide it as **Attachment K**.

28. Check all applicable **Emissions Unit Data Sheets** listed below:

<input type="checkbox"/> Bulk Liquid Transfer Operations	<input type="checkbox"/> Haul Road Emissions	<input type="checkbox"/> Quarry
<input type="checkbox"/> Chemical Processes	<input type="checkbox"/> Hot Mix Asphalt Plant	<input type="checkbox"/> Solid Materials Sizing, Handling and Storage Facilities
<input type="checkbox"/> Concrete Batch Plant	<input type="checkbox"/> Incinerator	<input type="checkbox"/> Storage Tanks
<input type="checkbox"/> Grey Iron and Steel Foundry	<input type="checkbox"/> Indirect Heat Exchanger	
<input type="checkbox"/> General Emission Unit, specify:		

Fill out and provide the **Emissions Unit Data Sheet(s)** as **Attachment L**.

29. Check all applicable **Air Pollution Control Device Sheets** listed below:

<input type="checkbox"/> Absorption Systems	<input type="checkbox"/> Baghouse	<input type="checkbox"/> Flare
<input type="checkbox"/> Adsorption Systems	<input type="checkbox"/> Condenser	<input type="checkbox"/> Mechanical Collector
<input type="checkbox"/> Afterburner	<input checked="" type="checkbox"/> Electrostatic Precipitator	<input type="checkbox"/> Wet Collecting System
<input type="checkbox"/> Other Collectors, specify –		

Fill out and provide the **Air Pollution Control Device Sheet(s)** as **Attachment M**.

30. Provide all **Supporting Emissions Calculations** as **Attachment N**, or attach the calculations directly to the forms listed in Items 28 through 31.

31. **Monitoring, Recordkeeping, Reporting and Testing Plans.** Attach proposed monitoring, recordkeeping, reporting and testing plans in order to demonstrate compliance with the proposed emissions limits and operating parameters in this permit application. Provide this information as **Attachment O**.

➤ Please be aware that all permits must be practically enforceable whether or not the applicant chooses to propose such measures. Additionally, the DAQ may not be able to accept all measures proposed by the applicant. If none of these plans are proposed by the applicant, DAQ will develop such plans and include them in the permit.

32. **Public Notice.** At the time that the application is submitted, place a **Class I Legal Advertisement** in a newspaper of general circulation in the area where the source is or will be located (See 45CSR§13-8.3 through 45CSR§13-8.5 and **Example Legal Advertisement** for details). Please submit the **Affidavit of Publication** as **Attachment P** immediately upon receipt.

33. **Business Confidentiality Claims.** Does this application include confidential information (per 45CSR31)?

YES NO

➤ If **YES**, identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "**Precautionary Notice – Claims of Confidentiality**" guidance found in the **General Instructions** as **Attachment Q**.

Section III. Certification of Information

34. **Authority/Delegation of Authority.** Only required when someone other than the responsible official signs the application. Check applicable **Authority Form** below:

<input type="checkbox"/> Authority of Corporation or Other Business Entity	<input type="checkbox"/> Authority of Partnership
<input type="checkbox"/> Authority of Governmental Agency	<input type="checkbox"/> Authority of Limited Partnership

Submit completed and signed **Authority Form** as **Attachment R**.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

35A. **Certification of Information.** To certify this permit application, a Responsible Official (per 45CSR§13-2.22 and 45CSR§30-2.28) or Authorized Representative shall check the appropriate box and sign below.

Certification of Truth, Accuracy, and Completeness

I, the undersigned Responsible Official / Authorized Representative, hereby certify that all information contained in this application and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry I further agree to assume responsibility for the construction, modification and/or relocation and operation of the stationary source described herein in accordance with this application and any amendments thereto, as well as the Department of Environmental Protection, Division of Air Quality permit issued in accordance with this application, along with all applicable rules and regulations of the West Virginia Division of Air Quality and W.Va. Code § 22-5-1 et seq. (State Air Pollution Control Act). If the business or agency changes its Responsible Official or Authorized Representative, the Director of the Division of Air Quality will be notified in writing within 30 days of the official change.

Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

SIGNATURE Timothy Sagraves DATE: 3-12-24
(Please use blue ink) (Please use blue ink)

35B. Printed name of signee: Timothy Sagraves		35C. Title: Mill Manager
35D. E-mail: Timothy.Sagraves@WY.com	35E. Phone: 304-765-4242	36F. FAX 304-765-4280
36A. Printed name of contact person (if different from above): Jesse Hanshaw, P.E.		36B. Title: Principal Engineer, SLR International Corporation
36C. E-mail: jhanshaw@slrconsulting.com	36D. Phone: 304-545-8563	36E. FAX: 681-205-8969

PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Attachment A: Business Certificate | <input type="checkbox"/> Attachment K: Fugitive Emissions Data Summary Sheet |
| <input type="checkbox"/> Attachment B: Map(s) | <input checked="" type="checkbox"/> Attachment L: Emissions Unit Data Sheet(s) |
| <input checked="" type="checkbox"/> Attachment C: Installation and Start Up Schedule | <input checked="" type="checkbox"/> Attachment M: Air Pollution Control Device Sheet(s) |
| <input checked="" type="checkbox"/> Attachment D: Regulatory Discussion | <input checked="" type="checkbox"/> Attachment N: Supporting Emissions Calculations |
| <input checked="" type="checkbox"/> Attachment E: Plot Plan | <input checked="" type="checkbox"/> Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans |
| <input checked="" type="checkbox"/> Attachment F: Detailed Process Flow Diagram(s) | <input checked="" type="checkbox"/> Attachment P: Public Notice |
| <input checked="" type="checkbox"/> Attachment G: Process Description | <input type="checkbox"/> Attachment Q: Business Confidential Claims |
| <input type="checkbox"/> Attachment H: Material Safety Data Sheets (MSDS) | <input type="checkbox"/> Attachment R: Authority Forms |
| <input checked="" type="checkbox"/> Attachment I: Emission Units Table | <input checked="" type="checkbox"/> Attachment S: Title V Permit Revision Information |
| <input checked="" type="checkbox"/> Attachment J: Emission Points Data Summary Sheet | <input type="checkbox"/> Application Fee |

Please mail an original and three (3) copies of the complete permit application with the signature(s) to the DAQ, Permitting Section, at the address listed on the first page of this application. Please DO NOT fax permit applications.

FOR AGENCY USE ONLY – IF THIS IS A TITLE V SOURCE:

- Forward 1 copy of the application to the Title V Permitting Group and:*
- For Title V Administrative Amendments:*
 - NSR permit writer should notify Title V permit writer of draft permit,*
- For Title V Minor Modifications:*
 - Title V permit writer should send appropriate notification to EPA and affected states within 5 days of receipt,*
 - NSR permit writer should notify Title V permit writer of draft permit.*
- For Title V Significant Modifications processed in parallel with NSR Permit revision:*
 - NSR permit writer should notify a Title V permit writer of draft permit,*
 - Public notice should reference both 45CSR13 and Title V permits,*
 - EPA has 45 day review period of a draft permit.*

Attachment A

Business Certificate

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

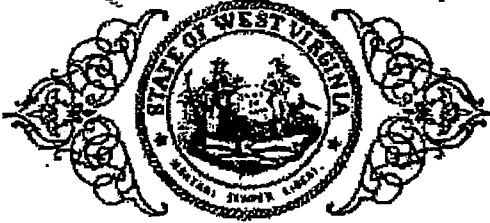
Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



State of West Virginia



Certificate

*I, Natalie E. Tennant, Secretary of State of the
State of West Virginia, hereby certify that*

WEYERHAEUSER NR COMPANY

was incorporated under the laws of West Virginia and a Certificate of Incorporation was issued by the West Virginia Secretary of State's Office on October 15, 2008.

I further certify that the corporation has not been revoked by the State of West Virginia nor has the West Virginia Secretary of State issued a Certificate of Dissolution to the corporation.

Accordingly, I hereby issue this

CERTIFICATE OF EXISTENCE



*Given under my hand and the
Great Seal of the State of
West Virginia on this day of
June 23, 2011*

Natalie E. Tennant

Secretary of State

Attachment B

Maps

Application for NSR Permit and Title V Permit Revision

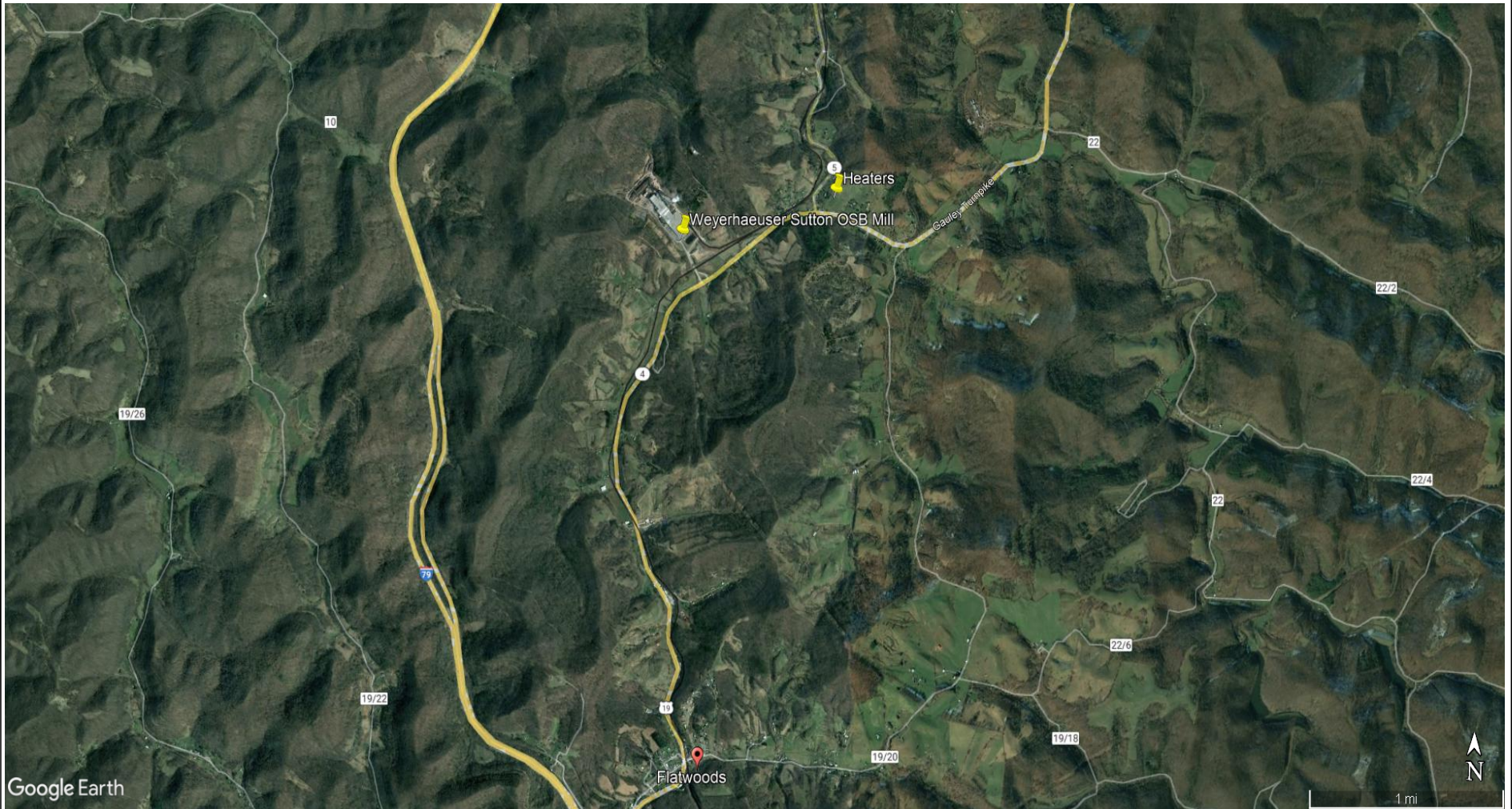
Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024





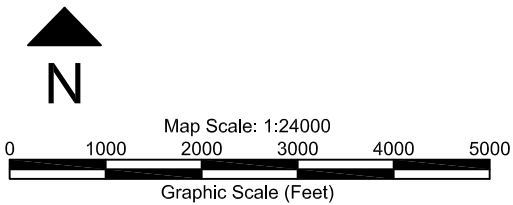
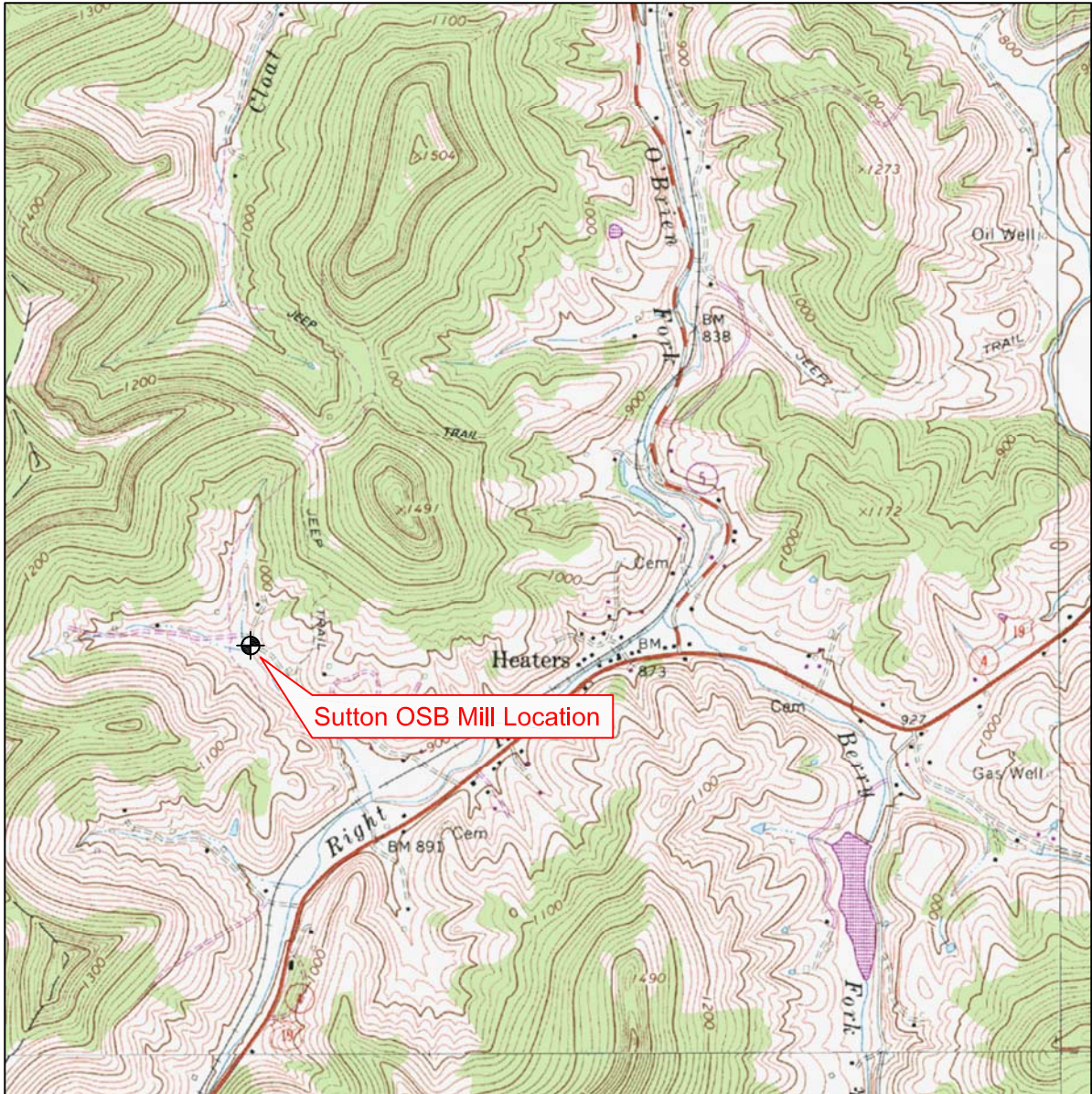
DATE:
02-12-2024

**WEYERHAEUSER NR COMPANY
SUTTON OSB MILL
Braxton County, Heaters, WV**

REVISION
0



ATTACHMENT B - AREA MAP



Topo map represents a portion of the Burnsville, W.Va. USGS Topographic Quadrangle, 1965 Edition, Photorevised 1989.

GPS Coordinates of Site

Lat: 38.76011° N, Long: -80.65541° W



#8 Capitol Street, Suite 300
 Charleston, West Virginia 25301
 Tel: 681-205-8949, Fax: 681-205-8969

Weyerhaeuser NR Company
 3601 Gauley Turnpike
 Heaters, West Virginia

Report:

Application for NSR Permit

Drawing

Attachment B - Map (Topographic)

Date: February 2024

Scale: 1" = 2000'

Fig. No.

Drawn By: CLB

Project #: 116.00687.00035

Attachment C

Installation & Start Up Schedule

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



Installation and Startup Schedule

The WESP, Control Device ID: 4200-00-10, has already been constructed and installed on site, as permitted under R13-1761L. If and when the proposed changes are approved the Biofilter will be taken offline.

Preliminary Project Schedule

Task	Duration	Start	Finish
Engineering Evaluation/Testing			3/30/2024
Biofilter Shut Down			8/1/2024
Demolition on Biofilter			To Be Determined

Attachment D

Regulatory Discussion

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



REGULATORY DISCUSSION

APPLICABLE REGULATIONS

Replacing the biofilter with the Wet Electrostatic Precipitator (WESP) as the primary end control device is subject to the following applicable rules and regulations:

Federal and State:

45 CSR 13 – Permits for Construction, Modification, Relocation, and Operation of Stationary Sources of Air Pollutants.

The changes proposed at the Sutton OSB Mill include the future demolition and removal of the Biofilter, Control Device ID: 4800-00-10, and implementation and designation of the existing WESP, Control Device ID: 4200-00-10, as the primary end control device for emission streams from the Energy Cells, Dryers, and OSB Press. As designed, the WESP can provide at least the same control efficiency as the existing biofilter / WESP control device combination and no increase in emissions will result.

Weyerhaeuser proposes to replace the control device used to comply with the requirements under Table 1B of 40 CFR 63 Subpart DDDD. Under Section 63.2268 of Subpart DDDD, a wet add on control device has additional compliance demonstration requirements that must be satisfied. Review and addition of substantive requirements requires modification under 45 CSR 13.

45 CSR 30 - Operating Permit Requirements.

Removing the biofilter control device and replacing it with the WESP will require a significant modification under 45 CSR 30. If approved, the changes proposed herein must be incorporated into the R30 Permit by reflecting the changes in the emission units table, table 4.1.2, the language in section 4.1.3., 4.1.6.c., 4.1.7., 4.1.26., 4.1.29., 4.1.20., and the Monitoring, Testing, and Recordkeeping requirements under sections 4.2, 4.3, and 4.4, respectively.

40 CFR 63 Subpart DDDD - *National Emission Standards for Hazardous Air Pollutants from Plywood and Composite Wood Products Facilities.*

The facility is a major source of HAPs and is currently subject to the Plywood and Composite Wood Products (PCWP) MACT. The modification proposed in this application will result in the WESP becoming the primary control device for emission units that currently vent through the Biofilter. The proposed biofilter replacement will affect the 40 CFR 63 Subpart DDDD requirements since a wet add on control device will be the primary HAP control used to comply with one of the six compliance options required under Table 1B for the associated emission units.

Under Section 63.2268 of Subpart DDDD, *Initial compliance demonstration for a wet control device*, if you use a wet control device as the sole means of reducing HAP emissions, you must develop and implement a plan for review and approval to address how organic HAP captured in the wastewater from the wet control device is contained or destroyed to minimize re-release to the atmosphere such that the desired emissions reductions are obtained. As required, the plan to address HAP re-release will be submitted with the Notification of Compliance Status. Submission of the plan demonstrates compliance with condition (8) of Table 5 to Subpart DDDD. Implementation of the plan will demonstrate compliance condition (6) of Table 7 of Subpart DDDD.

40 CFR 60, Subpart Db - The facility must record and maintain records of the amounts of each fuel combusted each day, maintain records of start-ups and shutdowns, and a quarterly ash and BTU analysis of the wood combusted under paragraph 4.4.3. of the R30 Permit. The proposed changes do not impact analysis under this regulation.

40 CFR 64 – Compliance Assurance Monitoring

The facility is subject to compliance assurance monitoring (CAM). Part 64 applies to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit is subject to an emission limitation or standard for the applicable regulated air pollutant (PM), other than an emission limitation or standard that is exempt under paragraph (b)(1) (HAPs) of this section. External inspections of the ductwork and control devices must be conducted monthly and internal inspections must be conducted every 12 months for the WESP and Dry Waste System Baghouse. Voltage on the WESP must be continuously monitored, and have at least two fields in service and voltage maintained at or above 30 kV, with an alarm to sound if the voltage falls below this level.

40 CFR 61 - This facility is subject to the asbestos inspection and notification requirements. However, no asbestos is affected by the proposed changes.

State Only:

45 CSR 4 - No Objectionable Odors.

45 CSR 17 - Fugitive Particulate Emissions.

45 CSR 27 – Best Available Technology (BAT) for Toxic Air Pollutants (TAPs) Emissions.

If approved, the existing WESP Bypass Stack, Emission Point ID 21A, will become the new Main Stack. Any discharge in excess of the amount shown in Table A of 45CSR27 shall employ BAT at all chemical processing units emitting the toxic air pollutant: Provided, that any source or equipment specially subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such regulation or standard.

NON-APPLICABILITY DETERMINATIONS

The following requirements have been determined “not applicable” due to the following:

40 CFR 63 Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, Boiler MACT.

The major source boiler MACT does not apply to the Heaters Mill due to the wood fired Energy Cells direct firing the dryers. As a result, the Energy Cells are not defined as a boiler or process heater which exempts them from this Regulation.

40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.

Tanks at the facility were installed after the applicability date but are not subject to the requirements because their capacities are less than 75 m³.

Attachment E

Plot Plan

Application for NSR Permit and Title V Permit Revision

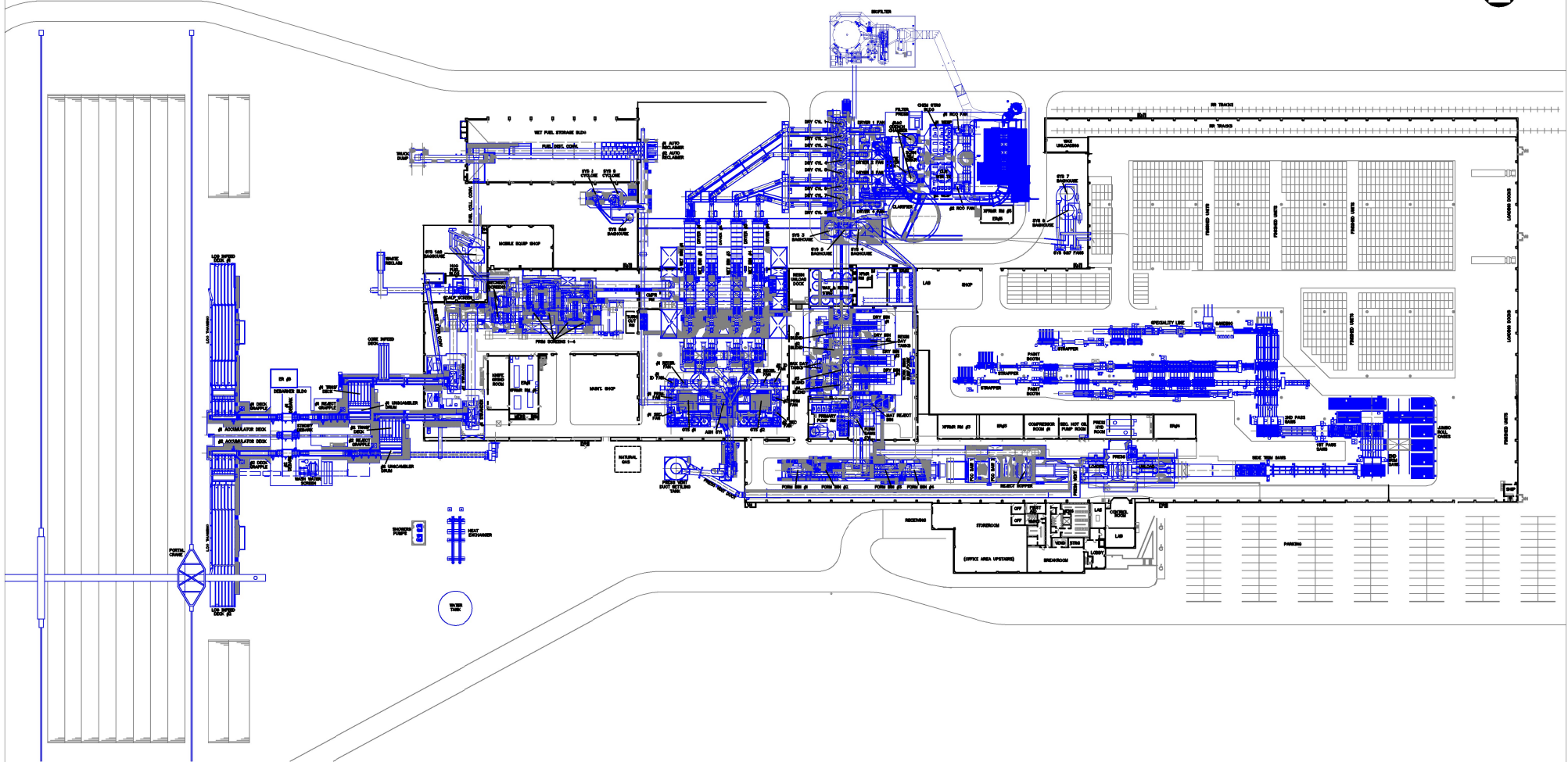
Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



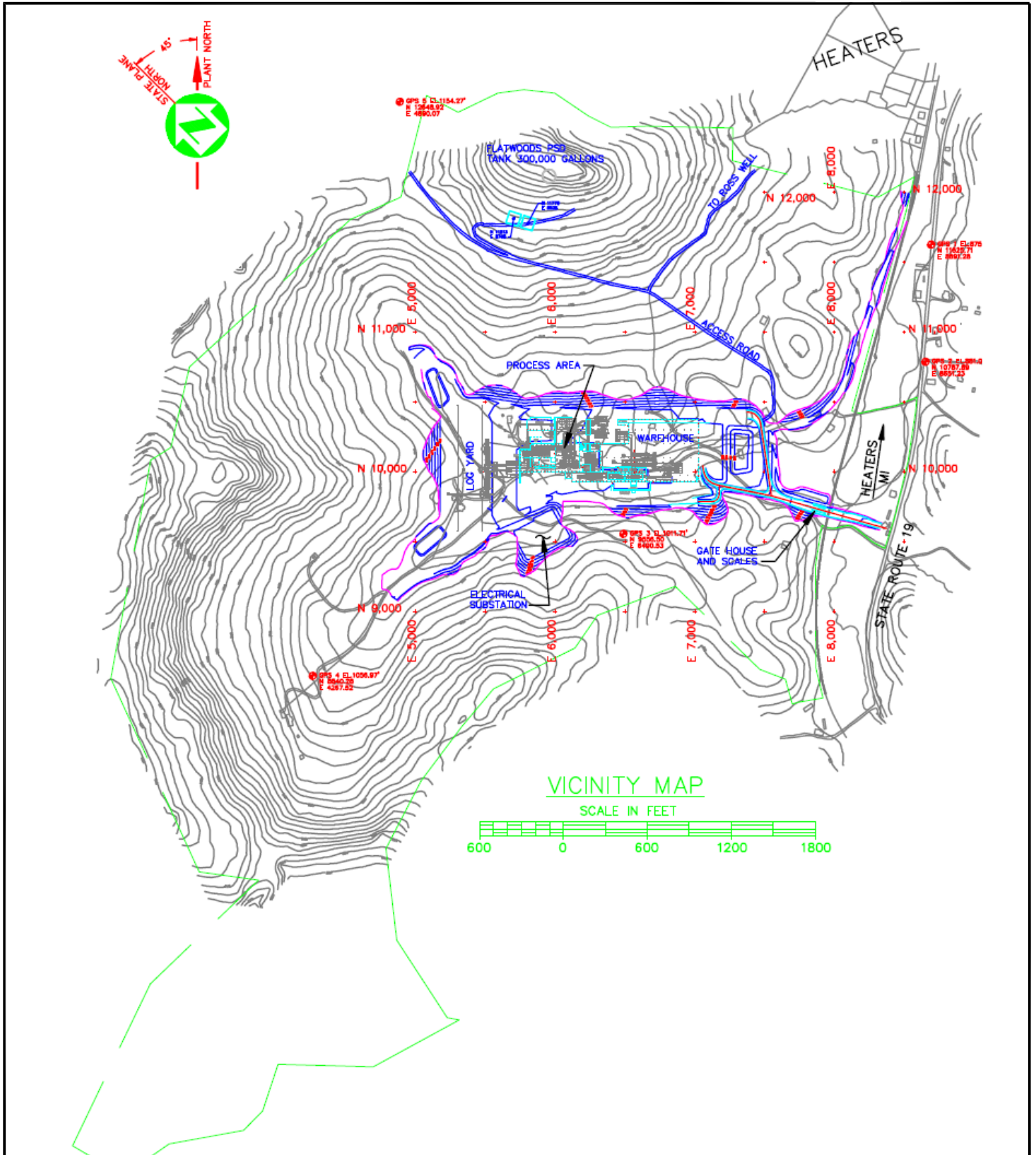



Weyerhaeuser NR Co.

Attachment E - Plot Plan

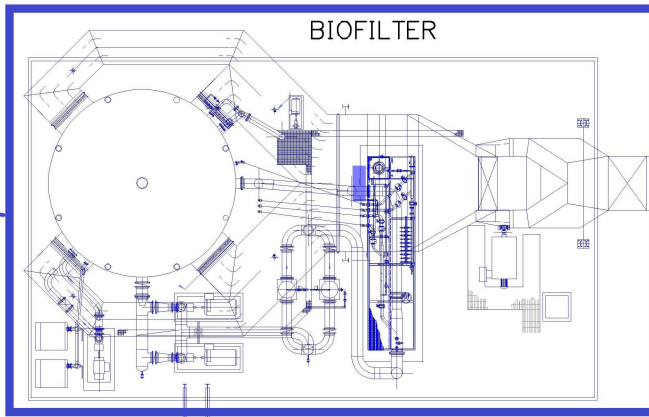
Sutton OSB Mill

Feb 2024

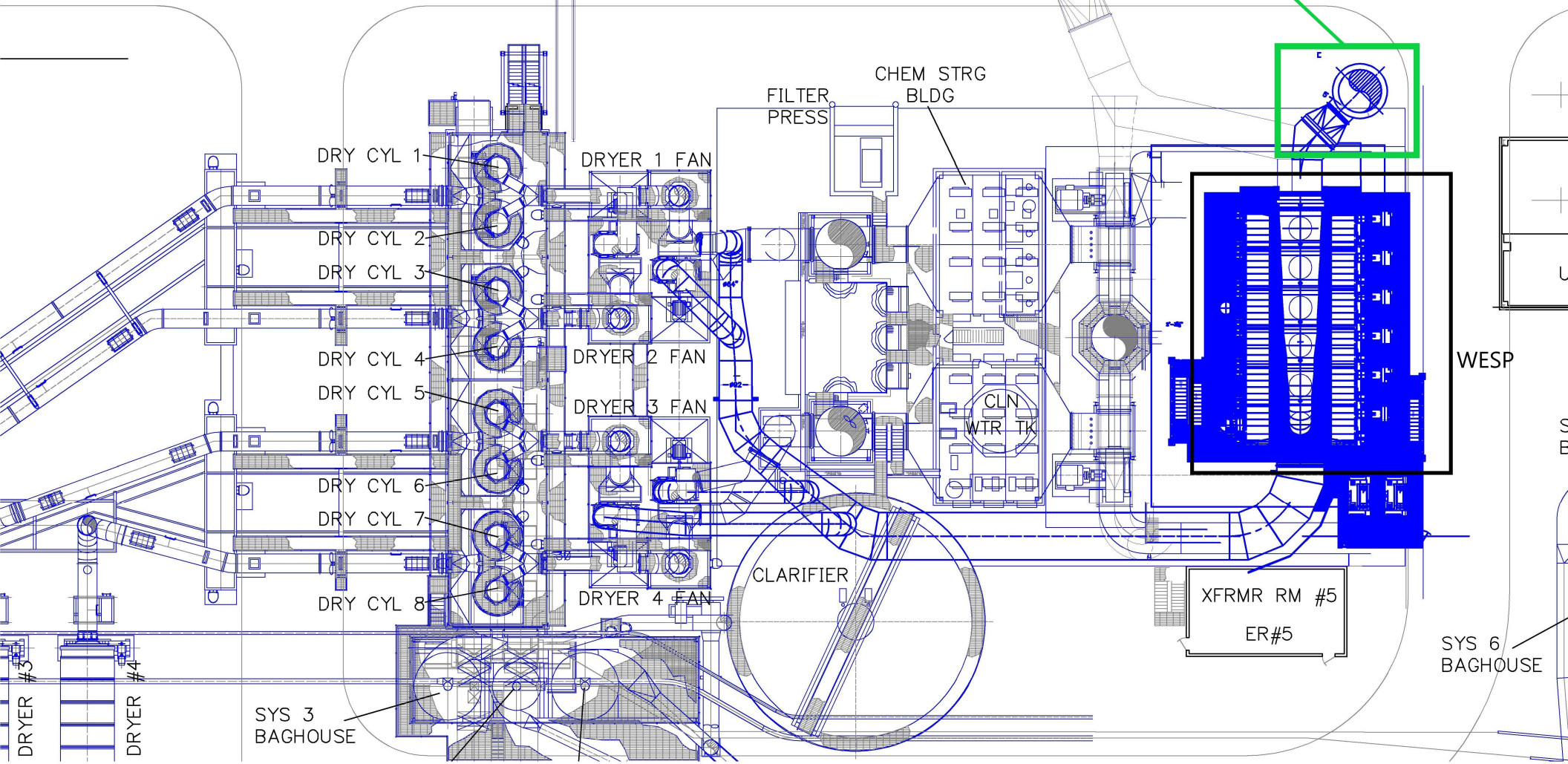
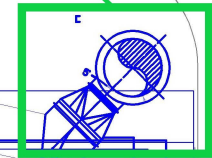


DATE: 02-12-2024	WEYERHAEUSER NR COMPANY SUTTON OSB MILL Braxton County, Heaters, WV	REVISION 0
DRAWN BY: 	ATTACHMENT E - PLOT PLAN	

Remove Biofilter and Main Stack (Emission Point ID 23)



New Main Stack (Emission Point 21A)
(Existing WESP Bypass Stack)



Attachment F

Process Flow Diagram

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

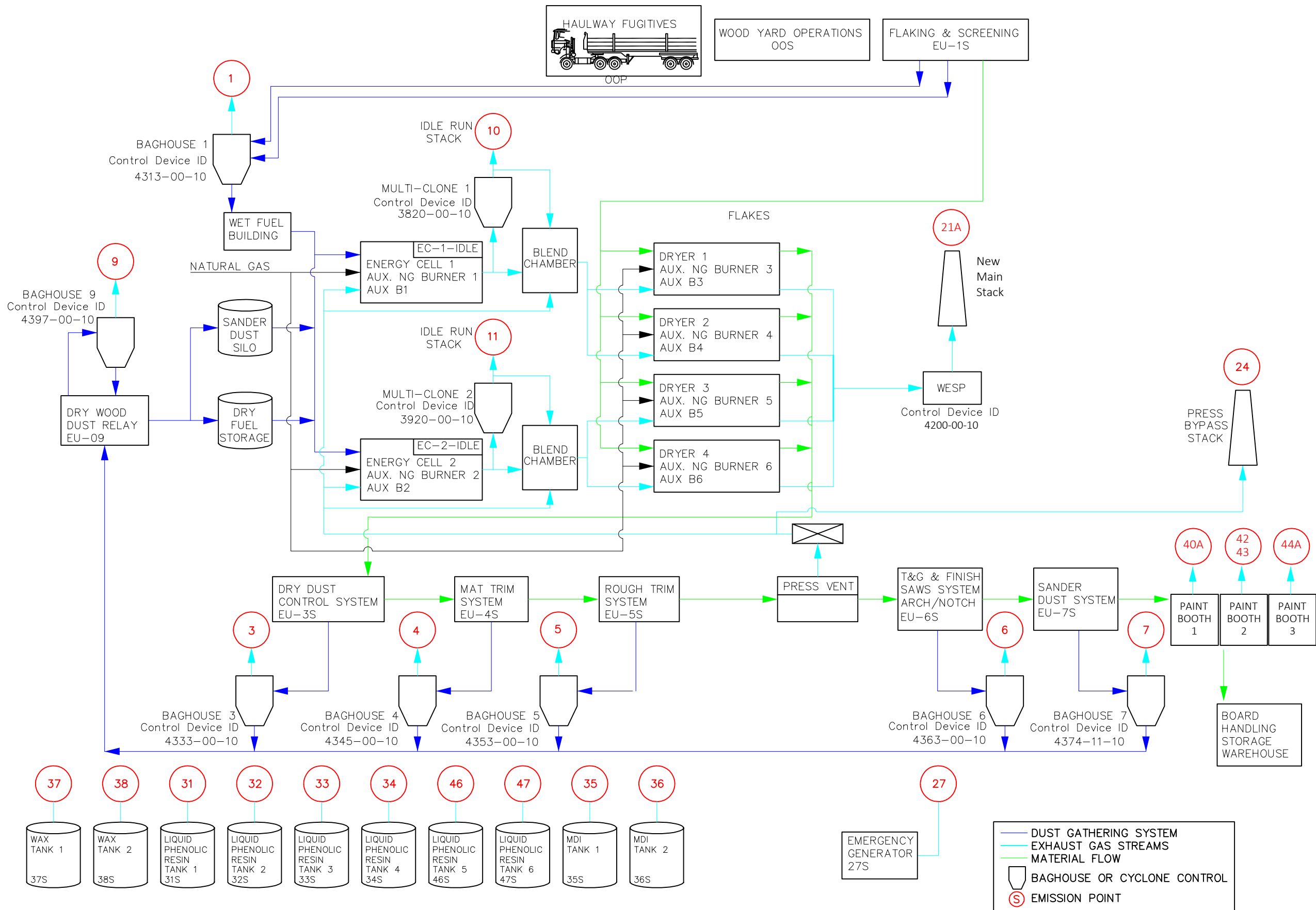
Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



ATTACHMENT C - PROCESS FLOW



NOTES:

- Energy Cell No. 1 Wood dust burner ID. 3800-00-10
Aux. natural gas burner ID. 3816-00-11
- Energy Cell No. 2 Wood dust burner ID. 3900-00-10
Aux. natural gas burner ID. 3916-00-11
- Dryer No. 1 Aux. natural gas burner ID. 3130-00-11
- Dryer No. 2 Aux. natural gas burner ID. 3230-00-11
- Dryer No. 3 Aux. natural gas burner ID. 3330-00-11
- Dryer No. 4 Aux. natural gas burner ID. 3430-00-11
- OSB Press Equipment ID. 4700-00-10

REV	DATE	BY	APPD	REVISION DESCRIPTION	REV	DATE	BY	APPD	REVISION DESCRIPTION
11	2/12/24			REMOVED BIOFILTER	5	10/13/11	MHR	-	ADDED ARCH/NOTCH SYSTEM TO BAGHOUSE 6
10	8/23/22	MHR	-	COMBINED WESP1 & WESP2 INTO A SINGLE WESP	4	1/9/08	DEK	-	ADDED RTOS.
9	9/14/17	MHR	-	REMOVED WAX TANK HEATER	3	2/10/05	DEK	-	ADDED 2 TANKS, REMOVED RCOS.
8	2/16/16	MHR	-	REVISED PRESS VENT TO SHOW TO BLEND CHAMBERS	2	5/30/02	BW	-	ADDED BAGHOUSE 3, RENUMBERED OTHERS
7	2/8/16	MHR	-	REMOVED RCOS/RTOS & ADDED BIOFILTER W/ NEW STACK	1	4/23/02	BW	-	REVISED PRESS VENT BYPASS LINE
6	10/28/11	MHR	-	ADDED BLEND CHAMBERS	0	7/16/01	BW	-	ISSUED FOR RECORD



APPROVED	SCALE	NTS	MO	DAY	YR.
-	DRAWN	B. WICKS	04	23	02
PROJECT	CHK'D	M. RUTHERFORD	08	23	22

PROCESS DIAGRAM FOR WEYERHAEUSER WEST VIRGINIA SUTTON OSB FACILITY	
DRAWING NUMBER	REV 11
800-G-7003-A-02	

Attachment G

Process Description

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



PROCESS DESCRIPTION

General Overview of Control and History

Following issuance of Permit R13-1761I in August of 2016, Weyerhaeuser executed its plan to upgrade the PWCP MACT HAP control system to incorporate a biological oxidation scrubber, commonly referred to as a biofilter, at the Sutton OSB Mill. The biofilter was installed in the winter of 2016 to replace the two regenerative catalytic oxidizers (RCOs) as a means of controlling HAPs from the Mill. The Rule 13 permit was updated to R13-1761J, October 18, 2018, to completely remove the old RCO units from the facility. Subsequently, the Title V permit was renewed and amended under R30-00700016-2018(MM01, 5/7/2019). After successful demonstration, the biofilter is currently operating as the Mill's primary HAP emission control device.

Following failure of the biofilter's blower fan the Title V Permit was modified under Permit R30-00700016-2018(SM01, 9/7/2021), and the Rule 13 Permit under Permit R13-1761K (5/24/2021), to incorporate conditions of DAQ Consent Order Number CO-R34-E-2020-10 relating to operation and maintenance of the biofilter fan wheel.

The Title V Permit was recently renewed under Permit R30-00700016-2024, issued January 8, 2024, and included a new WESP, Control Device ID: 4200-00-10, constructed and permitted under R13-1761L, to replace the two old WESP's. Changes to the facility that were covered under the R13-1761L permitting action included:

- Replacement of two WESPs with one new WESP and update of associated emission points;
- Construction of the new WESP Bypass Stack, EP # 21A, and removal of the old bypass stack, EP # 21;
- Revision of the potential-to-emit (PTE) of the methanol emissions emitted from the Biofilter (Control Device ID: 4800-00-10) to account for a change in the method of compliance under Table 1B of 40 CFR 63, Subpart DDDD (limit total HAP, measured as THC, to 20 ppm_{vd}), and revision of emissions from EP # 23 (to reflect removal of the RCO's under R13-1761J, and the CO emission limit based on more recent stack testing) and EP # 24 (to account for revisions to the calculations made previously during Title V permitting that were not adjusted in the R13 permit); and
- Modification of the emission points associated with Paint Booths No. 1 and 3, that now vent inside the building.

Weyerhaeuser now proposes to remove the existing biofilter and replace it with the recently permitted WESP, Control Device ID: 4200-00-10. The WESP is considered a wet add on control device under 40 CFR 63 Subpart DDDD and will be the primary HAP control used to comply with

one of the six compliance options required under Table 1B for the associated process units. Weyerhaeuser will continue to show compliance under option (2) of Table 1B by limiting total HAP, measured as THC, to 20 ppm_{vd}. The existing clarifier is used as part of the water cycle. The unit is designed to incorporate existing centrifuges and basket strainers that remove solids during the cycle. The existing energy cells, dryers, and OSB press will be controlled by the WESP. The applicant estimates the WESP is at least as effective as the level of control efficiency claimed from the existing combination of the WESP and biofilter, and the facility's PTE will not increase from the proposed modification.

If the application is approved, existing Main Stack Emission Point 23 will be removed and its vent stream routed to Emission Point 21A, the current WESP Bypass Stack, future new Main Stack. Changes at the site will include demolition and removal of the biofilter, main stack and duct work.

Changes to the Rule 13 permit include changing permit language that references the biofilter, updating the Emission Unit Table, and removing the RCDME from the permit. In addition, a plan must be developed and implemented to address how organic HAPs captured in the wastewater from the wet control device is contained or destroyed to minimize re-release to the atmosphere such that the desired emissions reductions are obtained. The application includes an updated air pollution control device form that provides information about the WESP and emission point 21A.

Attachment H

SDS

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



Attachment I

Emission Units Table

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



Attachment I
Emission Units Table
(includes all emission units and air pollution control devices
that will be part of this permit application review, regardless of permitting status)

Emission Unit ID ¹	Emission Point ID ²	Emission Unit Description	Year Installed/ Modified	Design Capacity	Type ³ and Date of Change	Control Device ⁴
1S	1	Flaking and Screening System	1996	65,450 ACFM 50 lb/hr (oven dry)		4313-00-10 Fabric Filter
3S	3	Dry Flake Area	1996	53,400 ACFM 3,300 lb/hr (oven dry)		4333-00-10 Fabric Filter
4S	4	Mat Trim System	1996	43,100 ACFM 5,500 lb/hr (oven dry)		4345-00-10 Fabric Filter
5S	5	Rough Trim System	1996	21,200 ACFM 5,730 lb/hr (oven dry)		4353-00-10 Fabric Filter
6S	6	Tongue & Groove and Sawing System	1996 / 2011	30,970 ACFM 6,160 lb/hr (oven dry)		4363-00-10 Fabric Filter
7S	7	Sander Dust System	1996	44,800 ACFM 2,200 lb/hr (oven dry)		4374-00-10 Fabric Filter
9S	9	Dry Waste System	1996	13,200 ACFM 8,550 lb/hr (oven dry)		4397-00-10 Fabric Filter
3800-00-10 3816-00-11	10 21A 23	Energy Cell No. 1 ⁽²⁾	1996	29 MMBtu/hr 175 MMBtu/hr	Modification	3820-00-10 Multiclone 4110-00-10 <u>4200-00-10</u> WESP ⁽³⁾ 4440-00-10 4460-00-10 Biofilter

3900-00-10 3916-00-11	11 21A 23	Energy Cell No. 2 ⁽²⁾	1996	29 MMBtu/hr 175 MMBtu/hr	Modification	3920-00-10 Multiclone 4120-00-10 <u>4200-00-10</u> WESP ⁽³⁾ 4440-00-10 4460-00-10 Biofilter
3130-00-11	21A 23	Dryer No. 1	1996	55 MMBtu/hr	Modification	4110-00-10 <u>4200-00-10</u> WESP ⁽³⁾ 4440-00-10 4460-00-10 Biofilter
3230-00-11	21A 23	Dryer No. 2	1996	55 MMBtu/hr		
3330-00-11	21A 23	Dryer No. 3	1996	55 MMBtu/hr	Modification	4120-00-10 <u>4200-00-10</u> WESP ⁽³⁾ 4440-00-10 4460-00-10 Biofilter
3430-00-11	21A 23	Dryer No. 4	1996	55 MMBtu/hr		
4700-00-10	21A 23 24	OSB Press	1996/2008	60.4 tons/hr	Modification	4110-00-10 4120-00-10 <u>4200-00-10</u> WESP ⁽³⁾ 4440-00-10 4460-00-10 Biofilter
27S	27	Emergency Diesel Generator	1996	1,030 hp		None
31S	31	Liquid Phenolic Resin Tank #1	1996	15,000 gallons		None
32S	32	Liquid Phenolic Resin Tank #2	1996	15,000 gallons		None
33S	33	Liquid Phenolic Resin Tank #3	1996	15,000 gallons		None
34S	34	Liquid Phenolic Resin Tank #4	1996	15,000 gallons		None
35S	35	MDI Tank #1	1996	15,000 gallons		None
36S	36	MDI Tank #2	1996	15,000 gallons		None
37S	37	Wax Tank #1	1996	15,000 gallons		None
38S	38	Wax Tank #2	1996	15,000 gallons		None
40S/41S	40A ⁽⁴⁾	Paint Booth No.1	2002/2016	26 gallons/hr		Filters
42S/43S	42/43	Paint Booth No.2	2002	26 gallons/hr		Filters
44S/45S	44A ⁽⁴⁾	Paint Booth No.3	2002/2016	26 gallons/hr		Filters

46S	46	Liquid Phenolic Resin Tank #5	2005	15,000 gallons		None
47S	47	Liquid Phenolic Resin Tank #6	2005	15,000 gallons		None

¹ For Emission Units (or Sources) use the following numbering system: 1S, 2S, 3S,... or other appropriate designation.

² For Emission Points use the following numbering system: 1E, 2E, 3E, ... or other appropriate designation.

³ New, modification, removal

⁴ For Control Devices use the following numbering system: 1C, 2C, 3C,... or other appropriate designation.

- (1) WESP = Wet Electrostatic Precipitator
- (2) Energy Cells are authorized to operate in the following scenarios: During “normal operations,” gases will be vented through the WESP and Biofilter and out Emission Point 21A ~~23~~. ~~During RCDME, gases will be vented through the WESP and out Emission Point 21.~~ During “Idle Run Condition,” gases will be vented through Multiclones and out Emission Points 10 and 11. During “Energy Cell Only Mode,” gases will be vented through WESP and out Emission Point 21A.
- (3) ~~As of the issuance of this permit, until such time as the new WESP (4130-00-10 4200-00-10) is installed and operating as the primary end control device at Emission Point 21A, the permittee is authorized to use the two (2) existing WESPs (4110-00-10 and 4120-4200-00-10) and Biofilter (4800-00-10) combination in place of the new WESP. The existing WESPs Biofilter combination will comply with all requirements applicable to the new WESP contained herein.~~
- (4) Vents inside the warehouse building.



Attachment J

Emission Points Data Summary Sheet

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



**Attachment J
EMISSION POINTS DATA SUMMARY SHEET**

Table 1: Emissions Data

Emission Point ID No. (Must match Emission Units Table & Plot Plan)	Emission Point Type ¹	Emission Unit Vented Through This Point (Must match Emission Units Table & Plot Plan)		Air Pollution Control Device (Must match Emission Units Table & Plot Plan)		Vent Time for Emission Unit (chemical processes only)		All Regulated Pollutants - Chemical Name/CAS ³ (Speciate VOCs & HAPS)	Maximum Potential Uncontrolled Emissions ⁴		Maximum Potential Controlled Emissions ⁵		Emission Form or Phase (At exit conditions, Solid, Liquid or Gas/Vapor)	Est. Method Used ⁶	Emission Concentration ⁷ (ppmv or mg/m ³) Hourly(lb/MSE)
		ID No.	Source	ID No.	Device Type	Short Term ²	Max (hr/yr)		lb/hr	ton/yr	lb/hr	ton/yr			
21A (Energy Cell Only Mode)	Upward Vertical Stack	3816-00-11 (Aux. Normal run)	Energy Cell No. 1 (Wood Combustion)	4200-00-10	Wet ESP (WESP)		8,760	Acetophenone	1.37E-03	6.01E-03			Vapor	Bis(2-ethylhexyl phthalate), Chlorobenzene, Dinitrophenol, 2,4-, Methyl chloroform, Nitrophenol, 4-, Pentachlorophenol, Trichlorophenol, 2, 4, 6- (AP-42 EE) Dioxin 2,3,7,8-TCDD (Est. Guide EE) All others (Team Bulletin EE)	3.33E-05
								Antimony	5.56E-04	2.43E-03					6.75E-05
								Bis(2-ethylhexylphthalate)	1.65E-05	7.21E-05					4.70E-08
								Carbon disulfide	4.82E-02	2.11E-01					1.17E-03
								Carbon tetrachloride	1.19E-04	5.19E-04					2.88E-06
								Chlorobenzene	1.16E-02	5.06E-02					3.30E-05
								Chloroform	1.74E-02	7.63E-02					4.23E-04
								Cobalt	1.11E-02	4.87E-02					1.35E-03
								Dinitrophenol, 2,4-Dioxin (2,3,7,8-TCDD)	6.30E-05	2.76E-04					1.80E-07
								Ethylbenzene	3.27E-10	1.43E-09					7.94E-11
		Mercury	1.45E-03	6.33E-03			3.51E-05								
		Methyl chloride	1.33E-02	5.84E-02			3.24E-04								
		Methyl chloroform	3.63E-02	1.59E-01			8.82E-04								
		Methyl ethyl ketone	1.09E-02	4.75E-02			3.10E-05								
		Nitrophenol, 4-	4.45E-03	1.95E-02			1.08E-04								
		Pentachlorophenol	3.85E-05	1.69E-04			1.10E-07								
		Selenium	1.79E-05	7.82E-05			5.10E-08								
		Styrene	4.15E-04	1.82E-03			5.04E-05								
		Tetrachloroethylene	5.56E-03	2.43E-02			1.35E-04								
		Trichloroethylene	6.30E-02	2.76E-01			1.53E-03								
Trichlorophenol, 2,4,6-	2.82E-03	1.23E-02			6.84E-05										
Vinyl chloride	7.70E-06	3.37E-05			2.20E-08										
Total HAP	6.30E-03	2.76E-02			1.80E-05										

21A (Normal Operation)	Upward Vertical Stack	3800-00-10 3900-00-10 3130-00-11 3230-00-11 3330-00-11 3430-00-11 4700-00-10	Energy Cell 1 Energy Cell 2 Dryer 1 Dryer 2 Dryer 3 Dryer 4 OSB Press	4200-00- 10	WESP	8,760	CO	40.66	106.21					0.433
							NOx	88.23	221.6					0.939
							PM2.5/PM10/PM	34.68	79.4					0.369
							SO2	12.26	17.9					0.130
							Pb		0.03					0.502
							VOC _(propane)	47.17	113.08					
							VOC _(WPP1)	59.09	145.5					
							Acetaldehyde	2.40	4.89					2.55E-02
							Acetophenone	1.37E-03	6.01E-03					
							Acrolein	0.93	1.21					9.88E-03
							Antimony	5.56E-04	2.43E-03					
							Arsenic	9.86E-04	2.29E-03					1.05E-05
							Benzene	6.52E-02	1.12E-01					6.93E-04
							Beryllium	3.41E-05	5.62E-05					3.63E-07
							Bis(2-eth-phth)	1.65E-05	7.21E-05					
							Cadmium	2.23E-03	4.31E-03					2.37E-05
							Carbon disulfide	4.82E-02	2.11E-01					
							Carbon tetrachl.	1.19E-04	5.19E-04					
							Chlorine	1.99E-01	3.80E-01					2.11E-03
							Chlorobenzene	1.16E-02	5.06E-02					
							Chloroform	1.74E-02	7.63E-02					
							Chromium	1.09E-02	1.70E-02					1.16E-04
							Cobalt	1.11E-02	4.87E-02					
							Cumene	4.74	5.67					5.04E-02
							Dinitrophenol	6.30E-05	2.76E-04					
							Dioxin	3.27E-10	1.43E-09					
							Ehtylbenzene	1.45E-03	6.33E-03					
							Formaldehyde	4.55	10.30					4.84E-02
							Hexane	2.58E-01	3.78E-01					2.74E-03
							Hydrogen Chlo.	4.53E-01	1.06					4.82E-03
							Pb	0.01	0.03					1.24E-04
							Manganese	1.83E-01	0.178					1.95E-03
							Mercury	1.33E-02	5.84E-02					
							Methanol	10.49	31.49					1.12E-01
Methyl chloride	3.63E-02	0.159												
Methyl chloroform	1.09E-02	4.75E-02												
MEK	4.45E-03	1.95E-02												
MIK	1.38E-01	2.83E-01	1.47E-03											
Methylene chlor.	1.44E-01	0.216												
Methylene diph.	2.36E-02	2.70E-02												
Napthalene	1.28E-05	5.62E-05	2.29E-07											
Nickel	4.06E-03	6.84E-03	4.32E-05											
Nitrophenol	3.85E-05	1.69E-04												
Pentachlorophenol	1.79E-05	7.82E-05												
Phenol	0.00	0.0	0.00E+00											
POM	1.81E-05	7.92E-05	3.23E-07											
Propionaldehyde	1.00	0.83	1.06E-02											
Selenium	4.15E-04	1.82E-03												
Styrene	5.56E-03	2.43E-02												
Tetrachloroethylen	6.30E-02	2.76E-01												
Toluene	1.61E-01	2.37E-01	1.72E-03											
Trichloroethylene	2.82E-03	1.23E-02												
Trichlorophenol	7.70E-06	3.37E-05												
Vinyl chloride	6.30E-03	2.76E-02												

Attachment K

Fugitive Emissions Data Summary Sheet

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



Attachment L

Emissions Unit Data Sheet

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



Attachment M

Air Pollution Control Device Sheet

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



<p>25. Collecting rappers: None</p> <p>Type of rappers:</p> <p>Number of rappers:</p> <p>Time interval between raps of the same rappers: _____ sec</p> <p>Total time for one complete rapping cycle: _____ sec</p>	<p>26. Discharge rappers: None</p> <p>Type of rappers:</p> <p>Number of rappers:</p> <p>Time interval between raps of the same rappers: _____ sec</p> <p>Total time for one complete rapping cycle: _____ sec</p>
--	---

27. Plate cleaning system: Rapping Water spray washing Other, specify

28. Sectionalization and power requirements:

<p>Number of fields: 6</p> <p>Number of bus sections:</p> <p>Total:</p> <p>In series:</p> <p>In parallel:</p> <p>Number of gas passages: 1,584</p> <p>Cross-sectional area per gas passages: _____ ft²</p> <p>Applied voltage (peak): 70,000 volts per field</p>	<p>Current density on wires: _____ mA/ft</p> <p>Total power requirements: 630 kW</p> <p>Field strengths: 105 kW</p> <p>Charging: _____ KV/in</p> <p>Collecting: _____ KV/in</p> <p>Sparking Voltage: _____ volts</p> <p>Sparking rate (optimum): _____ no./sec</p> <p>Proposed power supply:</p> <p>Type rectifiers:</p> <p>Number of Transformers:</p>
---	---

How would the loss of one field affect the performance of the precipitator? The loss of one field will have a minimal effect due to field isolation. To meet the 80% PM control requirement at least 4 of the 6 fields need to be online having a minimum voltage of 30 kV.

Particle Distribution

29. Complete the table:	Particle Size Distribution at Inlet to Collector	Fraction Efficiency of Collector
Particulate Size Range (microns)	Weight % for Size Range	Weight % for Size Range
0 – 2		
2 – 4		
4 – 6		
6 – 8		
8 – 10		
10 – 12		
12 – 16		
16 – 20		
20 – 30		
30 – 40		
40 – 50		
50 – 60		
60 – 70		
70 – 80		
80 – 90		
90 – 100		
>100		

30. Supply curve showing the expected collection efficiency versus content of coal burned over a range of 0.4% to 5% sulfur (if applicable).		
31. Supply curve showing the collection efficiency versus gas volume from 90 to 130 percent of design rating of precipitator.		
32. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooling, gas reheating, gas humidification): Pre-quench of process gas at inlet for cooling of air stream.		
33. Describe the collection material disposal system: Pollutants are collected and captured in the wash water, this water is sent to the clarifier and a centrifuge for solids removal.		
34. Have you included Electrostatic Precipitator Control Device in the Emissions Points Data Summary Sheet?		
<p>35. Proposed Monitoring, Recordkeeping, Reporting, and Testing</p> <p>Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.</p> <table border="0" data-bbox="131 814 1498 1354"> <tr> <td data-bbox="131 814 812 1354"> <p>MONITORING:</p> <ul style="list-style-type: none"> WESP voltage is measured using a voltmeter with an accuracy of +-1 kV that is calibrated at least semi-annually. During normal operation, the WESP shall have at least 2 fields in operation and voltage across all online fields shall be maintained at or above 30 kV during operation. If the voltage falls below 30 kV for 30 seconds an alarm will sound to signify a corrective action shall be taken to return the voltage above 30 kV. The parameter is recorded as a 6-minute average. </td> <td data-bbox="812 814 1498 1354"> <p>RECORDKEEPING:</p> <ul style="list-style-type: none"> Permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. Maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. Keep records of each notification and report filed under 40CFR63 Subpart DDDD. Keep records of performance testing & evaluation, records required by Table 7 and 8 of Subpart DDDD. Record monitoring data and visible emission observations. Voltage across the WESP as a 6 min. block average, including record of periods during normal operation when voltage drops below 30 kV, and maintenance and malfunction records for the WESP. </td> </tr> </table>	<p>MONITORING:</p> <ul style="list-style-type: none"> WESP voltage is measured using a voltmeter with an accuracy of +-1 kV that is calibrated at least semi-annually. During normal operation, the WESP shall have at least 2 fields in operation and voltage across all online fields shall be maintained at or above 30 kV during operation. If the voltage falls below 30 kV for 30 seconds an alarm will sound to signify a corrective action shall be taken to return the voltage above 30 kV. The parameter is recorded as a 6-minute average. 	<p>RECORDKEEPING:</p> <ul style="list-style-type: none"> Permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. Maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. Keep records of each notification and report filed under 40CFR63 Subpart DDDD. Keep records of performance testing & evaluation, records required by Table 7 and 8 of Subpart DDDD. Record monitoring data and visible emission observations. Voltage across the WESP as a 6 min. block average, including record of periods during normal operation when voltage drops below 30 kV, and maintenance and malfunction records for the WESP.
<p>MONITORING:</p> <ul style="list-style-type: none"> WESP voltage is measured using a voltmeter with an accuracy of +-1 kV that is calibrated at least semi-annually. During normal operation, the WESP shall have at least 2 fields in operation and voltage across all online fields shall be maintained at or above 30 kV during operation. If the voltage falls below 30 kV for 30 seconds an alarm will sound to signify a corrective action shall be taken to return the voltage above 30 kV. The parameter is recorded as a 6-minute average. 	<p>RECORDKEEPING:</p> <ul style="list-style-type: none"> Permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. Maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. Keep records of each notification and report filed under 40CFR63 Subpart DDDD. Keep records of performance testing & evaluation, records required by Table 7 and 8 of Subpart DDDD. Record monitoring data and visible emission observations. Voltage across the WESP as a 6 min. block average, including record of periods during normal operation when voltage drops below 30 kV, and maintenance and malfunction records for the WESP. 	

<p>REPORTING:</p> <ul style="list-style-type: none"> • For CAM, monitoring reports shall be submitted to the Director: Semi-annual monitoring reports. • The company will report SSM notifications, any control equipment malfunctions, emission limit or opacity deviations. • Performance Test results shall be reported. 	<p>TESTING:</p> <ul style="list-style-type: none"> • Visual inspections will be conducted: External inspections of the ductwork and control device shall be conducted monthly and internal inspections shall be conducted every 12 months. • Semimonthly visible emission checks at the proposed emission point 21A will be conducted during periods of facility operation using the procedures outlined in 40 CFR 60, Appendix A, Method 22. If visible emissions are identified a 45 CSR 7A evaluation shall be performed within 24 hours; unless the visible emission condition is corrected in a timely manner. §4.2.7 of site permit. • Conduct performance tests upon initial start-up (63.2261). • Table 7 (7): Repeat performance testing at least every 60 months. • Table 7 (6): Initial compliance demonstration for a wet control device requires develop and implement a plan for how organic HAP captured in wastewater is contained or destroyed to minimize re-release to the atmosphere such that the desired emissions reductions are obtained (63.2268). • Under Table 2, for a (4) Control device other than a thermal oxidizer, catalytic oxidizer, or biofilter, Petition the EPA Administrator for site-specific operating parameter(s) to be established during the performance test and maintain the average operating parameter(s) within the range(s) established during the performance test. Maintain the 3-hour block average THC concentration in the control device exhaust below the maximum concentration established during the performance test.
<p>MONITORING:</p>	<p>Please list and describe the process parameters and ranges that are proposed to be monitored in order to demonstrate compliance with the operation of this process equipment or air control device.</p>
<p>RECORDKEEPING:</p>	<p>Please describe the proposed recordkeeping that will accompany the monitoring.</p>
<p>REPORTING:</p>	<p>Please describe any proposed emissions testing for this process equipment on air pollution control device.</p>
<p>TESTING:</p>	<p>Please describe any proposed emissions testing for this process equipment on air pollution control device.</p>
<p>36. Manufacturer's Guaranteed Capture Efficiency for each air pollutant. Particulate Matter (PM) > 99%</p>	
<p>37. Manufacturer's Guaranteed Control Efficiency for each air pollutant. Particulate Matter (PM) 80%</p>	
<p>38. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty. The Wet ESP will operate efficiently as long as the gas flow does not exceed the designed rating. Lower gas flow will increase performance. Manufacturer required maintenance includes routine inspections and internal cleaning to maintain field voltages.</p>	

Attachment N

Supporting Emissions Calculations

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



Table B-1: Facility-Wide Potential Emission Rates of Regulated Compounds

Emission Point ID	Emission Source ID	Regulated Compounds								HAPs (tpy)
		CO (tpy)	NO _x (tpy)	TSP (tpy)	PM ₁₀ (tpy)	PM _{2.5} (tpy)	SO ₂ (tpy)	VOC (tpy)	Lead (tpy)	
1	Flaking and screening system	--	--	0.04	0.04	0.02	--	0.05	--	--
3	Dry flake area	--	--	1.45	1.45	0.65	--	3.57	--	--
4	Mat trim system	--	--	2.41	2.41	1.08	--	3.59	--	--
5	Rough trim system	--	--	2.51	2.51	1.13	--	3.74	--	--
6	Tongue and Groove and sawing system	--	--	2.72	2.72	1.22	--	4.02	--	--
7	Sander dust system	--	--	0.96	0.96	0.43	--	1.72	--	--
9	Dry waste system	--	--	3.74	3.74	1.69	--	5.58	--	--
10 & 11	EC-1 idle run multiclone & EC-2 idle run multiclone ²	8.40	11.20	9.52	9.52	7.28	1.40	12.75	0.013	3.79
21A	Main Stack	106.2	221.6	79.4	79.4	79.4	17.9	145.5	0.03	60.3
24	Press system bypass	2.11	--	0.34	0.34	0.34	--	5.62	--	5.69
27	Emergency generator	0.28	1.24	0.04	0.03	0.03	0.021	0.03	--	4.0E-05
31	Liquid phenolic resin tank 1	--	--	--	--	--	--	0.002	--	5.0E-06
32	Liquid phenolic resin tank 2	--	--	--	--	--	--	0.002	--	5.0E-06
33	Liquid phenolic resin tank 3	--	--	--	--	--	--	0.002	--	5.0E-06
34	Liquid phenolic resin tank 4	--	--	--	--	--	--	0.002	--	5.0E-06
35	MDI Tank 1	--	--	--	--	--	--	2.0E-07	--	2.0E-07
36	MDI Tank 2	--	--	--	--	--	--	2.0E-07	--	2.0E-07
37	Wax Tank 1	--	--	--	--	--	--	0.01	--	0.01
38	Wax Tank 2	--	--	--	--	--	--	0.01	--	0.01
40 & 41	Paint Booth 1	--	--	0.59	0.59	0.59	--	1.14	--	--
42 & 43	Paint Booth 2	--	--	0.59	0.59	0.59	--	1.14	--	--
44 & 45	Paint Booth 3	--	--	0.59	0.59	0.59	--	1.71	--	--
46	Liquid phenolic resin tank 5	--	--	--	--	--	--	0.002	--	5.0E-06
47	Liquid phenolic resin tank 6	--	--	--	--	--	--	0.002	--	5.0E-06
Total Potential Emissions Estimated (tpy)		108.6	222.9	95.4	95.3	87.7	17.9	177.4	0.03	66.03
Title V Allowable Emissions Proposed (tpy)		229.0	249.0	95.4	95.4	87.8	17.9	249.0	0.03	66.03

2. Idle Run emissions are shown for completeness, but are not included in the Facility-wide totals.

PSD Analysis for Title V Allowable Limits

Estimated NO _x Emissions from Main Stack #21A:	221.6	tpy
Other:	1.24	tpy
NO _x limit to avoid PSD:	249	tpy
Total NO _x allowed from Main Stack:	247.76	tpy
PSD Compliance Margin	26.12	tpy

Estimated VOC Emissions from 1-9, & 21A:	167.8	tpy
Other:	5.7	tpy
VOC limit to avoid PSD:	249	tpy
Total VOC allowed 1-9, & 21A :	243.3	tpy
PSD Compliance Margin	75.56	tpy

Estimated CO Emissions from Main Stack #21A:	106.2	tpy
Other:	2.4	tpy
CO limit to avoid PSD:	229	tpy
Total CO allowed from Main Stack:	226.6	tpy
PSD Compliance Margin	120.4	tpy

Facility Wide HAP Totals for R13-1761M

Pollutants	PTE	Source of Emissions with Respect to Facility Calculations
	tpy	
Acetaldehyde	5.12	Main Stack + Press Bypass
Acrolein	1.21	Main Stack + Press Bypass
Chlorine	0.44	Main Stack + Press Bypass
Cumene	6.45	Main Stack + Press Bypass
Formaldehyde	11.36	Main Stack + Press Bypass
Methanol	34.98	Main Stack + Press Bypass
Propionaldehyde	0.83	Main Stack + Press Bypass
Xylenes	1.96	Main Stack + Press Bypass
Quantifiable HAPs	62.37	Measurable Total
Total HAPs	66.03	Includes All Trace Quantities

Weyerhaeuser Company - Heaters, West Virginia
Plant ID No. 007-00016

Table B-3: Dry Flake Area

Emission Unit: **Dry Flake Area (ID No. 3S)**
Dry flake area contains 4 dry bins, 17 conveyor pickups, 4 weigh belts, 4 blenders and 4 forming bins.

Control Device: **Bagfilter (ID No. 4333-00-10)**

Emission Point: **ID No. 3**

Potential Process Throughput:

Material Processing Rate: 3,300 lb/hr (oven dry)
Baghouse Control Efficiency³: 99.99%
Air Flow Rate: 53,400 ACFM
Operation: 8,760 hr/yr

Potential Emissions Summary:

Criteria Compounds	Emission Factor	Reference	Controlled Emissions	
			(lb/hr)	(ton/yr)
PM	3,300 lb/hr	1	0.33	1.45
PM-10	3,300 lb/hr	1	0.33	1.45
PM-2.5	1,485 lb/hr	4	0.15	0.65
VOC	0.0494 lb/ODT	2	0.08	0.36

References:

1. Emission factor is potential material process rate.
2. VOC emissions are based on one-fifth of the VOC emission factor for cyclones handling green southern pine chips as referenced in Weyerhaeuser Title V Cross Functional Team Bulletin #3.g (Rev), 3/19/07. VOC factor is assumed "as carbon", and is converted to propane by multiplying by 1.22. Then, the formaldehyde factor from Table 2A to Appendix B of 40 CFR 63 Subpart DDDD; Blending and Forming Operations - OSB, is converted to ODT using 42 lb/cu.ft. and added in.
3. Baghouse control efficiency is based on original air permit application of July 1994, which states the PM collection efficiency of the baghouse is 99.9981%.
4. PM-2.5 emission factor is estimated as 45% of the PM-10 emission factor based on the cumulative weight percentages of particulates from a sander controlled by a cyclone and bagfilter as listed in AP-42, Appendix B.1, Section 10.5.

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Table B-4: Mat Trim System

Emission Unit: **Mat Trim System (ID No. 4S)**
 Mat trim system contains 2 mat side trim saws, 2 flying end saws and 6 material collection hoppers.

Control Device: **Bagfilter (ID No. 4345-00-10)**

Emission Point: **ID No. 4**

Potential Process Throughput:

Material Processing Rate: 5,500 lb/hr (oven dry)
 Baghouse Control Efficiency³: 99.99%
 Air Flow Rate: 43,100 ACFM
 Operation: 8,760 hr/yr

Potential Emissions Summary:

Criteria Compounds	Emission Factor	Reference	Controlled Emissions	
			(lb/hr)	(ton/yr)
PM	5,500 lb/hr	1	0.55	2.41
PM-10	5,500 lb/hr	1	0.55	2.41
PM-2.5	2,475 lb/hr	4	0.25	1.08
VOC	0.0298 lb/ODT	2	0.08	0.36

References:

1. Emission factor is potential material process rate.
2. VOC emissions are based on one-fifth of the VOC emission factor for cyclones handling dry southern pine material as referenced in Weyerhaeuser Title V Cross Functional Team Bulletin #3.g (Rev), 3/19/07. VOC factor is assumed "as carbon", and is converted to propane by multiplying by 1.22. Then, the formaldehyde factor from Table 2A to Appendix B of 40 CFR 63 Subpart DDDD; Finishing Saws, is converted to ODT using 42 lb/cu.ft. and added in.
3. Baghouse control efficiency is based on original air permit application of July 1994, which states the PM collection efficiency of the baghouse is 99.9981%.
4. PM-2.5 emission factor is estimated as 45% of the PM-10 emission factor based on the cumulative weight percentages of particulates from a sander controlled by a cyclone and bagfilter as listed in AP-42, Appendix B.1, Section 10.5.

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Table B-5: Rough Trim System

Emission Unit: **Rough Trim System (ID No. 5S)**
Rough trim system contains 4 rough trim and hogging heads, material collection screw and 5 press pit floor sweeps.

Control Device: **Bagfilter (ID No. 4353-00-10)**

Emission Point: **ID No. 5**

Potential Process Throughput:

Material Processing Rate: 5,730 lb/hr (oven dry)
Baghouse Control Efficiency³: 99.99%
Air Flow Rate: 21,200 ACFM
Operation: 8,760 hr/yr

Potential Emissions Summary:

Criteria Compounds	Emission Factor	Reference	Controlled Emissions	
			(lb/hr)	(ton/yr)
PM	5,730 lb/hr	1	0.57	2.51
PM-10	5,730 lb/hr	1	0.57	2.51
PM-2.5	2,579 lb/hr	4	0.26	1.13
VOC	0.0298 lb/ODT	2	0.09	0.37

References:

1. Emission factor is potential material process rate.
2. VOC emissions are based on one-fifth of the VOC emission factor for cyclones handling dry southern pine material as referenced in Weyerhaeuser Title V Cross Functional Team Bulletin #3.g (Rev), 3/19/07. VOC factor is assumed "as carbon", and is converted to propane by multiplying by 1.22. Then, the formaldehyde factor from Table 2A to Appendix B of 40 CFR 63 Subpart DDDD; Finishing Saws, is converted to ODT using 42 lb/cu.ft. and added in.
3. Baghouse control efficiency is based on original air permit application of July 1994, which states the PM collection efficiency of the baghouse is 99.9981%.
4. PM-2.5 emission factor is estimated as 45% of the PM-10 emission factor based on the cumulative weight percentages of particulates from a sander controlled by a cyclone and bagfilter as listed in AP-42, Appendix B.1, Section 10.5.

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Table B-6: Tongue & Groove and Sawing System

Emission Unit: Arch/Notch and Tongue & Groove and Sawing System (ID No. 6S)
Arch/Notch machine cutter and Tongue & Groove and Sawing system contains 2 four-head T&G systems, 1 two-head T&G machine, finish cross cut (2 hogging heads & 2 saws) and finish ripcut (2 hogging heads & 2 saws), 1 Arch & Notch machine cutter (3 small notch cutting heads)

Control Device: Bagfilter (ID No. 4363-00-10)

Emission Point: ID No. 6

Potential Process Throughput:

Material Processing Rate: 6,200 lb/hr (oven dry)
Baghouse Control Efficiency³: 99.99%
Air Flow Rate: 30,970 ACFM
Operation: 8,760 hr/yr

Potential Emissions Summary:

Criteria Compounds	Emission Factor	Reference	Controlled Emissions	
			(lb/hr)	(ton/yr)
PM	6,200 lb/hr	1	0.62	2.72
PM-10	6,200 lb/hr	1	0.62	2.72
PM-2.5	2,790 lb/hr	4	0.28	1.22
VOC	0.0298 lb/ODT	2	0.09	0.40

References:

1. Emission factor is potential material process rate.
2. VOC emissions are based on one-fifth of the VOC emission factor for cyclones handling dry southern pine material as referenced in Weyerhaeuser Title V Cross Functional Team Bulletin #3.g (Rev), 3/19/07. VOC factor is assumed "as carbon", and is converted to propane by multiplying by 1.22. Then, the formaldehyde factor from Table 2A to Appendix B of 40 CFR 63 Subpart DDDD; Finishing Saws, is converted to ODT using 42 lb/cu.ft. and added in.
3. Baghouse control efficiency is based on original air permit application of July 1994, which states the PM collection efficiency of the baghouse is 99.9981%.
4. PM-2.5 emission factor is estimated as 45% of the PM-10 emission factor based on the cumulative weight percentages of particulates from a sander controlled by a cyclone and bagfilter as listed in AP-42, Appendix B.1, Section 10.5.

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Table B-7: Sander Dust System

Emission Unit: Sander Dust System (ID No. 7S)
 Sander dust system contains a 6-head wide belt sander.
Control Device: Bagfilter (ID No. 4374-00-10)
Emission Point: ID No. 7

Potential Process Throughput:

Material Processing Rate: 2,200 lb/hr (oven dry)
 Baghouse Control Efficiency³: 99.99%
 Air Flow Rate: 44,800 ACFM
 Operation: 8,760 hr/yr

Potential Emissions Summary:

Criteria Compounds	Emission Factor	Reference	Controlled Emissions	
			(lb/hr)	(ton/yr)
PM	2,200 lb/hr	1	0.22	0.96
PM-10	2,200 lb/hr	1	0.22	0.96
PM-2.5	990 lb/hr	4	0.10	0.43
VOC	0.0357 lb/ODT	2	0.04	0.17

References:

1. Emission factor is potential material process rate.
2. VOC emissions are based on one-fifth of the VOC emission factor for cyclones handling dry southern pine material as referenced in Weyerhaeuser Title V Cross Functional Team Bulletin #3.g (Rev), 3/19/07. VOC factor is assumed "as carbon", and is converted to propane by multiplying by 1.22. Then, the formaldehyde factor from Table 2A to Appendix B of 40 CFR 63 Subpart DDDD; Finishing Sanders, is converted to ODT using 42 lb/cu.ft. and added in.
3. Baghouse control efficiency is based on original air permit application of July 1994, which states the PM collection efficiency of the baghouse is 99.9981%.
4. PM-2.5 emission factor is estimated as 45% of the PM-10 emission factor based on the cumulative weight percentages of particulates from a sander controlled by a cyclone and bagfilter as listed in AP-42, Appendix B.1, Section 10.5.

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Table B-8: Dry Waste System

Emission Unit: **Dry Waste System (ID No. 9S)**
 Dry waste system pneumatically relays material through two cyclones to the dry fuel silo from systems 3, 4, 5 and 6 to the sander dust silo from system 7.

Control Device: **Bagfilter (ID No. 4397-00-10)**

Emission Point: **ID No. 9**

Potential Process Throughput:

Material Processing Rate: 8,550 lb/hr (oven dry)
 Baghouse Control Efficiency³: 99.99%
 Air Flow Rate: 13,200 ACFM
 Operation: 8,760 hr/yr

Potential Emissions Summary:

Criteria Compounds	Emission Factor	Reference	Controlled Emissions	
			(lb/hr)	(ton/yr)
PM	8,550 lb/hr	1	0.85	3.74
PM-10	8,550 lb/hr	1	0.85	3.74
PM-2.5	3,848 lb/hr	4	0.38	1.69
VOC	0.0298 lb/ODT	2	0.13	0.56

References:

1. Emission factor is potential material process rate.
2. VOC emissions are based on one-fifth of the VOC emission factor for cyclones handling dry southern pine material as referenced in Weyerhaeuser Title V Cross Functional Team Bulletin #3.g (Rev), 3/19/07. VOC factor is assumed "as carbon", and is converted to propane by multiplying by 1.22. Then, the formaldehyde factor from Table 2A to Appendix B of 40 CFR 63 Subpart DDDD; Finishing Saws, is converted to ODT using 42 lb/cu.ft. and added in.
3. Baghouse control efficiency is based on original air permit application of July 1994, which states the PM collection efficiency of the baghouse is 99.9981%.
4. PM-2.5 emission factor is estimated as 45% of the PM-10 emission factor based on the cumulative weight percentages of particulates from a sander controlled by a cyclone and bagfilter as listed in AP-42, Appendix B.1, Section 10.5.

Table B-10: Energy Cells 1 & 2 (Idle Run)

Emission Unit: Energy Cell No. 1 (ID No. 3800-00-10 and 3816-00-11) - Idle Run Mode and
29 MMBtu/hr auxiliary NG burner used mainly during start-up.
Energy Cell No. 2 (ID No. 3900-00-10 and 3916-00-11) - Idle Run Mode
29 MMBtu/hr auxiliary NG burner used mainly during start-up.

Control Device: Multiclone (ID No. 3820-00-10) and
Multiclone (ID No. 3920-00-10)

Emission Points: ID Nos. 10 and 11

Potential Process Throughput:

Combined Wood Combustion: 10,000 lb/hr (wet basis)
Maximum Combined Heat Input (Idle Run): 40 MMBtu/hr
Dry/Green Wood Ratio: 0.5 lb/lb
Combined Idle Mode Operation: 2800 hr/yr
Particulate Control: 80.0%

Potential Emissions Summary: ¹

Criteria Compounds	Emission Factor	Control Efficiency	Reference	Controlled Emissions		Uncontrolled Emissions	
				(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
CO	0.15 lb/MMBtu	-	2	6.00	8.40	6.00	8.40
NO _x	0.2 lb/MMBtu	-	2	8.00	11.20	8.00	11.20
PM	0.85 lb/MMBtu	80%	2	6.80	9.52	34.00	47.60
PM-10	0.85 lb/MMBtu	80%	2	6.80	9.52	34.00	47.60
PM-2.5	0.65 lb/MMBtu	80%	6	5.20	7.28	26.00	36.40
SO ₂	0.025 lb/MMBtu	-	3	1.00	1.40	1.00	1.40
VOC	2.28E-01 lb/MMBtu	-	2	9.11	12.75	9.11	12.75
Lead	9.60E-03 lb/ton wood	80%	4	0.01	0.01	0.05	0.07

Hazardous Air Pollutant	Emission Factor	Control Efficiency	Reference	Controlled Emissions		Uncontrolled Emissions	
				(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Acetaldehyde	7.02E-03 lb/ton wood	-	2	3.51E-02	4.91E-02	3.51E-02	4.91E-02
Acetophenone	3.33E-05 lb/ton wood	-	5	1.67E-04	2.33E-04	1.67E-04	2.33E-04
Acrolein	5.85E-02 lb/ton wood	-	2	2.93E-01	4.10E-01	2.93E-01	4.10E-01
Antimony	6.75E-05 lb/ton wood	80%	5	6.75E-05	9.45E-05	3.38E-04	4.73E-04
Arsenic	3.33E-04 lb/ton wood	80%	5	3.33E-04	4.66E-04	1.67E-03	2.33E-03
Benzene	9.00E-02 lb/ton wood	-	5	0.45	0.63	0.45	0.63
Beryllium	1.10E-06 lb/MMBtu	80%	3	8.80E-06	1.23E-05	4.40E-05	6.16E-05
Bis(2-ethylhexylphthalate)	4.70E-08 lb/MMBtu	-	3	1.88E-06	2.63E-06	1.88E-06	2.63E-06
Cadmium	1.26E-04 lb/ton wood	80%	5	1.26E-04	1.76E-04	6.30E-04	8.82E-04
Carbon disulfide	1.17E-03 lb/ton wood	-	5	5.85E-03	8.19E-03	5.85E-03	8.19E-03
Carbon tetrachloride	2.88E-06 lb/ton wood	-	5	1.44E-05	2.02E-05	1.44E-05	2.02E-05
Chlorine	7.90E-04 lb/MMBtu	-	3	3.16E-02	4.42E-02	3.16E-02	4.42E-02
Chlorobenzene	3.30E-05 lb/MMBtu	-	3	1.32E-03	1.85E-03	1.32E-03	1.85E-03
Chloroform	4.23E-04 lb/ton wood	-	5	2.12E-03	2.96E-03	2.12E-03	2.96E-03
Chromium	2.10E-05 lb/MMBtu	80%	3	1.68E-04	2.35E-04	8.40E-04	1.18E-03
Cobalt	1.35E-03 lb/ton wood	80%	5	1.35E-03	1.89E-03	6.75E-03	9.45E-03
Cumene	1.62E-04 lb/ton wood	-	5	8.10E-04	1.13E-03	8.10E-04	1.13E-03
Dinitrophenol, 2,4-	1.80E-07 lb/MMBtu	-	3	7.20E-06	1.01E-05	7.20E-06	1.01E-05
Dioxin (2,3,7,8-TCDD)	7.94E-11 lb/BD ton	80%	4	3.97E-11	5.56E-11	1.99E-10	2.78E-10
Ethylbenzene	3.51E-05 lb/ton wood	-	5	1.76E-04	2.46E-04	1.76E-04	2.46E-04
Formaldehyde	9.90E-02 lb/ton wood	-	2	4.95E-01	6.93E-01	4.95E-01	6.93E-01
Hexane	4.95E-03 lb/ton wood	-	5	2.48E-02	3.47E-02	2.48E-02	3.47E-02
Hydrogen chloride	4.32E-02 lb/ton wood	-	5	0.22	0.30	0.22	0.30
Lead	9.60E-03 lb/ton wood	80%	4	0.01	0.01	0.05	0.07
Manganese	9.00E-02 lb/ton wood	80%	5	9.00E-02	1.26E-01	4.50E-01	6.30E-01

Table B-10: Energy Cells 1 & 2 (Idle Run)

Emission Unit: Energy Cell No. 1 (ID No. 3800-00-10 and 3816-00-11) - Idle Run Mode and
29 MMBtu/hr auxiliary NG burner used mainly during start-up.
Energy Cell No. 2 (ID No. 3900-00-10 and 3916-00-11) - Idle Run Mode
29 MMBtu/hr auxiliary NG burner used mainly during start-up.

Control Device: Multiclone (ID No. 3820-00-10) and
Multiclone (ID No. 3920-00-10)

Emission Points: ID Nos. 10 and 11

Potential Emissions Summary (continued):

Hazardous Air Pollutant	Emission Factor	Control Efficiency	Reference	Controlled Emissions		Uncontrolled Emissions	
				(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Mercury	3.24E-04 lb/ton wood	-	5	1.62E-03	2.27E-03	1.62E-03	2.27E-03
Methanol	1.35E-02 lb/ton wood	-	2	6.75E-02	9.45E-02	6.75E-02	9.45E-02
Methyl chloride	8.82E-04 lb/ton wood	-	5	4.41E-03	6.17E-03	4.41E-03	6.17E-03
Methyl chloroform	3.10E-05 lb/MMBtu	-	3	1.24E-03	1.74E-03	1.24E-03	1.74E-03
Methyl ethyl ketone	1.08E-04 lb/ton wood	-	5	5.40E-04	7.56E-04	5.40E-04	7.56E-04
Methyl isobutyl ketone	7.74E-03 lb/ton wood	-	5	3.87E-02	5.42E-02	3.87E-02	5.42E-02
Methylene chloride	1.35E-02 lb/ton wood	-	5	0.07	0.09	0.07	0.09
Naphthalene	8.46E-02 lb/ton wood	-	5	0.42	0.59	0.42	0.59
Nickel	5.04E-03 lb/ton wood	80%	5	5.04E-03	7.06E-03	2.52E-02	3.53E-02
Nitrophenol, 4-	1.10E-07 lb/MMBtu	-	3	4.40E-06	6.16E-06	4.40E-06	6.16E-06
Pentachlorophenol	5.10E-08 lb/MMBtu	-	3	2.04E-06	2.86E-06	2.04E-06	2.86E-06
Phenol	3.69E-04 lb/ton wood	-	2	1.85E-03	2.58E-03	1.85E-03	2.58E-03
POM	8.47E-02 lb/ton wood	-	5	0.42	0.59	0.42	0.59
Propionaldehyde	6.10E-05 lb/MMBtu	-	3	2.44E-03	3.42E-03	2.44E-03	3.42E-03
Selenium	5.04E-05 lb/ton wood	80%	5	5.04E-05	7.06E-05	2.52E-04	3.53E-04
Styrene	1.35E-04 lb/ton wood	-	5	6.75E-04	9.45E-04	6.75E-04	9.45E-04
Tetrachloroethylene	1.53E-03 lb/ton wood	-	5	7.65E-03	1.07E-02	7.65E-03	1.07E-02
Toluene	8.10E-04 lb/ton wood	-	5	4.05E-03	5.67E-03	4.05E-03	5.67E-03
Trichloroethylene	6.84E-05 lb/ton wood	-	5	3.42E-04	4.79E-04	3.42E-04	4.79E-04
Trichlorophenol, 2,4,6-	2.20E-08 lb/MMBtu	-	3	8.80E-07	1.23E-06	8.80E-07	1.23E-06
Vinyl chloride	1.80E-05 lb/MMBtu	-	3	7.20E-04	1.01E-03	7.20E-04	1.01E-03
Xylenes	9.36E-05 lb/ton wood	-	5	4.68E-04	6.55E-04	4.68E-04	6.55E-04
Total MACT HAP	- -	-	-	0.89	1.25	0.89	1.25
Total HAP	- -	-	-	2.71	3.79	3.14	4.39

References:

1. Idle Run emissions are shown for completeness, but are not included in the facility-wide totals.
2. Emission factor from vendor data as specified by air permit application filed November 1994. VOC factor is assumed as VOC "as carbon" and is converted to propane by multiplying by 1.22. In addition, 100% formaldehyde and 50% methanol are added into the VOC factor.
3. Reportable Compound Estimating Guide OSB Mills, 2002, prepared by Weyerhaeuser Environmental Technology and Science.
4. Emission factor represents median or average uncontrolled value.
Emission factor from Weyerhaeuser Title V Cross Functional Team Bulletin #32, 12/13/94.
5. Emission factor from AP-42, Section 1.6, September 2003.
6. PM-2.5 emission factor is estimated as 77% of the PM emission factor based on the uncontrolled particulate emission factors in AP-42, Section 1.6, September 2003.

Table B-11: Main Stack (21A)

Emission Unit: OSB Press (ID No. 4700-00-10);
Energy Cell 1 (ID Nos. 3800-00-10 and 3816-00-11);
Energy Cell 2 (ID Nos. 3900-00-10 and 3916-00-11); and
Dryer Nos. 1, 2, 3, and 4 (ID Nos. 3130-00-11, 3230-00-11, 3330-00-11, and 3430-00-11)

Control Device: Wet Electrostatic Precipitator WESP (ID No. 4200-00-10)

Emission Point: ID No. 21A

Main Stack (ID No. 21A) Potential Emissions Summary:

Criteria Compound (ton/yr)	Energy Cells - Wood Combustion	Wet ESP Stack Test	Main Stack (ID No. 21A) Uncontrolled Emission Rate ¹
CO ²	-	106.21	106.2 tpy
NO _x	-	221.64	221.6 tpy
PM ⁵	-	79.38	79.4 tpy
PM-10 ⁵	-	79.38	79.4 tpy
PM-2.5 ⁵	-	79.38	79.4 tpy
SO ₂	-	17.91	17.9 tpy
Lead	-	0.03	0.03 tpy
VOC (as propane)	-	113.08	113.1 tpy
VOC (as WPP1)	-	145.49	145.5 tpy
Controlled Emission Rate ¹			
VOC (as propane)	-	113.08	113.1 tpy
VOC (as WPP1)	-	145.49	145.5 tpy

Minimum RCO Control Efficiency:⁴ 0.00%
Minimum Control For Methanol 0.00%

Hazardous Air Pollutant	Energy Cells - Wood Combustion (lb/hr)	Wet ESP Stack Test (lb/hr)	Main Stack (ID No. 21A) Uncontrolled Emission Rate ¹		Main Stack (ID No. 21A) Controlled Emission Rate ¹	
			(lb/hr)	(tpy)	(lb/hr)	(tpy)
Acetaldehyde	-	2.40	2.40	4.89	2.40	4.89
Acetophenone	1.37E-03	-	1.37E-03	6.01E-03	1.37E-03	6.01E-03
Acrolein	-	0.93	0.93	1.21	0.93	1.21
Antimony	5.56E-04	-	5.56E-04	2.43E-03	5.56E-04	2.43E-03
Arsenic	-	0.00	9.86E-04	2.29E-03	9.86E-04	2.29E-03
Benzene	-	0.07	6.52E-02	1.12E-01	6.52E-02	1.12E-01
Beryllium	-	0.00	3.41E-05	5.62E-05	3.41E-05	5.62E-05
Bis(2-ethylhexyl-phthalate)	1.65E-05	-	1.65E-05	7.21E-05	1.65E-05	7.21E-05
Cadmium	-	0.00	2.23E-03	4.31E-03	2.23E-03	4.31E-03
Carbon disulfide	4.82E-02	-	4.82E-02	2.11E-01	4.82E-02	2.11E-01
Carbon tetrachloride	1.19E-04	-	1.19E-04	5.19E-04	1.19E-04	5.19E-04
Chlorine	-	0.20	1.99E-01	3.80E-01	1.99E-01	3.80E-01
Chlorobenzene	1.16E-02	-	1.16E-02	5.06E-02	1.16E-02	5.06E-02
Chloroform	1.74E-02	-	1.74E-02	7.63E-02	1.74E-02	7.63E-02
Chromium	-	0.01	1.09E-02	1.70E-02	1.09E-02	1.70E-02
Cobalt	1.11E-02	-	1.11E-02	4.87E-02	1.11E-02	4.87E-02
Cumene	-	4.74	4.74	5.67	4.74	5.67
Dinitrophenol, 2,4-	6.30E-05	-	6.30E-05	2.76E-04	6.30E-05	2.76E-04
Dioxin (2,3,7,8-TCDD)	3.27E-10	-	3.27E-10	1.43E-09	3.27E-10	1.43E-09
Ethylbenzene	1.45E-03	-	1.45E-03	6.33E-03	1.45E-03	6.33E-03
Formaldehyde ³	-	4.55	4.55	10.30	4.55	10.30
Hexane	-	0.26	2.58E-01	3.78E-01	2.58E-01	3.78E-01

Table B-11: Main Stack (21A)

Emission Unit: OSB Press (ID No. 4700-00-10);
Energy Cell 1 (ID Nos. 3800-00-10 and 3816-00-11);
Energy Cell 2 (ID Nos. 3900-00-10 and 3916-00-11); and
Dryer Nos. 1, 2, 3, and 4 (ID Nos. 3130-00-11, 3230-00-11, 3330-00-11, and 3430-00-11)
Control Device: Wet Electrostatic Precipitator WESP (ID No. 4200-00-10)

Emission Point: ID No. 21A

Main Stack (ID No. 21A) Potential Emissions Summary (continued):

Hazardous Air Pollutant	Energy Cells - Wood Combustion (lb/hr)	Wet ESP Stack Test (lb/hr)	Main Stack (ID No. 21A)		Main Stack (ID No. 21A)	
			Uncontrolled Emission Rate ¹ (lb/hr)	(tpy)	Controlled Emission Rate ¹ (lb/hr)	(tpy)
Hydrogen chloride	-	0.45	4.53E-01	1.06E+00	4.53E-01	1.06E+00
Lead	-	0.01	0.01	0.03	0.01	0.03
Manganese	-	0.18	1.83E-01	1.78E-01	1.83E-01	1.78E-01
Mercury	1.33E-02	-	1.33E-02	5.84E-02	1.33E-02	5.84E-02
Methanol	-	10.49	10.49	31.49	10.49	31.49
Methyl chloride	3.63E-02	-	3.63E-02	1.59E-01	3.63E-02	1.59E-01
Methyl chloroform	1.09E-02	-	1.09E-02	4.75E-02	1.09E-02	4.75E-02
Methyl ethyl ketone	4.45E-03	-	4.45E-03	1.95E-02	4.45E-03	1.95E-02
Methyl isobutyl ketone	-	0.14	1.38E-01	2.83E-01	1.38E-01	2.83E-01
Methylene chloride (Dichloromethane)	-	0.14	1.44E-01	2.16E-01	1.44E-01	2.16E-01
Methylene diphenyl diisocyanate (MDI)	-	0.02	2.36E-02	2.70E-02	2.36E-02	2.70E-02
Naphthalene	-	0.00	1.28E-05	5.62E-05	1.28E-05	5.62E-05
Nickel	-	0.00	4.06E-03	6.84E-03	4.06E-03	6.84E-03
Nitrophenol, 4-	3.85E-05	-	3.85E-05	1.69E-04	3.85E-05	1.69E-04
Pentachlorophenol	1.79E-05	-	1.79E-05	7.82E-05	1.79E-05	7.82E-05
Phenol	-	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
POM	-	0.00	1.81E-05	7.92E-05	1.81E-05	7.92E-05
Propionaldehyde	-	1.00	1.00	0.83	1.00	0.83
Selenium	4.15E-04	-	4.15E-04	1.82E-03	4.15E-04	1.82E-03
Styrene	5.56E-03	-	5.56E-03	2.43E-02	5.56E-03	2.43E-02
Tetrachloroethylene	6.30E-02	-	6.30E-02	2.76E-01	6.30E-02	2.76E-01
Toluene	-	0.16	1.61E-01	2.37E-01	1.61E-01	2.37E-01
Trichloroethylene	2.82E-03	-	2.82E-03	1.23E-02	2.82E-03	1.23E-02
Trichlorophenol, 2,4,6-	7.70E-06	-	7.70E-06	3.37E-05	7.70E-06	3.37E-05
Vinyl chloride	6.30E-03	-	6.30E-03	2.76E-02	6.30E-03	2.76E-02
Xylenes	-	0.45	4.48E-01	1.96E+00	4.48E-01	1.96E+00
Total MACT HAP	-	19.37	19.37	48.72	19.37	48.72
Total HAP	0.23	26.21	26.45	60.32	26.45	60.32

References:

% HAP Control

0

1. Uncontrolled values are without Biofilter control; controlled values include the minimum Methanol control efficiency.
2. Due to uncertainty surrounding CO emissions from wood fired fuel cells and to ensure the mill remains a PSD minor source, the mill requests the CO facility-wide emissions limit to be set at 229 tpy, which allows a Main Stack (EP ID 21A) permit limit of 225.4 tpy.
3. As shown historically at this mill, formaldehyde emissions vary in some scenarios; therefore, assume no control of formaldehyde.
4. RCO Control has been zeroed out since it has been removed; and RCO data deleted from column F.
5. PM values are after going through controls (Multiclones, Cyclonic Separators & WESP)

Table B-12: Wet ESP Stack Test

Emission Unit: OSB Press (ID No. 4700-00-10);
Energy Cell 1 (ID Nos. 3800-00-10 and 3816-00-11);
Energy Cell 2 (ID Nos. 3900-00-10 and 3916-00-11); and
Dryer Nos. 1, 2, 3, and 4 (ID Nos. 3130-00-11, 3230-00-11, 3330-00-11, and 3430-00-11)
Control Device: Wet Electrostatic Precipitator WESP (ID No. 4200-00-10)

Emission Point: ID No. 21A

Potential Process Throughput:

Wood Flakes Dried:	56 ODT/hr
Average Annual OSB Production:	86 MSF/hr (3/8 inch)
Maximum Hourly OSB Production:	94 MSF/hr (3/8 inch)
Operational Hours:	8,760 hr/yr
Particulate Control:	80.0%

Potential Emissions Summary: ¹

Criteria Compounds	Hourly Emission Factor	Reference	Annual Emission Factor	Reference	Uncontrolled Emissions	
					(lb/hr)	(ton/yr)
CO	0.433 lb/MSF	2	0.282 lb/MSF	9	40.66	106.2
NO _x	0.939 lb/MSF	2	0.588 lb/MSF	3	88.23	221.6
PM	0.369 lb/MSF	2	0.211 lb/MSF	3	34.68	79.4
PM-10	0.369 lb/MSF	2	0.211 lb/MSF	3	34.68	79.4
PM-2.5	0.369 lb/MSF	3	0.211 lb/MSF	3	34.68	79.4
SO ₂	0.130 lb/MSF	2	0.048 lb/MSF	3	12.26	17.9
VOC (as propane)	0.502 lb/MSF	2, 4	0.300 lb/MSF	3	47.17	113.1
VOC (as WPP1)	Uncontrolled VOCs as WPP1 - calculations below table			7, 8	59.09	145.5
					Controlled VOC Emissions	
VOC (as propane)	- lb/MSF	-	0.278 lb/MSF	7	25.82	113.1
VOC (as WPP1)	- lb/MSF	-	0.311 lb/MSF	7, 8	33.22	145.5

Hazardous Air Pollutant	Hourly Emission Factor	Reference	Annual Emission Factor	Reference	Uncontrolled Emissions	
					(lb/hr)	(ton/yr)
Acetaldehyde	2.55E-02 lb/MSF	2	1.30E-02 lb/MSF	3	2.401	4.892
Acrolein	9.88E-03 lb/MSF	2	3.21E-03 lb/MSF	3	0.929	1.210
Arsenic	1.05E-05 lb/MSF	2	6.09E-06 lb/MSF	3	0.001	0.002
Benzene	6.93E-04 lb/MSF	2	2.97E-04 lb/MSF	3	0.065	0.112
Beryllium	3.63E-07 lb/MSF	2	1.49E-07 lb/MSF	3	3.41E-05	5.62E-05
Cadmium	2.37E-05 lb/MSF	2	1.15E-05 lb/MSF	3	0.002	0.004
Chlorine	2.11E-03 lb/MSF	2	1.01E-03 lb/MSF	3	0.199	0.380
Chromium	1.16E-04 lb/MSF	2	4.52E-05 lb/MSF	3	0.011	0.017
Cumene	5.04E-02 lb/MSF	2	1.50E-02 lb/MSF	3	4.739	5.668
Dichloromethane	1.54E-03 lb/MSF	2	5.73E-04 lb/MSF	3	0.144	0.216
Formaldehyde	4.84E-02 lb/MSF	2	2.73E-02 lb/MSF	3	4.552	10.302
Hexane	2.74E-03 lb/MSF	2	1.00E-03 lb/MSF	3	0.258	0.378
Hydrogen Chloride	4.82E-03 lb/MSF	2	2.82E-03 lb/MSF	3	0.453	1.063
Lead	1.24E-04 lb/MSF	2	7.90E-05 lb/MSF	3	0.012	0.030
Manganese	1.95E-03 lb/MSF	2	4.72E-04 lb/MSF	3	0.183	0.178
MDI	2.51E-04 lb/MSF	2	7.18E-05 lb/MSF	3	0.024	0.027
Methanol	1.12E-01 lb/MSF	2	8.36E-02 lb/MSF	3	10.49	31.49

Table B-12: Wet ESP Stack Test

Emission Unit: OSB Press (ID No. 4700-00-10);
Energy Cell 1 (ID Nos. 3800-00-10 and 3816-00-11);
Energy Cell 2 (ID Nos. 3900-00-10 and 3916-00-11); and
Dryer Nos. 1, 2, 3, and 4 (ID Nos. 3130-00-11, 3230-00-11, 3330-00-11, and 3430-00-11)
Control Device: Wet Electrostatic Precipitator WESP (ID No. 4200-00-10)

Emission Point: ID No. 21A

Potential Emissions Summary (continued):¹

Hazardous Air Pollutant	Hourly Emission Factor	Reference	Annual Emission Factor	Reference	Uncontrolled Emissions	
					(lb/hr)	(ton/yr)
Methyl isobutyl ketone	1.47E-03 lb/MSF	2	7.52E-04 lb/MSF	3	0.138	0.283
Naphthalene	2.29E-07 lb/ODT	5	2.29E-07 lb/ODT	5	1.28E-05	5.62E-05
Nickel	4.32E-05 lb/MSF	2	1.82E-05 lb/MSF	3	0.004	0.007
Phenol	0.00E+00 lb/MSF	6	0.00E+00 lb/MSF	6	0.000	0.000
POM	3.23E-07 lb/ODT	5	3.23E-07 lb/ODT	5	1.81E-05	7.92E-05
Propionaldehyde	1.06E-02 lb/MSF	2	2.21E-03 lb/MSF	3	0.999	0.831
Toluene	1.72E-03 lb/MSF	2	6.29E-04 lb/MSF	3	0.161	0.237
Xylenes	8.00E-03 lb/ODT	5	8.00E-03 lb/ODT	5	0.448	1.962
Total MACT HAP	- -	-	- -	-	19.37	48.72
Total HAP	- -	-	- -	-	26.21	59.29

Methanol Adjustment for VOC Calculation	Uncontrolled		Controlled	
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Methanol (lb/hr):	10.49	10.49		
Methanol as propane (lb/hr):	4.81	4.81		
Methanol Response Factor:	65%	65%		
Methanol Adjustment as propane (lb/hr):	3.13	3.13		
Total WPP1 VOC(lb/hr)⁴:	59.1	48.60		
Total VOC as Propane (lb/hr):	47	47.17		
Total HAP (lb/hr)	26	26.21		

	Uncontrolled		Controlled	
	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)
Methanol (tpy):	31.49	31.49		
Methanol as propane (tpy):	14.43	14.43		
Methanol Response Factor:	65%	65%		
Methanol Adjustment as propane (tpy):	9.38	9.38		
Total WPP1 VOC(tpy)⁴:	145.5	145.49		
Total VOC as Propane (tpy)	113	113.08		
Total HAP	59	59.29		

References:

- Stack testing includes contributions from strand drying, direct wood-firing, and the press. Hourly emission rates are based on the Maximum Hourly OSB Production. Annual emission rates are based on the Average Annual OSB Production.
- Emission factor based on stack testing conducted on the existing Wet ESP. Emission factor represents the 95th % Confidence Level.
- Emission factor based on stack testing conducted on the existing Wet ESP. Emission factor represents the average of test runs.
- VOC emission testing was performed from 1997 through 2006; all results were converted to a propane basis. Per EPA's *Interim VOC Measurement Protocol for the Wood Products Industry - July 2007*, WPP1 VOC is calculated based on VOC as propane, plus formaldehyde and methanol emissions, with a methanol adjustment.
- Reportable Compound Estimating Guide OSB Mills, 2002, prepared by Weyerhaeuser Environmental Technology and Science. Emission factors for direct wood-fired OSB dryers.
- Phenol resulted in non-detect on all runs and the detection limit is less than 1 ppm.
- VOC annual emission factor based on stack testing cited in #3 adjusted for 90% Methanol DRE from Biofilter
The emission factor represents the average of test runs conducted on the existing WESP, therefore VOC and Methanol were measured simultaneously.
- The WPP1 VOC factor was developed per EPA OTM-26 method, which takes the average as-carbon emission rate converted to propane by multiplying by 1.22, and then adjusts for formaldehyde, methanol, and non-VOC compounds.
- Emission factor based on ICR stack testing conducted in May 2022 at the Biofilter outlet. Emission factor represents the average of test runs.

**Weyerhaeuser Company - Heaters, West Virginia
Plant ID No. 007-00016**

Table B-13: Energy Cells (Wood Combustion)

Emission Unit: Energy Cell 1 (ID Nos. 3800-00-10 and 3816-00-11) and
Energy Cell 2 (ID Nos. 3900-00-10 and 3916-00-11)

Control Device: NA

Emission Point: ID No. 21A (Wood Combustion Emissions)

Potential Process Throughput:

Wood Combustion in both cells:	41.18 GT/hr
Maximum Heat Input:	350 MMBtu/hr
Dry/Green Wood Ratio:	0.5 lb/lb
Hours of Operation:	8,760 hr/yr
Particulate Control:	80.0%

Potential Emissions Summary:

Criteria Compounds	Wood Combustion Emission Factor	Control Efficiency	Reference	Uncontrolled Emissions ⁵	
				(lb/hr)	(ton/yr)
CO	--	-	1	-	-
NO _x	--	-	1	-	-
PM	--	-	1	-	-
PM-10	--	-	1	-	-
SO ₂	--	-	1	-	-
VOC	--	-	1	-	-

Hazardous Air Pollutant	Wood Combustion Emission Factor	Control Efficiency	Reference	Uncontrolled Emissions ⁵	
				(lb/hr)	(ton/yr)
Acetaldehyde	--	-	1	-	-
Acetophenone	3.33E-05 lb/ton wood	-	4	1.37E-03	6.01E-03
Acrolein	--	-	1	-	-
Antimony	6.75E-05 lb/ton wood	80%	4	5.56E-04	2.43E-03
Arsenic	--	-	1	-	-
Benzene	--	-	1	-	-
Beryllium	--	-	1	-	-
Bis(2-ethylhexylphthalate)	4.70E-08 lb/MMBtu	-	2	1.65E-05	7.21E-05
Cadmium	--	-	1	-	-
Carbon disulfide	1.17E-03 lb/ton wood	-	4	4.82E-02	2.11E-01
Carbon tetrachloride	2.88E-06 lb/ton wood	-	4	1.19E-04	5.19E-04
Chlorine	--	-	1	-	-
Chlorobenzene	3.30E-05 lb/MMBtu	-	2	1.16E-02	5.06E-02
Chloroform	4.23E-04 lb/ton wood	-	4	1.74E-02	7.63E-02
Chromium	--	-	1	-	-
Cobalt	1.35E-03 lb/ton wood	80%	4	1.11E-02	4.87E-02
Cumene	--	-	1	-	-
Dinitrophenol, 2,4-	1.80E-07 lb/MMBtu	-	2	6.30E-05	2.76E-04
Dioxin (2,3,7,8-TCDD)	7.94E-11 lb/BD ton	80%	3	3.27E-10	1.43E-09
Ethylbenzene	3.51E-05 lb/ton wood	-	4	1.45E-03	6.33E-03
Formaldehyde	--	-	1	-	-

Weyerhaeuser Company - Heaters, West Virginia
Plant ID No. 007-00016

Table B-13: Energy Cells (Wood Combustion)

Emission Unit: Energy Cell 1 (ID Nos. 3800-00-10 and 3816-00-11) and
Energy Cell 2 (ID Nos. 3900-00-10 and 3916-00-11)

Control Device: NA

Emission Point: ID No. 21A (Wood Combustion Emissions)

Potential Emissions Summary (continued):

Hazardous Air Pollutant	Wood Combustion Emission Factor	Control Efficiency	Reference	Uncontrolled Emissions ⁵	
				(lb/hr)	(ton/yr)
Hexane	--	-	1	-	-
Hydrogen chloride	--	-	1	-	-
Lead	--	-	1	-	-
Manganese	--	-	1	-	-
Mercury	3.24E-04 lb/ton wood	-	4	1.33E-02	5.84E-02
Methanol	--	-	1	-	-
Methyl chloride	8.82E-04 lb/ton wood	-	4	3.63E-02	1.59E-01
Methyl chloroform	3.10E-05 lb/MMBtu	-	2	1.09E-02	4.75E-02
Methyl ethyl ketone	1.08E-04 lb/ton wood	-	4	4.45E-03	1.95E-02
Methyl isobutyl ketone	--	-	1	-	-
Methylene chloride	--	-	1	-	-
Naphthalene	--	-	1	-	-
Nickel	--	-	1	-	-
Nitrophenol, 4-	1.10E-07 lb/MMBtu	-	2	3.85E-05	1.69E-04
Pentachlorophenol	5.10E-08 lb/MMBtu	-	2	1.79E-05	7.82E-05
Phenol	--	-	1	-	-
POM	--	-	1	-	-
Propionaldehyde	--	-	1	-	-
Selenium	5.04E-05 lb/ton wood	80%	4	4.15E-04	1.82E-03
Styrene	1.35E-04 lb/ton wood	-	4	5.56E-03	2.43E-02
Tetrachloroethylene	1.53E-03 lb/ton wood	-	4	6.30E-02	2.76E-01
Toluene	--	-	1	-	-
Trichloroethylene	6.84E-05 lb/ton wood	-	4	2.82E-03	1.23E-02
Trichlorophenol, 2,4,6-	2.20E-08 lb/MMBtu	-	2	7.70E-06	3.37E-05
Vinyl chloride	1.80E-05 lb/MMBtu	-	2	6.30E-03	2.76E-02
Xylenes	--	-	1	-	-
Total MACT HAP	--	-	-	-	-
Total HAP	--	-	-	0.23	1.03

References:

1. Emissions are addressed in the dryer calculations by an emission factor that includes the contribution from direct wood-firing.
2. Emission factor from AP-42, Section 1.6, September 2003.
3. Reportable Compound Estimating Guide OSB Mills, 2002, prepared by Weyerhaeuser Environmental Technology and Science.
4. Emission factor from Weyerhaeuser Title V Cross Functional Team Bulletin #32, 12/13/94.
5. Uncontrolled values are without control.

Table B-15: OSB Press Bypass

Emission Unit: OSB Press (ID No. 4700-00-10)
Control Device: N/A
Emission Point: ID No. 24 (Bypass Stack)

Potential Process Throughput:

Average Annual OSB Production:	86 MSF/hr (3/8 inch)	Old rates
Maximum Hourly OSB Production:	94 MSF/hr (3/8 inch)	92
Maximum Bypass Venting:	500 hr/yr	700

Potential Emissions Summary: ¹

Criteria Compounds	Hourly Emission Factor	Reference	Annual Emission Factor	Reference	Emission Rate ¹	
					(lb/hr)	(ton/yr)
CO	0.098 lb/MSF 3/8	2	0.098 lb/MSF 3/8	2	9.21	2.11
PM	2.71E-02 lb/MSF 3/8	3	1.59E-02 lb/MSF 3/8	4	2.55	0.34
PM-10	2.71E-02 lb/MSF 3/8	3	1.59E-02 lb/MSF 3/8	4	2.55	0.34
PM-2.5	2.71E-02 lb/MSF 3/8	3	1.59E-02 lb/MSF 3/8	4	2.55	0.34
VOC	3.93E-01 lb/MSF 3/8	5	2.61E-01 lb/MSF 3/8	5	36.90	5.62

Hazardous Air Pollutant	Hourly Emission Factor	Reference	Annual Emission Factor	Reference	Emission Rate ¹	
					(lb/hr)	(ton/yr)
Acetaldehyde	2.12E-02 lb/MSF 3/8	3	1.08E-02 lb/MSF 3/8	4	1.988	0.232
Acrolein	0.00E+00 lb/MSF 3/8	6	0.00E+00 lb/MSF 3/8	6	0.000	0.000
Arsenic	0.00E+00 lb/MSF 3/8	6	0.00E+00 lb/MSF 3/8	6	0.000	0.000
Benzene	2.49E-04 lb/MSF 3/8	3	1.23E-04 lb/MSF 3/8	4	0.023	0.003
Beryllium	0.00E+00 lb/MSF 3/8	6	0.00E+00 lb/MSF 3/8	6	0.000	0.000
Cadmium	5.97E-06 lb/MSF 3/8	3	2.35E-06 lb/MSF 3/8	4	0.001	0.000
Chlorine	1.25E-02 lb/MSF 3/8	3	2.95E-03 lb/MSF 3/8	4	1.172	0.064
Chromium	1.66E-04 lb/MSF 3/8	3	5.95E-05 lb/MSF 3/8	4	0.016	0.001
Cumene	1.31E-01 lb/MSF 3/8	3	3.65E-02 lb/MSF 3/8	4	12.267	0.784
Dichloromethane	0.00E+00 lb/MSF 3/8	6	0.00E+00 lb/MSF 3/8	6	0.000	0.000
Formaldehyde	6.54E-02 lb/MSF 3/8	3	4.94E-02 lb/MSF 3/8	4	6.145	1.062
Hexane	0.00E+00 lb/MSF 3/8	6	0.00E+00 lb/MSF 3/8	6	0.000	0.000
Hydrogen Chloride	0.00E+00 lb/MSF 3/8	6	0.00E+00 lb/MSF 3/8	6	0.000	0.000
Lead	3.87E-05 lb/MSF 3/8	3	1.10E-05 lb/MSF 3/8	4	0.004	0.000
Manganese	1.44E-04 lb/MSF 3/8	3	5.29E-05 lb/MSF 3/8	4	0.014	0.001
MDI	3.10E-04 lb/MSF 3/8	3	2.06E-04 lb/MSF 3/8	4	0.029	0.004
Methanol	1.69E-01 lb/MSF 3/8	3	1.62E-01 lb/MSF 3/8	4	15.922	3.490
MIBK	0.00E+00 lb/MSF 3/8	6	0.00E+00 lb/MSF 3/8	6	0.000	0.000
Nickel	5.33E-04 lb/MSF 3/8	3	1.94E-04 lb/MSF 3/8	4	0.050	0.004
Phenol	5.58E-03 lb/MSF 3/8	3	1.97E-03 lb/MSF 3/8	4	0.524	0.042
Propionaldehyde	0.00E+00 lb/MSF 3/8	6	0.00E+00 lb/MSF 3/8	6	0.000	0.000
Toluene	0.00E+00 lb/MSF 3/8	6	0.00E+00 lb/MSF 3/8	6	0.000	0.000
Total MACT HAP	- -	-	- -	-	24.58	4.83
Total HAP	- -	-	- -	-	38.15	5.69

References:

- Hourly emission rates are based on the Maximum Hourly OSB Production. Annual emission rates are based on the Average Annual OSB Production.
- Reportable Compound Estimating Guide OSB Mills, 2002, prepared by Weyerhaeuser Environmental Technology and Science. Emission factors represent average uncontrolled values.
- Emission factor based on stack testing conducted on the Press. Emission factor represents the 95th % Confidence Level.
- Emission factor based on stack testing conducted on the Press. Emission factor represents the average of test runs.
- VOC emission factors are the sum of VOC classified HAP compounds.
- The following compounds resulted in non-detect on all runs and the detection limit for each is less than 1 ppm: Acrolein, Arsenic, Beryllium, Dichloromethane, Hexane, Hydrogen Chloride, MIBK, Propionaldehyde, and Toluene.

**Weyerhaeuser Company - Heaters, West Virginia
Plant ID No. 007-00016**

Table B-16: Emergency Generator

Emission Unit: Emergency Diesel Generator (ID No. 27S)
Control Device: N/A
Emission Point: ID No. 27

Potential Process Throughput:

Power output rating: 1030 hp
 Maximum fuel input rate: ¹ 7.21 MMBtu/hr
 Operation: 100 hr/yr
 Diesel Sulfur Content: 0.05 % by weight

Potential Emissions Summary:

Criteria Compound	Emission Factor	Reference	Emission Rate	
			(lb/hr)	(ton/yr)
CO	5.50E-03 lb/hp-hr	1	5.67	0.28
NO _x	2.40E-02 lb/hp-hr	1	24.72	1.24
PM	7.00E-04 lb/hp-hr	1	0.72	0.04
PM-10	5.75E-04 lb/hp-hr	1, 2	0.59	0.03
PM-2.5	5.58E-04 lb/hp-hr	1, 2	0.58	0.03
SO ₂	4.05E-04 lb/hp-hr	1	0.42	0.021
VOC	6.46E-04 lb/hp-hr	1	0.66	0.033
Sulfuric Acid Mist	8.75E-04 lb/MMBtu	3	6.31E-03	3.15E-04

Hazardous Air Pollutant	Emission Factor	Reference	Emission Rate	
			(lb/hr)	(ton/yr)
Acetaldehyde	2.52E-05 lb/MMBtu	2	1.82E-04	9.08E-06
Acrolein	7.88E-06 lb/MMBtu	2	5.68E-05	2.84E-06
Benzene	7.76E-04 lb/MMBtu	4	5.59E-03	2.80E-04
Formaldehyde	7.89E-05 lb/MMBtu	2	5.69E-04	2.84E-05
Naphthalene	1.30E-04 lb/MMBtu	4	9.37E-04	4.69E-05
PAHs	2.12E-04 lb/MMBtu	4	1.53E-03	7.64E-05
Toluene	2.81E-04 lb/MMBtu	4	2.03E-03	1.01E-04
Xylenes	1.93E-04 lb/MMBtu	4	1.39E-03	6.96E-05
Total MACT HAP	- -		8.07E-04	4.04E-05

References:

1. Maximum fuel input rate calculated using the power output rating and an average brake-specific fuel consumption (BSFC) of 7,000 Btu/hp-hr.
1. Emission factor was obtained from AP-42, Section 3.4, Table 3.4-1, October 1996. Maximum fuel input rate calculated using the power output rating and an average brake-specific fuel consumption (BSFC) of 7,000 Btu/hp-hr. Value is TOC "as methane", which is converted to propane. The formaldehyde emission factor is converted to lb/hp-hr and added into the VOC value.
2. AP-42, October 1996. The PM value (Table 3.4-1) is adjusted to PM-10 and PM-2.5 values by using a ration of fuel input emission factors from Table 3.4-2.
3. AP-42, September 1998, Table 1.3-1 indicates that the emission factor for SO₃ is 2S lb/1000 gallons of oil burned, where S = sulfur content in percent by weight. All the SO₃ is assumed to be converted to H₂SO₄. Since 80 lb of SO₃ is equivalent to 98 lb of H₂SO₄, the emission factor of H₂SO₄ is estimated to be 2.45S lb/1000 gallons of fuel burned (2.45 S = 2S x 98/80). Based on an average heating value of 140,000 Btu per gallon of diesel, the emission factor for H₂SO₄ is estimated to be 0.0175S lb/MMBtu.
2. AP-42, October 1996, Table 3.4-3.

**Weyerhaeuser Company - Heaters, West Virginia
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Table B-17: PF Resin Tanks

Emission Units: Liquid Phenolic Resin Tanks 1, 2, 3, 4, 5 and 6 (ID Nos. 31S-34S, 46S, and 47S)

Emission Points: ID Nos. 31-34, 46 and 47 (Resin Tank Emissions)

Potential Process Throughput:

Throughput per tank: 526,187 gal/yr
Number of Tanks: 6

Potential Emissions Summary: ¹

Hazardous Air Pollutant	Losses per Tank (lb/yr)			Total Losses (lb/yr)			Total Emissions (tpy)
	Working Loss	Breathing Loss	Total Emissions	Working Loss	Breathing Loss	Total Emissions	
VOC	3.98	0.91	4.89	23.88	5.46	29.34	1.47E-02
Formaldehyde	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00
Phenol	0.01	0.00	0.01	0.06	0.00	0.06	3.00E-05
Total MACT HAP			0.01			0.06	3.00E-05

Emission Units: MDI Tanks 1 and 2 (ID Nos. 35S and 36S)

Emission Points: ID Nos. 35 and 36 (MDI Tank Emissions)

Potential Process Throughput:

Throughput per tank: 753,268 gal/yr
Number of Tanks: 2

Potential Emissions Summary: ¹

Hazardous Air Pollutant	Losses per Tank (lb/yr)			Total Losses (lb/yr)			Total Emissions (tpy)
	Working Loss	Breathing Loss	Total Emissions	Working Loss	Breathing Loss	Total Emissions	
VOC	0.00	0.00	0.0004	0.00	0.00	0.0008	4.00E-07
MDI ²	0.00	0.00	0.0004	0.00	0.00	0.0008	4.00E-07

References:

1. The emissions are calculated from the EPA TANKS 4.0.9 program. TANKS is the program accepted by federal and state regulatory agencies for calculating VOCs and HAPs from fixed- and floating-roof storage tanks. TANKS is based on the emission estimation procedures from Chapter 7 of EPA's Compilation of Air Pollutant Emission Factors (AP-42).
2. TANKS calculated total losses from the MDI tanks. As this value is not broken into working or breathing losses due to the number of significant figures in the report, it is captured in the Total Emissions column. For conservative purposes, it is assumed that 100% of the losses is MDI.

Weyerhaeuser Company - Heaters, West Virginia
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Table B-19: Wax Tanks

Emission Units: Wax Tanks 1 and 2 (ID Nos. 37S-38S)
Emission Points: ID Nos. 37 and 38 (Wax Tank Emissions)

Potential Emissions:

Throughput per tank: 1,062,762 gal/yr
Number of Tanks: 2

VOC emission rate: ¹	0.01 tpy
Total VOC:	0.02 tpy
Permit Limit per Tank:	0.01 tpy

References:

1. Emission rate is permitted rate per tank.

Table B-18: Paint Booths

Emission Unit: Paint Booth Nos. 1, 2, and 3 (ID No. 40S, 41S, 42S, 43S, 44S, and 45S)
Control Device: Filters
Emission Point: ID Nos. 40A (inside bldg) (Booth 1); 42, 43 (Booth 2); 44A (inside bldg)(Booth 3)

Potential Process Throughput:

Paint Booth No. 1 Edgeseal Usage:	26.0 gal/hr	227760	80000	240000
Paint Booth No. 2 Edgeseal Usage:	26.0 gal/hr		80000	
Paint Booth No. 3 Edgeseal Usage:	26.0 gal/hr		60000	
Edgeseal Density:	8.30 lb/gal			

Potential Emissions Summary:

Total VOC 3.99

Criteria Compound	Solids Content	Overspray	Control Efficiency	Reference	Paint Booth No. 1		Paint Booth No. 1	
					Controlled Emission Rate		Uncontrolled Emission Rate	
					(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
PM	41.3%	10%	98.5%	1	0.13	0.59	8.91	39.04
PM-10	41.3%	10%	98.5%	1	0.13	0.59	8.91	39.04
PM-2.5	41.3%	10%	98.5%	1	0.13	0.59	8.91	39.04
VOCs	0.01	lb/gal	0.0%		0.26	1.14	0.26	1.14

Criteria Compound	Solids Content	Overspray	Control Efficiency	Reference	Paint Booth No. 2		Paint Booth No. 2	
					Controlled Emission Rate		Uncontrolled Emission Rate	
					(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
PM	41.3%	10%	98.5%	1	0.13	0.59	8.91	39.04
PM-10	41.3%	10%	98.5%	1	0.13	0.59	8.91	39.04
PM-2.5	41.3%	10%	98.5%	1	0.13	0.59	8.91	39.04
VOCs	0.01	lb/gal	0.0%		0.26	1.14	0.26	1.14

Criteria Compound	Solids Content	Overspray	Control Efficiency	Reference	Paint Booth No. 3		Paint Booth No. 3	
					Controlled Emission Rate		Uncontrolled Emission Rate	
					(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
PM	41.3%	10%	98.5%	1	0.13	0.59	8.91	39.04
PM-10	41.3%	10%	98.5%	1	0.13	0.59	8.91	39.04
PM-2.5	41.3%	10%	98.5%	1	0.13	0.59	8.91	39.04
VOCs	0.015	lb/gal	0.0%		0.39	1.71	0.39	1.71

References:

1. The maximum quantity of paint usage per hour is back-calculated using the hourly and annual particulate emissions permit limits, MSDS data, the September 2002 air permit application, and manufacturer specifications for filter efficiency. Per MSDS, paints are water-based, and there are no VOC emissions from the paint booths.

Attachment O

Monitoring/Recordkeeping/Reporting/ Testing Plans

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



MONITORING, RECORD KEEPING, REPORTING, TESTING PLANS

Wet Electrostatic Precipitator (WESP, 21A):

Monitoring

In order to comply with 45 CSR 2-3.1, semimonthly visible emission checks at the proposed emission point 21A will be conducted during periods of facility operation using the procedures outlined in 40 CFR 60, Appendix A, Method 22. If visible emissions are identified a 45 CSR 7A evaluation shall be performed within 24 hours; unless the visible emission condition is corrected in a timely manner. §4.2.7 of site permit.

Visual inspections of the ductwork and the WESP control device will be conducted. External inspections of the ductwork and control device shall be conducted monthly and internal inspections shall be conducted every 12 months. Any leaks or structural deficiencies discovered during these inspections shall be repaired as soon as practicable.

The permittee shall continuously monitor the voltage of the proposed Wet ESP (WESP, 4200-00-10). The voltage on the Wet ESP shall be measured with a voltmeter having a minimum accuracy of ± 1 kV. During normal operation the Wet ESP shall have at least 2 fields in operation at all times. Voltage in each online field shall be maintained at or above 30 kV. If the voltage in online fields falls below 30 kV for 30 seconds and alarm will sound and corrective action shall be taken. The voltage measured across the Wet ESP shall be recorded as a 6-minute average. An excursion triggers an inspection and corrective action.

Recordkeeping

Maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

Maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur.

Maintain records of all monitoring data required, documenting the date and time of each visible emission check, the emission point or equipment identification number, and name of observer.

The voltage measured across the Wet ESP (4200-00-10) shall be recorded as a 6-minute average and records shall be maintained. In addition, the operator plans to document and maintain records of all periods during normal operation (non-SSM) when the voltage of online fields is less than 30 kV for more than 30 seconds and any corrective actions taken during these periods. Maintenance and malfunction records for the Wet ESP (WESP) shall be maintained.

For Compliance Assurance Monitoring (CAM), the operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality

improvement plan required pursuant to 40 C.F.R. §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. 64 (such as data used to document the adequacy of monitoring, or records of monitoring, maintenance, or corrective actions). (WESP)

Maintain performance testing and evaluation, records required by Table 7 and 8 of Subpart DDDD.

The company will retain records for five (5) years, two (2) years on site, certified by a company official at such time that the DAQ may request said records.

Reporting

For CAM, monitoring reports shall be submitted to the Director: Semi-annual monitoring reports.

Submit all startup, shutdown, and malfunction (SSM) notifications. The company will report any control equipment malfunctions, emission limit or opacity deviations.

The permittee shall meet all applicable reporting requirements pursuant to 40 C.F.R. 63, Subpart DODD, Table 9 and Table 10. This includes semiannual compliance reports, which contain the information described within 40 CFR §63.2281(c)-(t). The semiannual reports may coincide with title V semiannual reporting in accordance with 40 CFR §63.2281(b)(5) and (g) where applicable.

Testing

Visual inspections will be conducted: External inspections of the ductwork and control device shall be conducted monthly and internal inspections shall be conducted every 12 months.

Semimonthly visible emission checks at the proposed emission point 21A will be conducted during periods of facility operation using the procedures outlined in 40 CFR 60, Appendix A, Method 22.

Conduct performance tests upon initial start-up (63.2261).

Table 7 (7): Repeat performance testing at least every 60 months.

Table 7 (6): Initial compliance demonstration for a wet control device requires develop and implement a plan for how organic HAP captured in wastewater is contained or destroyed to minimize re-release to the atmosphere such that the desired emissions reductions are obtained (63.2268).

Under Table 2, for a (4) Control device other than a thermal oxidizer, catalytic oxidizer, or biofilter, Petition the EPA Administrator for site-specific operating parameter(s) to be established during the performance test and maintain the average operating parameter(s) within the range(s) established during the performance test. Maintain the 3-hour block average THC concentration 1 in the control device exhaust below the maximum concentration established during the performance test.

Attachment P Public Notice

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that Weyerhaeuser NR Company has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Permit Modification of an oriented strand board manufacturing facility located on Gauley Pike, near Heaters, in Braxton County, West Virginia. The latitude and longitude coordinates are: 38.760131, -80.655412.

The applicant estimates there will be no increase in the potential to emit Regulated Air Pollutants and the new control equipment is estimated to reduce emissions by the following amounts: -4.37 tpy VOCs and -1.78 tpy HAPs

Startup of operation is planned to begin on or about August 1, 2024. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice. Written comments will also be received via email at DEPAirQualityPermitting@WV.gov.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 41281, during normal business hours.

Dated this the _____.

By: Weyerhaeuser NR Company
Timothy Sagraves
Mill Manager
3601 Gauley Pike
Heaters, WV 26627

Attachment Q

Business Confidential Claims

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



Attachment R Authority Forms

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

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Attachment S

Title V Permit Revision Information

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

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Attachment S
Title V Permit Revision Information

1. New Applicable Requirements Summary	
Mark all applicable requirements associated with the changes involved with this permit revision:	
<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input type="checkbox"/> NESHAP (45CSR15)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input type="checkbox"/> Section 111 NSPS (Subpart(s) _____)	<input checked="" type="checkbox"/> Section 112(d) MACT standards (Subpart(s) <u>DDDD</u> _____)
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input checked="" type="checkbox"/> Compliance Assurance Monitoring (40CFR64) ⁽¹⁾
<input type="checkbox"/> NO _x Budget Trading Program Non-EGUs (45CSR1)	<input type="checkbox"/> NO _x Budget Trading Program EGUs (45CSR26)
<p>⁽¹⁾ If this box is checked, please include Compliance Assurance Monitoring (CAM) Form(s) for each Pollutants Specific Emission Unit (PSEU) (See Attachment H to Title V Application). If this box is not checked, please explain why Compliance Assurance Monitoring is not applicable:</p> <p style="margin-left: 40px;">CAM is applicable and Attachment H is included with this submission, however, no changes to the monitoring requirements are proposed.</p>	

2. Non Applicability Determinations
List all requirements, which the source has determined not applicable to this permit revision and for which a permit shield is requested. The listing shall also include the rule citation and a rationale for the determination.
<input type="checkbox"/> Permit Shield Requested <i>(not applicable to Minor Modifications)</i>

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

3. Suggested Title V Draft Permit Language

Are there any changes involved with this Title V Permit revision outside of the scope of the NSR Permit revision? Yes No If Yes, describe the changes below.

Also, please provide **Suggested Title V Draft Permit language** for the proposed Title V Permit revision (including all applicable requirements associated with the permit revision and any associated monitoring /recordkeeping/ reporting requirements), OR attach a marked up pages of current Title V Permit. Please include appropriate citations (Permit or Consent Order number, condition number and/or rule citation (e.g. 45CSR§7-4.1)) for those requirements being added / revised.

4. Active NSR Permits/Permit Determinations/Consent Orders Associated With This Permit Revision

Permit or Consent Order Number	Date of Issuance	Permit/Consent Order Condition Number
R13-1761L	10-13-2023	
R30-00700016-2024	1-8-2024	
	/ /	

5. Inactive NSR Permits/Obsolete Permit or Consent Orders Conditions Associated With This Revision

Permit or Consent Order Number	Date of Issuance	Permit/Consent Order Condition Number
	MM/DD/YYYY	
	/ /	
	/ /	

6. Change in Potential Emissions

Pollutant	Change in Potential Emissions (+ or -), TPY
VOC	- 4.37 TPY
Total HAPs	- 1.78 TPY

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

7. Certification For Use Of Minor Modification Procedures (Required Only for Minor Modification Requests)

Note: This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete. The criteria for allowing the use of Minor Modification Procedures are as follows:

- i. Proposed changes do not violate any applicable requirement;
- ii. Proposed changes do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- iii. Proposed changes do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient air quality impacts, or a visibility increment analysis;
- iv. Proposed changes do not seek to establish or change a permit term or condition for which there is no underlying applicable requirement and which permit or condition has been used to avoid an applicable requirement to which the source would otherwise be subject (synthetic minor). Such terms and conditions include, but are not limited to a federally enforceable emissions cap used to avoid classification as a modification under any provision of Title I or any alternative emissions limit approved pursuant to regulations promulgated under § 112(j)(5) of the Clean Air Act;
- v. Proposed changes do not involve preconstruction review under Title I of the Clean Air Act or 45CSR14 and 45CSR19;
- vi. Proposed changes are not required under any rule of the Director to be processed as a significant modification;

Notwithstanding subparagraph 45CSR§30-6.5.a.1.A. (items i through vi above), minor permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in rules of the Director which are approved by the U.S. EPA as a part of the State Implementation Plan under the Clean Air Act, or which may be otherwise provided for in the Title V operating permit issued under 45CSR30.

Pursuant to 45CSR§30-6.5.a.2.C., the proposed modification contained herein meets the criteria for use of Minor permit modification procedures as set forth in Section 45CSR§30-6.5.a.1.A. The use of Minor permit modification procedures are hereby requested for processing of this application.

(Signed): _____ <i>(Please use blue ink)</i>	Date: _____ / _____ / _____ <i>(Please use blue ink)</i>
Named (typed): _____	Title: _____

Note: Please check if the following included (if applicable):

- | | |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | Compliance Assurance Monitoring Form(s) |
| <input checked="" type="checkbox"/> | Suggested Title V Draft Permit Language |

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

ATTACHMENT H - Compliance Assurance Monitoring (CAM) Plan Form

For definitions and information about the CAM rule, please refer to 40 CFR Part 64. Additional information (including guidance documents) may also be found at <http://www.epa.gov/ttn/emc/cam.html>

CAM APPLICABILITY DETERMINATION

1) Does the facility have a PSEU (Pollutant-Specific Emissions Unit considered separately with respect to **EACH** regulated air pollutant) that is subject to CAM (40 CFR Part 64), which must be addressed in this CAM plan submittal? To determine applicability, a PSEU must meet **all** of the following criteria (*If No, then the remainder of this form need not be completed*):

YES NO

- a. The PSEU is located at a major source that is required to obtain a Title V permit;
- b. The PSEU is subject to an emission limitation or standard for the applicable regulated air pollutant that is **NOT** exempt;

LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:

- NSPS (40 CFR Part 60) or NESHAP (40 CFR Parts 61 and 63) proposed after 11/15/1990.
- Stratospheric Ozone Protection Requirements.
- Acid Rain Program Requirements.
 - Emission Limitations or Standards for which a WVDEP Division of Air Quality Title V permit specifies a continuous compliance determination method, as defined in 40 CFR §64.1.
 - An emission cap that meets the requirements specified in 40 CFR §70.4(b)(12).
- c. The PSEU uses an add-on control device (as defined in 40 CFR §64.1) to achieve compliance with an emission limitation or standard;
- d. The PSEU has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than the Title V Major Source Threshold Levels; AND
- e. The PSEU is **NOT** an exempt backup utility power emissions unit that is municipally-owned.

BASIS OF CAM SUBMITTAL

2) Mark the appropriate box below as to why this CAM plan is being submitted as part of an application for a Title V permit:

RENEWAL APPLICATION. **ALL** PSEUs for which a CAM plan has **NOT** yet been approved need to be addressed in this CAM plan submittal.

INITIAL APPLICATION (submitted after 4/20/98). **ONLY** large PSEUs (i. e., PSEUs with potential post-control device emissions of an applicable regulated air pollutant that are equal to or greater than Major Source Threshold Levels) need to be addressed in this CAM plan submittal.

SIGNIFICANT MODIFICATION TO LARGE PSEUs. **ONLY** large PSEUs being modified after 4/20/98 need to be addressed in this cam plan submittal. For large PSEUs with an approved CAM plan, Only address the appropriate monitoring requirements affected by the significant modification.

3) ^a BACKGROUND DATA AND INFORMATION

Complete the following table for **all** PSEUs that need to be addressed in this CAM plan submittal. This section is to be used to provide background data and information for each PSEU in order to supplement the submittal requirements specified in 40 CFR §64.4. If additional space is needed, attach and label accordingly.

PSEU DESIGNATION	DESCRIPTION	POLLUTANT	CONTROL DEVICE	^b EMISSION LIMITATION or STANDARD	^c MONITORING REQUIREMENT
Emiss Pt. ID No. 21A	Energy Cells No. 1&2, Dryers 1-4, and OSB Press	PM	WESP	R30-007-00016; 21.78 lb/hr 95.4 tpy	Monthly Visible Inspection of Wet ESP. Monthly Voltage of each online field. Voltage to the WESP must be monitored continuously and greater than 30 kV, else an alarm sounds. The number of active WESP fields must be monitored during normal operation, and shall be at least two (2).
<u>EXAMPLE</u> Boiler No. 1	Wood-Fired Boiler	PM	Multiclone	45CSR§2-4.1.c.; 9.0 lb/hr	Monitor pressure drop across multiclone: Weekly inspection of multiclone

^a If a control device is common to more than one PSEU, one monitoring plan may be submitted for the control device with the affected PSEUs identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a). If a single PSEU is controlled by more than one control device similar in design and operation, one monitoring plan for the applicable control devices may be submitted with the applicable control devices

identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a).

^b Indicate the emission limitation or standard for any applicable requirement that constitutes an emission limitation, emission standard, or standard of performance (as defined in 40 CFR §64.1).

^c Indicate the monitoring requirements for the PSEU that are required by an applicable regulation or permit condition.

CAM MONITORING APPROACH CRITERIA

Complete this section for **EACH** PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide monitoring data and information for **EACH** indicator selected for **EACH** PSEU in order to meet the monitoring design criteria specified in 40 CFR §64.3 and §64.4. If more than two indicators are being selected for a PSEU or if additional space is needed, attach and label accordingly with the appropriate PSEU designation, pollutant, and indicator numbers.

4a) PSEU Designation: Emiss Pt ID 21A	4b) Pollutant: PM	4c) ^a Indicator No. 1: Voltage	4d) ^a Indicator No. 2: Visible Inspections
5a) GENERAL CRITERIA Describe the <u>MONITORING APPROACH</u> used to measure the indicators:		Measure with a voltmeter	Visual observations of ductwork and control device
^b Establish the appropriate <u>INDICATOR RANGE</u> or the procedures for establishing the indicator range which provides a reasonable assurance of compliance:		At least 2 fields in service and voltage > 30 kV(except during SSM). If Voltage falls below 30 kV for 30 seconds, an alarm sounds to trigger corrective actions	Any leaks or structural deficiencies are indicators that the equipment is not in proper working order.
5b) PERFORMANCE CRITERIA Provide the <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u> , such as detector location, installation specifications, and minimum acceptable accuracy:		The voltmeter is part of the WESP’s design. It has a minimum accuracy of +/- 1kV	Visible observations of the control equipment and ductwork are made.
^c For new or modified monitoring equipment, provide <u>VERIFICATION PROCEDURES</u> , including manufacturer’s recommendations, <u>TO CONFIRM THE OPERATIONAL STATUS</u> of the monitoring:		N/A	N/A
Provide <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> that are adequate to ensure the continuing validity of the data, (i.e., daily calibrations, visual inspections, routine maintenance, RATA, etc.):		Confirm voltmeter is zero when unit is not operating (at least semi-annually).	Operations personnel are properly trained on how to complete inspections. Training is conducted annually
^d Provide the <u>MONITORING FREQUENCY</u> :		Measured continuously	Monthly external inspections
Provide the <u>DATA COLLECTION PROCEDURES</u> that will be used:		Non-SSM periods when voltage falls below 30kV for more than 30 seconds will be documented.	Inspection Logs are maintained
Provide the <u>DATA AVERAGING PERIOD</u> for the purpose of determining whether an excursion or exceedance has occurred:		6 minute block average	N/A

^a Describe all indicators to be monitored which satisfies 40 CFR §64.3(a). Indicators of emission control performance for the control device and associated capture system may include measured or predicted emissions (including visible emissions or opacity), process and control device operating parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities.

- ^b Indicator Ranges may be based on a single maximum or minimum value or at multiple levels that are relevant to distinctly different operating conditions, expressed as a function of process variables, expressed as maintaining the applicable indicator in a particular operational status or designated condition, or established as interdependent between more than one indicator. For CEMS, COMS, or PEMS, include the most recent certification test for the monitor.
- ^c The verification for operational status should include procedures for installation, calibration, and operation of the monitoring equipment, conducted in accordance with the manufacturer's recommendations, necessary to confirm the monitoring equipment is operational prior to the commencement of the required monitoring.
- ^d Emission units with post-control PTE \geq 100 percent of the amount classifying the source as a major source (i.e., Large PSEU) must collect four or more values per hour to be averaged. A reduced data collection frequency may be approved in limited circumstances. Other emission units must collect data at least once per 24 hour period.

RATIONALE AND JUSTIFICATION

Complete this section for EACH PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide rationale and justification for the selection of EACH indicator and monitoring approach and EACH indicator range in order to meet the submittal requirements specified in 40 CFR §64.4.

6a) PSEU Designation: EP ID 21A

6b) Regulated Air Pollutant: PM

7) **INDICATORS AND THE MONITORING APPROACH:** Provide the rationale and justification for the selection of the indicators and the monitoring approach used to measure the indicators. Also provide any data supporting the rationale and justification. Explain the reasons for any differences between the verification of operational status or the quality assurance and control practices proposed, and the manufacturer's recommendations. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):
Monitoring voltage and comparing against a minimum value will provide a reasonable assurance of compliance that the WESP is operating properly. It is proposed to maintain at least 30 kV and a minimum of 2 fields active during normal operation. In accordance with 40 CFR 63 and 64, initial performance testing will be conducted to verify and ensure the monitoring requirements stated here are appropriate. Regular inspections will confirm that the capture and control system is intact.

8) **INDICATOR RANGES:** Provide the rationale and justification for the selection of the indicator ranges. The rationale and justification shall indicate how EACH indicator range was selected by either a COMPLIANCE OR PERFORMANCE TEST, a TEST PLAN AND SCHEDULE, or by ENGINEERING ASSESSMENTS. Depending on which method is being used for each indicator range, include the specific information required below for that specific indicator range. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

- COMPLIANCE OR PERFORMANCE TEST (Indicator ranges determined from control device operating parameter data obtained during a compliance or performance test conducted under regulatory specified conditions or under conditions representative of maximum potential emissions under anticipated operating conditions. Such data may be supplemented by engineering assessments and manufacturer's recommendations). The rationale and justification shall INCLUDE a summary of the compliance or performance test results that were used to determine the indicator range, and documentation indicating that no changes have taken place that could result in a significant change in the control system performance or the selected indicator ranges since the compliance or performance test was conducted.
- TEST PLAN AND SCHEDULE (Indicator ranges will be determined from a proposed implementation plan and schedule for installing, testing, and performing any other appropriate activities prior to use of the monitoring). The rationale and justification shall INCLUDE the proposed implementation plan and schedule that will provide for use of the monitoring as expeditiously as practicable after approval of this CAM plan, except that in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval.
- ENGINEERING ASSESSMENTS (Indicator Ranges or the procedures for establishing indicator ranges are determined from engineering assessments and other data, such as manufacturers' design criteria and historical monitoring data, because factors specific to the type of monitoring, control device, or PSEU make compliance or performance testing unnecessary). The rationale and justification shall INCLUDE documentation demonstrating that compliance testing is not required to establish the indicator range.

RATIONALE AND JUSTIFICATION: Based on vendor data, the minimum voltage to ensure proper operation is 30 kV and at least 2 fields must be in service to ensure adequate emission control. It is proposed to combine and streamline the CAM and MACT requirements into a single set of operating standards and emission limits for the WESP. The regulated pollutant emitted by the PSEU that subjects the WESP to CAM applicability is PM. The HAP emissions are exempt under paragraph b(1) of 40 CFR Part 64, 40CFR64.2.(b)(1)(i).

R30-00700016-2024 Markup

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill

Weyerhaeuser NR Company

SLR Project No.: 116.00687.00106

March 2024



West Virginia Department of Environmental Protection

Harold D. Ward
Cabinet Secretary

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:
Weyerhaeuser NR Company
Sutton OSB Mill
R30- 00700016-2024

Laura M. Crowder

Laura M. Crowder
Director, Division of Air Quality
Laura M. Crowder

Digitally signed by: Laura M. Crowder
DN: CN = Laura M. Crowder email = Laura.M.Crowder@wv.gov C = US
C = WV Department of Environmental Protection OU = Division of Air
Quality
Date: 2024.01.08 17:48:50 -28732

Issued: January 8, 2024 • Effective: January 22, 2024
Expiration: January 8, 2029 • Renewal Application Due: July 8, 2028

Permit Number: **R30-00700016-2024**
Permittee: **Weyerhaeuser NR Company**
Facility Name: **Sutton OSB Mill**
Permittee Mailing Address: **3601 Gauley Turnpike, Heaters, WV 26627**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 -Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Heaters, Braxton County, West Virginia
Facility Mailing Address:	3601 Gauley Turnpike, Heaters, WV 26627
Telephone Number:	(304) 765-4200
Type of Business Entity:	Corporation
Facility Description:	Manufacturer of oriented strand board (OSB)
SIC Codes:	2493
UTM Coordinates:	529.939 km Easting • 4,290.213 km Northing • Zone 17

Permit Writer: Robert Mullins

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR] 3, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0. Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units<1>

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
1S	1	Flaking and Screening System (consists of 2 flakers, 27 conveyor pickups, 6 green screens, and 1 hog and disk screen)	1996	65,450ACFM 50 lb/hr (oven dry)	Fabric Filter 4313-00-10
3S	3	Dry Flake Area (consists of 4 dry bins, 17 conveyor pickups, 4 weigh belts, 4 blenders, and 4 forming bins)	1996	53,400ACFM 3,300 lb/hr (oven dry)	Fabric Filter 4333-00-10
4S	4	Mat Trim System (consists of 2 mat side trim saws, 2 flying end saws, and 6 material collection hoppers)	1996	43,100ACFM 5,500 lb/hr (oven dry)	Fabric Filter 4345-00-10
5S	5	Rough Trim System (consists of 4 rough trim and hogging heads, material collection screw, and 5 press pit floor sweeps)	1996	21,200ACFM 5,730 lb/hr (oven dry)	Fabric Filter 4353-00-10
6S	6	Tongue & Groove and Sawing System (consists of 2 four-head T&G systems, 1 two-head T&G machine, finish crosscut {2 hogging heads and 2 saws} and finish ripcut {2 hogging heads and 2 saws})	1996	30,970ACFM 6,160 lb/hr (oven dry)	Fabric Filter 4363-00-10
7S	7	Sander Dust System (consists of a 6-head wide belt sander)	1996	44,800ACFM 2,200 lb/hr (oven dry)	Fabric Filter 4374-00-10
9S	9	Dry Waste System (pneumatically relays material through 2 cyclones to the Dry Fuel Silo from systems 3, 4, 5, and 6 to the Sander Dust Silo from system 7)	1996	13,200ACFM 8,550 lb/hr (oven dry)	Fabric Filter 4397-00-10
3816-00-11	10	Energy Cell No. 1 Auxiliary Burner - Idle Run<1J	1996	29 MMBTU/hr	Multi-Clone No.1 3820-00-10
3800-00-10	10	Energy Cell No. 1 - Idle Run(!I	1996	<30 MMBTU/hr	Multi-Clone No.1 3820-00-10

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
3816-00-11	21A 23	Energy Cell No. 1 Auxiliary Burner - Normal Run¹	1996	29 MMBTU/hr	WESP ⁽³⁾ 4130-00-10 4200-00-10
3800-00-10	21A 23	Energy Cell No. 1 - Normal Run(I)	1996	175 MMBTU/hr	Biofilter 4800-00-10
3916-00-11	11	Energy Cell No. 2 Auxiliary Burner - Idle Run¹	1996	29 MMBTU/hr	Multi-Clone No.2 3920-00-10
3900-00-10	11	Energy Cell No. 2 - Idle Run(I)	1996	<30 MMBTU/hr	Multi-Clone No.2 3920-00-10
3916-00-11	21A 23	Energy Cell No. 2 Auxiliary Burner - Normal Run{1}	1996	29 MMBTU/hr	WESP ⁽³⁾ 4130-00-10 4200-00-10
3900-00-10	21A 23	Energy Cell No. 2 - Normal Run(I)	1996	175 MMBTU/hr	Biofilter 4800-00-10
3130-00-11	21A 23	Auxiliary Burner-Dryer No. 1	1996	55 MMBTU/hr	WESP ⁽³⁾ 4130-00-10 4200-00-10
3230-00-11	21A 23	Auxiliary Burner-Dryer No. 2	1996	55 MMBTU/hr	Biofilter 4800-00-10
3330-00-11	21A 23	Auxiliary Burner-Dryer No. 3	1996	55 MMBTU/hr	WESP ⁽³⁾ 4130-00-10 4200-00-10
3430-00-11	21A 23	Auxiliary Burner-Dryer No. 4	1996	55 MMBTU/hr	Biofilter 4800-00-10
4700-00-10	21A 23	OSB Press Vent Exhaust	1996	60.4 Ton/hr	WESP ⁽³⁾ 4130-00-10 4200-00-10 Biofilter 4800-00-10
4700-00-10	24	OSB Press Vent Exhaust (Bypass Mode)	1996	60.4 Ton/hr	None
27S	27	Emergency Diesel Generator	1996	1030hp	None
31S	31	Liquid Phenolic Resin Tank No. 1	1996	15,000 Gallons	None
32S	32	Liquid Phenolic Resin Tank No. 2	1996	15,000 Gallons	None
33S	33	Liquid Phenolic Resin Tank No. 3	1996	15,000 Gallons	None
34S	34	Liquid Phenolic Resin Tank No. 4	1996	15,000 Gallons	None
46S	46	Liquid Phenolic Resin Tank No. 5	2005	15,000 Gallons	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
47S	47	Liquid Phenolic Resin Tank No. 6	2005	15,000 Gallons	None
35S	35	MDI Tank No. 1	1996	15,000 Gallons	None
36S	36	MDI Tank No. 2	1996	15,000 Gallons	None
37S	37	Wax Tank No. 1	1996	15,000 Gallons	None
38S	38	Wax Tank No. 2	1996	15,000 Gallons	None
40S and 41S	40A(4)	Paint Booth No. 1	2002	26 Gal./hr	Filters
42S and 43S	42 and 43	Paint Booth No. 2	2002	26 Gal./hr	Filters
44S and 45S	44A<4)	Paint Booth No. 3	2002	26 Gal./hr	Filters

- (1) WESP = Wet Electrostatic Precipitator
- (2) Energy Cells are authorized to operate in the following scenarios: During "normal operations," gases will be vented through the WESP and Biofilter and out Emission Point 21A 23. ~~During RCDME, gases will be vented through the WESP and out Emission Point 21A.~~ During "Idle Run Condition," gases will be vented through Multiclones and out Emission Points 10 and 11. During "Energy Cell Only Mode," gases will be vented through the WESP and out Emission Point 21A.
- (3) ~~As of the issuance of R13-1761LM, until such time as the new WESP (41304200-00-10) is installed and operating as the primary end control device at Emission Point 21A, the permittee is authorized to use the two (2) existing WESPs (4200-00-10 110-00-10 and 4120-00-10) and Biofilter (4800-00-10) combination in place of the new WESP. The existing WESPs Biofilter combination will comply with all requirements applicable to the new WESP contained herein.~~
- (4) Vents inside the warehouse building.

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-1761LM	October 13, 2023 Pending

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.39.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NOx	Nitrogen Oxides
CBI	Confidential Business Information	NSPS	New Source Performance Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM₁₀	Particulate Matter less than 10µm in diameter
C.F.R. or CFR	Code of Federal Regulations	pph	Pounds per Hour
CO	Carbon Monoxide	ppm	Parts per Million
C.S.R. or CSR	Codes of State Rules	PSD	Prevention of Significant Deterioration
DAQ	Division of Air Quality	psi	Pounds per Square Inch
DEP	Department of Environmental Protection	SIC	Standard Industrial Classification
FOIA	Freedom of Information Act	SIP	State Implementation Plan
HAP	Hazardous Air Pollutant	SO₂	Sulfur Dioxide
HON	Hazardous Organic NESHAP	TAP	Toxic Air Pollutant
HP	Horsepower	TPY	Tons per Year
lbs/hr or lb/hr	Pounds per Hour	TRS	Total Reduced Sulfur
LDAR	Leak Detection and Repair	TSP	Total Suspended Particulate
m	Thousand	USEPA	United States Environmental Protection Agency
MACT	Maximum Achievable Control Technology	UTM	Universal Transverse Mercator
mm	Million	VEE	Visual Emissions Evaluation
mmBtu/hr	Million British Thermal Units per Hour	VOE	Volatile Organic Compounds
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA or NIA	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c. [45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration. [45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3. [45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time. [45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
 - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

- d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.

[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.

[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.

[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.

[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
- b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield.

- d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.
- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.40]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
- b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
- c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
- b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Reserved

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall

directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45 CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B.]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

2.24. Property Rights

- 2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
 - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
 - c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U.S. EPA.
[45CSR§30-5.1.a.2.]

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.
[40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

3.2. Monitoring Requirements

- 3.2.1. None.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.
2. The result of the test for each permit or rule condition.
3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
- a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A., 45CSR13, R13-1761, 4.4.1]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31. [45CSR§30-5.1.c.3.E.]
- 3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57fu Street SE
Charleston, WV 25304

US EPA:

Section Chief
U.S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

- 3.5.4. **Fees.** The permittee shall pay fees on an annual basis in accordance with 45CSR§30-8. [45CSR§30-8.]
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:

DEPAirQualityReports@wv.gov

US EPA:

R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent

with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:
DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. **Reserved.**

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Reserved.
2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or email. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None.

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
- a. 40 C.F.R. 60, Subpart Kb - "Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984." 40 C.F.R. 60, Subpart Kb applies to each storage vessel with a capacity greater than or equal to 75m³ (19,813 gallons) that is used to store volatile organic liquids for which construction, reconstruction, or modification commenced after July 23, 1984. All tanks at the facility were installed after the July 23, 1984 applicability date, but are not subject to the requirements of 40 C.F.R. 60, Subpart Kb because their capacities are less than 75 m³.

4.0. Source-Specific Requirements [emission point ID(s): 1, 3- 7, 9-11, 21A, ~~23~~, 24, 27, 31-38, 40A, 42, 43, 44A, 46, and 47]

4.1. Limitations and Standards

4.1.1. The permittee shall operate the following particulate matter control devices and said control devices shall be designed to achieve the removal efficiencies as listed:

Table 4.1.1.: Particulate Matter Control Device Removal Efficiencies

Particulate Sources	Control Device Description and ID No.	Removal Efficiency
Flaking and Screening Dust Control	Baghouse (4313-00-10)	99.9
Dry Dust Control System	Baghouse (4333-00-10)	99.9
Mat Trim System	Baghouse (4345-00-10)	99.9
Rough Trim System	Baghouse (4353-00-10)	99.9
T & G and Finish Saws System	Baghouse (4363-00-10)	99.9
Sander Dust System	Baghouse (4374-00-10)	99.9
Dry Waste Relay System	Baghouse (4397-00-10)	99.9
30 MMBTU/hr Energy Cell (3800-00-10) Idle Run	Multi-Clone (3820-00-10)	80.0
30 MMBTU/hr Energy Cell (3900-00-10) Idle Run	Multi-Clone (3920-00-10)	80.0
175 MMBTU/hr Energy Cell (3800-00-10)	WESP (4130 4200-00-10)	80.0
175 MMBTU/hr Energy Cell (3900-00-10)	WESP (4130 4200-00-10)	80.0

[45CSR13, R13-1761, 4.1.1]

4.1.2. Emissions to the air from the permitted facility shall not exceed the following:

Table 4.1.2.: Emission Limits^{<1>}

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
1	Flaking and Screening System	Fabric Filter (4313-00-10)	PM ₁₀	0.59	2.58
			VOC	0.01	0.05
3	Dry Flake Area	Fabric Filter (4333-00-10)	PM ₁₀	0.48	2.11
			VOC	0.82	3.57
4	Mat Trim System	Fabric Filter (4345-00-10)	PM ₁₀	0.55	2.41
			VOC	0.82	3.59

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
5	Rough Trim System	Fabric Filter (4353-00-10)	PM10 VOC	0.57 0.85	2.51 3.74
6	Tongue & Groove and Sawing System	Fabric Filter (4363-00-10)	PM10 VOC	0.62 0.92	2.70 4.02
7	Sander Dust System	Fabric Filter (4374-00-10)	PM ₁₀ VOC	0.40 0.39	1.77 1.72
9	Dry Waste System	Fabric Filter (4397-00-10)	PM ₁₀ VOC	0.86 1.27	3.74 5.58
10 ⁽²⁾	Energy Cell No. 1 (3800-00-10) (Idle-Run Mode Only) Auxiliary Burners (3816-00-11) (Idle-Run Mode Only)	Multi-Clone (3820-00-10)	PM10 SO2 CO VOC NOx Benzene	6.8 1.0 6.0 9.1 8.0 0.45	9.5 1.4 8.4 12.8 11.2 0.63
11 ⁽²⁾	Energy Cell No. 2 (3900-00-10) (Idle-Run Mode) Auxiliary Burners (3916-00-11) (Idle-Run Mode)	Multi-Clone (3920-00-10)	Hydrochloric Acid Lead Compounds Methylene Chloride Naphthalene POM Total HAP	0.22 0.01 0.07 0.43 0.43 2.71	0.31 0.01 0.10 0.60 0.60 3.79
21A ⁽³⁾	Energy Cell No. 1 (3800-00-10) Energy Cell No. 2 (3900-00-10) Dryer No. 1 (3130-00-11) Dryer No. 2 (3230-00-11) Dryer No. 3 (3330-00-11) Dryer No. 4 (3430-00-11) OSB Press (4700-00-10) Auxiliary Burners (3816-00-11) Auxiliary Burners (3916-00-11)	WESP (4130-00-10)	PM_{2.5}/PM₁₀/PM₁₀ SO₂ CO VOC NOx Acetaldehyde Acrolein Formaldehyde Lead Compounds Methanol Phenol Propionaldehyde Total HAP	34.68 12.26 40.66 59.09 88.23 2.40 0.93 4.55 0.01 10.49 0.00 1.00 26.21	N/A⁽³⁾

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
23 <u>21A</u> ⁽⁴⁾	Energy Cell No. 1 (3800-00-10) Energy Cell No. 2 (3900-00-10) Dryer No. 1 (3130-00-11) Dryer No. 2 (3230-00-11) Dryer No. 3 (3330-00-11) Dryer No. 4 (3430-00-11) OSB Press (4700-00-10) Auxiliary Burners (3816-00-11) Auxiliary Burners (3916-00-11)	WESP (4130 4200-00-10) Biofilter- (4800-00-10)	PM _{2.5} /PM ₁₀ /PM	34.68	79.40
			SO ₂	12.26	17.90
			CO	40.66	106.20
			VOC	59.10	145.50
			NO _x	88.23	221.60
			Acetaldehyde	2.40	4.89
			Acrolein	0.93	1.21
			Cumene	4.74	5.67
			Formaldehyde	4.56	10.32
			Lead Compounds	0.01	0.03
			Methanol	10.49	31.49
			Phenol	0.00	0.00
			Propionaldehyde	1.00	0.83
			Xylenes	0.45	1.96
Total HAP	26.21	60.30			
24	OSB Press (4700-00-10) (Bypass Mode)	NIA	PM ₁₀	2.55	0.34
			CO	9.21	2.11
			VOC	36.90	5.62
			Acetaldehyde	1.99	0.23
			Chlorine	1.17	0.06
			Cumene	12.27	0.78
			Formaldehyde	6.15	1.06
			Methanol	15.92	3.49
			MDI	0.03	0.01
			Phenol	0.52	0.04
			Total HAP	38.15	5.69
27	Emergency diesel-fired generator	NIA	PM ₁₀	0.44	0.03
			SO ₂	3.10	0.16
			CO	4.20	0.21
			VOC	0.50	0.03
			NO _x	18.20	0.92
31	Liquid Phenolic Resin Tank No. 1	NIA	VOC	---	0.01
32	Liquid Phenolic Resin Tank No. 2	NIA			
33	Liquid Phenolic Resin Tank No. 3	NIA			
34	Liquid Phenolic Resin Tank No. 4	NIA			
35	MDI Tank No. 1	NIA	VOC	---	---
36	MDI Tank No. 2	NIA			
37	Wax Tank No. 1	NIA	VOC	---	0.01
38	Wax Tank No. 2	NIA			

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
40A	Paint Booth No. 1	Filters	PM10 ⁽⁶⁾ VOC ⁽⁵⁾	0.39 0.91	1.71 3.99
42&43	Paint Booth No. 2	Filters			
44A	Paint Booth No. 3	Filters			
46	Liquid Phenolic Resin Tank No. 5	N/A	VOC	---	0.01
47	Liquid Phenolic Resin Tank No. 6	N/A			

- (1) The VOC emissions from emission points 1-11 are based on estimations using industry averages and not testing data.
- (2) These emission limits are applicable only when the Energy Cells are in "Idle Run Mode" as defined under 4.1.3. As these emissions are less than those generated during normal operation ~~or RCDME~~, they do not contribute to the facility's PTE.
- (3) ~~These emission limits are applicable only when the mill is operating under the RCDME as outlined under 4.1.3. Emissions generated during the RCDME contribute toward the annual emission limits given under footnote (4) as applicable. Although the RCDME Emissions contribute toward the limits under Emission Point 23, they are actually vented through Emission Point 21A.~~
- (4) The hourly emission limits are applicable when the ~~Biofilter~~ **WESP** is being utilized during all times of "normal operation" and during times of "Energy Cell Only Mode" as defined under 4.1.3. ~~The annual emission limits also include contributions made during RCDME events.~~
- (5) Aggregate limits from all three paint booths.

Compliance with the hourly PM₁₀ emission limits for emission points 3, 4, 5, 6, 7, 9, 21A, ~~23~~, 24, 40A, 42, 43, and 44A shall streamline compliance with the less stringent hourly particulate matter emission limits of 45CSR§7-4.1. Compliance with the hourly PM₁₀ emission limit for emission points JO and 11 shall streamline compliance with the less stringent 45CSR§2-4.1.b hourly particulate matter emission limit. Compliance with the hourly SO₂ emission limit for emission points 10 and 11 shall streamline compliance with the less stringent 45CSR§J0-3.3 hourly SO₂ emission limit.

[45CSR13, R13-1761, 4.1.2, 4.1.13, 4.1.14, and 4.1.15; 45CSR§7-4.1; 45CSR§2-4.1.b; 45CSR§10-3.3.f]

- 4.1.3. For the purposes of this permit, the following operating scenarios are defined:
- a. "Normal operation" shall be defined as those times when the Energy Cells are in operation, material is being dried in the dryers, gases are vented through the WESP ~~and Biofilter~~, and emitted from Emission Point ~~21A~~ **23**;
 - b. "Idle Run Mode" shall be defined as those times when the Energy Cells are operating, no material is being dried in the dryers, gases are vented through the operating Multi-clones, and emitted from Emission Points 10 and 11;
 - c. "Energy Cell Only Mode" shall be defined as those times when the Energy Cells are operating, no material is being dried in the dryers, gases are vented through the WESP only, and emitted from Emission Point 21A; ~~and~~

- d. ~~"RCDME" shall be defined as those times when the Energy Cells are operating, material is being dried in the dryers, gases are vented through the WESP, and emitted from Emission Point 21A.~~

~~[45CSR13, R13-1761, 4.1.3]~~

- 4.1.4. Operation of the Energy Cells (ID No. 3800-00-10 and ID No. 3900-00-10) shall be in accordance with the following requirements:

- a. The permitted facility shall burn only hogged wood as the primary fuel or natural gas as the backup fuel to fire the Energy Cells (ID No. 3800-00-10 and ID No. 3900-00-10). Alternative fuels may be used only after receiving prior written approval from the Director;
- b. During Idle Run Mode, Energy Cells shall be limited to a combined total of 2,800 hours of operation on a consecutive 12-month period; and
- c. During Idle Run Mode, the combined heat input rate to Energy Cells (ID No. 3800-00-10 and ID No. 3900-00-10) shall be limited to 40 MMBTU/hr. Additionally, the maximum heat input rate to each individual energy cell shall be less than 30 MMBTU/hr.

~~[45CSR13, R13-1761, 4.1.4]~~

- 4.1.5. The auxiliary natural gas burners, designated as 3816-00-11 and 3916-00-11, (associated with the Energy Cells), shall not exceed a maximum design heat input of 29 MMBTU/hr per unit.

~~[45CSR13, R13-1761, 4.1.5]~~

- ~~4.1.6. Pursuant to 40 CFR 63, Subpart DODD, operation of the facility under the Routine Control Device Maintenance Exemption (RCDME) shall be according to the following requirements:~~

- ~~a. For each process unit, a maximum of 3% of its actual annual operating hours may be during periods when its controlling Biofilter is offline for routine maintenance. This exemption applies to each dryer (1-4) and the press.~~
- ~~b. As a minimization strategy, the facility shall to the greatest extent practically possible perform routine maintenance during periods when the press and dryers are already offline (not producing product) for maintenance or other reasons;~~
- ~~c. After startup of the Biofilter, operation of the facility under the RCDME shall only occur after a new RCDME request specific to the Biofilter (submitted pursuant to the requirements of Subpart DODD) is approved in writing by the Director.~~

~~[45CSR13, R13-1761, 4.1.6, 45CSR34, 40 C.F.R. §63.2251]~~

- 4.1.7. The permitted facility shall route the press vent exhaust fumes into the Energy Cells and Dryers during normal operations. At times when the press is processing wood materials, the facility will be allowed to exhaust press vent fumes directly to the atmosphere through a press Bypass Stack (emission point 24) for a maximum of 500 hours per consecutive 12 month period. When the presses are not processing wood, the press vent fumes may be exhausted directly to the atmosphere through the press Bypass Stack for an unrestricted amount of time.

~~[45CSR13, R13-1761, 4.1.7]~~

- 4.1.8. The auxiliary natural gas fired burners (for Dryers No. 1 through No. 4), designated as 3130-00-11, 3230-00-11, 3330-00-11, and 3430-00-11, shall not exceed a maximum design heat input of 55 MMBTU/hr per unit.
[45CSR13, R13-1761, 4.1.8]
- 4.1.9. The permittee shall not exceed the following material or production limits (annual limits based on a rolling twelve (12) month period):
- a. Phenol formaldehyde resin (liquid or powder) shall not exceed 31,697,525 pounds/yr measured on a solids basis;
 - b. Polymeric diphenylmethane diisocyanate (MDI) shall not exceed 15,457,049 pounds/yr;
 - c. Wax shall not exceed 14,155,990 pounds/yr; and
 - d. Production of OSB shall not exceed a maximum hourly rate of 94 MSF/hr or a maximum annual rate of 753,360 MSF/yr as adjusted to 3/8 inch OSB.
- [45CSR13, R13-1761, 4.1.9]**
- 4.1.10. The permittee shall operate and maintain filter systems for the purpose of controlling particulate matter released from Paint Booths No. 1, 2, and 3. The filter systems shall be designed, operated, and maintained to achieve a minimum control efficiency of 98.5%.
[45CSR13, R13-1761, 4.1.11]
- 4.1.11. All access roads used in conjunction with the operations permitted herein shall be paved.
[45CSR13, R13-1761, 4.1.12]
- 4.1.12. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR13, R13-1761, 4.1.13; 45CSR§2-3.1, Emission Point IDs (10, 11)]
- 4.1.13. No person shall cause, suffer, allow or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following:
- a. Stockpiling of ash or fuel either in the open or in enclosures such as silos;
 - b. Transport of ash in vehicles or on conveying systems, to include spillage, tracking or blowing of particulate matter from or by such vehicles or equipment; and
 - c. Ash or fuel handling systems and ash disposal areas.
- [45CSR13, R13-1761, 4.1.13; 45CSR§2-5.1, Emission Point IDs (10, 11)] Note: applies to submerged ash conveyer.**

- 4.1.14. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 4.1.15. [45CSR13, R13-1761, 4.1.14; 45CSR§7-3.1, Emission Point IDs (1, 3, 4, 5, 6, 21A, 23, 24, 40A, 42, 43, 44A)]
- 4.1.15. The provisions of 4.1.14 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period. [45CSR13, R13-1761, 4.1.14; 45CSR§7-3.2, Emission Point IDs (1, 3, 4, 5, 6, 21A, 23, 24, 40A, 42, 43, 44A)]
- 4.1.16. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to 4.1.21 is required to have a full enclosure and be equipped with a particulate matter control device. [45CSR13, R13-1761, 4.1.14; 45CSR§7-3.7, Emission Point IDs (7, 9)]
- 4.1.17. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A of 45CSR7.

Emission Point	45CSR7 Hourly Particulate Emission Limit (pph)
1 (flaking and screening system)	0.12

Compliance with this 45CSR7 requirement streamlines compliance with the 45CSR13 permit requirement related to emission point #1 in permit condition 4.1.2.
 [45CSR13, R13-1761, 4.1.14; 45CSR§7-4.1.]

- 4.1.18. Mineral acids shall not be released from any type source operation or duplicate source operation or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity given in Table 45-7B of 45CSR7.

Hydrochloric acid mist and/or vapor for source operations installed after July 1, 1970: 210 mg/m³

[45CSR13, R13-1761, 4.1.14; 45CSR§7-4.2 and Table 45-7B, Emission Point IDs (21A and 23)]

- 4.1.19. No person shall circumvent the provisions of 45CSR7 by adding additional gas to any exhaust or group of exhausts for the purpose of reducing the stack gas concentration. [45CSR13, R13-1761, 4.1.14; 45CSR§7-4.3]
- 4.1.20. Any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures. [45CSR13, R13-1761, 4.1.14; 45CSR§7-4.12]
- 4.1.21. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be

limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonable achievable. [45CSR13, R13-1761, 4.1.14; 45CSR§7-5.1]

- 4.1.22. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment. [45CSR13, R13-1761, 4.1.14; 45CSR§7-5.2]
- 4.1.23. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director. [45CSR13, R13-1761, 4.1.14; 45CSR§7-9.1]
- 4.1.24. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations. [45CSR13, R13-1761, 4.1.15; 45CSR§10-4.1, Emission Point ID (21A and 23)]
- 4.1.25. The owner or operator of a plant that discharges or may discharge a toxic air pollutant into the open air in excess of the amount shown in Table A of 45CSR27 shall employ BAT at all chemical processing units emitting the toxic air pollutant: Provided, that any source or equipment specially subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such regulation or standard. [45CSR13, R13-1761, 4.1.16; 45CSR§27-3.1, Emission Point IDs (10, 11, 21A, 23, 24)]

~~4.1.26. Additional Biofilter Requirements~~

~~The permittee shall operate the Biofilter in accordance with the following additional requirements:~~

- ~~a. The permittee shall clean and inspect the biofilter fan quarterly. Inspection shall include non-destructive testing to measure metal thickness of the fan components. The first such preventive maintenance inspection shall be conducted no later than April 19, 2021;~~
- ~~b. No later than May 19, 2021, the permittee shall place an order for a spare biofilter fan made from a corrosion resistant stainless steel alloy. The spare fan wheel shall be stored at the facility and be readily available for installation and operation;~~
- ~~c. In the event of an operating fan failure, the spare fan wheel shall be installed as soon as practicable;~~
- ~~d. The permittee shall keep and maintain a spare fan wheel at the facility at all times unless the previous spare has recently been placed into operation;~~
- ~~e. No later than thirty (30) days after a spare fan wheel for the fan has been placed into operation and no other spare fan wheel is available on site, the permittee shall do one of the following:~~

- ~~i. Order a new or refurbished fan wheel that can be placed into primary service or maintained at the site as the spare fan wheel; or~~
- ~~ii. Initiate repair of the fan wheel that was taken out of service. Once repaired, it may be returned to primary service or maintained at the site as the spare.~~
- ~~f. Unless requested and granted an extension by the DAQ, the Facility shall not operate more than twelve (12) months after placing a new or spare fan wheel into operation without a spare present at the facility; and~~
- ~~g. The permittee shall submit to the DAQ with each of its Semi-Annual Plywood MACT Self Monitoring Reports a report on the fan PM events that have been performed since submission of the previous Semi-Annual Plywood MACT Self Monitoring Report. The fan PM event report shall include, at a minimum, the following:~~
 - ~~i. The date for each fan PM event that occurred, discussion of findings and any performed or anticipated maintenance or repairs, and~~
 - ~~ii. A copy of each fan PM form filled out during each Fan PM event.~~

~~[45CSR13, R13-1761, 4.1.10]~~

- 4.1.27. The permittee shall abide by the work practice standards associated with Group 1 miscellaneous coating operations by using non-HAP coatings as defined in 40 C.F.R. §63.2292.
[45CSR34; 40 C.F.R. §63.2241 and 40 C.F.R. 63, Subpart DDDD, Table 3]
- 4.1.28. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.1 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-1761, 4.1.20; 45CSR§13-5.10]
- 4.1.29. **40 CFR 63, Subpart DDDD Add-on Control Systems Compliance Options (Biofilter WESP)**
~~Except for periods when the mill is operating under the RCDME, t~~The permittee shall, while using the ~~Biofilter~~ WESP limit emissions of total HAP, measured as THC (as carbon)*, to 20 ppmvd.
- You may choose to subtract methane from THC as carbon measurements.
[45CSR13, R13-1761, 4.1.17; 45CSR34; 40 C.F.R. §63.2240(b) and Table IB of 40 CFR 63, Subpart DDDD]
- 4.1.30. **40 CFR 63, Subpart DDDD Operating Requirements (Biofilter WESP)**

The permittee shall meet the following ~~Biofilter~~ WESP operating requirements:

- a. ~~Maintain the 24 hour block Biofilter bed temperature within the range established according to §63.2262(m); or~~ Petition the EPA Administrator for site-specific operating parameter(s) to be established during the performance test and maintain the average operating parameter(s) within the range(s) established during the performance test; or

- b. ~~Maintain the 24-hour block average THC concentration in the Biofilter exhaust below the maximum concentration established during the performance test. Maintain the 3-hour block average THC concentration¹ in the control device exhaust below the maximum concentration established during the performance test.~~

[45CSR13, R13-1761, 4.1.18; 45CSR34; 40 C.F.R. §63.2240(b) and Table 2 of 40 CFR 63, Subpart DDDD]

4.2. Monitoring Requirements

- 4.2.1. For the purpose of determining compliance with the operating limits set forth in Section 4.1.4.b, of this permit, the permittee shall monitor and record the monthly and rolling twelve month total number of hours the Energy Cells (ID No. 3800-00-10 and ID No. 3900-00-10) operate in the idle run mode.
[45CSR13, R13-1761, 4.2.1]
- 4.2.2. For the purpose of determining compliance with the operating limits set forth in Section 4.1.7 of this permit, the permittee shall monitor and record the monthly and rolling twelve month total number of hours the press vent fumes are being exhausted directly to the atmosphere through the press Bypass Stack (Emission Point 24).
[45CSR13, R13-1761, 4.2.2]
- 4.2.3. For the purpose of determining compliance with the throughput limits set forth in Section 4.1.9.a through 4.1.9.c of this permit, the permittee shall monitor and record the monthly and twelve month rolling total throughput of phenol formaldehyde resin (liquid or powder) as measured on a solids basis, polymeric diphenylmethane diisocyanate (MDI), and wax.
[45CSR13, R13-1761, 4.2.3]
- 4.2.4. For the purpose of determining compliance with the production limit set forth in Section 4.1.9.d of this permit, the permittee shall monitor and record the monthly and rolling twelve month total of OSB (as adjusted to 3/8 inch) produced at the facility. Compliance with the hourly production limit shall be based on the average hourly production rate as calculated for each month.
[45CSR13, R13-1761, 4.2.4]
- 4.2.5. For the purpose of determining compliance with the aggregate paint booths VOC limit set forth in Table 4.1.2. of this permit, the permittee shall calculate and record the monthly and rolling twelve month total of VOCs emitted from the paint booths (40S through 45S). The VOC emissions shall be calculated as the total amount, by weight, of the VOCs contained within the coatings used. No HAP containing coatings are permitted to be used in the paint booths.
[45CSR13, R13-1761, 4.2.5]
- 4.2.6. The permittee shall meet all applicable ~~Biofilter~~ **WESP** monitoring requirements pursuant to 40 C.F.R. 63, Subpart DDDD. This shall include ~~Biofilter bed temperature~~ **WESP site specific operating parameter and operating parameter range** monitoring ~~or Biofilter outlet THC monitoring, determined as the 24-hour block average of all recorded readings, calculated after every 24 hours of operation as the average of the evenly spaced recorded readings in the previous 24 hours.~~ For the purpose of calculating data averages, you must not use data recorded during the events listed within 40 CFR §63.2270(b) and (c). Some of these events include malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities, data recorded during periods of startup, shutdown, and malfunction; or data recorded during periods of control device downtime covered in any approved routine control device maintenance exemption.

Additionally, in accordance with 40 CFR §63.2270(±), to calculate the data averages for each 3-hour or 24-hour averaging period, you must have at least 75 percent of the required recorded readings for that period using only readings that are based on valid data

[45CSR13, R13-1761, 4.2.6., 45CSR34, 40C.F.R.§63.2270]

- 4.2.7. To demonstrate compliance with the 45CSR§2-3.1 opacity limits specified in 4.1.12 for emissions points 10 and 11, the permittee shall conduct semimonthly (every two weeks) visible emission checks. These checks shall be conducted during periods of facility operation for a sufficient time interval (but no less than 1 minute) to determine if the unit has visible emissions using the procedures outlined in 40 C.F.R. 60, Appendix A, Method 22. If sources of visible emissions are identified during the checks, or at any other time, the permittee shall conduct a 40 C.F.R. 60, Appendix A, Method 9 evaluation within twenty-four (24) hours. A Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions.

The semimonthly visible emission checks shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. 60, Appendix A, Method 22 or from the lecture portion of the 40 C.F.R. 60, Appendix A, Method 9 certification course.

[45CSR§30-5.1.c, Emission Point IDs (10, 11)]

- 4.2.8. To demonstrate compliance with the 45CSR§§7-3.1, 3.2, and 3.7 opacity limits specified in 4.1.14, 4.1.15, and 4.1.16 for emissions points 1, 3, 4, 5, 6, 7, 9, 21A, ~~23~~, 24, 40A, 42, 43, and 44A, the permittee shall conduct semimonthly (every two weeks) visible emission checks. These checks shall be conducted during periods of facility operation for a sufficient time interval (no less than 1 minute) to determine if the unit has visible emissions using the procedures outlined in 40 C.F.R. 60, Appendix A, Method 22. If sources of visible emissions are identified during the checks, or at any other time, the permittee shall conduct a 45CSR7A evaluation within twenty-four (24) hours. A 45CSR7A evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions.

The semimonthly visible emission checks shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. 60, Appendix A, Method 22 or from the lecture portion of the 40 C.F.R. 60, Appendix A, Method 9 certification course.

[45CSR§30-5.1.c, Emission Point IDs (1, 3, 4, 5, 6, 7, 9, 21A, ~~23~~, 24, 40A, 42, 43, 44A)]

- 4.2.9. For WESP (~~4130-4200~~-00-10), and the Dry Waste System Baghouse (4397-00-10), the permittee shall conduct visual inspections of the ductwork and the control devices. These visual inspections shall be conducted by personnel trained annually on the proper methods to complete these inspections and a copy of the current training manual shall be maintained on site and available for review by the Director or his duly authorized representative upon request. External inspections of the ductwork and control devices shall be conducted monthly and internal inspections shall be conducted every 12 months. Any leaks or structural deficiencies discovered during these inspections, or at any other time, are indicators that the equipment is not in proper

working order. Leaks or structural deficiencies shall be repaired as soon as practicable, but no later than one week within the date of discovery, unless granted an extension by the Director.

[45CSR§30-5.1.c; 40 C.F.R. §§64.6(c), 64.7(c), and 64.7(d)]

- 4.2.10. The permittee shall continuously monitor the voltage of WESP (~~4130-4200~~-00-10). The voltage on the WESP shall be measured with a voltmeter having a minimum accuracy of ± 1 kV. At least semi-annually, each voltmeter shall be calibrated to confirm that it has a reading of zero when the WESP is not operating. During normal operation, the WESP shall have at least 2 fields in service and the voltage shall be maintained at or above 30 kV. If the voltage falls below 30 kV for 30 seconds, an alarm will sound and corrective action shall be taken to return the voltage to a value at or above 30 kV.

[45CSR§30-5.1.c; 40 C.F.R. §§64.6(c), 64.7(c), and 64.7(d)]

- 4.2.11. The permittee shall monitor the pressure drop across the Dry Waste System Baghouse (4397-00-10) on a daily basis. The pressure drop shall be measured using a differential pressure gauge with a minimum accuracy of ± 0.25 inches of H₂O. Pressure taps shall be located at the inlet and outlet to the baghouse. At least annually, the pressure gauge and the reader shall be calibrated according to manufacturer's recommendations. When the pressure drop is greater than 5 inches of H₂O or less than 0.2 inches of H₂O, the permittee shall conduct an inspection of the baghouse and corrective action shall be taken to return the pressure drop to an operating range of less than 5 inches and greater than 0.2 inches of H₂O.

[45CSR§30-5.1.c; 40 C.F.R. §§64.6(c), 64.7(c), and 64.7(d)]

4.3. Testing Requirements

- 4.3.1. Within 180 days after initial startup of the WESP (~~4130-4200~~-00-10), the permittee shall conduct, or have conducted, in accordance with a protocol submitted pursuant to 3.3.l(c), performance tests on the WESP to determine compliance with the hourly particulate matter limit (during normal operation) given for Emission Point ~~21A 23~~ under Table 4.1.2.

[45CSR13, R13-1761, 4.3.1]

- 4.3.2. The permittee shall meet all applicable ~~Biofilter~~ WESP testing requirements pursuant to 40 C.F.R. 63, Subpart DDDD. This shall include the repeat ~~Biofilter~~ WESP performance testing as specified in 40 C.F.R. 63 Subpart DDDD Table 7 Rows ~~(3 6)~~ and (7) as well as any additional confirmatory testing determined necessary by the Director.

[45CSR13, R13-1761, 4.3.2., 45CSR34, 40 C.F.R. §63.227l(a), 40 C.F.R. 63, subpart DDDD, Table 7 row ~~(3)~~ (6) and (7)]

- 4.3.3. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s) may be required to conduct or have conducted tests to determine the compliance of such unit(s) with the emission limitations of 45CSR§2-4. Such tests shall be conducted in accordance with the appropriate method set forth in the Appendix to 45CSR2 or other equivalent EPA approved method approved by the Director. The Director or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices. Sufficient information on temperatures, velocities, pressures, weights and dimensional values shall be reported to the Director, with such necessary commentary as he may require to allow an accurate evaluation of the reported test results and the conditions under which they were obtained.

[45CSR13, R13-1761, 4.1.13; 45CSR§§2-8.1.b and 8.1.b.1]

4.3.4. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment and the required safety equipment such as scaffolding, railings and ladders to comply with generally accepted good safety practices.

[45CSR13, R13-1761, 4.1.14; 45CSR§7-8.1]

4.3.5. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.

[45CSR13, R13-1761, 4.1.14; 45CSR§7-8.2]

4.4. Recordkeeping Requirements

4.4.1. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.1, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-1761, 4.4.2]

4.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.1, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-1761, 4.4.3]

- 4.4.3. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day. The permittee shall also maintain records of the date and time of start-up and shutdown; and a quarterly ash and BTU analysis of the wood combusted.

The 40 C.F.R. §60.48c(g) requirement to maintain records of the quantity of each fuel combusted on a daily basis was streamlined with the less stringent 45CSR§2A-7.1.a.1 requirement to maintain records of the quantity of natural gas consumed on a monthly basis.

[45CSR13, R13-1761, 4.4.5 and 4.1.13; 40 C.F.R. §60.48c(g); 45CSR16; 45CSR§2-8.3.c; 45CSR§§2A-7.1.a.1, 7.1.a.3 and 7.1.a.6, Emission Point IDs (10 and 11)]

- 4.4.4. The permittee shall meet all applicable record-keeping requirements pursuant to 40 C.F.R. 63, Subpart DDDD. These records shall include the following:
- a. A copy of each notification and report that you submitted to comply with this 40 C.F.R. 63, Subpart DDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in 40 C.F.R. § 63.10(b)(2)(xiv).
 - b. The records related to startup and shutdown, failures to meet the standard, and actions taken to minimize emissions, specified in paragraphs (i) through (iv).
 - i. Record the date, time, and duration of each startup and/or shutdown period, including the periods when the affected source was subject to the standard applicable to startup and shutdown.
 - ii. In the event that an affected unit fails to meet an applicable standard, record the number of failures; for each failure, record the date, time, cause and duration of each failure.
 - iii. For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, and the following information:
 - A. For any failure to meet a compliance option in 40 C.F.R §63.2240, including the compliance options in Table 1A or 1B to 40 C.F.R. 63, Subpart DDDD or the emissions averaging compliance option, record an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.
 - B. For each failure to meet an operating requirement in Table 2 to 40 C.F.R. 63, Subpart DDDD or work practice requirement in Table 3 to 40 C.F.R. 63, Subpart DDDD, maintain sufficient information to estimate the quantity of each regulated pollutant emitted over the emission limit. This information must be sufficient to provide a reliable emissions estimate if requested by the Administrator.
 - iv. Record actions taken to minimize emissions in accordance with 40 C.F.R §63.2250(g), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
 - c. Documentation of your approved routine control device maintenance exemption (RCDME), if you request such an exemption under 40 C.F.R. §63.2251.
 - d. Records of performance tests and performance evaluations as required in 40 C.F.R. §63.10(b)(2)(viii).

- e. You must keep the records required in Tables 7 and 8 to 40 C.F.R. 63, Subpart DDDD to show continuous compliance with each compliance option, operating requirement, and work practice requirement that applies to you.

1. Maintain records of all Group 1 coatings to assure the use of non-HAP coatings.

[45CSR13, R13-1761, 4.4.6, 45CSR34, 40 C.F.R. §63.2282, 40 C.F.R. 63, Subpart DDDD, Tables 7 and 8.]

- 4.4.5. The permittee shall maintain records of all monitoring data required by Sections 4.2.7 and 4.2.8 documenting the date and time of each visible emission check, the emission point or equipment identification number, the name or means of identification of the responsible observer, the results of the check, and, if necessary, all corrective actions taken. Should a visible emission observation be required to be performed per the requirements specified in 40 C.F.R. 60, Appendix A, Method 9 or 45CSR7A, the data records of each observation shall be maintained per the requirements of 40 C.F.R. 60, Appendix A, Method 9 or 45CSR7A. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (OOS) or equivalent.
[45CSR§30-5.1.c]
- 4.4.6. The permittee shall monitor all fugitive particulate emission sources as required by 4.1.13 and 4.1.21 to ensure that a system to minimize fugitive emissions has been installed or implemented. Records shall be maintained stating the types of fugitive particulate capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems.
[45CSR§30-5.1.c]
- 4.4.7. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures as required by 4.1.22 applied at the facility.
[45CSR§30-5.1.c]
- 4.4.8. The permittee shall maintain records of all monitoring data required by Section 4.2.9 documenting the date and time of each visual inspection, the emission point or equipment identification number, the name or means of identification of the responsible observer, the results of the inspection, and if necessary, all corrective actions taken. For any maintenance conducted on the control devices, records shall be maintained in accordance with 4.4.1.
[45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]
- 4.4.9. The voltage measured across WESP (~~4130~~ 4200-00-10) shall be recorded as a 6-minute block average and records shall be maintained in accordance with 3.4.1. In addition to records of voltage, the permittee shall document and maintain records of all periods during normal operation (non-SSM) when the voltage is less than 30 kV for more than 30 seconds and any corrective actions taken during these periods. Maintenance and malfunction records for the WESP shall be maintained in accordance with 4.4.1 and 4.4.2.
[45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]
- 4.4.10. The pressure drop across the Dry Waste System Baghouse (4397-00-10) shall be recorded daily. For any excursions when the pressure drop is greater than 5 inches of H₂O or less than 0.2 inches of H₂O, the permittee shall maintain records of the date and length of time of the occurrence and of the corrective actions taken. Maintenance and malfunction records for the Dry Waste System Baghouse shall be maintained in accordance with 4.4.1 and 4.4.2.
[45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]

4.4.11. For Compliance Assurance Monitoring (CAM), the owner or operator shall comply with the recordkeeping requirements of permit conditions 3.4.1 and 3.4.2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. 64 (such as data used to document the adequacy of monitoring, or records of monitoring, maintenance, or corrective actions). (~~WESP {4130 4200-00-10}~~ and Dry Waste System Baghouse {4397-00-10}) [45CSR§30-5.1.c; 40 C.F.R. §64.9(b)]

~~4.4.12. For the purpose of determining compliance with 4.1.6.a., the permittee shall keep a daily record of any start-up, any shut-down, total hours operated and hours operated while the unit's controlling Biofilter WESP is offline for routine control device maintenance. And, as regards the Biofilter WESP, the permittee shall keep daily records of any start-up, any shut-down, total hours operated and total hours off line for routine maintenance.~~
[45CSR13, R13-1761, 4.4.4]

4.5. Reporting Requirements

4.5.1. For CAM, monitoring reports shall be submitted to the Director and at a minimum shall include and be in accordance with information in permit conditions 3.5.6 and 3.5.8, as applicable. Also, at a minimum, the following information, as applicable, shall be included:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(~~WESP {4130 4200-00-10}~~ and Dry Waste System Baghouse {4397-00-10}) [45CSR§30-5.1.c; 40 C.F.R. §64.9(a)]

4.5.2. The permittee shall meet all applicable reporting requirements pursuant to 40 C.F.R. 63, Subpart DDDD, Table 9 and Table 10. This includes semiannual compliance reports, which contain the information described within 40 CFR §63.2281(c)-(t). The semiannual reports may coincide with title V semiannual reporting in accordance with 40 CFR §63.2281(b)(5) and (g) where applicable.
[45CSR13, R13-1761, 4.5.1., 45CSR34, 40 C.F.R. §§63.2281(a) and (b)]

4.6. Compliance Plan

4.6.1. None.

5.0. 40 C.F.R. 63, Subpart ZZZZ, RICE Requirements [Emission Point ID (27)]

5.1. Limitations and Standards

- 5.1.1. If you own or operate an emergency stationary RICE located at a major source of HAPs, you must operate the emergency stationary RICE according to the requirements in paragraphs 5.1.1.a through 5.1.1.c of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 5.1.1.a through 5.1.1.c, is prohibited. If you do not operate the engine according to the requirements in paragraphs 5.1.1.a through 5.1.1.c, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
- a. There is no time limit on the use of emergency stationary RICE in emergency situations.
 - b. You may operate your emergency stationary RICE for the purpose specified in paragraph 5.1.1.b.i of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs 5.1.1.c of this section counts as part of the 100 hours per calendar year allowed by this paragraph 5.1.1.b.
 1. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
 - c. Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph 5.1.1.b of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[45CSR34, 40 C.F.R.§63.6640(1)(1-3), Emission Point ID (27)]

5.2. Monitoring Requirements

- 5.2.1. None.

5.3. Testing Requirements

- 5.3.1. None.

5.4. Recordkeeping Requirements

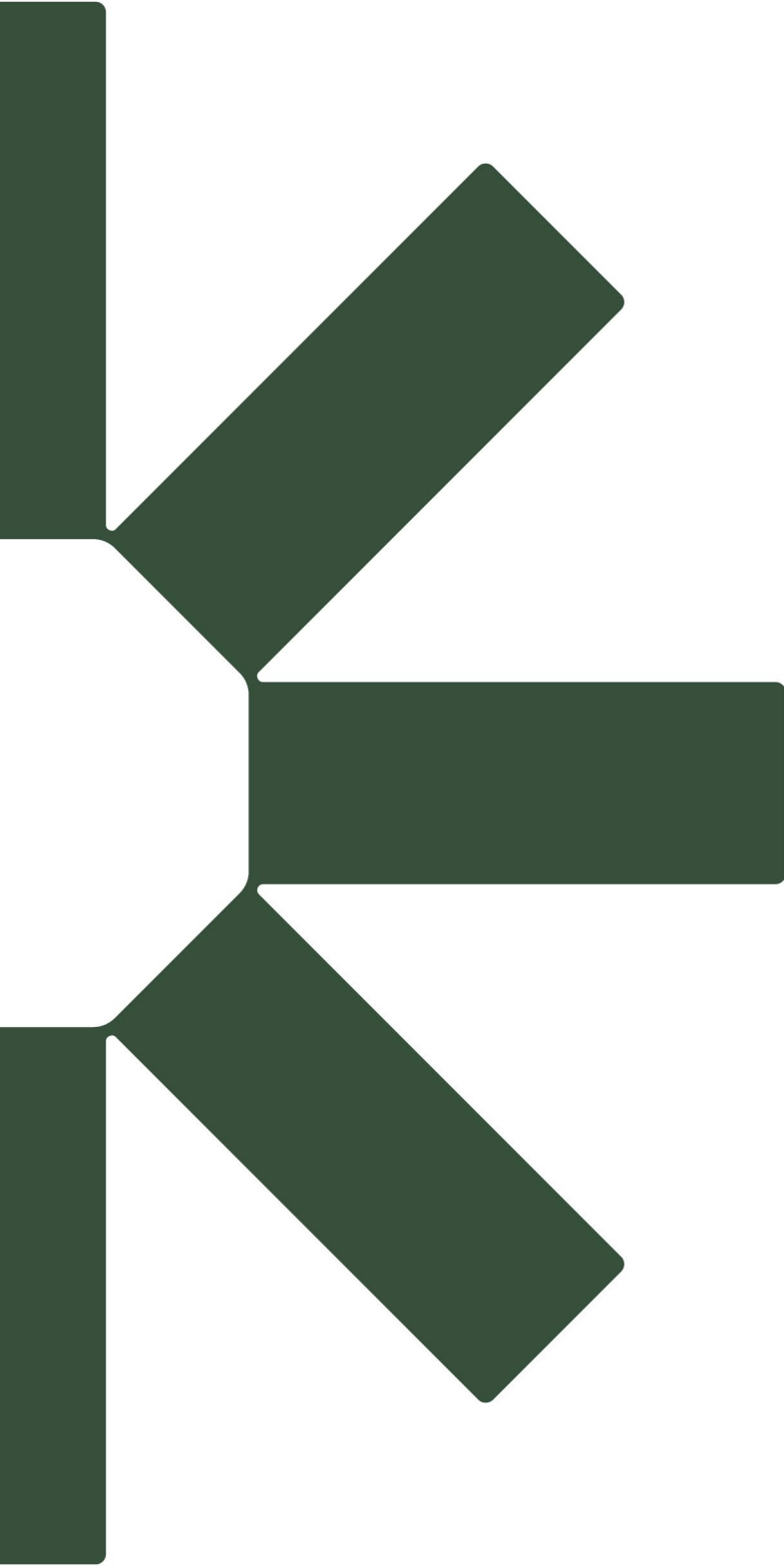
- 5.4.1. None.

5.5. Reporting Requirements

5.5.1. None.

5.6. Compliance Plan

5.6.1. None.



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