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

Re: Pre-DPTitleV-Permit_R30-00700016-2023 WeyerCo Comments

1 message

Mullins, Robert A <robert.a.mullins@wv.gov> Tue, Nov 14, 2023 at 8:29 AM
To: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Cc: "Rutherford, Matthew" <Matthew.Rutherford@weyerhaeuser.com>

Jesse

Having looked at the submitted comments, since about half the conditions that cite the WESP Control ID are incorporated R13 conditions the change to the WESP control device ID will have to go through the R13 Permit process first which I see from your Note will be sometime in early 2024. I will be adding the "block" clarification to condition 4.4.9. before I send the Proposed permit to notice.

Thanks,
R.A.

On Thu, Nov 9, 2023 at 11:22 AM Jesse Hanshaw <jhanshaw@slrconsulting.com> wrote:

> **Hi RA,**
>
> Hope you are doing well. As aways we greatly appreciate the opportunity to review and comment on these pre-draft permits.
>
> Please find attached the permitting document with markups for comment.
>
> These comments are summarized below as follows:
>
> 1. Section 1.1 Equipment Table Control Device ID update on pg 4 of 37 – (5) places
>
> a. Request to change WESP ID from 4130-00-10 to 4200-00-10
>
> b. This will allow the permit to match IDs recently defined by Electrical Engineering Department
>
> Note: Weyerhaeuser is planning another R13 modification projected for Jan 2024 in which we would follow up to make these changes in the construction permit as well.
>
> 2. Section 1.1 Equipment Table Control Device ID update on pg 5 of 37 – footnote #3
>
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> 3. Permit Condition 4.1.1. (2) places to update WESP ID
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> 4. Permit Condition 4.1.2. – pg 21 of 37, update WESP ID

a. 4.1.2. pg 22 of 37, update WESP ID

5. Likewise, these same changes are requested in permit conditions,

a. 4.2.9

b. 4.2.10

c. 4.3.1

d. 4.4.9 – Also request to add clarification that the 6-minute average shall be “block”.

e. 4.4.11

f. 4.5.1.

Please let us know your thoughts on these requested Title V changes.

Thanks,

Jesse

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

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

Re: Pre-DPTitleV-Permit_R30-00700016-2023 WeyerCo Comments

1 message

McCumbers, Carrie <carrie.mccumbers@wv.gov> Tue, Nov 14, 2023 at 8:30 AM
To: "Mullins, Robert A" <robert.a.mullins@wv.gov>

I agree. These are Rule 13 changes and we definitely cannot wait until January to send this permit out to notice. It needs to go out as soon as possible in order to meet the deadline.

Thanks,
Carrie

On Tue, Nov 14, 2023 at 8:17 AM Mullins, Robert A <robert.a.mullins@wv.gov> wrote:

> Jesse sent me comments on the Pre-Draft Title V for the Sutton OSB mill. Having looked them over the change in the control device ID will have to go through the R13 Permit process first since about half the conditions that cite the WESP Control ID are incorporated R13 conditions. I will be adding the "block" clarification to condition 4.4.9. Going to send a response back and then send the permit to notice.
>
> -R.A.
>
> ---------- Forwarded message ---------
> From: **Jesse Hanshaw** <jhanshaw@slrconsulting.com>
> Date: Thu, Nov 9, 2023 at 11:22 AM
> Subject: Pre-DPTitleV-Permit_R30-00700016-2023 WeyerCo Comments
> To: Robert A Mullins <robert.a.mullins@wv.gov>
> Cc: Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com>
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Please let us know your thoughts on these requested Title V changes.

Thanks,

Jesse

Jesse Hanshaw
Principal Engineer - Air Quality

D 681-205-8969 **O** 681-205-8949
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Mullins, Robert A <robert.a.mullins@wv.gov>

Pre-DPTitleV-Permit_R30-00700016-2023 WeyerCo Comments

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To: Robert A Mullins <robert.a.mullins@wv.gov>
Cc: "Rutherford, Matthew" <Matthew.Rutherford@weyerhaeuser.com>

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Jesse Hanshaw
Principal Engineer - Air Quality

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SLR International Corporation
8 Capitol Street Suite 300, Charleston WV United States 25301

Pre-DPTitleV-Permit_R30-00700016-2023 WeyerCo Comments.pdf
499K

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- 00700016-2023

Laura M. Crowder
Director, Division of Air Quality

Issued: [Date of issuance] • *Effective: [Equals issue date plus two weeks]*
Expiration: [5 years after issuance date] • *Renewal Application Due: [6 months prior to expiration]*

Permit Number: **R30-00700016-2023**
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 45CSR13, 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.

Table of Contents

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	65,450 ACFM 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	53,400 ACFM 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	43,100 ACFM 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	21,200 ACFM 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	30,970 ACFM 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	44,800 ACFM 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	13,200 ACFM 8,550 lb/hr (oven dry)	Fabric Filter 4397-00-10
3816-00-11	10	Energy Cell No. 1 Auxiliary Burner – Idle Run[1]	1996	29 MMBTU/hr	Multi-Clone No.1 3820-00-10
3800-00-10	10	Energy Cell No. 1 - Idle Run[1]	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 Run[1]	1996	29 MMBTU/hr	WESP[3] 4200-00-10 Biofilter 4800-00-10
3800-00-10	21A 23	Energy Cell No. 1 – Normal Run[1]	1996	175 MMBTU/hr	
3916-00-11	11	Energy Cell No. 2 Auxiliary Burner – Idle Run[1]	1996	29 MMBTU/hr	Multi-Clone No.2 3920-00-10
3900-00-10	11	Energy Cell No. 2 - Idle Run[1]	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] 4200-00-10 Biofilter 4800-00-10
3900-00-10	21A 23	Energy Cell No. 2 – Normal Run[1]	1996	175 MMBTU/hr	
3130-00-11	21A 23	Auxiliary Burner – Dryer No. 1	1996	55 MMBTU/hr	WESP[3] 4200-00-10 Biofilter 4800-00-10
3230-00-11	21A 23	Auxiliary Burner – Dryer No. 2	1996	55 MMBTU/hr	
3330-00-11	21A 23	Auxiliary Burner – Dryer No. 3	1996	55 MMBTU/hr	WESP[3] 4200-00-10 Biofilter 4800-00-10
3430-00-11	21A 23	Auxiliary Burner – Dryer No. 4	1996	55 MMBTU/hr	
4700-00-10	21A 23	OSB Press Vent Exhaust	1996	60.4 Ton/hr	WESP[3] 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	1030 hp	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 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 R13-1761L, until such time as the new WESP (~~4130~~ 4200-00-10) is installed and operating, the permittee is authorized to use the two (2) existing WESPs (4110-00-10 and 4120-00-10) in place of the new WESP. The existing WESPs 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
R13-1761L	October 13, 2023

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	**NO_x**	Nitrogen Oxides
CBI	Confidential Business Information	**NSPS**	New Source Performance Standards
CEM	Continuous Emission Monitor	**PM**	Particulate Matter
CES	Certified Emission Statement	**PM_{10}**	Particulate Matter less than 10µm in diameter
C.F.R. *or* CFR	Code of Federal Regulations		
CO	Carbon Monoxide	**pph**	Pounds per Hour
C.S.R. *or* CSR	Codes of State Rules	**ppm**	Parts per Million
DAQ	Division of Air Quality	**PSD**	Prevention of Significant Deterioration
DEP	Department of Environmental Protection	**psi**	Pounds per Square Inch
FOIA	Freedom of Information Act	**SIC**	Standard Industrial Classification
HAP	Hazardous Air Pollutant		
HON	Hazardous Organic NESHAP	**SIP**	State Implementation Plan
HP	Horsepower	**SO_2**	Sulfur Dioxide
lbs/hr *or* lb/hr	Pounds per Hour	**TAP**	Toxic Air Pollutant
LDAR	Leak Detection and Repair	**TPY**	Tons per Year
m	Thousand	**TRS**	Total Reduced Sulfur
MACT	Maximum Achievable Control Technology	**TSP**	Total Suspended Particulate
		USEPA	United States Environmental Protection Agency
mm	Million		
mmBtu/hr	Million British Thermal Units per Hour	**UTM**	Universal Transverse Mercator
		VEE	Visual Emissions Evaluation
$mmft^3$/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour	**VOC**	Volatile Organic Compounds
NA *or* N/A	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 57th 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 Enforcement[1]:
DEPAirQualityReports@wv.gov

[1]For 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 75m^3 (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 m^3.

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} VOC	0.59 0.01	2.58 0.05
3	Dry Flake Area	Fabric Filter (4333-00-10)	PM_{10} VOC	0.48 0.82	2.11 3.57
4	Mat Trim System	Fabric Filter (4345-00-10)	PM_{10} VOC	0.55 0.82	2.41 3.59

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
5	Rough Trim System	Fabric Filter (4353-00-10)	PM_{10} VOC	0.57 0.85	2.51 3.74
6	Tongue & Groove and Sawing System	Fabric Filter (4363-00-10)	PM_{10} 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)	PM_{10} SO_2 CO VOC NO_X Benzene Hydrochloric Acid Lead Compounds Methylene Chloride Naphthalene POM Total HAP	6.8 1.0 6.0 9.1 8.0 0.45 0.22 0.01 0.07 0.43 0.43 2.71	9.5 1.4 8.4 12.8 11.2 0.63 0.31 0.01 0.10 0.60 0.60 3.79
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)			
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~~ 4200-00-10)	$PM_{2.5}/PM_{10}/PM$ SO_2 CO VOC NO_X 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[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)	$PM_{2.5}/PM_{10}/PM$ SO_2 CO VOC NO_X Acetaldehyde Acrolein Cumene Formaldehyde Lead Compounds Methanol Phenol Propionaldehyde Xylenes Total HAP	34.68 12.26 40.66 59.10 88.23 2.40 0.93 4.74 4.56 0.01 10.49 0.00 1.00 0.45 26.21	79.40 17.90 106.20 145.50 221.60 4.89 1.21 5.67 10.32 0.03 31.49 0.00 0.83 1.96 60.30
24	OSB Press (4700-00-10) (Bypass Mode)	N/A	PM_{10} CO VOC Acetaldehyde Chlorine Cumene Formaldehyde Methanol MDI Phenol Total HAP	2.55 9.21 36.90 1.99 1.17 12.27 6.15 15.92 0.03 0.52 38.15	0.34 2.11 5.62 0.23 0.06 0.78 1.06 3.49 0.01 0.04 5.69
27	Emergency diesel-fired generator	N/A	PM_{10} SO_2 CO VOC NO_X	0.44 3.10 4.20 0.50 18.20	0.03 0.16 0.21 0.03 0.92
31	Liquid Phenolic Resin Tank No. 1	N/A	VOC	---	0.01
32	Liquid Phenolic Resin Tank No. 2	N/A			
33	Liquid Phenolic Resin Tank No. 3	N/A			
34	Liquid Phenolic Resin Tank No. 4	N/A			
35	MDI Tank No. 1	N/A	VOC	---	---
36	MDI Tank No. 2	N/A			
37	Wax Tank No. 1	N/A	VOC	---	0.01
38	Wax Tank No. 2	N/A			

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
40A	Paint Booth No. 1	Filters	PM_{10}[5] 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 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 PM_{10} 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 PM_{10} emission limit for emission points 10 and 11 shall streamline compliance with the less stringent 45CSR§2-4.1.b hourly particulate matter emission limit. Compliance with the hourly SO_2 emission limit for emission points 10 and 11 shall streamline compliance with the less stringent 45CSR§10-3.3.f 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 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 DDDD, 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 DDDD) 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/m^3

[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)**
Except for periods when the mill is operating under the RCDME, the permittee shall, while using the Biofilter limit emissions of total HAP, measured as THC (as carbon)[a], to 20 ppmvd.

[a] 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 1B of 40 CFR 63, Subpart DDDD]

4.1.30. **40 CFR 63, Subpart DDDD Operating Requirements (Biofilters)**

The permittee shall meet the following Biofilter operating requirements:

a. Maintain the 24-hour block Biofilter bed temperature within the range established according to §63.2262(m); or

b. Maintain the 24-hour block average THC concentration in the Biofilter 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 monitoring requirements pursuant to 40 C.F.R. 63, Subpart DDDD. This shall include Biofilter bed temperature 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 operating 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(f), 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 H_2O. 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 H_2O or less than 0.2 inches of H_2O, 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 H_2O.
[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 3.3.1(c), performance tests on the WESP to determine compliance with the hourly particulate matter limit (during normal operation) given for Emission Point 23 under Table 4.1.2.
[45CSR13, R13-1761, 4.3.1]

4.3.2. The permittee shall meet all applicable Biofilter testing requirements pursuant to 40 C.F.R. 63, Subpart DDDD. This shall include the repeat Biofilter performance testing as specified in 40 C.F.R. 63 Subpart DDDD Table 7 Row (3) as well as any additional confirmatory testing determined necessary by the Director.
[45CSR13, R13-1761, 4.3.2., 45CSR34, 40 C.F.R. §63.2271(a), 40 C.F.R. 63, subpart DDDD, Table 7 row (3)]

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.

i. 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 H_2O or less than 0.2 inches of H_2O, 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 is offline for routine control device maintenance. And, as regards the Biofilter, 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)-(f). 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.

i. 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(f)(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.

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

RE: R30-00700016-2023

1 message

Jesse Hanshaw <jhanshaw@slrconsulting.com> Tue, Oct 24, 2023 at 11:54 AM
To: "Mullins, Robert A" <robert.a.mullins@wv.gov>, "Rutherford, Matthew" <matthew.rutherford@weyerhaeuser.com>

Thanks RA,

We will start our review and let you know.

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

From: Mullins, Robert A <robert.a.mullins@wv.gov>
Sent: October 24, 2023 10:53 AM

To: Jesse Hanshaw <jhanshaw@slrconsulting.com>; Rutherford, Matthew <matthew.rutherford@weyerhaeuser.com>
Subject: R30-00700016-2023

I've combined R30-00700016-2018(SM02) into the Title V renewal R30-00700016-2023. Please review the documents and respond with any questions or comments by November 10, 2023 so that I can address any questions/comments before sending the permit 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>

Fwd: WV Draft Permit R13-1761L for Weyerhaeuser NR Company; Sutton OSB Mill

1 message

McCumbers, Carrie <carrie.mccumbers@wv.gov> Mon, Sep 11, 2023 at 7:08 AM
To: "Robert.A.Mullins@wv.gov" <robert.a.mullins@wv.gov>

---------- Forwarded message ---------
From: **Mink, Stephanie R** <stephanie.r.mink@wv.gov>
Date: Fri, Sep 8, 2023 at 10:53 AM
Subject: WV Draft Permit R13-1761L for Weyerhaeuser NR Company; Sutton OSB Mill
To: Supplee, Gwendolyn <supplee.gwendolyn@epa.gov>, <Weinelt.Eva@epa.gov>, <Timothy.Sagraves@wy.com>, Matthew.Rutherford@Weyerhaeuser.com <Matthew.Rutherford@weyerhaeuser.com>, Jesse Hanshaw <jhanshaw@slrconsulting.com>
Cc: Crowder, Laura M <Laura.M.Crowder@wv.gov>, McKeone, Beverly D <Beverly.D.Mckeone@wv.gov>, McCumbers, Carrie <Carrie.McCumbers@wv.gov>, Nicole D Ernest <nicole.d.ernest@wv.gov>, Kessler, Joseph R <joseph.r.kessler@wv.gov>, Johnson, Rebecca H <Rebecca.H.Johnson@wv.gov>, Richard Eric Ray <richard.eric.ray@wv.gov>

Please find attached the Draft Permit R13-1761L, Engineering Evaluation and Public Notice for Weyerhaeuser NR Company's Sutton OSB Mill located in Braxton County.

The public notice will be published in *The Braxton Citizens News* on Tuesday, September 12, 2023 and the thirty day comment period will end on Thursday, October 12, 2023.

Should you have any questions or comments, please contact the permit writer, Joe Kessler, at 304-926-0499 ext. 41271 or Joseph.R.Kessler@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

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3 attachments

007-00016_DRAFT_13-1761L.pdf
227K

007-00016_EVAL_13-1761L (signed).pdf
266K

13-1761L Public Notice.pdf
14K

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

Read: Completeness Determination, Sutton OSB Mill, Application No.: R30-00700016-2018(SM02)

1 message

Jesse Hanshaw <jhanshaw@slrconsulting.com> Wed, Jul 26, 2023 at 9:54 AM
To: "robert.a.mullins@wv.gov" <robert.a.mullins@wv.gov>

Your message

To: Jesse Hanshaw
Subject: Completeness Determination, Sutton OSB Mill, Application No.: R30-00700016-2018(SM02)
Sent: Tuesday, July 25, 2023 1:15:26 PM (UTC-05:00) Eastern Time (US & Canada)

was read on Wednesday, July 26, 2023 9:54:04 AM (UTC-05:00) Eastern Time (US & Canada).

Jesse Hanshaw
Principal Engineer - Air Quality

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

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

Completeness Determination, Sutton OSB Mill, Application No.: R30-00700016-2018(SM02)

1 message

Mullins, Robert A <robert.a.mullins@wv.gov> Tue, Jul 25, 2023 at 1:15 PM
To: Timothy.Sagraves@wy.com, matthew.rutherford@weyerhaeuser.com, Jesse Hanshaw <jhanshaw@slrconsulting.com>

To:	Timothy Sagraves
Cc:	Matthew Rutherford; Jesse Hanshaw
Subject	Completeness Determination, Sutton OSB Mill, Application No.: R30-00700016-2018(SM02)

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 June 22, 2023. 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

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

Re: R30-00700016-2023 Pre-Draft

1 message

Jesse Hanshaw <jhanshaw@slrconsulting.com> Thu, Jul 6, 2023 at 10:11 AM
To: "Mullins, Robert A" <robert.a.mullins@wv.gov>, "Rutherford, Matthew" <matthew.rutherford@weyerhaeuser.com>

Thank you, RA, for the extra work and comparison.

I have spoken with Joe Kessler about the Mod and he said he needed a couple of weeks before he could give it a thorough review and get started, so hopefully we will have the Mod approved in time.

Thanks again,
Jesse

Get Outlook for iOS

Jesse Hanshaw

Principal Engineer - Air Quality

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

From: Mullins, Robert A <robert.a.mullins@wv.gov>
Sent: Thursday, July 6, 2023 9:34:29 AM
To: Jesse Hanshaw <jhanshaw@slrconsulting.com>; Rutherford, Matthew <matthew.rutherford@weyerhaeuser.com>
Subject: R30-00700016-2023 Pre-Draft

After checking with Carrie, I plan to wait till the recently submitted R13 modification has been issued (unless I start getting close to the date I need to propose to meet the renewal issuance deadline) and combine that with Title V Sig. Mod. with the renewal, before proposing the renewal.

I have attached the pre-Draft versions of the Title V renewal Permit and Factsheet for Weyerhaeuser's Sutton OSB Mill. Please review them and respond with any questions or comments in case I end up needing to go to notice with this version and process the Sig. Mod. separately.

I'll send you the combined Renewal and SM after the R13 is issued. I mainly wanted you to have this pre-draft so you can compare it with the upcoming R13 and have the opportunity to resolve any permit consistency issues between the permits that may exist while they are both open.

The Potential emissions in the Factsheet are currently a mix of the Renewal Applications stated PTEs and the emission limits given in section 4 with the emission limit being used if it was higher than the PTE. Hopefully after, the R13 Mod. I'll just use the stated PTE emissions from that Eval.

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>

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

1 message

Mink, Stephanie R <stephanie.r.mink@wv.gov> Tue, Jun 27, 2023 at 1:39 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. R30-00700016-2018 (SM02)

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 June 22, 2023, 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 Permitting

601 57th Street SE

Charleston, WV 25304

Phone: 304-926-0499 x41281

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

Weyerhaeuser SM02

1 message

Mink, Stephanie R <stephanie.r.mink@wv.gov> Tue, Jun 27, 2023 at 1:35 PM
To: Robert A Mullins <robert.a.mullins@wv.gov>

Here's a dated copy of the application, I'll be sending the email in a few minutes.

Thanks

--

Stephanie Mink

Environmental Resources Associate

West Virginia Department of Environmental Protection

Division of Air Quality, Title V Permitting

601 57th Street SE

Charleston, WV 25304

Phone: 304-926-0499 x41281

R30-00700016-2018 (SM02) Weyerhaeuser app.pdf
7543K

Received
June 22, 2023
WV DEP/Div of Air Quality

Division of Air Quality Permit Application Submittal

Please find attached a permit application for : Weyerhaeuser NR Company, Heaters WV
[Company Name; Facility Location]

- DAQ Facility ID (for existing facilities only): 007-00016
- Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only): R13-1761K, R30-00700016-2018(SM01)

- 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 ATTACHMENT S 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: Matthew Rutherford
    - Email: Matthew.Rutherford@weyerhaeuser.com
    - Phone Number:
  - ☒ Consultant
    - Name: Jesse Hanshaw
    - Email: jhanshaw@slrconsulting.com
    - Phone Number: (304) 545-8563

global environmental solutions

Weyerhaeuser NR Company

Sutton OSB Mill

Facility ID No. 007-00016

Heaters, West Virginia

Application for NSR Permit and Title V Permit Revision

May 2023

Sutton OSB Mill

Application for NSR Permit and Title V Permit Revision

Prepared for:

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, WV 25301

This document has been prepared by SLR International Corporation. The material and data in this permit application were prepared under the supervision and direction of the undersigned.

Jesse Hanshaw, P.E.
Principal Engineer

CONTENTS

Notes:

ATTACHMENT B – Map(s) Not Applicable – No resulting change

ATTACHMENT H – Safety Data Sheets (SDS) Not Applicable – No resulting change

ATTACHMENT K – Fugitive Emissions Data Sheet Not Applicable – No resulting change

ATTACHMENT Q – Business Confidential Claims Not Applicable – No claims are asserted

ATTACHMENT R – Authority Forms Not Applicable – Certified by Responsible Official

APPLICATION FOR PERMIT

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

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:
☐ **OWNER** ☐ **OPERATOR** ☒ **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? ☒ **YES** ☐ **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 *proposed site?* ☒ **YES** ☐ **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):
R30-00700016-2018(SM01)
R13-1761K

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):	12C. Nearest city or town:	12D. County:
N/A	Heaters	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 changes at the Sutton OSB Mill including removal of the two existing Wet Electrostatic Precipitators, control devices Wet ESP No. 1, 4110-00-10, and Wet ESP No. 2, 4120-00-10, and installing one new Wet ESP (WESP) control device. Applicant also proposes to update the emission points for Paint Booth 1 (EP 40 & 41) and Paint Booth 3 (EP 44 & 45) to show these two paint booths will discharge their vent stream inside the building, after it passes through the existing filtration system. They no longer vent through the stacks identified as Emission Points 40, 41, and 44, 45. Additionally a small amount of VOCs was added for the water based coatings. Lastly, the % methanol removal efficiency was removed from the main biofilter stack since the THC compliance option is now being utilized under the PCWP MACT.

14A. Provide the date of anticipated installation or change:	14B. Date of anticipated Start-Up if a permit is granted:
– Installation is scheduled to begin in May of 2023 and be completed in September 2023.	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:

☐ Bulk Liquid Transfer Operations	☐ Haul Road Emissions	☐ Quarry
☐ Chemical Processes	☐ Hot Mix Asphalt Plant	☐ Solid Materials Sizing, Handling and Storage Facilities
☐ Concrete Batch Plant	☐ Incinerator	☐ Storage Tanks
☐ Grey Iron and Steel Foundry	☐ Indirect Heat Exchanger	

☒ General Emission Unit, specify: **Paint Booth 1 & Paint Booth 3 have General Emission Unit Forms provided.**

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

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

☐ Absorption Systems	☐ Baghouse	☐ Flare
☐ Adsorption Systems	☐ Condenser	☐ Mechanical Collector
☐ Afterburner	☒ Electrostatic Precipitator	☐ Wet Collecting System

☐ 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:

☐ Authority of Corporation or Other Business Entity	☐ Authority of Partnership
☐ Authority of Governmental Agency	☐ 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 *(Please use blue ink)* DATE: 6-21-2023 *(Please use blue ink)*

35B. Printed name of signee:		35C. Title:
Timothy Sagraves		Mill Manager
35D. E-mail:	36E. Phone:	36F. FAX
Timothy.Sagraves@WY.com	304-765-4242	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:

- ☒ **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: Material Safety Data Sheets (MSDS)**
- ☒ **Attachment I: Emission Units Table**
- ☒ **Attachment J: Emission Points Data Summary Sheet**
- ☐ **Attachment K: Fugitive Emissions Data Summary Sheet**
- ☒ **Attachment L: Emissions Unit Data Sheet(s)**
- ☒ **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**
- ☐ **Attachment R: Authority Forms**
- ☒ **Attachment S: Title V Permit Revision Information**
- ☐ **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
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

Attachment A

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

MAP

Not Applicable (N/A)

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

ATTACHMENT C

INSTALLATION AND START-UP

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

Installation and Startup Schedule

Preliminary Project Schedule

Task	Duration	Start	Finish
Engineering			
Purchasing & Fabrication	27 wks		5/25/2023
Installation	18 wks	5/22/2023	9/23/2023
Mobilization	1 wk	5/22/2023	5/26/2023
Wet ESP Installation	17 wks	5/22/2023	9/15/2023
Outage and Tie-In	1 wks	10/04/2023	10/13/2023
Commissioning and Start-Up	1 wks	10/04/2023	10/13/2023

ATTACHMENT D

REGULATORY DISCUSSION

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

REGULATORY DISCUSSION

APPLICABLE REGULATIONS

The replacement of the Wet ESP 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 demolition and removal of the two existing wet electrostatic precipitators, control devices Wet ESP No. 1, 4110-00-10, and Wet ESP No. 2, 4120-00-10, and installation of one new WESP to replace the two existing WESPs. The new WESP is designed to provide at least the same control efficiency as the existing control device and no increase in PM emissions will result. The new WESP, proposed control device WESP, 4130-00-10, will provide the same level of control, in combination with the Biofilter, of emission units as the previous two Wet ESP devices.

The applicant also proposes to update the emission points associated with Paint Booth No. 1 and Paint Booth No. 3 in the permit: Emission Points 40 & 41, 44 & 45. The two paint booths now vent inside the building after passing through the filtration control device. The applicant proposes to replace emission point 40 & 41 with emission point 40A for Paint Booth 1; and to replace emission point 44 & 45 with emission point 44A for Paint Booth 3. In reviewing these paint booths it came to the company's attention that there is a small amount of VOCs listed within the water based coatings used at the site, so their emissions are also being updated to reflect VOCs in their PTE.

Lastly, Weyerhaeuser would like to reflect in the permit a change in how the Heaters Mill has been demonstrating compliance with the PWCP MACT. Originally the site utilized the 90% methanol control achieved by the biofilter but due to subsequent testing the site has transition to an overall reduction in total hydrocarbons (THC). Therefore, the 90% methanol control requirement is being removed from the emission calculations to accurately reflect the site's current MACT compliance option. This caused the methanol emissions to go back up to uncontrolled rates which represent a conservative PTE.

This change to the methanol emissions are what triggers this Rule 13 modification, but is more of a secondary request being proposed here just so compliance is streamlined with the MACT's THC compliance option.

45 CSR 30 - Operating Permit Requirements.

Replacing the Wet ESP control device and updating the emission points associated with Paint Booths No. 1 and 3 at Weyerhaeuser's Sutton OSB Mill, as described within the 45CSR13 section above. In addition, the CAM plan for the WESP will be updated to define new operating ranges for the new control equipment. These Title V changes will be classified as a significant modification under 45 CSR 30.

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

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 wet electrostatic precipitator (WESP) proposed in this application will be used in combination with, upstream of, the Biofilter control device. The Biofilter is the primary control device for the emission units that vent through the WESP, The proposed WESP replacement and subsequent monitoring changes will not affect the status of 40 CFR 63 Subpart DDDD or its requirements since it is not the regulated final control device. At this point it is considered an integral part of the process necessary to maintain compliant operation of the biofilter. If in the future the WESP becomes a primary, end of line control device, the applicability of this regulation will be reconsidered.
.

State Only:

45 CSR 4 - No Objectionable Odors.

45 CSR 17 - Fugitive Particulate Emissions.

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.

ATTACHMENT E

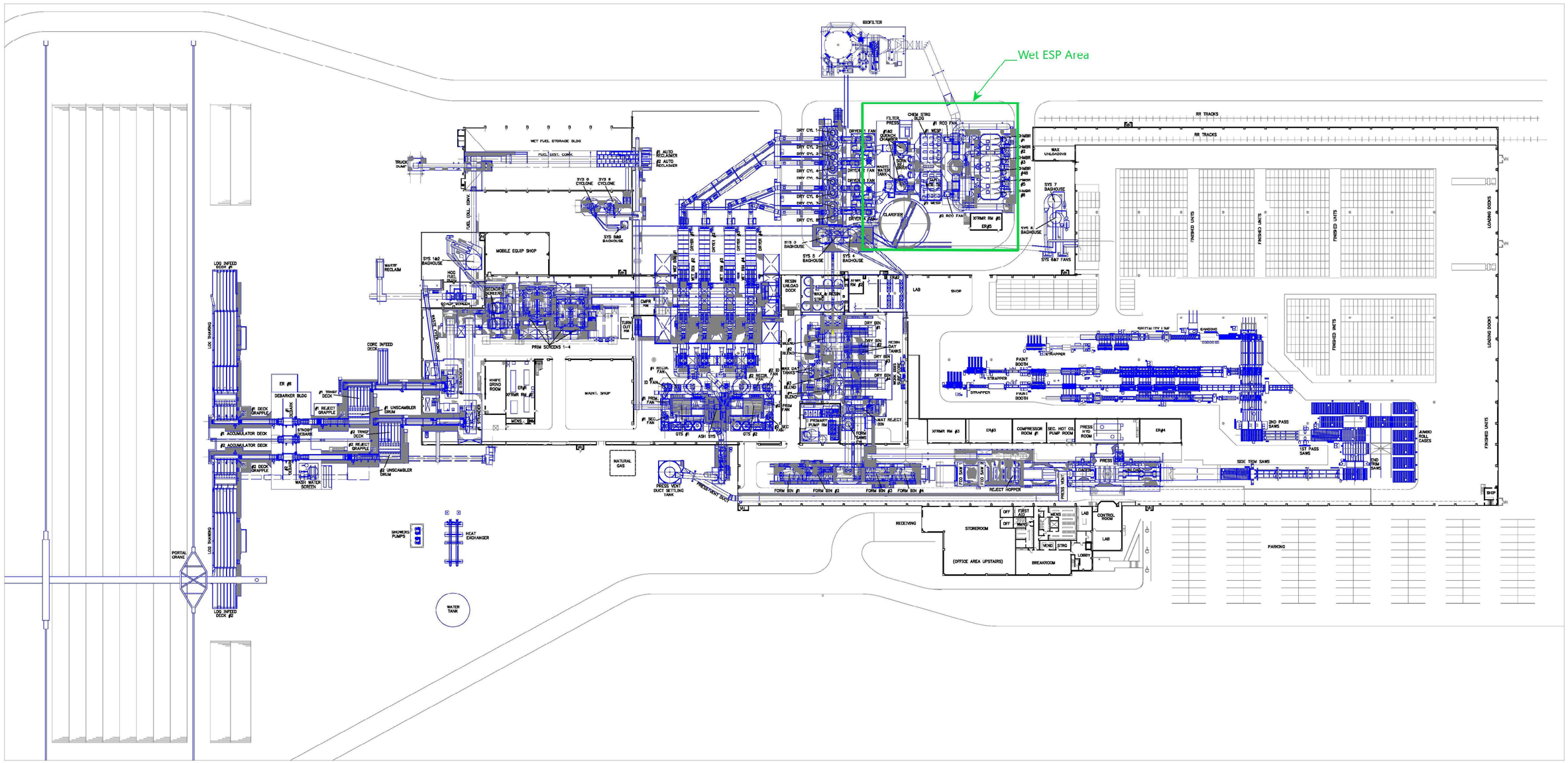
PLOT PLAN

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023



1	09/14/17	MHR		ADDED BIOFILTER EQUIPMENT
Ø	12/12/01	BW		RELEASED FOR REVIEW
REV	DATE	BY	APP'D	DESCRIPTION OF REVISION

Weyerhaeuser

Engineered Strand Products

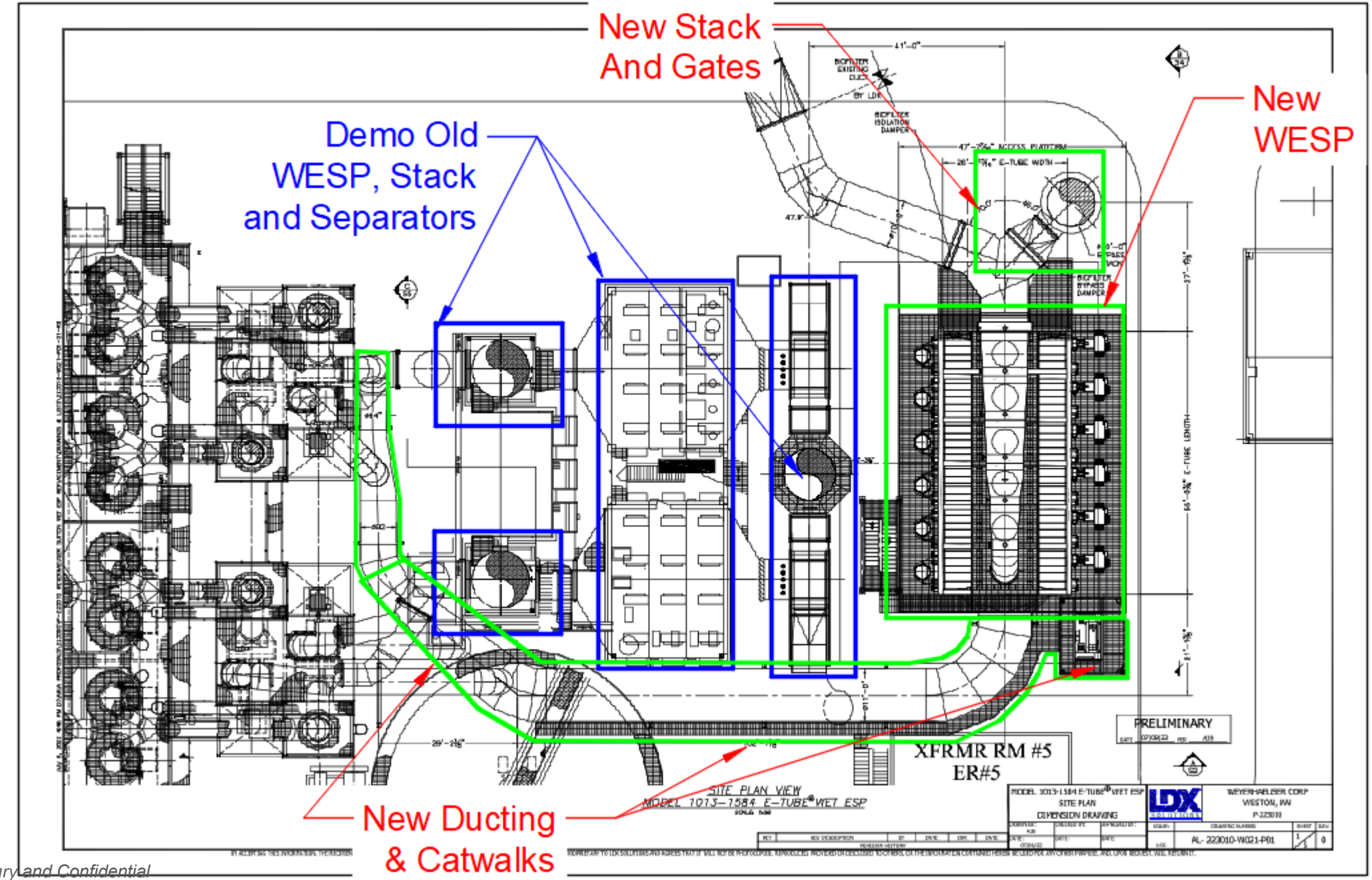
Sutton OSB
Heaters, West Virginia

APPROVED	SCALE	1"=60'	MO	DAY	YR.
	DRAWN	B. WICKS	12	12	Ø1
DATE	CHK'D				
	APP'D				
PROJECT	APP'D				

GENERAL FACILITY
EQUIPMENT LAYOUT

DRAWING NUMBER
800-G-7002-D-02

REV 1



ATTACHMENT F

PROCESS FLOW DIAGRAM

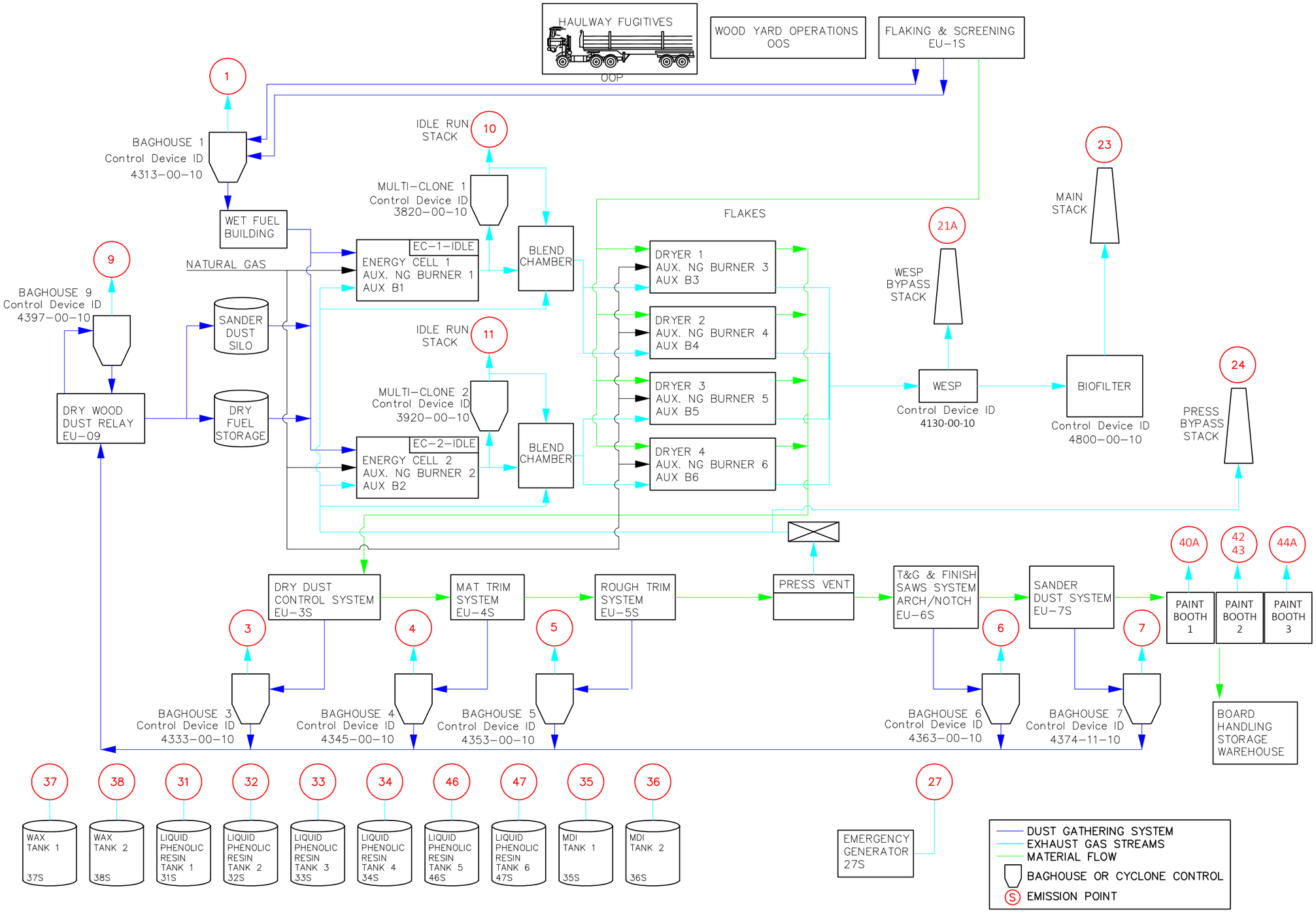
Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

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

APPROVED	–	SCALE	NTS
PROJECT		DRAWN	B. WICKS
		CHK'D	M. RUTHERFORD

MO	DAY	YR.
04	23	02
08	23	22

Weyerhaeuser

Sutton OSB
Heaters, West Virginia

PROCESS DIAGRAM FOR
WEYERHAEUSER WEST VIRGINIA
SUTTON OSB FACILITY

DRAWING NUMBER
800–G–7003–A–02

REV 10

ATTACHMENT G

PROCESS DESCRIPTION

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

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 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.

More Recent Developments

Since this time, Weyerhaeuser has applied to renew the facility's Title V Permit, Permit R30-00700016-2018. While the renewal is under review, the applicant herein proposes to modify the site's current Rule 13 permit, R13-1761K, to incorporate proposed changes to the Wet Electrostatic Precipitator (WESP) control device and Paint Booths 1 and 3.

If the application is approved, existing Wet ESP No. 1 and Wet ESP No. 2 will be replaced with one new WESP control device, proposed as control device name WESP. Changes at the site will include construction of a foundation, grid, new ducting and gates, the new six (6) chamber WESP, new catwalks, and a new WESP Bypass Stack proposed as Emission Point 21A. Following installation of the new WESP, the two existing WESPs, the existing Bypass Stack (EP# 21) and the existing separators will be demolished and removed.

Changes to the Rule 13 permit include changing permit language that references Wet ESP No. 1 and Wet ESP No. 2, and updating the Emission Unit Table. The application includes an updated air pollution control device form that provides information about the proposed WESP and proposed emission point 21A (the new WESP Bypass Stack).

The emission points associated with Paint Booth 1 and Paint Booth 3 are being updated because the booths no longer vent through the stacks at emission points 40, 41, 44, and 45. The emissions from these booths are now discharged inside the warehouse building at proposed emission

points 40A (Paint Booth 1) and 44A (Paint Booth 3). Emissions from Paint Booth 1 and 3 remain controlled by filters; no changes are proposed related to the filters, PM emission limits or maintenance requirements. However, a small amount of VOCs have been added to each paint booth to account for trace VOCs in the water based coatings. Changes to the Rule 13 Permit include updating permit language and updating the emission point IDs in the Emission Unit Table and the Emission Limits Table in permit condition 4.1.2. Lastly, the amount of methanol emitted from the main stack was updated to remove the 90% control listed by the biofilter at the MACT control option. Since the biofilter was originally permitted, Weyerhaeuser has now changed to the total hydrocarbon (THC) concentration limit. Therefore, methanol emissions are conservatively going back to being reflected on an uncontrolled worst-case bases.

ATTACHMENT H

SAFETY DATA SHEETS (SDS)

Not Applicable (N/A)

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

ATTACHMENT I

EMISSION UNITS TABLE

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

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 Wet ESP No. 1~~ 4130-00-10 WESP (1) 4800-00-10 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 Wet ESP No. 2~~ 4130-00-10 WESP 4800-00-10 Biofilter
3130-00-11	21A 23	Dryer No. 1	1996	55 MMBtu/hr	Modification	~~4110-00-10 Wet ESP No. 1~~ 4130-00-10 WESP 4800-00-10 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 Wet ESP No. 2~~ 4130-00-10 WESP 4800-00-10 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 Wet ESP No. 1~~ ~~4120-00-10 Wet ESP No. 2~~ 4130-00-10 WESP 4800-00-10 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	~~40/41~~ 40A inside bldg	Paint Booth No.1	2002/2016	26 gallons/hr	Modification	Filters
42S/43S	42/43	Paint Booth No.2	2002	26 gallons/hr		Filters
44S/45S	~~44/45~~ 44A inside bldg	Paint Booth No.3	2002/2016	26 gallons/hr	Modification	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) ESP = Electrostatic Precipitator

(2) Energy Cells are authorized to operate in the following scenarios: During "normal operations," gases will be vented through Wet ESP~~s~~ and Biofilter and out Emission Point 23. During RCDME, gases will be vented through Wet ESP~~s~~ 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 Wet ESP~~s~~ and out Emission Point 21A.

ATTACHMENT J

EMISSION POINTS DATA SUMMARY SHEET

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

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)
		ID No.	Source	ID No.	Device Type	Short Term[2]	Max (hr/yr)		lb/hr	ton/yr	lb/hr	ton/yr			Hourly(lb/MSF)
21A (RCDME Mode)	Upward vertical stack	3816-00-11 (Aux. Normal run) 3800-00-10 (Normal Run)	Energy Cell No. 1	4130-00-10	Wet ESP (WESP)		263	Acetaldehyde	2.401	0.147			Vapor	Naphthalene (EE) POM (EE) Xylene (EE) All others (ST)	2.55E-02
								Acrolein	0.929	0.036					9.88E-03
								Arsenic	0.001	0.000					1.05E-05
								Benzene	0.065	0.003					6.93E-04
								Beryllium	3.41E-05	1.68E-06					3.63E-07
								Cadmium	0.002	0.000					2.37E-05
								Chlorine	0.199	0.011					2.11E-03
								Chromium	0.011	0.001					1.16E-04
								Cumene	4.739	0.170					5.04E-02
								Dichloromethane	0.144	0.006					1.54E-03
								Formaldehyde	4.552	0.309					4.84E-02
								Hexane	0.258	0.011					2.74E-03
								Hydrogen Chloride	0.453	0.032					4.82E-03
								Lead	0.012	0.001					1.24E-04
								Manganese	0.183	0.005					1.95E-03
								MDI	0.024	0.001					2.51E-04
								Methanol	10.49	0.94					1.12E-01
								Methyl isobutyl ketone	0.138	0.009					1.47E-03
								Naphthalene	1.28E-05	1.69E-06					2.29E-07
								Nickel	0.004	0.000					4.32E-05
								Phenol	0.000	0.000					0.00E+00
								POM	1.81E-05	2.38E-06					3.23E-07
								Propionaldehyde	0.999	0.025					1.06E-02
								Toluene	0.161	0.007					1.72E-03
		3916-00-11 (Aux. Normal run) 3900-00-10 (Normal run)	Energy Cell No. 2												
		3130-00-11, 3230-00-11, 3330-00-11, 3430-00-11	Dryer No. 1 Dryer No. 2 Dryer No. 3 Dryer No. 4												

		4700-00-10	OSB Press					Xylenes Total MACT HAP Total HAP VOC (WPP1) NOx CO SO2 PM2.5/PM10/PM	0.448 19.37 26.21 59.1 88.23 40.66 12.26 34.68	0.059 1.46 1.78 4.4 221.6 96.3 17.9 79.4					8.00E-03 - - - 0.939 0.433 0.13 0.369
21A (Energy Cell Only Mode)	Upward Vertical Stack	3816-00-11 (Aux. Normal run) 3800-00-10 (Normal Run)	Energy Cell No. 1 (Wood Combustion)	4130-00-10	Wet ESP (WESP)		8,760	Acetophenone Antimony Bis(2-ethylhexylphthalate) Carbon disulfide Carbon tetrachloride Chlorobenzene Chloroform Cobalt Dinitrophenol, 2,4- Dioxin (2,3,7,8-TCDD) Ethylbenzene Mercury Methyl chloride Methyl chloroform Methyl ethyl ketone Nitrophenol, 4- Pentachlorophenol Selenium Styrene Tetrachloroethylene Trichloroethylene Trichlorophenol, 2,4,6- Vinyl chloride Total HAP	1.37E-03 5.56E-04 1.65E-05 4.82E-02 1.19E-04 1.16E-02 1.74E-02 1.11E-02 6.30E-05 3.27E-10 1.45E-03 1.33E-02 3.63E-02 1.09E-02 4.45E-03 3.85E-05 1.79E-05 4.15E-04 5.56E-03 6.30E-02 2.82E-03 7.70E-06 6.30E-03 0.23	6.01E-03 2.43E-03 7.21E-05 2.11E-01 5.19E-04 5.06E-02 7.63E-02 4.87E-02 2.76E-04 1.43E-09 6.33E-03 5.84E-02 1.59E-01 4.75E-02 1.95E-02 1.69E-04 7.82E-05 1.82E-03 2.43E-02 2.76E-01 1.23E-02 3.37E-05 2.76E-02 1.03			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 6.75E-05 4.70E-08 1.17E-03 2.88E-06 3.30E-05 4.23E-04 1.35E-03 1.80E-07 7.94E-11 3.51E-05 3.24E-04 8.82E-04 3.10E-05 1.08E-04 1.10E-07 5.10E-08 5.04E-05 1.35E-04 1.53E-03 6.84E-05 2.20E-08 1.80E-05 -
		3916-00-11 (Aux. Normal run) 3900-00-10 (Normal run)	Energy Cell No. 2 (Wood Combustion)												
40A	Vents inside building after passing through filter	40S & 41S	Paint Booth 1	Filters	Paint booth filter		8,760	PM2.5/PM10/PM VOC	8.91 0.26	39.04 1.14	0.13 0.26	0.59 1.14	Vapor, entrained PM Vapor	EE	

44A	Vents inside building after passing through filter	44S & 45S	Paint Booth 3	Filters	Paint booth filter		8,760	PM2.5/PM10/PM VOC	8.91 0.39	39.04 1.71	0.13 0.39	0.59 1.71	Vapor, entrained PM Vapor	EE	
42/43	Vertical Stack	42S &43S	Paint Booth 2	Filters	Paint booth filter		8,760	PM2.5/PM10/PM VOC	8.91 0.26	39.04 1.14	0.13 0.26	0.59 1.14	Vapor, entrained PM Vapor	EE	

23 (Main Stack)	Upward vertical stack	3816-00-11 (Aux. Normal run) 3800-00-10 (Normal Run) _____ 3916-00-11(Aux Normal Run) 3900-00-10 (Normal Run) _____ 3130-00-11 3230-00-11 3330-00-11 3430-00-11 _____ 4700-00-10	Energy Cell No. 1 Energy Cell No. 2 Dryer 1 Dryer 2 Dryer 3 Dryer 4 OSB Press		WESP Biofilter			Acetaldehyde Acrolein Arsenic Benzene Beryllium Cadmium Chlorine Chromium Cumene Dichloromethane Formaldehyde Hexane Hydrogen Chloride Lead Manganese MDI Methanol Methyl isobutyl ketone Naphthalene Nickel Phenol POM Propionaldehyde Toluene Xylenes Total MACT HAP Total HAP VOC (WPP1) NOx CO SO2 PM2.5/PM10/PM	2.401 0.929 0.001 0.065 3.41E-05 0.002 0.199 0.011 4.739 0.144 4.552 0.258 0.453 0.012 0.183 0.024 10.49 0.138 1.28E-05 0.004 0.000 1.81E-05 0.999 0.161 0.448 19.37 26.45 59.1 88.23 40.66 12.26 173.4	4.892 1.210 0.002 0.112 5.62E-05 0.004 0.380 0.017 5.668 0.216 10.302 0.378 1.063 0.030 0.178 0.027 31.49 0.283 5.62E-05 0.007 0.000 7.92E-05 0.831 0.237 1.962 48.72 60.32 145.49 221.6 96.3 17.9 396.92	34.68	79.4	Vapor	Naphthalene (EE) POM (EE) Xylene (EE) All others (ST)	2.55E-02 9.88E-03 1.05E-05 6.93E-04 3.63E-07 2.37E-05 2.11E-03 1.16E-04 5.04E-02 1.54E-03 4.84E-02 2.74E-03 4.82E-03 1.24E-04 1.95E-03 2.51E-04 1.12E-01 1.47E-03 2.29E-07 4.32E-05 0.00E+00 3.23E-07 1.06E-02 1.72E-03 8.00E-03 - - - 0.939 0.433 0.13 0.369

24 (Press Bypass)	Upward Vertical Stact	4700-00-10	OSB Press		NA			CO	9.21	2.11						0.098
								PM	2.55	0.34						2.71E-02
								PM-10	2.55	0.34						2.71E-02
								PM-2.5	2.55	0.34						2.71E-02
								VOC	36.90	5.62						3.93E-01
								Acetaldehyde	1.988	0.232						2.12E-02
								Acrolein	0.000	0.000						0.00E+00
								Arsenic	0.000	0.000						0.00E+00
								Benzene	0.023	0.003						2.49E-04
								Beryllium	0.000	0.000						0.00E+00
								Cadmium	0.001	0.000						5.97E-06
								Chlorine	1.172	0.064						1.25E-02
								Chromium	0.016	0.001						1.66E-04
								Cumene	12.267	0.784						1.31E-01
								Dichloromethane	0.000	0.000						0.00E+00
								Formaldehyde	6.145	1.062						6.54E-02
								Hexane	0.000	0.000						0.00E+00
								Hydrogen Chloride	0.000	0.000						0.00E+00
								Lead	0.004	0.000						3.87E-05
								Manganese	0.014	0.001						1.44E-04
								MDI	0.029	0.004						3.10E-04
								Methanol	15.922	3.490						1.69E-01
								MIBK	0.000	0.000						0.00E+00
								Nickel	0.050	0.004						5.33E-04
								Phenol	0.524	0.042						5.58E-03
								Propionaldehyde	0.000	0.000						0.00E+00
								Toluene	0.000	0.000						0.00E+00
								Total MACT HAP	24.58	4.83						
								Total HAP	38.15	5.69						

The EMISSION POINTS DATA SUMMARY SHEET provides a summation of emissions by emission unit. Note that uncaptured process emission unit emissions are not typically considered to be fugitive and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET. Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions). Please complete the FUGITIVE EMISSIONS DATA SUMMARY SHEET for fugitive emission activities.

[1] Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.

[2] Indicate by "C" if venting is continuous. Otherwise, specify the average short-term venting rate with units, for intermittent venting (ie., 15 min/hr). Indicate as many rates as needed to clarify frequency of venting (e.g., 5 min/day, 2 days/wk).

[3] List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. **LIST** Acids, CO, CS_2, VOCs, H_2S, Inorganics, Lead, Organics, O_3, NO, NO_2, SO_2, SO_3, all applicable Greenhouse Gases (including CO_2 and methane), etc. **DO NOT LIST** H_2, H_2O, N_2, O_2, and Noble Gases.

[4] Give maximum potential emission rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

[5] Give maximum potential emission rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

[6] Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).

[7] Provide for all pollutant emissions. Typically, the units of parts per million by volume (ppmv) are used. If the emission is a mineral acid (sulfuric, nitric, hydrochloric or phosphoric) use units of milligram per dry cubic meter (mg/m^3) at standard conditions (68 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO_2, use units of ppmv (See 45CSR10).

Attachment J
EMISSION POINTS DATA SUMMARY SHEET

Table 2: Release Parameter Data								
Emission Point ID No. *(Must match Emission Units Table)*	Inner Diameter (ft.)	Exit Gas			Emission Point Elevation (ft)		UTM Coordinates (km)	
		Temp. (^{o}F)	Volumetric Flow [1] (acfm) *at operating conditions*	Velocity (fps)	Ground Level *(Height above mean sea level)*	Stack Height [2] *(Release height of emissions above ground level)*	Northing	Easting
21A	10	157	335,780	72	934	125	4,290.439	530.096
40A		Ambient	5,634					
44A		Ambient	5,634					

[1] Give at operating conditions. Include inerts.
[2] Release height of emissions above ground level.

ATTACHMENT K

FUGITIVE EMISSIONS DATA SHEET

Not Applicable (N/A)

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

ATTACHMENT L

EMISSION UNIT DATA SHEET

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

Attachment L
EMISSIONS UNIT DATA SHEET
GENERAL

To be used for affected sources other than asphalt plants, foundries, incinerators, indirect heat exchangers, and quarries.

Identification Number (as assigned on *Equipment List Form*):

1. Name or type and model of proposed affected source:

   Paint Booth 1, located inside warehouse building.

   Paint Booth 1 now discharges inside the building, after going through the filtration system, a woven paper filter control device. This is the same control device setup as previously used, no change in emissions is proposed. Stacks at emissions points 40 & 41 are no longer in use. The outlet of the filter box is the current emission point, proposed emission point 40A.

2. On a separate sheet(s), furnish a sketch(es) of this affected source. If a modification is to be made to this source, clearly indicated the change(s). Provide a narrative description of all features of the affected source which may affect the production of air pollutants.

3. Name(s) and maximum amount of proposed process material(s) charged per hour:

   A maximum 26.0 gallons, based on permitted throughput, of paint may be charged per hour. Water based paint will be used. There are small amounts of VOC's present in the paint, 0.01 lb VOC/gal. Solids content is estimated to be 41.3% by weight and the remaining material is water. Material Safety Data Sheets for the paint were previously submitted as Attachment H of the R13 permit application submitted 7/7/2002, available upon request.

4. Name(s) and maximum amount of proposed material(s) produced per hour:

   26 gal/hr

5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants:

   NA.

* The identification number which appears here must correspond to the air pollution control device identification number appearing on the *List Form*.

6. Combustion Data (if applicable):

(a) Type and amount in appropriate units of fuel(s) to be burned:

NA

(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:

NA

(c) Theoretical combustion air requirement (ACF/unit of fuel):

@ °F and psia.

(d) Percent excess air:

(e) Type and BTU/hr of burners and all other firing equipment planned to be used:

NA

(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:

NA

(g) Proposed maximum design heat input: $\times 10^6$ BTU/hr.

7. Projected operating schedule:

Hours/Day	24	Days/Week	7	Weeks/Year	52

8. Projected amount of pollutants that would be emitted from this affected source if no control devices were used:

@ Ambient °F and Atmospheric pressure psia

a.	NO_X	NA	lb/hr	grains/ACF
b.	SO_2	NA	lb/hr	grains/ACF
c.	CO	NA	lb/hr	grains/ACF
d.	PM_{10}	8.91	lb/hr	grains/ACF
e.	Hydrocarbons	NA	lb/hr	grains/ACF
f.	VOCs	0.26	lb/hr	grains/ACF
g.	Pb	NA	lb/hr	grains/ACF
h.	Specify other(s)			
			lb/hr	grains/ACF
			lb/hr	grains/ACF
			lb/hr	grains/ACF
			lb/hr	grains/ACF

NOTE: (1) An Air Pollution Control Device Sheet must be completed for any air pollution device(s) used to control emissions from this affected source.

(2) Complete the Emission Points Data Sheet.

9. Proposed Monitoring, Recordkeeping, Reporting, and Testing
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.

MONITORING	RECORDKEEPING
No changes to monitoring requirements are proposed. Existing Monitoring requirements include: Operate and maintain filter systems for the purpose of controlling particulate matter released from Paint Booth 1. Maintain and operate control device in a manner consistent with safety and good air pollution control practices for minimizing emissions.	Keep records of monitoring information. Keep records of all required pollution control equipment inspection and/or preventative maintenance procedures. Keep records of the occurrence and duration of any malfunction or operational shutdown of air pollution control equipment during which excess emissions occur.
REPORTING	**TESTING**
Report instances of deviation from permitted conditions.	No testing is required for this unit. Testing shall be performed upon request from the Director.

MONITORING. 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 OPERATION/AIR POLLUTION CONTROL DEVICE.

RECORDKEEPING. PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.

REPORTING. PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.

TESTING. PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.

10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty

Maintenance of the filtration system and filters as required by the manufacturer.

Attachment L
EMISSIONS UNIT DATA SHEET
GENERAL

To be used for affected sources other than asphalt plants, foundries, incinerators, indirect heat exchangers, and quarries.

Identification Number (as assigned on *Equipment List Form*):

1. Name or type and model of proposed affected source:

   Paint Booth 2, located inside warehouse building.

2. On a separate sheet(s), furnish a sketch(es) of this affected source. If a modification is to be made to this source, clearly indicated the change(s). Provide a narrative description of all features of the affected source which may affect the production of air pollutants.

3. Name(s) and maximum amount of proposed process material(s) charged per hour:

   A maximum 26.0 gallons, based on permitted throughput, of paint may be charged per hour. Water based paint will be used. There are small amounts of VOC's present in the paint, 0.01 lb VOC/gal. Solids content is estimated to be 41.3% by weight and the remaining material is water. Material Safety Data Sheets for the paint were previously submitted as Attachment H of the R13 permit application submitted 7/7/2002, available upon request.

4. Name(s) and maximum amount of proposed material(s) produced per hour:

   26 gal/hr

5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants:

   NA.

* The identification number which appears here must correspond to the air pollution control device identification number appearing on the *List Form*.

6. Combustion Data (if applicable):

(a) Type and amount in appropriate units of fuel(s) to be burned:

NA

(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:

NA

(c) Theoretical combustion air requirement (ACF/unit of fuel):

@ °F and psia.

(d) Percent excess air:

(e) Type and BTU/hr of burners and all other firing equipment planned to be used:

NA

(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:

NA

(g) Proposed maximum design heat input: $\times 10^6$ BTU/hr.

7. Projected operating schedule:

Hours/Day	24	Days/Week	7	Weeks/Year	52

8. Projected amount of pollutants that would be emitted from this affected source if no control devices were used:

@ Ambient °F and Atmospheric pressure psia

a.	NO_X	NA	lb/hr	grains/ACF
b.	SO_2	NA	lb/hr	grains/ACF
c.	CO	NA	lb/hr	grains/ACF
d.	PM_{10}	8.91	lb/hr	grains/ACF
e.	Hydrocarbons	NA	lb/hr	grains/ACF
f.	VOCs	0.26	lb/hr	grains/ACF
g.	Pb	NA	lb/hr	grains/ACF
h.	Specify other(s)			
			lb/hr	grains/ACF
			lb/hr	grains/ACF
			lb/hr	grains/ACF
			lb/hr	grains/ACF

NOTE: (1) An Air Pollution Control Device Sheet must be completed for any air pollution device(s) used to control emissions from this affected source.

(2) Complete the Emission Points Data Sheet.

9. Proposed Monitoring, Recordkeeping, Reporting, and Testing
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.

MONITORING	RECORDKEEPING
No changes to monitoring requirements are proposed. Existing Monitoring requirements include: Operate and maintain filter systems for the purpose of controlling particulate matter released from Paint Booth 1. Maintain and operate control device in a manner consistent with safety and good air pollution control practices for minimizing emissions.	Keep records of monitoring information. Keep records of all required pollution control equipment inspection and/or preventative maintenance procedures. Keep records of the occurrence and duration of any malfunction or operational shutdown of air pollution control equipment during which excess emissions occur.
REPORTING	**TESTING**
Report instances of deviation from permitted conditions.	No testing is required for this unit. Testing shall be performed upon request from the Director.

MONITORING. 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 OPERATION/AIR POLLUTION CONTROL DEVICE.

RECORDKEEPING. PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.

REPORTING. PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.

TESTING. PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.

10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty

Maintenance of the filtration system and filters as required by the manufacturer.

Attachment L
EMISSIONS UNIT DATA SHEET
GENERAL

To be used for affected sources other than asphalt plants, foundries, incinerators, indirect heat exchangers, and quarries.

Identification Number (as assigned on *Equipment List Form*):

1. Name or type and model of proposed affected source:

   Paint Booth 3, located inside warehouse building.

   Paint Booth 1 now discharges inside the building, after going through the filtration system, a woven paper filter control device. This is the same control device setup as previously used, no change in emissions is proposed. Stacks at emissions points 44 & 45 are no longer in use. The outlet of the filter box is the current emission point, proposed emission point 44A.

2. On a separate sheet(s), furnish a sketch(es) of this affected source. If a modification is to be made to this source, clearly indicated the change(s). Provide a narrative description of all features of the affected source which may affect the production of air pollutants.

3. Name(s) and maximum amount of proposed process material(s) charged per hour:

   A maximum 26.0 gallons, based on permitted throughput, of paint may be charged per hour. Water based paint will be used. There are small amounts of VOC's present in the paint, 0.015 lb VOC/gal. Solids content is estimated to be 41.3% by weight and the remaining material is water. Material Safety Data Sheets for the paint were previously submitted as Attachment H of the R13 permit application submitted 7/7/2002, available upon request.

4. Name(s) and maximum amount of proposed material(s) produced per hour:

   NA.

5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants:

   NA.

* The identification number which appears here must correspond to the air pollution control device identification number appearing on the *List Form*.

6. Combustion Data (if applicable):

(a) Type and amount in appropriate units of fuel(s) to be burned:

NA

(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:

NA

(c) Theoretical combustion air requirement (ACF/unit of fuel):

@ °F and psia.

(d) Percent excess air:

(e) Type and BTU/hr of burners and all other firing equipment planned to be used:

NA

(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:

NA

(g) Proposed maximum design heat input: $\times 10^6$ BTU/hr.

7. Projected operating schedule:

Hours/Day	24	Days/Week	7	Weeks/Year	52

8. Projected amount of pollutants that would be emitted from this affected source if no control devices were used:

@ Ambient °F and Atmospheric pressure psia

a.	NO_X	NA	lb/hr	grains/ACF
b.	SO_2	NA	lb/hr	grains/ACF
c.	CO	NA	lb/hr	grains/ACF
d.	PM_{10}	8.91	lb/hr	grains/ACF
e.	Hydrocarbons	NA	lb/hr	grains/ACF
f.	VOCs	0.39	lb/hr	grains/ACF
g.	Pb	NA	lb/hr	grains/ACF
h.	Specify other(s)			
			lb/hr	grains/ACF
			lb/hr	grains/ACF
			lb/hr	grains/ACF
			lb/hr	grains/ACF

NOTE: (1) An Air Pollution Control Device Sheet must be completed for any air pollution device(s) used to control emissions from this affected source.

(2) Complete the Emission Points Data Sheet.

9. Proposed Monitoring, Recordkeeping, Reporting, and Testing
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.

MONITORING	RECORDKEEPING
No changes to monitoring requirements are proposed. Existing Monitoring requirements include: Operate and maintain filter systems for the purpose of controlling particulate matter released from Paint Booth 3. Maintain and operate control device in a manner consistent with safety and good air pollution control practices for minimizing emissions.	Keep records of monitoring information. Keep records of all required pollution control equipment inspection and/or preventative maintenance procedures. Keep records of the occurrence and duration of any malfunction or operational shutdown of air pollution control equipment during which excess emissions occur.
REPORTING	**TESTING**
Report instances of deviation from permitted conditions.	No testing is required for this unit. Testing shall be performed upon request from the Director.

MONITORING. 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 OPERATION/AIR POLLUTION CONTROL DEVICE.

RECORDKEEPING. PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.

REPORTING. PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.

TESTING. PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.

10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty

Maintenance of the filtration system and filters as required by the manufacturer.

ATTACHMENT M

AIR POLLUTION CONTROL DEVICE DATA SHEET

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

Attachment M
Air Pollution Control Device Sheet
(ELECTROSTATIC PRECIPITATOR)

Control Device ID No. (must match Emission Units Table):

Equipment Information

1. Manufacturer: LDX Solutions, Geoenergy Model No. 1013-1584 E-Tube Wet ESP	2. Type: ☒ Wet ☐ Dry ☐ Single-stage ☐ Two-stage
3. Provide diagram(s) of unit describing capture system with duct arrangement and size of duct, air volume, capacity, horsepower of movers. If applicable, state hood face velocity and hood collection efficiency.	
4. Guaranteed collection efficiency: Minimum: 80%	5. Type of particulate controlled: Paticulate Matter (PM), Condensable Organics

Gas Stream Characteristics

6. Particulate which will be emitted from outlet of precipitator: 0.008 grains/ACF 13.6 lb/hr	
7. Gas flow rate into collector: Design maximum: 360,000 acfm at 230 °F Average expected: acfm at °F	8. Gas Stream Temperature: Inlet: 230 °F Outlet: 160 °F
9. Pressure Drop: < 2.5 in. H_2O 11. Gas velocity through precipitator: ft/sec	10. Particulate Grain Loading in grains/scf.: Inlet: 0.13 °F Outlet: 0.008 °F
12. Percent moisture of gas stream: Maximum: 25 % Typical: 16 %	13. Water vapor content of effluent stream: 0.262 lb water/lb dry air
14. Density of gas stream: lb/ACF	15. Viscosity of gas stream: lb/sec-ft
16. Fan requirements: 2,400 HP ft^3/min	17. Gas stream residence time or treatment time: 2.0 sec.
18. Particulate to be collected: Type: Wood and Ash Particulate Resistivity: ohm-cm Specific Gravity:	19. Value of drift velocity, w, used for a particle with a diameter of one micron: ft/sec
20. What equation was used to determine theoretical efficiency? Write the equation below: The Deutsch Equation: ln (1 - efficiency) = - Aώ / Q Where: efficiency = (inlet – outlet) / inlet; A = collecting area; ώ =particle migration velocity; Q = gas flow rate through the ESP	
21. Dimensions of stack: Diameter 10 ft Height 125 ft	

Precipitator Characteristics

22. Collecting electrodes: Type of collecting electrodes: ☐ Vee plate ☐ Opzel plate ☒ Other, specify: round, tube design Number: 1,584 round tubes Vertical height: 13 feet long ft Total area of active collecting surface: 53,910 ft^2	23. Discharge electrodes: Type of discharge electrodes: Star II electrodes Number: 1,584 Effective length of each electrode: 13 ft Wire spacing in direction of gas flow: Center ft 24. Spacing between collecting and discharge electrodes: Varies, approx. 3.25 inches ~~ft~~

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

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

28. Sectionalization and power requirements:

Number of fields: 6		Current density on wires:	mA/ft
Number of bus sections:		Total power requirements:	kW
Total:		Field strengths:	kW
In series:		Charging:	KV/in
In parallel:		Collecting:	KV/in
Number of gas passages: 1,584		Sparking Voltage:	volts
Cross-sectional area per gas passages:	ft^2	Sparking rate (optimum):	no./sec
Applied voltage (peak):	70 kV per field	Proposed power supply:	
		Type rectifiers:	
		Number of Transformers:	

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 a centrifuge for solids removal.

34. Have you included ***Electrostatic Precipitator Control Device*** in the Emissions Points Data Summary Sheet?

35. **Proposed Monitoring, Recordkeeping, Reporting, and Testing**
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.

MONITORING: WESP voltage is measured using a voltmeter. WESP shall have at least 4 of 6 fields in operation at all times. 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 and corrective action shall be taken. The parameter is recorded as a 6-minute average.	RECORDKEEPING: Maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. The voltage measured across the WESP (4130-00-10) shall be recorded as a 6-minute average and records shall be maintained. Instances of alarm and corrective action shall be recorded.
REPORTING: For CAM, monitoring reports shall be submitted to the Director: Semi-annual monitoring reports. The company will report any control equipment malfunctions, emission limit or opacity deviations.	TESTING: Visual Emission checks will be conducted periodically as required.

MONITORING:	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.
RECORDKEEPING:	Please describe the proposed recordkeeping that will accompany the monitoring.
REPORTING:	Please describe any proposed emissions testing for this process equipment on air pollution control device.
TESTING:	Please describe any proposed emissions testing for this process equipment on air pollution control device.

36. Manufacturer's Guaranteed Capture Efficiency for each air pollutant.
Particulate Matter (PM) > 99%

37. Manufacturer's Guaranteed Control Efficiency for each air pollutant.
Particulate Matter (PM) 80%

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.

LDX Solutions supplies state-of-the-art clean air technologies to industry with a complete line of Geoenergy® technologies. This includes the GeoTherm® II RTO, the E-Tube® Wet ESP, and wet scrubber systems. Since 1984, the Geoenergy technologies have solved difficult air emission control issues, while meeting demanding air quality regulations with unmatched availability and low operating costs.

For complete engineering, project management and construction services, as well as comprehensive aftermarket service and spare parts supply, contact LDX Solutions today.

LDX Solutions

www.LDXsolutions.com

Atlanta Office

60 Chastain Center Blvd, Ste 60
Kennesaw, GA 30144 USA

770-429-5575

Seattle Office

8271 154th Ave. NE, Ste 250
Redmond, WA 98052 USA

425-283-5070

We are a Global Supplier of Clean Air Technologies

Our experienced staff designs engineered systems, under the Dustex® and Geoenergy® brands, that control Particulate Matter, Heavy Metals, Acid Gases, VOCs (Volatile Organic Compounds), and HAPs (Hazard Air Pollutants).

Our Technologies Include:

- GeoTherm® Regenerative Thermal Oxidizer (RTO)
- Circulating Dry Scrubber (CDS)
- Fabric Filter Dust Collector (Baghouse)
- Geocat® Regenerative Catalytic Oxidizer (RCO)
- Activated Carbon (ACI) & Dry Sorbent Injection (DSI) Systems
- SCR/SNCR
- Air-to-Air Heat Exchanger
- Cyclone
- Wet Scrubber
- E-tube® Wet Electrostatic Precipitator (WESP)

Lundberg®	Dustex®	Geoenergy®

GEOENERGY® E-TUBE® WET ESP

WET ELECTROSTATIC PRECIPITATOR

The Technology Choice For Fine Particle Collection

The collection of fine particulate is often one of the most difficult environmental control problems faced by industry. These sub-micron particles present a significant threat to human health and are one of the leading causes of visibility degradation. Thus, there is increasing regulatory pressure to reduce the emission of these particles to the environment. Industrial operators are looking for technologies that can meet this challenge at reasonable capital and operating costs.

The E-Tube® Wet Electrostatic Precipitator (Wet ESP) is just such a technology. Developed by Geoenergy® International Corporation and now part of the LDX Solutions family of emission control products, E-Tube® Wet ESPs have been successfully applied to hundreds of tough particulate control applications around the world. Presently, over 15 million CFM of emissions are being treated with E-Tube® Wet ESPs.

TYPICAL INSTALLATIONS

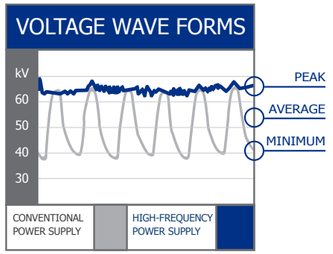
- Biomass-Fired Boilers
- Wood Dryers and Press Vents in the Panelboard and Pellet Industries
- Insulation Manufacturing
- Fiberglass/Mineral Wool Forming and Curing Operations
- Clean Room
- Mining Ore Drying
- Sewage Sludge Incinerators
- Hazardous Waste Incinerators
- Food Processing
- NGG Incineration
- Fine Particle Source Process Application
- Refinery FCCU
- Semiconductor Fabrication

GEOENERGY® E-TUBE® WET ESP

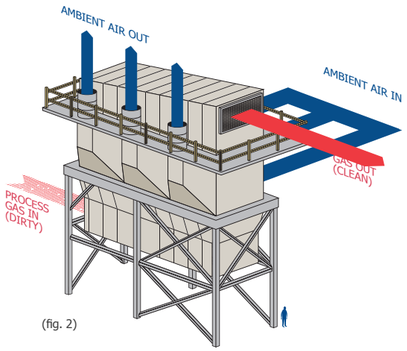
Advanced Technology Means Top Performance

The basic E-Tube® design features a number of technologies that ensure the best particle collection performance and ease of operability. Each of these has been proven in full-scale operation at many installations.

In addition, each E-Tube® project is custom designed to fit the requirement of a particular installation. This includes inlet/outlet ductwork, support and access facilities and integrated water recycling and treatment systems. Finally, each E-Tube® project, whether it is an equipment-only project or a complete turnkey installation, is supported by the entire LDX Solutions' engineering and project management team.



(fig. 1)



(fig. 2)

High-Frequency Transformer-Rectifier Sets

The Geoenergy® design, utilizes high-frequency transformer rectifiers (TR sets), to maximize the total electric field, and reduce energy consumption. This provides greater preformance than traditional 60 Hertz designs. (See fig.1)

External Tube Cooling

Improves performance and reduces water consumption because tubes are cooled with external air, allowing for natural condensation to collect on the collection tube walls, aiding in irrigation. (See fig. 2)

SPHERE™ Adjust Hardware

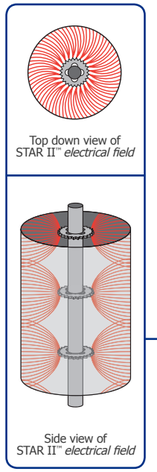
Lowers installation and maintenance costs through our unique one-bolt design. It also eliminates the requirement for a lower alignment frame, simplifying assembly and upkeep. (See fig. 3.2)

STAR II™ Electrode Design

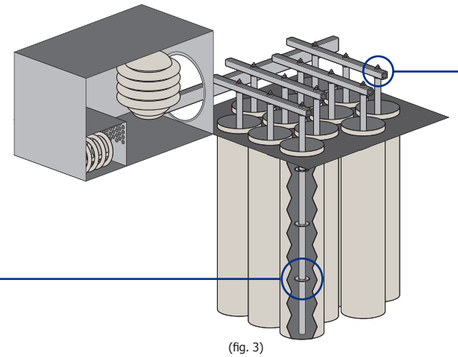
Maximizes electrical field and secondary current output through unique shape and design, enhancing efficiency and reducing Wet ESP size requirements. (See fig. 3.1)

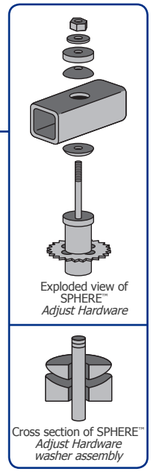
The Geoenergy® Wet ESP has been Deployed in Hundreds of Facilities

Facilities including sixteen installations in the last four years, all of which meet the strict emission requirements. Since its original design in 1984, the E-Tube® Wet ESP has been steadily refined and perfected, taking advantage of improvements in materials and technologies and rising to meet ever more stringent emission control standards.



(fig. 3.1)


(fig. 3)



(fig. 3.2)

Circular E-Tube Design

Increases efficiency, lowers operating costs and reduces footprint by maximizing exposure to the electrical field while reducing corrosion common in hexagonal or square designs. (See fig. 3)

The LDX Solutions Difference

For over 80 years, our engineers have been proud to analytically apply technologies to industry and helping our clients find solutions and adapt to changing technologies and emissions requirements. Today, we continue that tradition, offering complete engineering, project management and construction services, as well as comprehensive aftermarket service and spare parts supply.

30 YEARS OF LEADERSHIP AND INNOVATION

1984 1st Wet ESP on veneer dryer

DESIGNATED BACT BY OREGON DEQ

1988 1st Wet ESP on particleboard dryer

1995 Louisiana Pacific selects E-Tube® units for all northern division OSB mills

BOILER MACT I

2004 1st Boiler MACT compliant unit

2006 World's largest OSB mill installs E-Tube® units

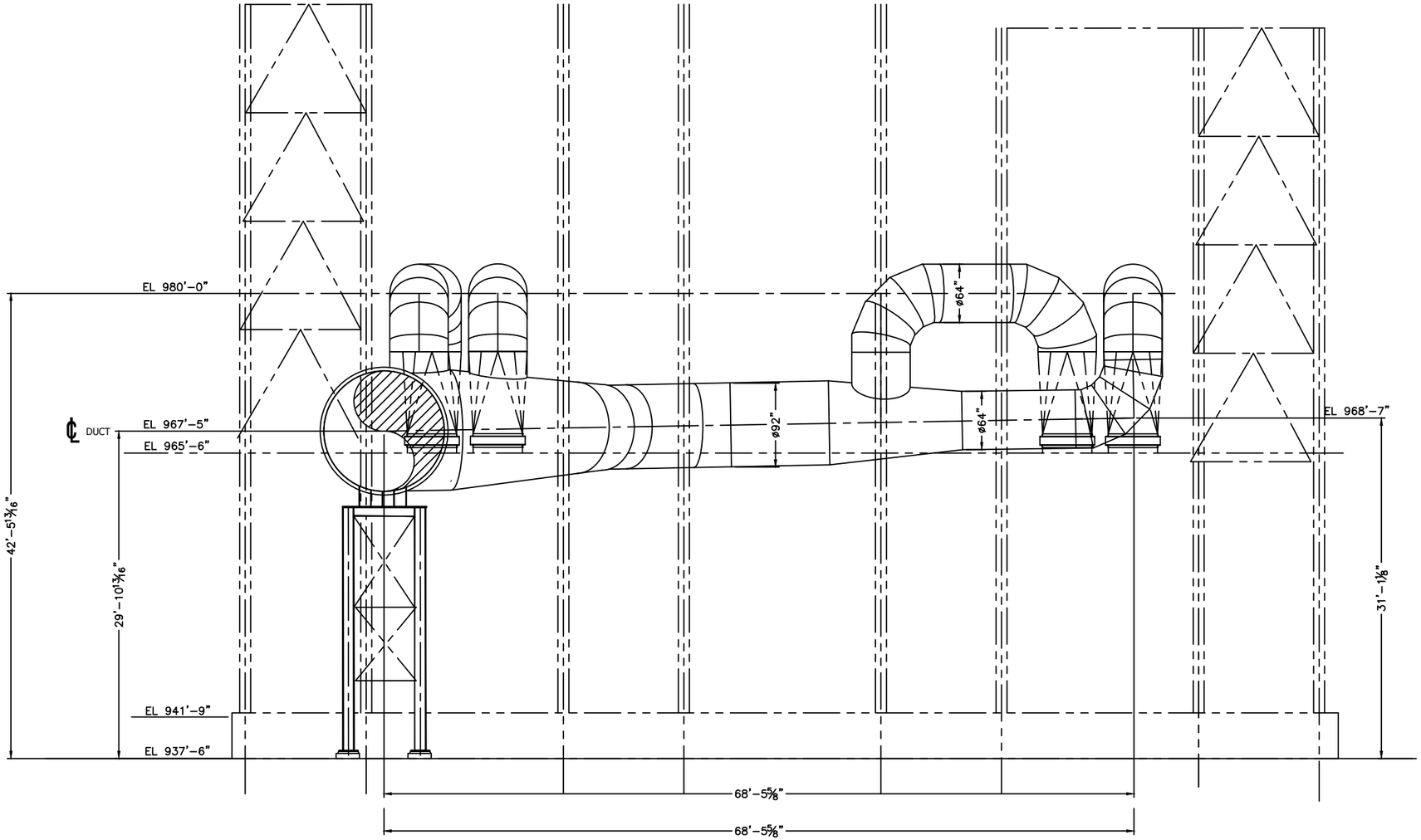
2010 World's largest pellet mill installs E-Tube® units

BOILER MACT II

2013 IP selects E-Tube® Wet ESPs for Boiler MACT compliance

Contact LDX Solutions today to learn more about our Geoenergy® E-Tube® Wet ESP and other emission control solutions.

Call 770-429-5575 or email mail@LDXsolutions.com



VIEW C (S1)

ELEVATION VIEW

MODEL 1013-1584 E-TUBE® WET ESP

SCALE: 1:64

PRELIMINARY

DATE 08/17/22 PER AJS

REV	REV DESCRIPTION	BY	DATE	CHK	DATE
REVISION HISTORY					

MODEL 1013-1584 E-TUBE® WET ESP
DUCT ELEVATION VIEW
DIMENSION DRAWING

DRAWN BY: AJS	CHECKED BY:	APPROVED BY:
DATE: 07/08/22	DATE:	DATE:

LDX SOLUTIONS

WEYERHAEUSER CORP
WESTON, WV
P-223010

SCALE:	DRAWING NUMBER	SHEET	REV.
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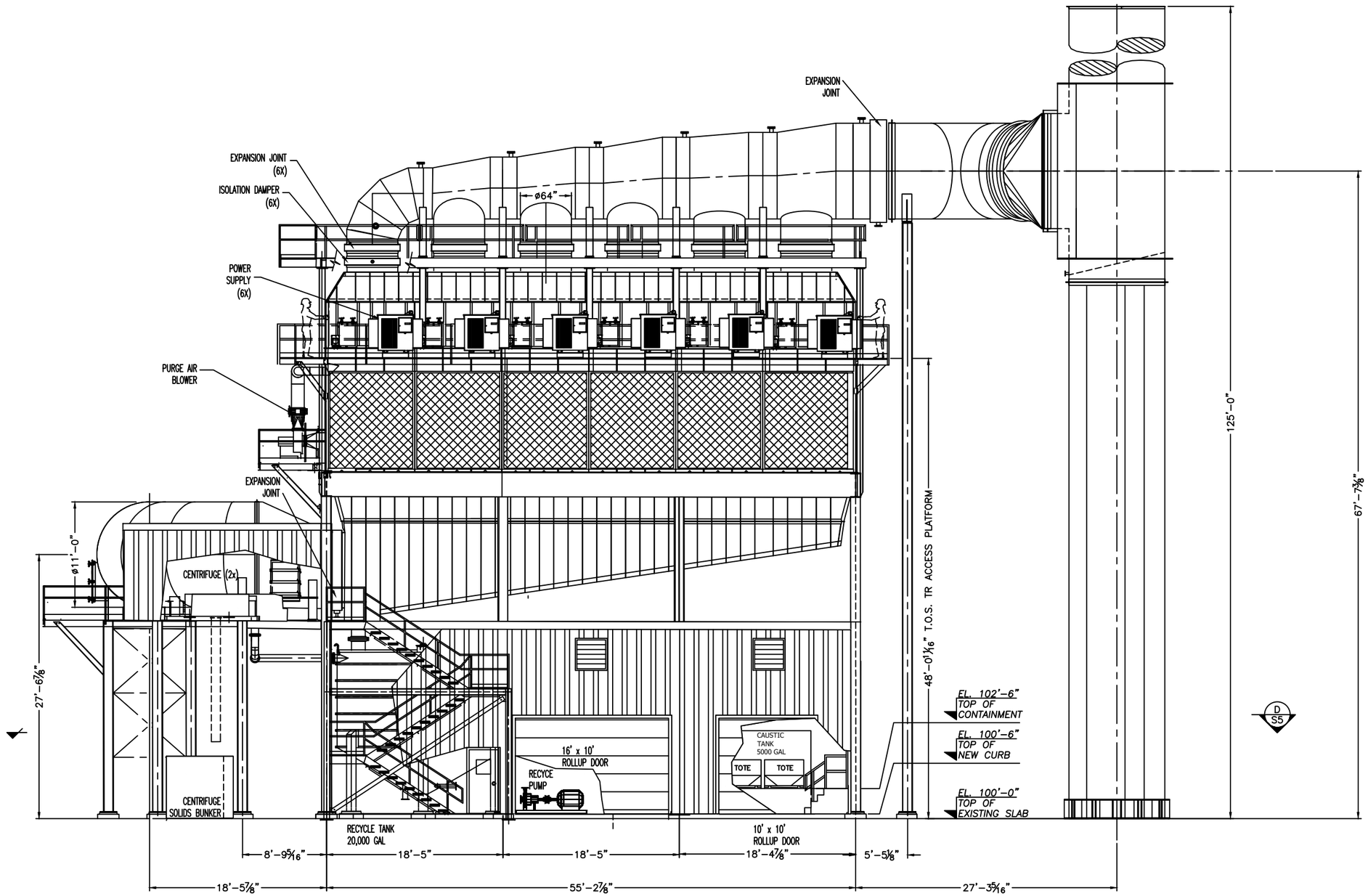

VIEW B S1

ELEVATION VIEW

MODEL 1013-1584 E-TUBE WET® ESP

SCALE: 1:64

PRELIMINARY

DATE 08/17/22 PER AJS

REV	REV DESCRIPTION	BY	DATE	CHK	DATE
REVISION HISTORY					

MODEL 1013-1584 E-TUBE® WET ESP
ELEVATION VIEW
DIMENSION DRAWING

DRAWN BY:	CHECKED BY:	APPROVED BY:
AJS		
DATE: 07/08/22	DATE:	DATE:

LDX SOLUTIONS

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SCALE:	DRAWING NUMBER	SHEET	REV.
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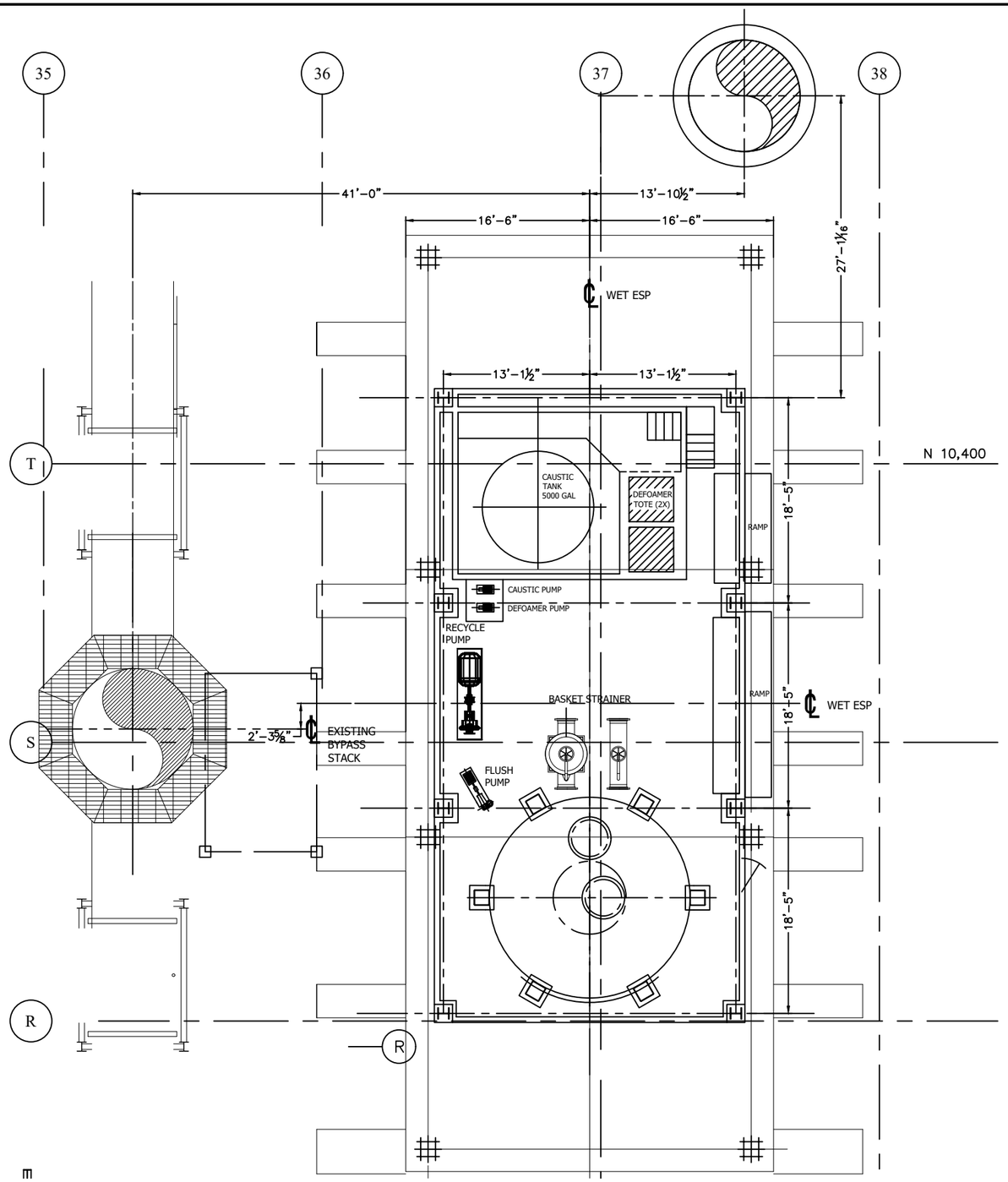

SECTION VIEW
MODEL 1013-1584 E-TUBE® WET ESP
SCALE: 1:64

D
S5

PRELIMINARY
DATE 08/17/22 PER AJS

REV	REV DESCRIPTION	BY	DATE	CHK	DATE
REVISION HISTORY					

MODEL 1013-1584 E-TUBE® WET ESP
PLAN VIEW
DIMENSION DRAWING

DRAWN BY:	CHECKED BY:	APPROVED BY:
AJS		
DATE: 07/08/22	DATE:	DATE:

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WESTON, WV
P-223010

SCALE:	DRAWING NUMBER	SHEET	REV.
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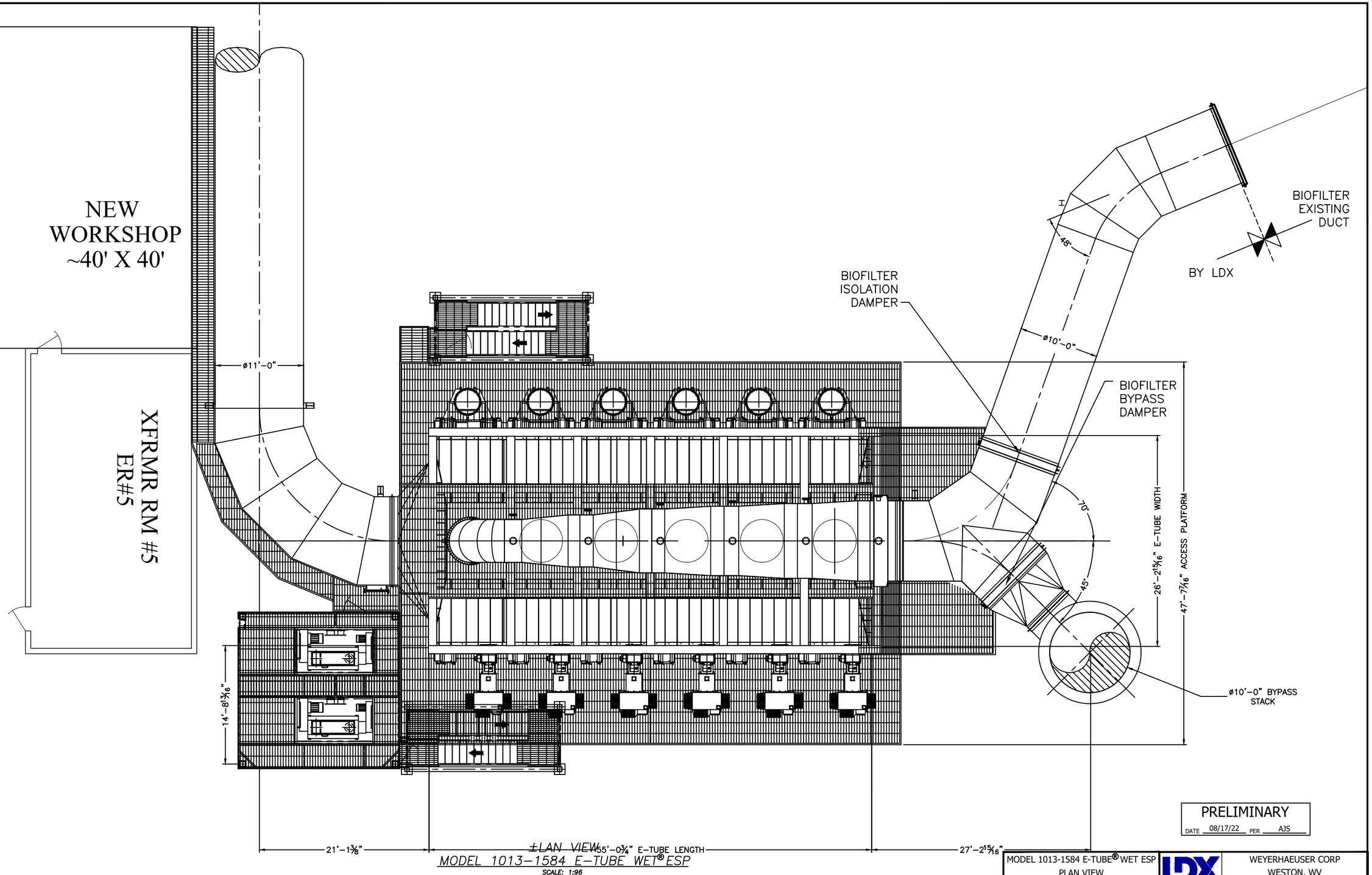

PLAN VIEW
MODEL 1013-1584 E-TUBE® WET ESP
SCALE: 1:96

PRELIMINARY
DATE 08/17/22 PER AJS

REV	REV DESCRIPTION	BY	DATE	CHK	DATE
REVISION HISTORY					

MODEL 1013-1584 E-TUBE® WET ESP PLAN VIEW DIMENSION DRAWING		
DRAWN BY: AJS	CHECKED BY:	APPROVED BY:
DATE: 07/08/22	DATE:	DATE:

LDX SOLUTIONS

WEYERHAEUSER CORP WESTON, WV P-223010			
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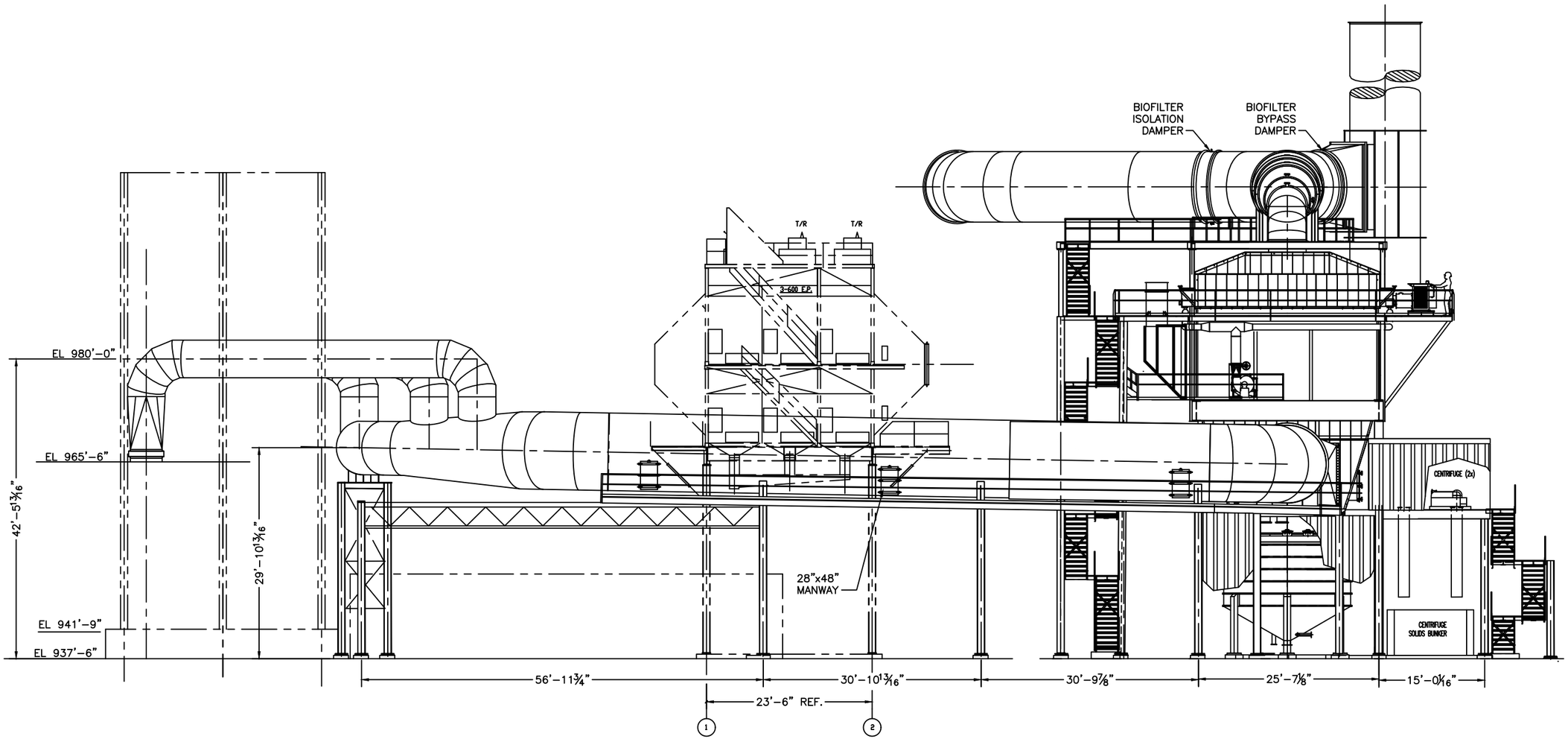


VIEW A S1

ELEVATION VIEW

MODEL 1013-1584 E-TUBE® WET ESP

SCALE: 1:96

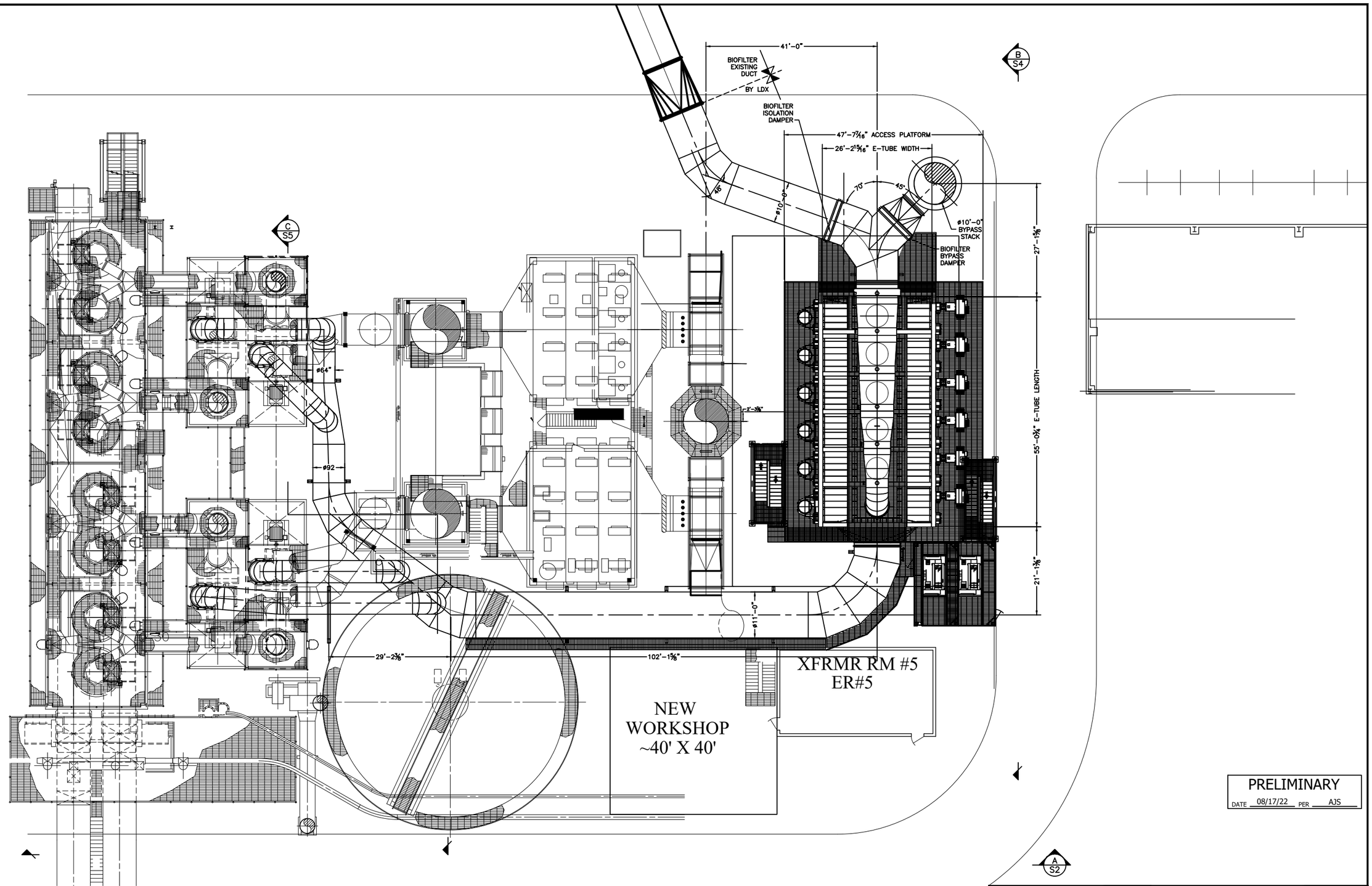
PRELIMINARY

DATE 08/17/22 PER AJS

REV	REV DESCRIPTION	BY	DATE	CHK	DATE

REVISION HISTORY

MODEL 1013-1584 E-TUBE® WET ESP SITE ELEVATION VIEW A-A DIMENSION DRAWING			LDX SOLUTIONS	WEYERHAEUSER CORP WESTON, WV P-223010		
DRAWN BY: AJS	CHECKED BY:	APPROVED BY:	SCALE:	DRAWING NUMBER	SHEET	REV.
DATE: 07/08/22	DATE:	DATE:	1:96	AL- 223010-W021-P01	2/6	0



SITE PLAN VIEW
MODEL 1013-1584 E-TUBE® WET ESP
SCALE: 1:128

PRELIMINARY
DATE 08/17/22 PER AJS

REV	REV DESCRIPTION	BY	DATE	CHK	DATE
REVISION HISTORY					

MODEL 1013-1584 E-TUBE® WET ESP
SITE PLAN
DIMENSION DRAWING

LDX SOLUTIONS

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WESTON, WV
P-223010

DRAWN BY:	CHECKED BY:	APPROVED BY:
AJS		
DATE: 07/08/22	DATE:	DATE:

SCALE:	DRAWING NUMBER	SHEET	REV.
1:128	AL- 223010-W021-P01	1/6	0

ATTACHMENT N

SUPPORTING EMISSIONS CALCULATIONS

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

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

Emission Point ID	Emision 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
23	Main Stack	96.3	221.6	79.4	79.4	79.4	17.9	145.5	0.03	60.3
21	RCDME (Biofilter Offline)	--	--	--	--	--	--	4.36	--	1.78
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	0.006	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)		98.7	222.9	95.4	95.3	87.7	17.9	181.8	0.03	67.8
Title V Allowable Emissions Proposed (tpy)		229.0	249.0	95.4	95.4	87.8	17.9	249.0	0.03	67.8

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 NOx Emissions from Main Stack #23:	221.6	tpy
Other:	1.24	tpy
NOx limit to avoid PSD:	249	tpy
Total NOx allowed from Main Stack:	247.76	tpy
PSD Compliance Margin	26.12	tpy

Estimated VOC Emissions from 1-9, 21,& 23:	172.1	tpy
Other:	5.7	tpy
VOC limit to avoid PSD:	249	tpy
Total VOC allowed 1-9, 21,& 23: :	243.3	tpy
PSD Compliance Margin	71.20	tpy

Estimated CO Emissions from Main Stack #23:	96.3	tpy
Other:	2.4	tpy
CO limit to avoid PSD:	229	tpy
Total CO allowed from Main Stack:	226.6	tpy
PSD Compliance Margin	130.3	tpy

Facility Wide HAP Totals for R13-1761L

Pollutants	Updated 2023	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
Xylenes	1.96	Main Stack + Press Bypass
HAPs	66.01	Total

Note: since there is no HAP control reflected by biofilter RCDME is reflected within the operating hours of the Main Stack

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

Table B-2: Flaking and Screening

Emission Unit: **Flaking and Screening System (ID No. 1S)**
Flaking and screening system contains 2 flakers, 27 conveyor pickups, 6 green screens and one hog and silk screen.
Control Device: **Bagfilter (ID No. 4313-00-10)**
Emission Point: **ID No. 1**

Potential Process Throughput:

Material Processing Rate:	100	lb/hr (green)
	50	lb/hr (oven dry)
Dry/Green Wood Ratio:	0.5	lb/lb
Baghouse Contol Efficiency[3]:	99.99%	
Air Flow Rate:	65,450	ACFM
Operation:	8,760	hr/yr

Potential Emissions Summary:

Criteria Compounds	Emission Factor	Reference	Controlled Emissions	
			(lb/hr)	(ton/yr)
PM	100 lb/hr	1	0.010	0.044
PM-10	100 lb/hr	1	0.010	0.044
PM-2.5	45 lb/hr	4	0.0045	0.0197
VOC	0.04392 lb/ODT	2	0.001	0.005

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.
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-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 Contol Efficiency[3]:	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.

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 Contol Efficiency[3]:	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.

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 Contol Efficiency[3]:	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.

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 Contol Efficiency[3]:	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.

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 Contol Efficiency[3]:	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.

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 Contol Efficiency[3]:	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	Emission Factor	Control	Reference	Controlled Emissions		Uncontrolled Emissions	
Pollutant		Efficiency		(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

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. 4130-00-10)**
Biofilter (ID Nos. 4800-00-10)
Emission Point: **ID No. 23**

Main Stack (ID No. 23) Potential Emissions Summary:

Criteria Compound (ton/yr)	Energy Cells - Wood Combustion	Wet ESP Stack Test		Main Stack (ID No. 23) Uncontrolled Emission Rate[1]
CO [2]	-	96.31		96.3 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 Biofilter Control For Methanol 0.00%

Hazardous Air Pollutant	Energy Cells - Wood Combustion (lb/hr)	Wet ESP Stack Test (lb/hr)		Main Stack (ID No. 23) Uncontrolled Emission Rate[1] (lb/hr)	(tpy)	Main Stack (ID No. 23) Controlled Emission Rate[1] (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

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. 4130-00-10)**
Biofilter (ID Nos. 4800-00-10)
Emission Point: **ID No. 23**

Main Stack (ID No. 23) Potential Emissions Summary (continued):

Hazardous Air Pollutant	Energy Cells - Wood Combustion (lb/hr)	Wet ESP Stack Test (lb/hr)		Main Stack (ID No. 23) Uncontrolled Emission Rate[1] (lb/hr)	(tpy)	Main Stack (ID No. 23) 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 23) 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 replaced by a biofilter RCO data deleted from column F since RCO has been removed.
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. 4130-00-10)**
Biofilter (ID Nos. 4800-00-10)
Emission Point: **ID No. 23**

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	0.256 lb/MSF	3	40.66	96.3
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
SO2	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. 4130-00-10)**
Biofilter (ID Nos. 4800-00-10)
Emission Point: **ID No. 23**

Potential Emissions Summary (continued): [1]

Hazardous Air Pollutant	Hourly Emission Factor	Reference	Annual Emission Factor	Reference	Uncontrolled Emissions (lb/hr)	Uncontrolled Emissions (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 (lb/hr)**	**Controlled (lb/hr)**		**Uncontrolled (ton/yr)**	**Controlled (ton/yr)**
Methanol (lb/hr):	10.49	10.49	Methanol (tpy):	31.49	31.49
Methanol as propane (lb/hr):	4.81	4.81	Methanol as propane (tpy):	14.43	14.43
Methanol Response Factor:	65%	65%		65%	65%
Methanol Adjustment as propane (lb/hr):	3.13	3.13	Methanol Adjustment as propane (tpy):	9.38	9.38
Total WPP1 VOC(lb/hr)[4]:	**59.1**	**48.60**	**Total WPP1 VOC(tpy)[4]:**	**145.5**	**145.49**
Total VOC as Propane (lb/hr):	**47**	**47.17**	Total VOC as Propane (tpy)	**113**	**113.08**
Total HAP (lb/hr)	**26**	**26.21**	Total HAP	**59**	**59.29**

References:

1. 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. Uncontrolled values are without biofilter control.
2. Emission factor based on stack testing conducted on the existing Wet ESP. Emission factor represents the 95th % Confidence Level.
3. Emission factor based on stack testing conducted on the existing Wet ESP. Emission factor represents the average of test runs.
4. 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.
5. Reportable Compound Estimating Guide OSB Mills, 2002, prepared by Weyerhaeuser Environmental Technology and Science. Emission factors for direct wood-fired OSB dryers.
6. Phenol resulted in non-detect on all runs and the detection limit is less than 1 ppm.
7. 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.
8. 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.

Table B-14: Routine Control Device Maintenance Exemption (RCDME)

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. 4130-00-10)**
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:	263	hr/yr

Potential Emissions Summary: [1]

Criteria Compounds	Hourly Emission Factor	Reference	Annual Emission Factor	Reference	Uncontrolled Emissions	
					(lb/hr)	(ton/yr)
VOC (as propane)	0.502 lb/MSF	2, 4	0.300 lb/MSF	3	47	3

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	0.147
Acrolein	9.88E-03 lb/MSF	2	3.21E-03 lb/MSF	3	0.929	0.036
Arsenic	1.05E-05 lb/MSF	2	6.09E-06 lb/MSF	3	0.001	0.000
Benzene	6.93E-04 lb/MSF	2	2.97E-04 lb/MSF	3	0.065	0.003
Beryllium	3.63E-07 lb/MSF	2	1.49E-07 lb/MSF	3	3.41E-05	1.68E-06
Cadmium	2.37E-05 lb/MSF	2	1.15E-05 lb/MSF	3	0.002	0.000
Chlorine	2.11E-03 lb/MSF	2	1.01E-03 lb/MSF	3	0.199	0.011
Chromium	1.16E-04 lb/MSF	2	4.52E-05 lb/MSF	3	0.011	0.001
Cumene	5.04E-02 lb/MSF	2	1.50E-02 lb/MSF	3	4.739	0.170
Dichloromethane	1.54E-03 lb/MSF	2	5.73E-04 lb/MSF	3	0.144	0.006
Formaldehyde	4.84E-02 lb/MSF	2	2.73E-02 lb/MSF	3	4.552	0.309
Hexane	2.74E-03 lb/MSF	2	1.00E-03 lb/MSF	3	0.258	0.011
Hydrogen Chloride	4.82E-03 lb/MSF	2	2.82E-03 lb/MSF	3	0.453	0.032
Lead	1.24E-04 lb/MSF	2	7.90E-05 lb/MSF	3	0.012	0.001
Manganese	1.95E-03 lb/MSF	2	4.72E-04 lb/MSF	3	0.183	0.005
MDI	2.51E-04 lb/MSF	2	7.18E-05 lb/MSF	3	0.024	0.001
Methanol	1.12E-01 lb/MSF	2	8.36E-02 lb/MSF	3	10.49	0.94

Table B-14: Routine Control Device Maintenance Exemption (RCDME)

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. 4130-00-10)**
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)	Uncontrolled Emissions (ton/yr)
Methyl isobutyl ketone	1.47E-03 lb/MSF	2	7.52E-04 lb/MSF	3	0.138	0.009
Naphthalene	2.29E-07 lb/ODT	5	2.29E-07 lb/ODT	5	1.28E-05	1.69E-06
Nickel	4.32E-05 lb/MSF	2	1.82E-05 lb/MSF	3	0.004	0.000
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	2.38E-06
Propionaldehyde	1.06E-02 lb/MSF	2	2.21E-03 lb/MSF	3	0.999	0.025
Toluene	1.72E-03 lb/MSF	2	6.29E-04 lb/MSF	3	0.161	0.007
Xylenes	8.00E-03 lb/ODT	5	8.00E-03 lb/ODT	5	0.448	0.059
Total MACT HAP	- -	-	- -	-	19.37	1.46
Total HAP	- -	-	- -	-	26.21	1.78

Methanol Adjustment for VOC calculation

Methanol as propane (lb/hr):	4.81	Methanol as propane (tpy):	0.43
Methanol Response Factor:	65%		
Methanol Adjusted as propane (lb/hr):	3.13	Methanol Adjusted as propane (tpy):	0.28
Total WPP1 VOC(lb/hr)[4]:	**59.1**	**Total WPP1 VOC(tpy)[4]:**	**4.4**

References:

1. 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. Uncontrolled values are without RCO control.
2. Emission factor based on stack testing conducted on the existing Wet ESP. Emission factor represents the 95th % Confidence Level.
3. Emission factor based on stack testing conducted on the existing Wet ESP. Emission factor represents the average of test runs.
4. 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.
5. Reportable Compound Estimating Guide OSB Mills, 2002, prepared by Weyerhaeuser Environmental Technology and Science. Emission factors for direct wood-fired OSB dryers.
6. Phenol resulted in non-detect on all runs and the detection limit is less than 1 ppm.
7. VOC annual emission factor based on stack testing of the RCO, June 11, 2009. Stack testing included contributions from strand drying, direct wood-firing, and the press. Emission factor represents the average of test runs.
8. 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.

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)	Emission Rate [1] (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)	Emission Rate [1] (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:

1. Hourly emission rates are based on the Maximum Hourly OSB Production. Annual emission rates are based on the Average Annual OSB Production.
2. Reportable Compound Estimating Guide OSB Mills, 2002, prepared by Weyerhaeuser Environmental Technology and Science. Emission factors represent average uncontrolled values.
3. Emission factor based on stack testing conducted on the Press. Emission factor represents the 95th % Confidence Level.
4. Emission factor based on stack testing conducted on the Press. Emission factor represents the average of test runs.
5. VOC emission factors are the sum of VOC classified HAP compounds.
6. 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.

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:	0.015	% 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	1.21E-04 lb/hp-hr	1	0.12	0.006
VOC	6.46E-04 lb/hp-hr	1	0.66	0.033
Sulfuric Acid Mist	2.63E-04 lb/MMBtu	3	1.89E-03	9.46E-05

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 SO_3 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 SO_3 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.

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.

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 Controlled Emission Rate		Paint Booth No. 1 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 Controlled Emission Rate		Paint Booth No. 2 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 Controlled Emission Rate		Paint Booth No. 3 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.

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.

ATTACHMENT O

MONITORING/RECORDKEEPING/REPORTING/ TESTING PLANS

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

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, 4130-00-10). 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 4 of 6 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 (4130-00-10) 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)

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.

Testing

Visual Emission checks will be conducted periodically as required.

Paint Booth 1 (40A) & Paint Booth 3 (44A):

Monitoring

No changes to monitoring requirements are proposed for the paint booths. Existing Monitoring requirements include:

Operate and maintain filter systems for the purpose of controlling particulate matter released from Paint Booth 1 and 3.

Maintain and operate control device in a manner consistent with safety and good air pollution control practices for minimizing emissions.

Recordkeeping

The company will keep records of the items monitored, and any malfunction or operational shutdown of pollution control equipment during which times excess emissions occur.

Reporting

The company will report any control equipment malfunctions, emission limit or opacity deviations.

Testing

No testing is required but may be performed at the Director’s request.

ATTACHMENT P

PUBLIC NOTICE

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

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 boards 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 an increase in the potential to emit Regulated Air Pollutants as follows: VOCs 3.99 tons/yr and Methanol 28.34 tons/yr.

Startup of operation is planned to begin on or about the 15th day of September, 2023. 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 _____ day of June, 2023.

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

ATTACHMENT Q

CONFIDENTIAL BUSINESS INFORMATION (SEE NOTE)

Not Applicable (N/A)

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

ATTACHMENT R

AUTHORITY FORMS

Not Applicable (N/A)

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

ATTACHMENT S

TITLE V REVISION INFORMATION

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

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:	
☐ SIP	☐ FIP
☒ Minor source NSR (45CSR13)	☐ PSD (45CSR14)
☐ NESHAP (45CSR15)	☐ Nonattainment NSR (45CSR19)
☐ Section 111 NSPS (Subpart(s)_____)	☐ Section 112(d) MACT standards (Subpart(s) DDDD)
☐ Section 112(g) Case-by-case MACT	☐ 112(r) RMP
☐ Section 112(i) Early reduction of HAP	☐ Consumer/commercial prod. reqts., section 183(e)
☐ Section 129 Standards/Reqts.	☐ Stratospheric ozone (Title VI)
☐ Tank vessel reqt., section 183(f)	☐ Emissions cap 45CSR§30-2.6.1
☐ NAAQS, increments or visibility (temp. sources)	☐ 45CSR27 State enforceable only rule
☐ 45CSR4 State enforceable only rule	☐ Acid Rain (Title IV, 45CSR33)
☐ Emissions Trading and Banking (45CSR28)	☒ Compliance Assurance Monitoring (40CFR64) (1)
☐ NO_x Budget Trading Program Non-EGUs (45CSR1)	☐ NO_x Budget Trading Program EGUs (45CSR26)
(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:	

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.
☐ **Permit Shield Requested** *(not applicable to Minor Modifications)*

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.

Regarding the Wet ESP: The emission point ID, the emission unit name and/or the plurality of the Wet ESP reference will need updated in the Table of Contents, the Equipment Table, and in sections 4.0, 4.1.1., 4.1.2., 4.1.3., 4.1.14., 4.1.15., 4.1.18., 4.1.24., 4.1.25., 4.2.7., 4.2.8., 4.2.9., 4.4.9., 4.4.11., 4.5.1.,

Regarding Paint Booth 1 & 3: The emission point ID will need updated in the Emission Limits Table of section 4.1.2., the paragraph following the table, 4.1.14., 4.1.15., 4.2.7.,

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
R13-1761K	05-24-2021	
R30-00700016-2018(SM01)	5-7-2019	
	/ /	

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
Methanol	26.95 tpy
VOC	27.95 tpy
Formaldehyde	-0.43 tpy
Cumene	-0.32
CO	-0.84

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):	_____ *(Please use blue ink)*	Date:	____ / ____ / ____ *(Please use blue ink)*
Named (typed):		Title:	

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

☐	Compliance Assurance Monitoring Form(s)
☒	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	Wet ESP	R30-007-00016; 22.41 lb/hr 98.2 tpy	Monthly Visible Inspection of Wet ESP Monthly Voltage of each online field
EXAMPLE 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 desig 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 MONITORING APPROACH used to measure the indicators:		Measure with a voltmeter	Visual observations of ductwork and control device
[b] Establish the appropriate INDICATOR RANGE or the procedures for establishing the indicator range which provides a reasonable assurance of compliance:		At least 4 field 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 SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA, 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 VERIFICATION PROCEDURES, including manufacturer's recommendations, TO CONFIRM THE OPERATIONAL STATUS of the monitoring:		N/A	N/A
Provide QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES 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 MONITORING FREQUENCY:		Measured continuously	Monthly external inspections
Provide the DATA COLLECTION PROCEDURES that will be used:		Non-SSM periods when voltage falls below 30kV for more than 30 seconds will be documented.	Inspection work order history is maintained
Provide the DATA AVERAGING PERIOD for the purpose of determining whether an excursion or exceedance has occurred:		6 minute 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 ε 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. 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 vender data, the minimum voltage to ensure proper operation is 30 kV and at least 4 field must be in service to ensure adequate emission control.

ATTACHMENT T

MODIFICATION PERMIT APPLICATION FEE

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

Company Name: Weyerhaeuser NR Company
Facility Name: Heaters, WV OSB Mill
Project Description: R13 Application with Title V Modification Request

Attachment – Permit Application Fees

Rule 13 Modification Permit $1,000.00 45CSR22 No Changes to MACT or NSPS	**Total $1,000.00**

SLR International Corporation 8 Capitol Street, Suite 300, Terminal Building Charleston, WV 25301
T: (681) 205-8949 **F:** (681) 205-8969 **www.slrconsulting.com**
Offices throughout USA, UK, Ireland, Canada, Australia, Namibia, and South Africa

TITLE V DRAFT PERMIT LANGUAGE

Application for NSR Permit and Title V Permit Revision

Sutton OSB Mill
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

May 2023

West Virginia Department of Environmental Protection

Harold D. Ward
Cabinet Secretary

Title V Operating Permit Revision

For Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Action Number: SM01 **SIC:** 2493
Name of Permittee: Weyerhaeuser NR Company
Facility Name/Location: Sutton OSB Mill
County: Braxton
Permittee Mailing Address: 3601 Gauley Turnpike, Heaters, VW 26627

Description of Permit Revision: Pursuant to the requirements of Consent Order CO-R34-E-2020-10, R13-1761K incorporated the requirements of paragraphs 6 through 11 of the Consent Order (relating to operation of the Biofilter fan-wheel) into the permit as condition 4.1.10. This significant modification incorporates the requirements of R13-1761K, condition 4.1.10, into the Title V permit.

Title V Permit Information:
Permit Number: R30-00700016-2018
Issued Date: July 23, 2018
Effective Date: August 6, 2018
Expiration Date: July 23, 2023

Directions To Facility: 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.

THIS PERMIT REVISION IS ISSUED IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL ACT (W.VA. CODE §§ 22-5-1 ET SEQ.) AND 45CSR30 - "REQUIREMENTS FOR OPERATING PERMITS." THE PERMITTEE IDENTIFIED AT THE FACILITY ABOVE IS AUTHORIZED TO OPERATE THE STATIONARY SOURCES OF AIR POLLUTANTS IDENTIFIED HEREIN IN ACCORDANCE WITH ALL TERMS AND CONDITIONS OF THIS PERMIT.

Laura M. Crowder

Laura M. Crowder
Digitally signed by: Laura M. Crowder
DN: CN = Laura M. Crowder email = Laura.M.Crowder@wv.gov C = US O = West Virginia Department of Environmental Protection OU = Division of Air Quality
Date: 2021.09.07 12:47:59 -04'00'

Laura M. Crowder
Director, Division of Air Quality

September 7, 2021
Date Issued

Permit Number: **R30-00700016-2018**
Permittee: **Weyerhaeuser NR Company**
Facility Name: **Sutton OSB Mill**
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
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 45CSR13, 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.

Table of Contents

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

1.1. Emission Units

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	65,450 ACFM 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	53,400 ACFM 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	43,100 ACFM 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	21,200 ACFM 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	30,970 ACFM 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	44,800 ACFM 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	13,200 ACFM 8,550 lb/hr (oven dry)	Fabric Filter 4397-00-10
3816-00-11	10	Energy Cell No. 1 Auxiliary Burner – Idle Run(1)	1996	29 MMBTU/hr	Multi-Clone No.1 3820-00-10

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
3800-00-10	10	Energy Cell No. 1 - Idle Run(1)	1996	<30 MMBTU/hr	Multi-Clone No.1 3820-00-10
3816-00-11	21A 23	Energy Cell No. 1 Auxiliary Burner – Normal Run(1)	1996	29 MMBTU/hr	~~Wet ESP No. 1 4110-00-10~~ WESP 4130-00-10 Biofilter 4800-00-10
3800-00-10	21A 23	Energy Cell No. 1 – Normal Run(1)	1996	175 MMBTU/hr	
3916-00-11	11	Energy Cell No. 2 Auxiliary Burner – Idle Run(1)	1996	29 MMBTU/hr	Multi-Clone No.2 3920-00-10
3900-00-10	11	Energy Cell No. 2 - Idle Run(1)	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	~~Wet ESP No. 2 4120-00-10~~ WESP 4130-00-10 Biofilter 4800-00-10
3900-00-10	21A 23	Energy Cell No. 2 – Normal Run(1)	1996	175 MMBTU/hr	
3130-00-11	21A 23	Auxiliary Burner – Dryer No. 1	1996	55 MMBTU/hr	~~Wet ESP No. 1 4110-00-10~~ WESP 4130-00-10 Biofilter 4800-00-10
3230-00-11	21A 23	Auxiliary Burner – Dryer No. 2	1996	55 MMBTU/hr	
3330-00-11	21A 23	Auxiliary Burner – Dryer No. 3	1996	55 MMBTU/hr	~~Wet ESP No.2 4120-00-10~~ WESP 4130-00-10 Biofilter 4800-00-10
3430-00-11	21A 23	Auxiliary Burner – Dryer No. 4	1996	55 MMBTU/hr	
4700-00-10	21A 23	OSB Press Vent Exhaust	1996	60.4 Ton/hr	~~Wet ESP No. 1 4110-00-10 Wet ESP No. 2 4120-00-10~~ WESP 4130-00-10 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	1030 hp	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

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
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
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 ~~and 41~~	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 ~~and 45~~	Paint Booth No. 3	2002	26 Gal./hr	Filters

(1) Energy Cells are authorized to operate in the following scenarios: During "normal operations," gases will be vented through Wet ESPs and Biofilter and out Emission Point 23. During RCDME, gases will be vented through Wet ESPs 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 Wet ESPs and out Emission Point 21

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
R13-1761KJ	~~October 18, 2018~~ May 24, 2021

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 such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). 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	**NSPS**	New Source Performance Standards
CBI	Confidential Business Information	**PM**	Particulate Matter
CEM	Continuous Emission Monitor	**PM_{10}**	Particulate Matter less than 10μm in diameter
CES	Certified Emission Statement	**pph**	Pounds per Hour
C.F.R. *or* CFR	Code of Federal Regulations	**ppm**	Parts per Million
CO	Carbon Monoxide	**PSD**	Prevention of Significant Deterioration
C.S.R. *or* CSR	Codes of State Rules	**psi**	Pounds per Square Inch
DAQ	Division of Air Quality	**SIC**	Standard Industrial Classification
DEP	Department of Environmental Protection	**SIP**	State Implementation Plan
FOIA	Freedom of Information Act	**SO_2**	Sulfur Dioxide
HAP	Hazardous Air Pollutant	**TAP**	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	**TPY**	Tons per Year
HP	Horsepower	**TRS**	Total Reduced Sulfur
lbs/hr *or* lb/hr	Pounds per Hour	**TSP**	Total Suspended Particulate
LDAR	Leak Detection and Repair	**USEPA**	United States Environmental Protection Agency
m	Thousand	**UTM**	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	**VEE**	Visual Emissions Evaluation
mm	Million	**VOC**	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
$mmft^3$/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour		
NA *or* N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

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§30-2.39]

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. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

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.
[45CSR§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. and 45CSR38]

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 57th Street SE
Charleston, WV 25304

US EPA:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air Section (3ED21)
1650 Arch Street
Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

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

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[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. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

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. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

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 telefax. 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 75m^3 (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 m^3.

4.0 Source-Specific Requirements [emission point ID(s): 1, 3 – 7, 9 – 11, 21, 23, 24, 27, 31 – 38, and 40 – 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 (41~~1~~3 0-00-10)	80.0
175 MMBTU/hr Energy Cell (3900-00-10)	WESP (41~~2~~3 0-00-10)	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} VOC	0.59 0.01	2.58 0.05
3	Dry Flake Area	Fabric Filter (4333-00-10)	PM_{10} VOC	0.48 0.82	2.11 3.57
4	Mat Trim System	Fabric Filter (4345-00-10)	PM_{10} VOC	0.55 0.82	2.41 3.59
5	Rough Trim System	Fabric Filter (4353-00-10)	PM_{10} VOC	0.57 0.85	2.51 3.74
6	Tongue & Groove and Sawing System	Fabric Filter (4363-00-10)	PM_{10} 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

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
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)	PM_{10}	6.8	9.5
			SO_2	1.0	1.4
			CO	6.0	8.4
			VOC	9.1	12.8
			NO_x	8.0	11.2
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)	Benzene	0.45	0.63
			Hydrochloric Acid	0.22	0.31
			Lead Compounds	0.01	0.01
			Methylene Chloride	0.07	0.10
			Napthalene	0.43	0.60
			POM	0.43	0.60
			Total HAP	2.71	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 ~~Wet ESP No. 1 (4110-00-10)~~ ~~Wet ESP No. 2 (4210-00-10)~~	$PM_{2.5}/PM_{10}/PM$	34.68	N/A[3]
			SO_2	12.26	
			CO	40.66	
			VOC	59.10	
			NO_x	88.23	
			Acetaldehyde	2.40	
			Acrolein	0.93	
			Formaldehyde	4.55	
			Lead Compounds	0.01	
			Methanol	10.49	
			Phenol	0.00	
			Proprionaldehyde	1.00	
			Total HAP	26.21	
23[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 4130-00-10 ~~Wet ESP No. 1 (4110-00-10)~~ ~~Wet ESP No. 2 (4210-00-10)~~ Biofilter (4800-00-10)	$PM_{2.5}/PM_{10}/PM$	34.68	79.40
			SO_2	12.26	17.90
			CO	44.66	225.40
			VOC	59.10	145.5
			NO_x	88.23	246.55
			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	59.29
24	OSB Press (4700-00-10) (Bypass Mode)	N/A	PM_{10}	2.55	0.34
			CO	9.21	2.11
			VOC	36.9	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

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
27	Emergency diesel-fired generator	N/A	PM_{10} SO_2 CO VOC NO_x	0.44 3.1 4.2 0.50 18.2	0.03 0.16 0.21 0.03 0.92
31	Liquid Phenolic Resin Tank No. 1	N/A	VOC	---	0.01
32	Liquid Phenolic Resin Tank No. 2	N/A			
33	Liquid Phenolic Resin Tank No. 3	N/A			
34	Liquid Phenolic Resin Tank No. 4	N/A			
35	MDI Tank No. 1	N/A	VOC	---	---
36	MDI Tank No. 2	N/A			
37	Wax Tank No. 1	N/A	VOC	---	0.01
38	Wax Tank No. 2	N/A			
40A ~~& 41~~	Paint Booth No. 1	Filters			
42 & 43	Paint Booth No. 2	Filters	PM_{10}	0.39	1.71
44A ~~& 45~~	Paint Booth No. 3	Filters	VOC	0.91	3.99
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 (6) as applicable. Although the RCDME Emissions are contributed 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 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.

Compliance with the hourly PM_{10} emission limits for emission points 3, 4, 5, 6, 7, 9, 21A, 23, 24, 40A, ~~41,~~ 42, 43, and 44A, ~~and 45~~ shall streamline compliance with the less stringent hourly particulate matter emission limits of 45CSR§7-4.1. Compliance with the hourly PM_{10} emission limit for emission points 10 and 11 shall streamline compliance with the less stringent 45CSR§2-4.1.b hourly particulate matter emission limit. Compliance with the hourly SO_2 emission limit for emission points 10 and 11 shall streamline compliance with the less stringent 45CSR§10-3.3.f hourly SO_2 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 operating WESP~~s~~ and Biofilter, and emitted from Emission Point 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 operating WESP~~s~~, and emitted from Emission Point 21A.

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 operating WESPs, 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 DDDD, 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. Reserved.

c. 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;

d. Reserved.

e. Reserved.

f. 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 DDDD) 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.

With the exception of times meeting the facility's routine control device maintenance exemption (RCDME) criteria, the permittee shall not bypass control equipment at any time, except as allowed under "Startup, Shutdown, and/or Malfunction" (SSM) events as defined within 40 CFR §63.2. During any SSM event the permittee shall have the general duty to reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. Therefore, the permittee shall maintain a startup, shutdown, and malfunction plan in accordance with 40 CFR §63.6(e)(3). Each of these events shall be reported in accordance with 40 CFR §63.10(d)(5) and thus 4.5.3 of this permit.
[45CSR13, R13-1761, 4.1.7, 45CSR34, 40 C.F.R. §63.2290]

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.
[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, ~~41,~~ 42, 43, 44A, ~~45~~)]

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, ~~41,~~ 42, 43, 44A, ~~and 45~~)]

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. Reserved.

4.1.28. The permittee shall develop a written SSM plan according to 40 C.F.R. §63.6(e)(3).
[45CSR13, R13-1761, 4.1.21; 45CSR34; 40 C.F.R. §63.2250(c)]

4.1.29. The permittee shall abide by the work practice standards associated with Group 1 miscellaneous coating operations by using non-HAP coatings as defined in 40CFR§63.2292.
[45CSR34; 40 C.F.R. §63.2241 and 40 C.F.R. 63, Subpart DDDD, Table 3]

4.1.30. **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, 4.1.22; 45CSR§13-5.10]

4.1.31. **40 CFR 63, Subpart DDDD Add-on Control Systems Compliance Options (Biofilter)**
Except for periods when the mill is operating under the RCDME or during times of SSM, the permittee shall, while using the Biofilter:

a. Limit emissions of total HAP, measured as THC (as carbon), to 20 ppmvd; or

b. Reduce methanol emissions by 90 percent; or

c. Reduce formaldehyde emissions by 90 percent.

[45CSR13, R13-1761, 4.1.19; 45CSR34; 40 C.F.R. §63.2240(b) and Table 1B of 40 CFR 63, Subpart DDDD]

4.1.32. **40 CFR 63, Subpart DDDD Operating Requirements (Biofilters)**
The permittee shall meet the following Biofilter operating requirements:

a. Maintain the 24-hour block Biofilter bed temperature within the range established according to §63.2262(m); or

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

[45CSR13, R13-1761, 4.1.20; 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. The permittee shall meet all applicable Biofilter monitoring requirements pursuant to 40 C.F.R. 63, Subpart DDDD. This shall include Biofilter bed temperature 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 operating hours. For 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(f), 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, 4.2.5., 45CSR34, 40C.F.R.§63.2270]

4.2.6. 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)]

4.2.7. 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, ~~41,~~ 42, 43, 44A, ~~and 45,~~ 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, ~~41,~~ 42, 43, 44A, ~~and 45~~)]

4.2.8. For Wet ESP WESP (4130-00-10) ~~No. 1 (4110-00-10), Wet ESP No. 2 (4120-00-10),~~ 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)]

4.2.9. The permittee shall continuously monitor the voltage of WESP (4130-00-10) ~~and Wet ESP No. 2 (4120-00-10)~~. The voltage on each Wet ESP 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 Wet ESP is not operating. During normal operation, each Wet ESP shall have at least ~~2~~ 4 fields in service and the voltage shall be maintained at or above ~~10~~ 30 kV. If the voltage falls below ~~10~~ 30kV for 30 seconds, an alarm will sound and corrective action shall be taken to return the voltage to a value at or above ~~10~~ 30 kV.
[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 monitor the pressure drop across ~~the Dry Waste System Baghouse (439~~7-00-10) on a daily basis. The pressure drop shall be measured using a differential pressure gauge with a minimum accuracy of ±0.25 inches of H_2O. 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 H_2O or less than 0.2 inches of H_2O, 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 H_2O.
[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. Performance testing shall be in accordance with the following:

a. At the same time as the initial performance test required under 40 C.F.R. 63, Subpart DDDD, the permittee shall conduct, or have conducted, a performance test during "normal mode" as defined under 4.1.3.a.~~2~~ to determine compliance at Emission Point 23 with the hourly emission limits of VOCs and the HAPs targeted by 40 CFR 63, Subpart DDDD;

b. Use of test methods shall be in accordance, where applicable, with 40 CFR 63, Subpart DDDD or in accordance with information contained in an approved test protocol; and

c. Any required performance test shall be in accordance with 3.3.1.

[45CSR13, R13-1761, 4.3.1]

4.3.2. The permittee shall meet all applicable Biofilter testing requirements pursuant to 40 C.F.R. 63, Subpart DDDD. This shall include the repeat Biofilter performance testing as specified in 40 C.F.R. 63 Subpart DDDD Table 7 Row (3) as well as any additional confirmatory testing determined necessary by the Director. **[45CSR13, R13-1761, 4.3.2., 45CSR34, 40 C.F.R. §63.2271(a), 40 C.F.R. 63, subpart DDDD, Table 7 row (3), 45CSR§30-5.1.c.]**

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. (10, 11)
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, 4.4.9 and 4.1.13; 40 C.F.R. §60.48c(g); 45CSR16; 45CSR§2-8.3.c; 45CSR§§2A-7.1.a.1 and 7.1.a.3]

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. Reserved.

b. Reserved.

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

d. Records of performance tests and performance evaluations.

[45CSR13, R13-1761, 4.4.10, 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 4.2.6 and 4.2.7 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 4.2.8 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 Wet ESP WESP (4130-00-10) ~~No. 1 (4110-00-10) and Wet ESP No. 2 (4120-00-10)~~ shall be recorded as a 6-minute 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 Wet ESP WESP ~~No. 1 and Wet ESP No. 2~~ 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 H_2O or less than 0.2 inches of H_2O, 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). *(Wet ESP WESP {4130-00-10} ~~No. 1 {4110-00-10}, Wet ESP No. 2 {4120-00-10}~~, 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 is offline for routine control device maintenance. And, as regards the Biofilter, 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, 4.4.7]

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.

(Wet ESP WESP {4130-00-10} ~~*No. 1 {4110-00-10}, Wet ESP No. 2 {4120-00-10},*~~ *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)-(f). 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)]

4.5.3. The permittee shall submit all startup, shutdown, and malfunction (SSM) notifications and semiannual reports in accordance with 40 CFR §63.6(e)(3) and §63.10(d)(5).
[45CSR34, 40 C.F.R.§63.2290]

4.6. Compliance Plan

4.6.1. None.

5.0 40CFR63, 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, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 5.1.1.a through 5.1.1.c of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs 5.1.1.a through 5.1.1.c of this section, 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 any combination of the purposes 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.

i. 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 and emergency demand response 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(f)(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.

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

Re: Weyerhaeuser NR Company, Heaters WV

1 message

McCumbers, Carrie <carrie.mccumbers@wv.gov> Thu, Jun 22, 2023 at 4:21 PM
To: Stephanie R Mink <stephanie.r.mink@wv.gov>
Cc: Joseph R Kessler <joseph.r.kessler@wv.gov>, Beverly D McKeone <beverly.d.mckeone@wv.gov>, "Robert.A.Mullins@wv.gov" <robert.a.mullins@wv.gov>

Stephanie,

Please assign this significant modification to R.A. as R30-00700016-2018 (SM02).

Thanks,
Carrie

On Thu, Jun 22, 2023 at 2:39 PM Air Quality Permitting, DEP <depairqualitypermitting@wv.gov> wrote:

> Stephanie, Please assign modification R13-1761L, 007-00016 From Weyerhaeuser to Joe Kessler.
>
> Application fee is $3500. Need affidavit.
>
> Carrie, application includes Attachment S.
>
> Bev
>
> ---------- Forwarded message ---------
> From: **Jesse Hanshaw** <jhanshaw@slrconsulting.com>
> Date: Thu, Jun 22, 2023 at 1:49 PM
> Subject: Weyerhaeuser NR Company, Heaters WV
> To: DEPAirQualityPermitting@wv.gov <depairqualitypermitting@wv.gov>
> Cc: Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com>, Krissy Whiting <kwhiting@slrconsulting.com>, Nathaniel Lanham <nlanham@slrconsulting.com>, Ryan Bell <rbell@slrconsulting.com>
>
> Mrs. Mink,
>
> Please find attached the Rule 13 Modification Permit for Weyerhaeuser's Heaters OSB Mill. The modification will be to cover the like kind replacement of the mill's wet electrostatic precipitator. Additional emission corrections and adjustments are also requested to better reflect emissions at the facility.
>
> Once I get the DAQ notice back that the application has been logged I will pay the application fee electronically.

Please let me know if you have any questions or comments.

Thanks,

Jesse

Jesse Hanshaw
Principal Engineer - Air Quality

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

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

Flow Diagram WeyCo

1 message

Jesse Hanshaw <jhanshaw@slrconsulting.com> Wed, Jun 14, 2023 at 1:41 PM
To: Robert A Mullins <robert.a.mullins@wv.gov>

Jesse Hanshaw
Principal Engineer - Air Quality

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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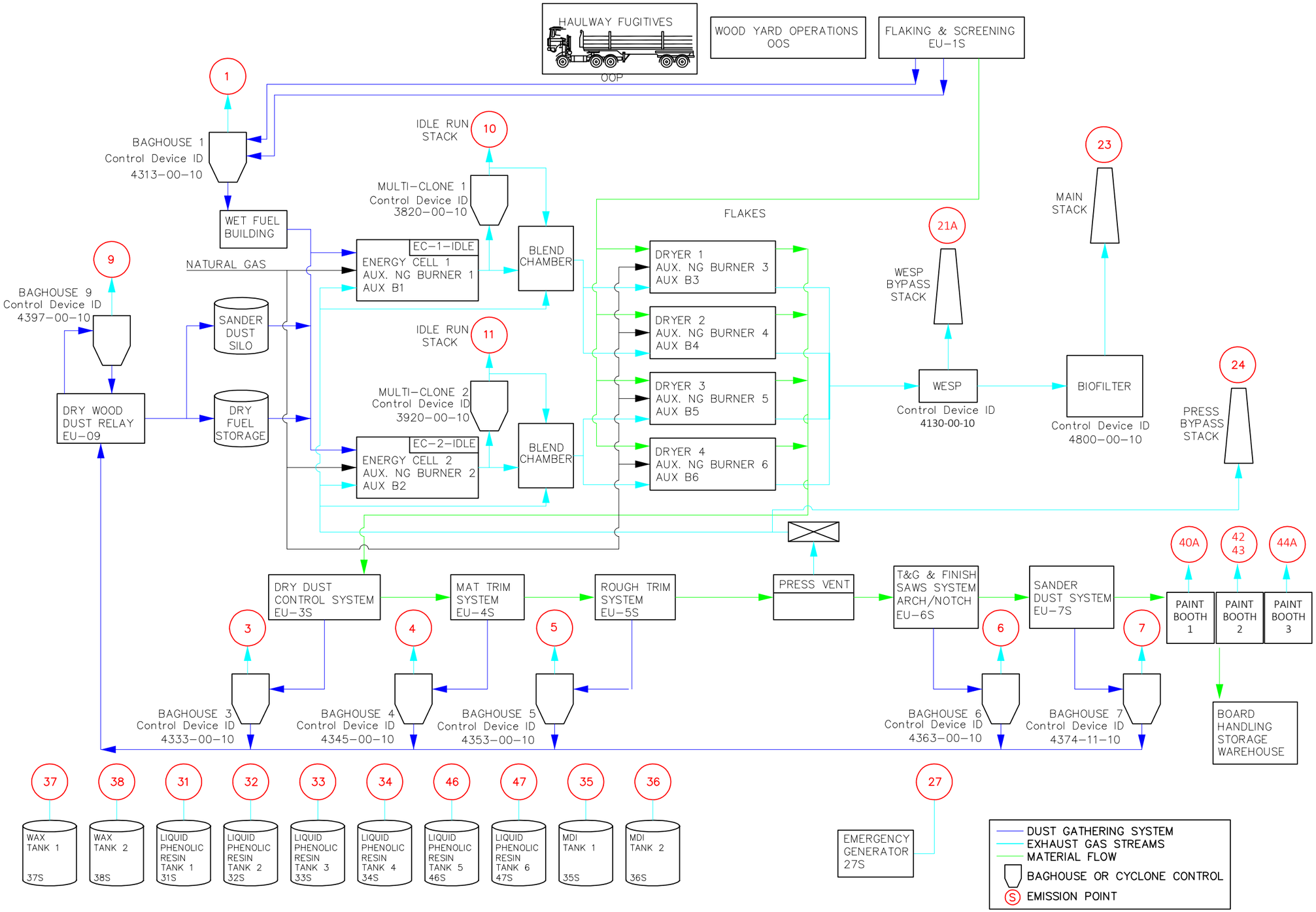
Flow Diagram.pdf
475K

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

APPROVED	–	SCALE	NTS
PROJECT		DRAWN	B. WICKS
		CHK'D	M. RUTHERFORD

MO	DAY	YR.
04	23	02
08	23	22

Weyerhaeuser

Sutton OSB
Heaters, West Virginia

PROCESS DIAGRAM FOR
WEYERHAEUSER WEST VIRGINIA
SUTTON OSB FACILITY

DRAWING NUMBER
800–G–7003–A–02

REV 10

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

FW: Attachment N_Facility Wide HAP PTE Calculations_Sutton OSB_06-12-23

1 message

Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com> Tue, Jun 13, 2023 at 9:07 AM
To: "Mullins, Robert A" <robert.a.mullins@wv.gov>
Cc: Jesse Hanshaw <jhanshaw@slrconsulting.com>

R.A.,

I have reviewed the attached facility wide PTE calculations from Jesse at SLR Consulting and approve. Please let us know if you have any questions.

Thanks,
Matthew

From: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Sent: Monday, June 12, 2023 4:39 PM
To: Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com>
Subject: [EXTERNAL] Attachment N_Facility Wide HAP PTE Calculations_Sutton OSB_06-12-23

Matthew,

Attached is the individual pdf. table summarizing the facility wide HAP changes for the factsheet. If you approve and there are no requested changes please forward the pdf. to R.A.

I have also attached the full spreadsheet with this table added as a new HAPs tab, but the calculations are actually embedded under the Compliance Summary Tab at the bottom of the table.

Please let me know if there are any questions or comments.

Thanks,

Jesse

Jesse Hanshaw
Principal Engineer - Air Quality

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

2 attachments

Attachment N_Facility Wide HAP PTE Calculations_Sutton OSB_06-12-23.pdf
7K

Attachment N_Facility Wide PTE Calculations_Sutton OSB_06-12-23.xlsx
209K

Facility Wide HAP Totals for Title V Renewal Application

Pollutants	Old Factsheet	Updated 2023	Source of Emissions with Respect to Facility Calculations
	tpy	tpy	
Acetaldehyde	4.89	4.89	From Main Stack Tab
Acrolein	1.13	1.21	Main Stack
Chlorine	0.44	0.38	Main Stack
Cumene	6.39	5.67	Main Stack
Formaldehyde	11.1	10.30	Main Stack
Methanol	34.27	7.58	Main Stack + RCDME+ Press Bypass
Xylenes	1.96	1.96	Main Stack
HAPs	39.8	31.98	Total

Note: Methanol Emissions Reflect a 90% control from Biofilter Except during RCDME or Press Bypass Operating Modes.

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

Re: Title V Renewal Sutton OSB Mill

1 message

Mullins, Robert A <robert.a.mullins@wv.gov> Mon, Jun 12, 2023 at 9:43 AM
To: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Cc: "Rutherford, Matthew" <matthew.rutherford@weyerhaeuser.com>

Have you all had a chance to look into the HAP PTE question I had?

Thanks,
R.A.

On Mon, May 22, 2023 at 12:24 PM Jesse Hanshaw <jhanshaw@slrconsulting.com> wrote:

> Hi RA,
>
> I will double check the individual and total HAPs and should be able to compare to what we are currently preparing for the R13 Mod. We are hoping to have this submitted in the near next few weeks.
>
> With respect to the quarterly ash and BTU monitoring we were hoping that since 45CSR2A is an interpretive rule we could present 20+ yrs of data that show annual sampling may be all that's needed since there is limited variability. Please let us know if that may be possible.
>
> Thanks,
>
> Jesse
>
> **Jesse Hanshaw**
> Principal Engineer - Air Quality
>
> **O** 681-205-8949
> **M** 304-545-8563
> **E** jhanshaw@slrconsulting.com

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8 Capitol Street Suite 300, Charleston WV United States 25301

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From: Mullins, Robert A <robert.a.mullins@wv.gov>
Sent: May 22, 2023 10:53 AM
To: Jesse Hanshaw <jhanshaw@slrconsulting.com>; Rutherford, Matthew <matthew.rutherford@weyerhaeuser.com>
Subject: Title V Renewal Sutton OSB Mill

I'm currently working on the Title V renewal for Weyerhaeuser's Sutton OSB Mill and have a few questions.

- The facility-wide emission summary and emission calculations in the 2023 Title V renewal does not have a breakdown of the HAP PTEs; it just lists Total HAPs. I have the following HAP PTEs from the last renewal, which should be accurate since there have been no changes to the PTEs since the last renewal. I just want to confirm that those HAP PTEs are accurate and if they are ask why total HAPs is only 39.8 tpy when the listed HAPs added up to 60.18 tpy, not counting the other trace HAPs that were not listed?

Hazardous Air Pollutants	Potential Emissions
Acetaldehyde	4.89
Acrolein	1.13
Chlorine	0.44
Cumene	6.39
Formaldehyde	11.10
Methanol	34.27
Xylenes	1.96
Total HAPs	39.80

- In the Proposed Permit language section of the Renewal application there is a strike through on Emission points (40 and 41) and (44 and 45) and listing them as fugitives. It also says this is to be modified in a coming R13 permit application, will this R13 application be in during the renewal process?
- In the Proposed Permit language section of the Renewal application also requested a change to the ash and BTU analysis frequency of condition 4.4.3. This frequency is set in the cited rule 45 CSR 2A-7.1.a.3 and can not be changed.

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>

RE: [EXTERNAL] Re: Title V Renewal Sutton OSB Mill

1 message

Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com> Tue, May 23, 2023 at 12:51 PM
To: "Mullins, Robert A" <robert.a.mullins@wv.gov>
Cc: Jesse Hanshaw <jhanshaw@slrconsulting.com>

Much appreciated, thank you

From: Mullins, Robert A <robert.a.mullins@wv.gov>
Sent: Tuesday, May 23, 2023 11:59 AM
To: Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com>
Cc: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Subject: Re: [EXTERNAL] Re: Title V Renewal Sutton OSB Mill

Ok, if that is the case you have probably been submitting them in an older format. You may want to check with Dave Porter and verify that but based on the guidance document I have access to PM10 filterable + PM10 condensable = PM10 but they are only reported as the components in SLEIS. I've attached the guidance document for reference.

Thanks,

Robert

On Tue, May 23, 2023 at 11:44 AM Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com> wrote:

> I'll double check when I get back to the Mill but pretty sure the 62.14 tpy is PM10 and included in the total PM of 86.9 tpy

From: Mullins, Robert A <robert.a.mullins@wv.gov>
Sent: Tuesday, May 23, 2023 11:32 AM
To: Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com>
Cc: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Subject: [EXTERNAL] Re: Title V Renewal Sutton OSB Mill

While you are double checking the HAP PTE calculations/data. Can you look into the Total PM PTE. The SLEIS data for 2022 has PM-filterable = 86.9 tpy and PM-condensable = 62.14 tpy and when added to get the Total PM = 149.04 tpy, which is higher than the PTE for Total PM. I checked a few years of data to see if it was a possible entry error (so easy to accidentally move the decimal) for one year but all the SLEIS data I checked was similar for PM.

Thanks,

Robert

On Mon, May 22, 2023 at 2:54 PM Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com> wrote:

> Yes, thank you for looking into this further. We have a lot of data for BTU value of the wood fuel!
>
> ---
>
> **From:** Jesse Hanshaw <jhanshaw@slrconsulting.com>
> **Sent:** Monday, May 22, 2023 2:24 PM
> **To:** Mullins, Robert A <robert.a.mullins@wv.gov>
> **Cc:** Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com>
> **Subject:** [EXTERNAL] RE: Title V Renewal Sutton OSB Mill
>
> RA,
>
> I appreciate you taking the time and brining this to Management’s attention.
>
> Hope you have a great day!
>
> **Jesse Hanshaw**

Principal Engineer - Air Quality

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

From: Mullins, Robert A <robert.a.mullins@wv.gov>
Sent: May 22, 2023 2:08 PM
To: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Cc: Rutherford, Matthew <matthew.rutherford@weyerhaeuser.com>
Subject: Re: Title V Renewal Sutton OSB Mill

Jesse,

I checked with Carrie and Enforcement and the answer I got back on the proposed change to the ash and BTU analysis, is that I can't make changes that's counter to the interpretive rule.

Thanks,

R.A.

On Mon, May 22, 2023 at 12:24 PM Jesse Hanshaw <jhanshaw@slrconsulting.com> wrote:

> Hi RA,
>
> I will double check the individual and total HAPs and should be able to compare to what we are currently preparing for the R13 Mod. We are hoping to have this submitted in the near next few weeks.
>
> With respect to the quarterly ash and BTU monitoring we were hoping that since 45CSR2A is an interpretive rule we could present 20+ yrs of data that show annual sampling may be all that's needed since there is limited variability. Please let us know if that may be possible.
>
> Thanks,
>
> Jesse
>
> **Jesse Hanshaw**
>
> Principal Engineer - Air Quality
>
> **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

From: Mullins, Robert A <robert.a.mullins@wv.gov>
Sent: May 22, 2023 10:53 AM
To: Jesse Hanshaw <jhanshaw@slrconsulting.com>; Rutherford, Matthew <matthew.rutherford@weyerhaeuser.com>
Subject: Title V Renewal Sutton OSB Mill

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Hazardous Air Pollutants	Potential Emissions
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Formaldehyde	11.10
Methanol	34.27
Xylenes	1.96

Total HAPs	39.80

- In the Proposed Permit language section of the Renewal application there is a strike through on Emission points (40 and 41) and (44 and 45) and listing them as fugitives. It also says this is to be modified in a coming R13 permit application, will this R13 application be in during the renewal process?
- In the Proposed Permit language section of the Renewal application also requested a change to the ash and BTU analysis frequency of condition 4.4.3. This frequency is set in the cited rule 45 CSR 2A-7.1.a.3 and can not be changed.

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>

Re: Title V Renewal Sutton OSB Mill

1 message

Mullins, Robert A <robert.a.mullins@wv.gov> Tue, May 23, 2023 at 11:31 AM
To: "Rutherford, Matthew" <Matthew.Rutherford@weyerhaeuser.com>
Cc: Jesse Hanshaw <jhanshaw@slrconsulting.com>

While you are double checking the HAP PTE calculations/data. Can you look into the Total PM PTE. The SLEIS data for 2022 has PM-filterable = 86.9 tpy and PM-condensable = 62.14 tpy and when added to get the Total PM = 149.04 tpy, which is higher than the PTE for Total PM. I checked a few years of data to see if it was a possible entry error (so easy to accidentally move the decimal) for one year but all the SLEIS data I checked was similar for PM.

Thanks,
Robert

On Mon, May 22, 2023 at 2:54 PM Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com> wrote:

> Yes, thank you for looking into this further. We have a lot of data for BTU value of the wood fuel!
>
> ---
>
> **From:** Jesse Hanshaw <jhanshaw@slrconsulting.com>
> **Sent:** Monday, May 22, 2023 2:24 PM
> **To:** Mullins, Robert A <robert.a.mullins@wv.gov>
> **Cc:** Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com>
> **Subject:** [EXTERNAL] RE: Title V Renewal Sutton OSB Mill
>
> RA,
>
> I appreciate you taking the time and brining this to Management’s attention.
>
> Hope you have a great day!
>
> **Jesse Hanshaw**

Principal Engineer - Air Quality

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

From: Mullins, Robert A <robert.a.mullins@wv.gov>
Sent: May 22, 2023 2:08 PM
To: Jesse Hanshaw <jhanshaw@slrconsulting.com>
Cc: Rutherford, Matthew <matthew.rutherford@weyerhaeuser.com>
Subject: Re: Title V Renewal Sutton OSB Mill

Jesse,

I checked with Carrie and Enforcement and the answer I got back on the proposed change to the ash and BTU analysis, is that I can't make changes that's counter to the interpretive rule.

Thanks,

R.A.

On Mon, May 22, 2023 at 12:24 PM Jesse Hanshaw <jhanshaw@slrconsulting.com> wrote:

> Hi RA,
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From: Mullins, Robert A <robert.a.mullins@wv.gov>
Sent: May 22, 2023 10:53 AM
To: Jesse Hanshaw <jhanshaw@slrconsulting.com>; Rutherford, Matthew <matthew.rutherford@weyerhaeuser.com>
Subject: Title V Renewal Sutton OSB Mill

I'm currently working on the Title V renewal for Weyerhaeuser's Sutton OSB Mill and have a few questions.

- The facility-wide emission summary and emission calculations in the 2023 Title V renewal does not have a breakdown of the HAP PTEs; it just lists Total HAPs. I have the following HAP PTEs from the last renewal, which should be accurate since there have been no changes to the PTEs since the last renewal. I just want to confirm that those HAP PTEs are accurate and if they are ask why total HAPs is only 39.8 tpy when the listed HAPs added up to 60.18 tpy, not counting the other trace HAPs that were not listed?

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Acetaldehyde	4.89
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Xylenes	1.96

Total HAPs	39.80

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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>

RE: Title V Renewal Sutton OSB Mill

1 message

Rutherford, Matthew <Matthew.Rutherford@weyerhaeuser.com> Mon, May 22, 2023 at 2:54 PM
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Robert Mullins

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Charleston, WV 25304

Phone: (304)926-0499 ext. 41286

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

Re: Weyerhaeuser Sutton question

1 message

Mullins, Robert A <robert.a.mullins@wv.gov> Mon, May 22, 2023 at 2:00 PM
To: "Adkins, Jesse D" <jesse.d.adkins@wv.gov>

Ok. Thanks.

On Mon, May 22, 2023 at 1:59 PM Adkins, Jesse D <jesse.d.adkins@wv.gov> wrote:

RA, James and I both think you can't make changes that's counter to the interpretive rule.

On Mon, May 22, 2023 at 1:30 PM Mullins, Robert A <robert.a.mullins@wv.gov> wrote:

Jesse and James,

I'm working on the Title V renewal for Weyerhaeuser's Sutton OSB Mill. In the renewal application they requested the marked change in the following condition based on their previous testing record.

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 an annually ~~a quarterly~~ ash and BTU analysis of the wood combusted. (10, 11)
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, 4.4.9 and 4.1.13; 40 C.F.R. §60.48c(g); 45CSR16; 45CSR§2-8.3.c; 45CSR§§2A-7.1.a.1 and 7.1.a.3]

I don't know if I can/should make this change. Normally I'd say it couldn't be changed since it is in the rule but 45CSR§§2A-7.1.a.3 is part of an interpretive rule so I am unsure if that changes things.

45CSR2-8.3.c doesn't specify the frequency of the records for the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit. It just says in a manner to be established by the Director. Can we approve anything other than what was established in Rule 2A.

I would like your opinions.

Thanks,
R.A.

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

Re: Weyerhaeuser Sutton question

1 message

Mullins, Robert A <robert.a.mullins@wv.gov> Mon, May 22, 2023 at 1:11 PM
To: "McCumbers, Carrie" <carrie.mccumbers@wv.gov>

Ok, thanks. I'll check with Jesse and James.

On Mon, May 22, 2023 at 1:08 PM McCumbers, Carrie <carrie.mccumbers@wv.gov> wrote:

> I think the Compliance/Enforcement Section reviewed the Rule 2 monitoring plans. The only way I can see that they could possibly deviate from 45CSR2A-7.1.a.3 is through 45CSR2-8.3.c where it doesn't specify the frequency of the records for the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit. It just says in a manner to be established by the Director. I don't know if the Director would be willing to or can approve anything other than what was established in Rule 2A. I would ask Jesse or James to see if anything like this is even possible.
>
> On Mon, May 22, 2023 at 12:33 PM Mullins, Robert A <robert.a.mullins@wv.gov> wrote:
>
> > I have a question about 45 CSR 2A-7.1.a.3. Weyerhaeuser wants to change the quarterly ash and BTU testing for their current condition 4.4.3 to annually. Normally I'd say it couldn't be changed since it is in the rule but it is part of an interpretive rule so I am unsure if that changes things.
> >
> > Would like your opinion.
> >
> > Thanks,
> > R.A.

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

RE: Title V Renewal Sutton OSB Mill

1 message

Jesse Hanshaw <jhanshaw@slrconsulting.com> Mon, May 22, 2023 at 12:24 PM
To: "Mullins, Robert A" <robert.a.mullins@wv.gov>, "Rutherford, Matthew" <matthew.rutherford@weyerhaeuser.com>

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Thanks,

Jesse

Jesse Hanshaw
Principal Engineer - Air Quality

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Robert Mullins

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Charleston, WV 25304

Phone: (304)926-0499 ext. 41286

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

Fwd: Proposed Plywood & Composit Wood Products NESHAP

1 message

McCumbers, Carrie <carrie.mccumbers@wv.gov> Mon, May 22, 2023 at 7:04 AM
To: "Robert.A.Mullins@wv.gov" <robert.a.mullins@wv.gov>

---------- Forwarded message ---------
From: **Egnor, Michael** <michael.egnor@wv.gov>
Date: Fri, May 19, 2023 at 2:14 PM
Subject: Fwd: Proposed Plywood & Composit Wood Products NESHAP
To: Matthew <Matthew.Rutherford@weyerhaeuser.com>, Miller, Lance <Lance.Miller@weyerhaeuser.com>, jhanshaw@slrconsulting.com <jhanshaw@slrconsulting.com>, cc: Carrie McCumbers <carrie.mccumbers@wv.gov>

Here are the proposed revisions to Subpart DDDD for the two Weyerhauser facilities in WV.

Thanks!
Mike

---------- Forwarded message ---------
From: **Jennings, Laura M** <laura.m.jennings@wv.gov>
Date: Fri, May 19, 2023 at 1:25 PM
Subject: Proposed Plywood & Composit Wood Products NESHAP
To: Michael Egnor <michael.egnor@wv.gov>

FYI -

National Emission Standards for Hazardous Air Pollutants:
Plywood and Composite Wood Products,
31856–31887 [2023–10067] [TEXT] [PDF]

Laura J

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

Fwd: The Morning Headlines from InsideEPA.com -- May 10, 2023

1 message

McCumbers, Carrie <carrie.mccumbers@wv.gov> Wed, May 10, 2023 at 10:14 AM
To: "Robert.A.Mullins@wv.gov" <robert.a.mullins@wv.gov>

There is an article attached regarding proposed changes to the Plywood MACT. This could affect Weyerhaeuser's renewal.

---------- Forwarded message ---------
From: **Adkins, Sandra K** <sandra.k.adkins@wv.gov>
Date: Wed, May 10, 2023 at 9:07 AM
Subject: Fwd: The Morning Headlines from InsideEPA.com -- May 10, 2023
To: Brian S Tephabock <brian.s.tephabock@wv.gov>, Beverly D McKeone <beverly.d.mckeone@wv.gov>, Laura M Jennings <laura.m.jennings@wv.gov>, Jesse D Adkins <jesse.d.adkins@wv.gov>, Todd H Shrewsbury <todd.h.shrewsbury@wv.gov>, James Robertson <james.robertson@wv.gov>, Laura M Crowder <laura.m.crowder@wv.gov>, Michael Egnor <michael.egnor@wv.gov>, Gene M Coccari <gene.m.coccari@wv.gov>, Jon D McClung <jon.d.mcclung@wv.gov>, Renu M Chakrabarty <renu.m.chakrabarty@wv.gov>, Carrie McCumbers <carrie.mccumbers@wv.gov>

Articles attached:

EPA Faces Criticism From All Sides Over Plywood Air Toxics Proposal

Environmentalists Seek To Strengthen MATS Plan, But Differ On How Much

D.C. Circuit Reinstates EPA's Perchlorate Drinking Water Determination (repeat article)

---------- Forwarded message ---------
From: **InsideEPA.com** <epa-alerts@iwpnews.com>
Date: Wed, May 10, 2023 at 8:06 AM
Subject: The Morning Headlines from InsideEPA.com -- May 10, 2023
To: <sandra.k.adkins@wv.gov>

May 10, 2023

Latest News

EPA Faces Criticism From All Sides Over Plywood Air Toxics Proposal

EPA's just-released proposal to apply new air toxics limits to the plywood and composite wood products (PCWP) sector is drawing criticism from all sides, with environmentalists pressing for stronger emissions cuts while groups representing the wood sector say the agency should allow more flexibility for industry. **FULL STORY**

Environmentalists Seek To Strengthen MATS Plan, But Differ On How Much

Environmental and public health groups are calling on EPA to further strengthen its mercury and air toxics standards (MATS) for power plants beyond the tighter limits the agency has proposed, but they differ on how far to go, while industry and free-market critics again claim the rules' adverse economic impacts far outweigh its benefits. **FULL STORY**

Lacking RCRA Power, EPA Touts Safety Policies For Vape Devices' Disposal

An EPA waste official is raising concerns that improper disposal of lithium-ion batteries from e-cigarettes and vapes is resulting in uncontrolled fires and explosions, but the agency has limited authority to regulate the practice and instead is touting state and local rules, as well as federal agencies' safety protocols when advising consumers on disposal. **FULL STORY**

From Inside TSCA

Avoiding Precedent, EPA Wins Stay Of TSCA Challenge To PFAS Test Order

EPA and the firefighting-foam maker that challenged its landmark TSCA testing order for a PFAS have agreed to a long-term stay after officials granted the firm an exemption from the mandate, avoiding for now a precedent-setting decision that could narrow the conditions on whether the law applies to chemical "processors." **FULL STORY**

From Climate Extra

EDF Says Louisiana Liability Statute Should Block CCS Permit 'Primacy'

Environmentalists are warning that Louisiana's law governing long-term liability for carbon capture and storage (CCS) projects is inadequately protective and makes the state ineligible to directly issue permits as EPA has recently proposed, highlighting a thorny problem that other states will also face as they seek permitting "primacy." **FULL STORY**

D.C. Circuit Reinstates EPA's Perchlorate Drinking Water Determination

The U.S. Court of Appeals for the District of Columbia has revived EPA's 2011 determination that Safe Drinking Water Act (SDWA) regulation of the common contaminant perchlorate is necessary,

scrapping its Trump-era withdrawal and setting a novel precedent that the agency lacks authority to roll back SDWA regulatory determinations. **FULL STORY**

Daily Feed

Chesapeake Bay program urges overhaul of TMDL

"Modeling and monitoring evidence indicates that current efforts to reduce nutrient loads will not meet the TMDL targets," says a new report from the Chesapeake Bay Program, a regional partnership overseen by EPA. **FULL STORY**

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4 attachments

EPA Faces Criticism From All Sides Over...od Air Toxics Proposal _ InsideEPA.pdf
1069K

Environmentalists Seek To Strengthen MA...But Differ On How Much _ InsideEPA.pdf
1151K

Lacking RCRA Power, EPA Touts Safety Po...Vape Devices' Disposal _ InsideEPA.pdf
1518K

D.C. Circuit Reinstates EPA's Perchlora...ng Water Determination _ InsideEPA.pdf
1198K

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EPA Faces Criticism From All Sides Over Plywood Air Toxics Proposal

May 9, 2023

EPA's just-released proposal to apply new air toxics limits to the plywood and composite wood products (PCWP) sector is drawing criticism from all sides, with environmentalists pressing for stronger emissions cuts while groups representing the wood sector say the agency should allow more flexibility for industry.

The proposed rule, which EPA quietly posted May 5 but has yet to publish in the *Federal Register*, would impose hazardous air pollutant (HAP) standards for processes currently subject to no limits on total HAP emissions.

It responds in part to a federal appeals court's 2007 remand and partial vacatur of a 2004 air toxics rule for the sector that included maximum achievable control technology (MACT) standards that required "no control" on those emissions, as well as environmental groups' petition for reconsideration of a 2020 Trump-era risk and technology review of that rule where the agency found no "residual" risks that require regulation.

But environmentalists are already saying EPA's new approach is nowhere near strong enough.

"After nearly twenty years without requiring basic controls on composite wood manufacturing processes, communities were expecting more than standards that in many cases still result in zero reductions in hazardous air pollution," Earthjustice attorney Kathleen Riley said in a May 9 statement.

The new proposed standards "reduce toxic pollution from plywood facilities by less than 8 percent. EPA must significantly strengthen the regulations, including by setting numeric limits on emissions rather than relying on work practices to reduce these facilities' harmful emissions," Earthjustice said.

Meanwhile, the American Wood Council (AWC) is attacking the plan as too prescriptive.

"The wood products industry installed expensive control technologies to comply with the 2004 PCWP MACT regulations and saw over 90 percent emissions reductions from regulated wood presses and dryers. While AWC continues to evaluate the proposed rule, we're disappointed that EPA didn't take advantage of the flexibility provided in the statute to come up with a more targeted proposal that minimizes burdens," said AWC President Jackson Morrill in a May 9 statement.

As proposed, the rule would set first-time limits for PCWP facilities on acetaldehyde, acrolein, formaldehyde, methanol, phenol, propionaldehyde, non-mercury (non-Hg) HAP metals, mercury (Hg), hydrogen chloride (HCl), polycyclic aromatic hydrocarbons (PAH), dioxin/furan (D/F) and methylene diphenyl diisocyanate (MDI).

It also includes emissions limits and work practices for PCWP process units and lumber kilns located at facilities that are major sources of HAP emissions.

EPA will take public comment on the proposal for 45 days following its eventual publication in the *Federal Register*. The agency faces a November deadline to finalize the rule, under a consent decree with environmentalists.

Technology Mandates

According to **an EPA fact sheet**, the rule would further identify MACT for acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde from fiberboard mat dryers at existing sources, hardboard press predryers at existing sources; and atmospheric refiners at new and existing sources; for MDI from tube dryers, reconstituted wood products presses, and miscellaneous coating operations at new and existing sources; and for non-mercury metals, Hg, HCl, D/F, and PAH from direct wood-fired dryers.

EPA's fact sheet also says the proposal comports with **an April 2020 ruling** of the U.S. Court of Appeals for the District of Columbia Circuit in *Louisiana Environmental Action Network v. EPA (LEAN)*. There, judges held that the agency has an obligation to address unregulated emissions from a major source category when it conducts a required 8-year technology review of a MACT standard that previously left such HAP emissions unregulated.

"EPA is also proposing annual burner-tune up standards for all direct-fired PCWP dryers, direct-fired lumber kilns, and associated combustion unit bypass stacks," the fact sheet continues.

"In addition, EPA is proposing work practices for various resinated material handling process units, lumber kilns, log vats, stand-alone digesters, fiber washers, and wastewater operations," it says. The proposal would further tighten emissions monitoring requirements and add new ones corresponding to the added emissions limits.

The agency is proposing to allow three years for compliance. It estimates that the proposed amendments would reduce HAP and volatile organic compound emissions from the PCWP source category by approximately 590 and 8,100 tons per year, respectively.

However, AWC is pushing back against what it says would be massive compliance costs from those requirements.

"EPA has proposed very stringent limits on biomass dryers and requirements on other low emitting equipment that, by EPA's own estimates, will add tens of millions in additional costs to the industry when the agency concluded in 2020 that risks to the public are acceptable," Morrill said in the trade group's statement.

"The almost 700 individual lumber kilns that would be affected by this rule, for example, need simple compliance procedures that are tied back to the existing, extensive obligations to meet lumber grading standards in the marketplace that also minimize emissions," AWC says.

"We're also concerned that there may be unintended consequences that would ultimately incentivize mills switching from biomass dryers to those that rely on fossil fuels, resulting in more greenhouse gas emissions," it adds. --*Stuart Parker* (**sparker@iwpnews.com**)

240552

RELATED NEWS

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- **Denka Drops IQA Challenge To Chloroprene Assessment As Redundant**
- **EPA Floats Tighter EtO, Chloroprene Limits In New Chemical Sector Air Rules**

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an online news service from the publishers of Inside EPA

Environmentalists Seek To Strengthen MATS Plan, But Differ On How Much

May 9, 2023

Environmental and public health groups are calling on EPA to further strengthen its mercury and air toxics standards (MATS) for power plants beyond the tighter limits the agency has proposed, but they differ on how far to go, while industry and free-market critics again claim the rules' adverse economic impacts far outweigh its benefits.

At a virtual public hearing on EPA's **April 5 proposal**, a slew of environmental groups praised EPA for its planned tightening of mercury and filterable particulate matter (fPM) limits, with PM serving as a proxy for the hazardous air pollutants (HAPs) targeted by MATS.

EPA proposed tightening the current fPM limit of 0.03 pounds per million Btu (lb/MMbtu) down to 0.01 lb/MMbtu, though the agency is also taking comment on limits as low as 0.006 lb/MMBtu.

The proposal would also strengthen mercury requirements for lignite plants by 70 percent, requiring them to meet the same standard as facilities burning bituminous and subbituminous coal. That means meeting a limit of 1.2 pounds per trillion British thermal units (lb/TBtu) units of heat input, or an alternative output-based standard of 0.013 pounds per gigawatt hour of electricity.

While environmentalists pressed officials to go further, they disagreed over how tough EPA must make the rule, with some urging the agency to back its strictest proposed options for fPM while others are seeking even tougher limits.

For example, the American Lung Association (ALA) and Sierra Club urged the agency to adopt the strictest option in the proposed rule, but Clean Air Task Force (CATF) said the agency should promulgate an even tougher limit.

EPA should finalize a standard "no higher than 0.006 pounds per million BTU," said Laura Kate Bender, national assistant vice president for healthy air at ALA.

She said EPA's Regulatory Impact Analysis shows that the health benefits would be "dramatically higher with this more stringent option compared to what the agency proposed, including more than 6 times more avoided premature respiratory mortalities from particulate matter exposure in 2035."

Further, she said, the group supports "tightening the standards for mercury for lignite coal plants to bring them in line with other types of coal. We also strongly support the requirement for continuous emissions monitoring," she said.

But Patrick Drupp, director of climate policy for Sierra Club, urged EPA to "go even further" than the proposal, and supported the 0.006 lb/MMBtu fPM limit. Under EPA's proposed limit of 0.01 lb/MMBtu, some 20 electric generating units (EGUs) at power plants would need to reduce their emissions, while with a 0.006 lb/MMBtu limit, "dozens more" EGUs would either have to install tougher controls, or close, Drupp said.

Drupp also urged EPA to lower the mercury limit not only for lignite plants, but for all coal-fired power plants. Drupp praised EPA's requirement for continuous emissions monitoring systems (CEMs) but said that EPA should consider requiring CEMS for hydrogen chloride gas as well.

Because EPA is tightening MATS under a reconsideration of the Trump EPA's risk-and-technology review (RTR) of the original MATS rule, EPA is obligated to consider implementation costs of any emissions limits it tightens pursuant to the Clean Air Act's technology review provision.

Jonathan Levenshus, director of federal energy campaigns for Sierra Club, called the MATS proposal "incredibly cost-effective," with anticipated compliance costs "just a fraction" of the expected health benefits.

Tougher Standards

However, Hayden Hashimoto, an attorney with CATF, called for EPA to set tougher fPM and mercury standards even than those supported by other environmental groups.

“While we appreciate that EPA is proposing to update this standard, the proposed level of 0.01 lb/MMBtu is inadequate. We urge you to strengthen the surrogate filterable PM standard to no higher than 0.0024 lb/MMBtu for all coal plants. As EPA notes in the proposal, 0.0024 lb/MMBtu is the average emission rate of the best performing 50% of units evaluated by the agency,” Hashimoto said.

With regard to mercury, “EPA can and should go further by lowering the mercury limits for all coal plants. EPA should also update and revise the acid gas limits to better reflect what control technologies are capable of,” Hashimoto said. CATF further urges EPA “to set standards for toxic organic hazardous air pollutants and eliminate the subcategory for waste coal plants.”

Meanwhile, opponents of EPA’s MATS proposal continue to argue that the rule is unjustified because costs outweigh the quantified HAP benefits, and relies instead on reductions in PM, which is not a HAP targeted by Clean Air Act section 112.

Daren Bakst, deputy director for the Center for Energy and Environment at the Competitive Enterprise Institute (CEI), a free-market think tank, says, in “this new proposed rule, EPA doesn’t even attempt to quantify direct benefits.”

EPA instead relies “solely” on “ancillary benefits” of reducing PM, Bakst claimed, in an “end run” around the Clean Air Act and congressional intent. The rule would reduce only a “tiny bit of mercury” at great expense, Bakst claimed, calling the proposal “arbitrary and capricious” and not “appropriate and necessary.”

The MATS rule depends on a reinstated preliminary finding that it is “appropriate and necessary” to regulate power plants under section 112, revived by the Biden administration after the Trump EPA rescinded it.

Also, a sizable delegation from Montana sought to bring attention to the potential closure of the Colstrip power plant’s remaining coal-fired EGUs in that state, and the economic damage and threat to electric reliability that would result.

Joseph Micheletti, representing the Rosebud Mine operated by Westmoreland Mining LLC that feeds the Colstrip plant, said “it is clear that the proposed rule is just another overreaching EPA attempt to shut down coal plants.”

Ken Wooley, general manager of the mine, said that “we will lose everything to gain almost nothing” if the power plant closes. -- *Stuart Parker* (**sparker@iwpnews.com**)

240550

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Lacking RCRA Power, EPA Touts Safety Policies For Vape Devices' Disposal

May 9, 2023

An EPA waste official is raising concerns that improper disposal of lithium-ion batteries from e-cigarettes and vapes is resulting in uncontrolled fires and explosions, but the agency has limited authority to regulate the practice and instead is touting state and local rules, as well as federal agencies' safety protocols when advising consumers on disposal.

Kristin Fitzgerald, an official in EPA's Office of Resource Conservation and Recovery, told an April 27 webinar hosted by the Northeast Recycling Council and Northeast Waste Management Officials Association, that despite the dangers of improper disposal of lithium-ion batteries, regulating disposal is mostly left to state-level waste officials and other federal agencies such as Federal Emergency Management Agency (FEMA) and the Department of Transportation (DOT).

Retailers, such as gas stations and vape shops, as well as manufacturers, are also subject to Food & Drug Administration (FDA) inspections and regulatory requirements for "tobacco products."

The Consumer Products Safety Commission has also issued warnings on some lithium-ion batteries.

She said that most e-cigarettes and vapes contain what are classified as both "acute" and "non-acute" hazardous materials, each with different regulations.

For example, in 1980, EPA classified nicotine as a hazardous waste under the Resource Conservation and Recovery Act (RCRA), a decision that was reaffirmed in 2019 when EPA crafted rules for pharmaceutical waste.

According to her **slide presentation**, she also said that lithium batteries are likely RCRA hazardous waste for both their ignitable and reactive properties.

"The combination of an electronic cigarette and a lithium-ion battery is a new and unique hazard," Fitzgerald said, quoting from FEMA's Fire Administration's policy. "There is no analogy among consumer products to the risk of a severe, acute injury presented by an e cigarette."

While the risk of fire or explosions are "uncommon," the consequences can be "devastating," she adds, in part because "the shape and construction of electronic cigarettes can make them (more likely than other products with lithium-ion batteries) behave like 'flaming rockets' when a battery fails," according to the slides.

But while EPA regulates lithium batteries in electric vehicles and other electronics, they don't have RCRA authority to regulate vape disposal because e-cigarettes that are disposed of by consumers at their residences are considered exempt household hazardous waste (HHW) and are not subject to regulation, Fitzgerald said.

EPA also lacks authority to impose extended producer responsibility (EPR) when it comes to vapes with lithium batteries, she added.

Because EPA cannot regulate household disposal, Fitzgerald said it was "imperative" that these devices be disposed of in a safe manner in order to avoid potential for fires by discarding vapes in curbside garbage.

"HHW is still hazardous, so EPA recommends using a HHW collection program," the slides say.

In addition, she noted, some states are more stringent and regulate HHW.

Smaller Generators

While EPA is unable to regulate HHW, it also faces difficulties regulating vape waste at smaller generators, such as schools and other public facilities, Fitzgerald said.

Schools fall under non-residential disposal, so EPA recommends they dispose of them like other hazardous waste such as pesticides, motor oils and cleaning chemicals.

Smaller schools, classified as Very Small Quantity Generators (VSQGs), are encouraged to contact small business collection programs to see if they collect vapes, or consolidate their waste by shipping them to larger schools, or Large Quantity Generators (LQGs) in the same district to be consolidated into LQG's waste management systems.

Under the Generator Improvements Rule, RCRA says that waste must be consolidated within the same organization, therefore the schools must be in the same district.

When mailing vapes to LQGs, VSQGs are subject to rules set by the DOT for lithium battery transportation. Some mailing organizations, such as FedEx, do not accept batteries to be shipped.

She also estimates that some facilities could be characterized as LQGs if they exceed various RCRA thresholds. For example, she estimates that it would take less than 1000 Juul pods or 200 full 5 milliliter vials to exceed the 1 kilogram of acute hazardous waste to be considered an LQG.

Similarly, it would take about 2000 of a certain kind of battery to exceed the 100 kilogram threshold for non-acute hazardous waste and be a SQG.

As a result of such risks, Fitzgerald cited procedures from DOT such as mailing vapes in plastic baggies to local waste facilities and wearing gloves when removing batteries.

Fitzgerald also noted FEMA's recommendations that call for avoiding extreme temperatures and keeping the items away from metal objects.

Fitzgerald also advised consumers to look up local recycling and waste facilities to check if they accept lithium batteries and vapes. This often means removing lithium batteries from vapes and placing them in individual plastic bags, storing vapes in sand buckets to reduce the risk of fire spreading and not putting vapes in curbside garbage or recycling bins.

State Rules

While EPA is unable to regulate vape batteries, states can adopt their own regulations, but they must be at least as stringent as federal rules.

In Florida, for example, a combination of "federal, state and local regulations prohibit the wrong disposal of certain electronic nicotine delivery systems. A waste determination is required before these systems are discarded in the trash or poured down the drain," according to Pinellas County's Guide To Electronic Nicotine Delivery System Disposal.

According to **the guidance**, these wastes include e-juice with any concentration of nicotine, including expired, spilled, unusable or unwanted products and e-cigarette devices, which may be hazardous due to lead solder, chromium coils and/or nicotine residue.

It also includes empty containers or devices that once held nicotine or e-juice with any concentration of nicotine, such as plasticware or glassware used to measure or transfer nicotine or nicotine-containing liquids.

Spent coils and scrap wire from the devices can be recycled through a metal recycler, the guide says, as can spent rechargeable batteries, which all contain heavy metals.

But rinse waters containing any concentration of nicotine cannot be discharged to the sewer, septic system or in soil, the guide adds.

Donald Stillwaugh, environmental specialist at the Department of Solid Waste in Pinellas County, FL said during the webinar, that his agency inspected facilities that disposed of vapes to determine compliance and knowledge of disposal recommendations.

Facilities such as schools, vape shops and gas stations were investigated, and workers found that most were improperly and unsafely discarding vapes.

For example, defective vapes were found to be kept in distribution facilities and stored in masses in cardboard boxes, causing large fire hazards due to the improper storage of lithium batteries. When made aware of the federal, state and county regulations for vape and e-cigarette disposal, most facilities began complying to avoid penalties and fines from the state.

California lawmakers have sought to mandate regulations for disposal practices but so far lawmakers have been unable to enact legislation. In 2019, a group of senators introduced SB 424 that would ban "a person or entity from selling, giving, or in any way furnishing to another person of any age in the state any single-use filters, plastic devices, electronic cigarettes, and vaporizer devices, as specified."

And in 2022, Assembly Bill 1690, also known as the Smoking Waste Pollution Prevention Act, was introduced. It sought to transition the sale of single-use cigarettes, cigars, and all-in-one disposable vapes to rechargeable and reusable smoking products. However, neither bill was enacted. -- *Sarah Mattalian* (**smattalian@iwpnews.com**)

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D.C. Circuit Reinstates EPA's Perchlorate Drinking Water Determination

May 9, 2023

The U.S. Court of Appeals for the District of Columbia has revived EPA's 2011 determination that Safe Drinking Water Act (SDWA) regulation of the common contaminant perchlorate is necessary, scrapping its Trump-era withdrawal and setting a novel precedent that the agency lacks authority to roll back SDWA regulatory determinations.

In **a split decision issued May 9**, a three-judge D.C. Circuit panel agreed with the Natural Resources Defense Council (NRDC) that EPA's withdrawal of the Obama-era perchlorate determination was unlawful, vacated the action, and remanded it to the agency -- requiring it to begin work on a SDWA rule for the chemical.

The majority opinion, authored by Senior Judge David Sentelle and joined by Senior Judge David Tatel, holds that although EPA has broad leeway to decide whether a particular contaminant warrants SDWA regulation, once it makes that choice it has no option but to proceed.

"Once EPA makes its regulatory determination, however, the Act balances that discretion with a strict, mandatory scheme governing the regulatory process. It instructs that, after determining the statutory criteria are met, the EPA Administrator 'shall, in accordance with the procedures established by this subsection, publish a maximum contaminant level goal [MCLG] and promulgate a national drinking water regulation,'" Sentelle wrote.

The third member of the panel, Judge Florence Pan, agreed with the majority that EPA erred in its withdrawal of the perchlorate determination but said that was because the 2019 revocation lacked scientific grounding.

"Contrary to my colleagues' view, nothing in the Safe Drinking Water Act forbids the EPA from withdrawing a determination to regulate. The statute is silent on that issue. But reading such a prohibition into the Safe Drinking Water Act would force the EPA to violate another statutory provision," Pan said, pointing to language in the law requiting program to apply "the best available science."

The judges' opinions **largely echo concerns** they raised at Jan. 27 oral argument. There, the two senior judges emphasized that SDWA says once a determination to regulate has been made, the agency "shall" issue that regulation and "shall" do so on a specified schedule. The law gives EPA 24 months to propose an MCLG and primary drinking water rule, with another 18 months for final action -- subject to a nine-month extension.

"To read into the statute another course of action -- one that allows EPA to withdraw its regulatory determination entirely and decide that it 'shall not' regulate -- would be to contravene the statute's clear language and structure and 'nullif[y] textually applicable provisions meant to limit [EPA's] discretion,'" Sentelle's opinion says.

EPA first began considering whether to regulate perchlorate under SDWA in 1998, but waffled on a final decision until 2011. Then, it issued a final determination that triggered SDWA's statutory deadline for proposing and finalizing both the health-based MCLG and an enforceable standard designed to come as close to the goal "as is feasible."

After EPA failed to meet that deadline, NRDC sued and reached an agreement with the agency that it would finalize perchlorate regulations by 2019. However, when the Trump EPA proposed those rules, it included an "alternative" of withdrawing the determination altogether, and finalized that option in 2020 on the basis that perchlorate was no longer found in drinking water at frequencies or levels posing a public health concern.

Although the Biden EPA reconsidered that decision, it **ultimately upheld** the withdrawal, prompting NRDC to move ahead with a court challenge.

The D.C. Circuit's decision means EPA is again under a statutory mandate to craft SDWA perchlorate rules, but does not specify how it will apply the statutory deadlines to that process.

Concurring Opinion

The split reasoning in the judges' opinions mirrored their remarks during oral argument, with Pan's position hinging on the idea that EPA has authority under SDWA to withdraw past regulatory determinations but must justify those decisions as required by the "best available science" -- and that the 2020 rulemaking fell short of that mandate.

"I would hold that EPA has authority to withdraw a determination to regulate a contaminant under the [SDWA], prior to the promulgation of a MCLG and accompanying regulation, when the best available science supports the agency's conclusion that the required factors for regulation are no longer met," Pan wrote.

"But in my view, the EPA's 2020 decision not to regulate perchlorate was arbitrary, capricious, and contrary to law because it was based on a MCLG that did not comply with a statutory directive, and relied on selectively updated data concerning the prevalence of perchlorate in drinking water," she added.

Pan's opinion says that the MCLGs EPA proposed in 2019, which environmentalists and Democratic-led states argued were much too lenient "plainly violated" the statutory mandate to reflect "the level at which no known or anticipated adverse effects on the health of persons occur," as it would contribute to a drop in IQ of 1 percent.

"Rather than debate that self-evident conclusion, the EPA chooses the path of obfuscation, essentially arguing that in this 'complicated technical area,' the court must defer to the agency's chosen approach to regulation," she wrote.

EPA argued in its briefs and again at the hearing that judges should defer to application of prior guidance on benchmark doses of toxic chemicals, which the agency said supports using a 1-percent effect on IQ as a starting point.

She says EPA relied on its own judgment about whether an adverse health effect is "biologically significant" instead of adhering to the statutory standard, which requires setting the MCLG "at the level at which [there are] no known or anticipated adverse effects on the health of persons."

The concurrence concludes, "Beneath the technical jargon and puffery about agency expertise, the EPA is not really arguing that it complied with the statute. Instead, the agency appears to content that the statute's requirements are not the best way to go about making policy in this area, and that its own judgment should control." -- *Sam Hess* (**shess@iwpnews.com**)

240535

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

Read: Completeness Determination, Sutton OSB Mill, Application No.R30-00700016-2023

1 message

Jesse Hanshaw <jhanshaw@slrconsulting.com> Tue, Jan 31, 2023 at 5:32 PM
To: "robert.a.mullins@wv.gov" <robert.a.mullins@wv.gov>

Your message

To: Jesse Hanshaw
Subject: Completeness Determination, Sutton OSB Mill, Application No.R30-00700016-2023
Sent: Tuesday, January 31, 2023 11:44:04 AM (UTC-05:00) Eastern Time (US & Canada)

was read on Tuesday, January 31, 2023 5:32:04 PM (UTC-05:00) Eastern Time (US & Canada).

SLR

Jesse Hanshaw
Principal Engineer

O 681-205-8949
C 304-545-8563
E jhanshaw@slrconsulting.com

SLR Consulting US LLC
8 Capitol Street Suite 300, Charleston, WV 25301

2022 ROSPA President's Award

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

Completeness Determination, Sutton OSB Mill, Application No.R30-00700016-2023

1 message

Mullins, Robert A <robert.a.mullins@wv.gov>
To: Timothy.Sagraves@wy.com, Matthew.Rutherford@wy.com, jhanshaw@slrconsulting.com

Tue, Jan 31, 2023 at 11:44 AM

From	Robert Mullins
To	Timothy Sagraves, Matthew Rutherford, Jesse Hanshaw
Subject	Completeness Determination, Sutton OSB Mill, Application No.R30-00700016-2023

Your Title V renewal application for a permit to operate the above referenced facility was received by this Division on January 11, 2023. After review of said application, it has been determined that the application is administratively complete as submitted. Therefore, the above referenced facility qualifies for an Application Shield.

The applicant has the duty to supplement or correct the application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a 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 permit.

The submittal of a complete application shall not affect the requirement that any source have all **preconstruction permits** required under the rules of the Division.

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. Until which time as your renewal permit is issued or denied, please continue to operate this facility in accordance with 45CSR30, section 6.3.c. which states: *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.* This protection shall cease to apply if, subsequent to the

completeness determination made pursuant to paragraph 6.1.d. of 45CSR30 and as required by paragraph 4.1.b., the applicant fails to submit by the deadline specified in writing any additional information identified as being needed to process the application.

Please remember, **failure of the applicant to timely submit information required or requested to process the application may cause the Application Shield to be revoked.** 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

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

WV DAQ Title V Permit Application Status for Weyerhaeuser NR Company; Sutton OSB Mill

1 message

Mink, Stephanie R <stephanie.r.mink@wv.gov> Fri, Jan 13, 2023 at 9:03 AM
To: Timothy.Sagraves@wy.com, Matthew.Rutherford@wy.com, jhanshaw@slrconsulting.com
Cc: Carrie McCumbers <carrie.mccumbers@wv.gov>, Robert A Mullins <robert.a.mullins@wv.gov>

RE: Application Status

Weyerhaeuser NR Company

Sutton OSB Mill

Facility ID No. 007-00016

Application No. R30-00700016-2023

Dear Mr. Sagraves,

Your application for a Title V Permit Renewal for Weyerhaeuser NR Company's Sutton OSB Mill was received by this Division on January 11, 2023, 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 Permitting

601 57th Street SE

Charleston, WV 25304

Phone: 304-926-0499 x41281

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

Weyerhaeuser renewal

1 message

Mink, Stephanie R <stephanie.r.mink@wv.gov> Fri, Jan 13, 2023 at 8:42 AM
To: Robert A Mullins <robert.a.mullins@wv.gov>

Here's a dated copy of the application and the info sheet, the email to the company will go out shortly.

Thanks

--

Stephanie Mink

Environmental Resources Associate

West Virginia Department of Environmental Protection

Division of Air Quality, Title V Permitting

601 57th Street SE

Charleston, WV 25304

Phone: 304-926-0499 x41281

2 attachments

01112023 R30-00700016-2023 Weyerhaeuser renewal.pdf
5982K

R30-00700016-2023.pdf
201K

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

Fwd: Weyerhaeuser NR Company; Sutton OSB Mill

1 message

Air Quality Permitting, DEP <depairqualitypermitting@wv.gov> Thu, Jan 12, 2023 at 5:16 PM
To: Stephanie R Mink <stephanie.r.mink@wv.gov>
Cc: Robert A Mullins <robert.a.mullins@wv.gov>

Stephanie,

Please assign this renewal to R.A. as R30-00700016-2023.

Thanks,
Carrie

---------- Forwarded message ---------
From: **Ryan Bell** <rbell@slrconsulting.com>
Date: Wed, Jan 11, 2023 at 5:34 PM
Subject: Weyerhaeuser NR Company; Sutton OSB Mill
To: DEPAirQualityPermitting@wv.gov <DEPAirQualityPermitting@wv.gov>
Cc: Jesse Hanshaw <jhanshaw@slrconsulting.com>

To the DAQ:

I'm pleased to present the WV DAQ Permitting Division with Weyerhaeuser NR Company's Title V Renewal Application, due January 23, 2023, for the Sutton OSB Mill (Facility ID 007-00016). The Sutton OSB Mill is currently operating under R30-00700016-2018(SM01) permit. The original permit was approved on 7/23/2018 and the Significant Mod 01 was issued on 9/7/2021. The attached application contains the DAQ's Cover Letter as the first page. Please let me know if you have any questions or concerns.

Thank you,

Ryan Bell

Ryan Bell
Associate Engineer

D 681-205-8968
O 681-205-8949
C 304-601-1198
E rbell@slrconsulting.com

SLR International Corporation
8 Capitol Street Suite 300, Charleston, WV 25301

Sutton OSB Mill_Title V Renewal Application Packet_Submit on Jan 11 2023.pdf
5993K

Received
January 11, 2023
WV DEP/Div of Air Quality

Division of Air Quality Permit Application Submittal

Please find attached a permit application for : Weyerhaeuser NR Company; Sutton OSB Mill
[Company Name; Facility Location]

- DAQ Facility ID (for existing facilities only): 007-00016
- Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only): R30-00700016-2018(SM01), R13-1762K

- 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) Application:
  - ☐ Title V Initial
  - ☑ Title V Renewal
  - ☐ Administrative Amendment**
  - ☐ Minor Modification**
  - ☐ Significant Modification**
  - ☐ Off Permit Change

****If the box above is checked, include the Title V revision information as ATTACHMENT S to the combined NSR/Title V 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: Jesse Hanshaw
    - Email: jhanshaw@slrconsulting.com
    - Phone Number: 304-545-8563

Weyerhaeuser NR Company

Sutton OSB Mill, 007-00016

Heaters, West Virginia

Title V Renewal Application

SLR Ref: 116.00687.00035

January 2023

Title V Renewal Application

Prepared for:

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, WV 26627

This document has been prepared by SLR International Corporation. The material and data in this permit application were prepared under the supervision and direction of the undersigned.

Nathaniel Lanham
WV Operations Manager

Jesse Hanshaw, P.E.
Principal Engineer

CONTENTS

APPLICATION FOR PERMIT

Title V Renewal Permit Application

Sutton OSB Mill, 007-00016
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

January 2023

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475
www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

1. **Name of Applicant (As registered with the WV Secretary of State's Office):**
Weyerhaeuser NR Company

2. Facility Name or Location:
Heaters Facility
Sutton OSB Mill

3. DAQ Plant ID No.:
0 0 7 — 0 0 0 1 6

4. Federal Employer ID No. (FEIN):
2 6 3 4 8 1 2 5 7

5. **Permit Application Type:**

☐ Initial Permit — When did operations commence? MM/DD/1996
☒ Permit Renewal — What is the expiration date of the existing permit? 07/23/2023
☐ Update to Initial/Renewal Permit Application

6. Type of Business Entity:

☒ Corporation ☐ Governmental Agency ☐ LLC
☐ Partnership ☐ Limited Partnership

7. Is the Applicant the:

☐ Owner ☐ Operator ☒ Both

If the Applicant is not both the owner and operator, please provide the name and address of the other party.

_____
_____
_____

8. Number of onsite employees:
140

9. Governmental Code:

☒ Privately owned and operated; 0
☐ Federally owned and operated; 1
☐ State government owned and operated; 2
☐ County government owned and operated; 3
☐ Municipality government owned and operated; 4
☐ District government owned and operated; 5

10. 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.

11. Mailing Address		
Street or P.O. Box: 3601 Gauley Turnpike		
City: Heaters	**State:** WV	**Zip: 26627-**
Telephone Number: (304) 765-4200	**Fax Number:** (304) 765-4285	

12. Facility Location		
Street: US Hwy 19	**City:** Heaters	**County:** Braxton
UTM Easting: 529.939 km	**UTM Northing:** 4,290.213 km	**Zone:** ☒ 17 or ☐ 18
Directions: From I-79 Take Exit #67 at Flatwoods, Turn on US 19 North. Follow US 19 North for approximately 5 miles, the mill entrance will be on the left.		
Portable Source? ☐ Yes ☒ No		
Is facility located within a nonattainment area? ☐ Yes ☒ No		**If yes, for what air pollutants?**
Is facility located within 50 miles of another state? ☐ Yes ☒ No		**If yes, name the affected state(s).**
Is facility located within 100 km of a Class I Area[1]? ☒ Yes ☐ No **If no, do emissions impact a Class I Area[1]?** ☐ Yes ☐ No		**If yes, name the area(s).** Otter Creek Wilderness

[1] *Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.*

13. Contact Information		
Responsible Official: Timothy Sagraves		**Title:** Mill Manager
Street or P.O. Box: 3601 Gauley Turnpike		
City: Heaters	**State:** WV	**Zip: 26627-**
Telephone Number: (304) 765-4242	**Fax Number:** (304) 765-4280	
E-mail address: Timothy.Sagraves@WY.com		
Environmental Contact: Matthew Rutherford		**Title:** Environmental Manager
Street or P.O. Box: 3601 Gauley Turnpike		
City: Heaters	**State:** WV	**Zip: 26627-**
Telephone Number: (304) 765-4217	**Fax Number:** (304) 765-4285	
E-mail address: Matthew.Rutherford@WY.com		
Application Preparer: Jesse Hanshaw		**Title:** Principal Engineer
Company: SLR International Corporation		
Street or P.O. Box: 8 Capitol Street, Suite 300		
City: Charleston	**State:** WV	**Zip: 25301**
Telephone Number: (304) 545-8563	**Fax Number:** (	
E-mail address: jhanshaw@slrconsulting.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Oriented Strand Board Manufacturing	Oriented Strand Board (OSB)	321219	2493

Provide a general description of operations.

Weyerhaeuser Sutton OSB produces oriented strandboard (OSB) with methylene diphenyl diisocyanate (MDI) resin, phenol-formaldehyde (PF) resin, wood strands, wax, and other additives to form the core layer entering the OSB press. Weyerhaeuser Sutton produces OSB using predominantly hardwood. Major processing areas at the Facility include: Log Intake and Storage, Flaking and Screening, Strand Drying, Mat Preparation, Pressing, and Board Finising and Shipping. Miscellaneous activities undertaken at the Facility include: General Facility and vehicle maintenance, knife filing and grinding, process wastewater treatment and reuse, wood fuel intake and storage, fire water storage, and other support activities.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
☒ SIP	☐ FIP
☒ Minor source NSR (45CSR13)	☐ PSD (45CSR14)
☐ NESHAP (45CSR15)	☐ Nonattainment NSR (45CSR19)
☒ Section 111 NSPS	☒ Section 112(d) MACT standards
☐ Section 112(g) Case-by-case MACT	☐ 112(r) RMP
☐ Section 112(i) Early reduction of HAP	☐ Consumer/commercial prod. reqts., section 183(e)
☐ Section 129 Standards/Reqts.	☐ Stratospheric ozone (Title VI)
☐ Tank vessel reqt., section 183(f)	☐ Emissions cap 45CSR§30-2.6.1
☐ NAAQS, increments or visibility (temp. sources)	☒ 45CSR27 State enforceable only rule
☒ 45CSR4 State enforceable only rule	☐ Acid Rain (Title IV, 45CSR33)
☐ Emissions Trading and Banking (45CSR28)	☒ **C**ompliance **A**ssurance **M**onitoring (40CFR64)
☐ CAIR NO_x Annual Trading Program (45CSR39)	☐ CAIR NO_x Ozone Season Trading Program (45CSR40)
☐ CAIR SO_2 Trading Program (45CSR41)	

19. Non Applicability Determinations

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

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 fuel cell heaters were originally evaluated for boiler MACT applicability and found not to be subject as a result of their exhaust being used for direct heating of the site's rotary dryers and therefore already covered by the PCWP MACT under Subpart DDDD.

40 CFR 60, Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

The energy cells indirect fired Thermal Oil Heater (TOH) contribution is less than 100 MMBTU/hr.

☒ Permit Shield

19. Non Applicability Determinations *(Continued)* - *Attach additional pages as necessary.*

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

☒ Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*).

1) Open Burning Prohibited (Refuse), Requirement: 45CSR§6-3.1. Permit Condition: 3.1.1.

2) Open Burning Prohibited, Requirement: 45CSR§6-3.2. Permit Condition: 3.1.2.

3) Asbestos, Requirement: 40 C.F.R. §61.145(b) & 45CSR15 Permit Condition: 3.1.3.

4) Odor, Requirement: 45CSR§4-3.1 Permit Condition: 3.1.4.

5) Standby plan for reducing emissions, Requirement: 45CSR§11-5.2 Permit Condition: 3.1.5.

6) Emission Inventory, Requirement: W.Va. Code § 22-5-4(a)(14) Permit Condition: 3.1.6.

7) Ozone-depleting substances, Requirement: 40 C.F.R. 82, Subpart F Permit Condition: 3.1.7.

8) Risk Management Plan, Requirement: 40 C.F.R. 68 Permit Condition: 3.1.8.

9) Stack Testing, Requirement: WV Code § 22-5-4(a)(15) and 45CSR13 Permit Condition: 3.3.1.

10) Monitoring Information, Requirement: 45CSR§30-5.1.c.2.A., 45CSR13, R13-1761, 4.4.1 Permit Condition: 3.4.1.

11) Retention of records, Requirement: 45CSR§30-5.1.c.2.B. Permit Condition: 3.4.2.

12) Responsible official, Requirement: 45CSR§30-4.4. and 5.1.c.3.D. Permit Condition: 3.5.1.

13) Confidential information, Requirement: 45CSR§30-5.1.c.3.E. Permit Condition: 3.5.2.

14) DEP / USEPA Address

15) Certified Emissions Statement, Requirement: 45CSR§30-8. Permit Condition: 3.5.4.

☒ Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1) Reporting - Permit Condition 3.1.2.

2) Reporting - Permit Condition 3.1.2.

3) Notification - Permit Condition 3.1.3.

4) Recordkeeping - Permit Condition: 3.4.3.

5) Reporting - Permit Condition: 3.1.5.

6) Reporting - Permit Condition: 3.1.6.

7) Recordkeeping - Permit Condition: 3.1.7.

8) Reporting - Permit Condition: 3.1.8.

9) Testing - Permit Condition: 3.3.1.

10) Recordkeeping - Permit Condition: 3.4.1.

11) Recordkeeping - Permit Condition: 3.4.2.

12) Reporting - Permit Condition: 3.5.1.

13) Reporting - Permit Condition: 3.5.2.

14) Reporting - Permit Condition: 3.5.3.

15) Reporting - Permit Condition: 3.5.4.

Are you in compliance with all facility-wide applicable requirements? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

20. Facility-Wide Applicable Requirements *(Continued)* - *Attach additional pages as necessary.*

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

16) Compliance Certification, Requirement: 45CSR§30-5.3.e. Permit Condition: 3.5.5.

17) Semi-Annual Monitoring Reports, Requirement: 45CSR§30-5.1.c.3.A., 45CSR13, R13-1761, 3.5.6. Permit Condition: 3.5.6.

18) Deviations, Requirement: 45CSR§30-5.1.c.3.C. and 45CSR§30-5.1.c.3.B. Permit Condition: 3.5.8.

19) New Applicable Requirements, Requirement: 45CSR§30-4.3.h.1.B. Permit Condition: 3.5.9.

20) Annual Resin, MDI & Wax Throughputs, Requirement: 45CSR13, R13-1761, 4.1.9 Permit Condition: 4.1.9

21) Paved Access Roads, Requirement: 45CSR13, R13-1761, 4.1.12 Permit Condition: 4.1.12.

22) Reducing Stack Gas Concentration, Requirement: 45CSR13, R13-1761, 4.1.14.; 45CSR§7-4.3 Permit Condition: 4.1.20.

23) Acceptable Stack Sampling Locations, Requirement: 45CSR13, R13-1761, 4.1.14; 45CSR§7-4.12 Permit Condition: 4.1.21.

24) Minimize Fugitive PM, Requirement: 45CSR13, R13-1761, 4.1.14.; 45CSR§7-5.1 Permit Condition: 4.1.22.

25) Minimize PM, Requirement: 45CSR13, R13-1761, 4.1.14., 45CSR§7-5.2 Permit Condition: 4.1.23.

26) Malfunctions, Requirement: 45CSR13, R13-1761, 4.1.14; 45CSR§7-9.1 Permit Condition: 4.1.24.

27) PCWP MACT (Group 1 Misc. Coatings), Requirement: 45CSR34; 40 C.F.R. §63.2241 and 40 C.F.R. 63, Subpart DDDD, Table 3 Permit Condition: 4.1.30.

28) Testing by Director, Requirement: 45CSR13, R13-1761, 4.1.13, 4.1.14; 45CSR§§2-8.1.b and 8.1.b.1.; 45CSR§§7-8.1 and 7-8.2 Permit Conditions: 4.3.3., 4.3.4., 4.3.5.

29) Fugitive Particulate, Requirement: 45CSR§30-5.1.c Permit Conditions: 4.4.9., 4.4.10.

☒ Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/ reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

16) Reporting - Permit Condition: 3.5.5.

17) Reporting - Permit Condition: 3.5.6.

18) Reporting - Permit Condition: 3.5.8.

19) Reporting, Notify & Submit Compliance Schedule - Permit Condition: 3.5.9.

20) Monitoring - Permit Condition: 4.2.3. and Recordkeeping - Permit Condition: 4.4.5.

21) Monitoring/Maintain Paved Access Roads - Permit Condition: 4.1.12.

22) Testing - Permit Condition: 4.1.20.

23) Testing/Original Design/Flows - Permit Condition: 4.1.21.

24) Monitoring/Original Design - Permit Condition: 4.1.22.

25) Monitoring/Maintenance/Records - Permit Conditions: 4.1.23., 4.4.10.

26) Reporting (24 hours) - Permit Condition: 4.1.24.

27) Recordkeeping - Permit Condition: 4.1.30.

28) Testing - Permit Conditions: 4.3.3., 4.3.4., 4.3.5.

29) Monitoring/Records - Permit Conditions: 4.4.9., 4.4.10.

Are you in compliance with all facility-wide applicable requirements? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

21. Active Permits/Consent Orders		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit *(if any)*
R13-1761K	05/24/2021	
R30-00700016-2018(SM01)	9/7/2021	
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22. Inactive Permits/Obsolete Permit Conditions		
Permit Number	Date of Issuance	Permit Condition Number
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Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
See attached Potential Emissions Summary (Appendix B, Table B-1) for details	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	229
Nitrogen Oxides (NO_X)	249
Lead (Pb)	0.03
Particulate Matter ($PM_{2.5}$)[1]	87.8
Particulate Matter (PM_{10})[1]	95.4
Total Particulate Matter (TSP)	95.4
Sulfur Dioxide (SO_2)	17.9
Volatile Organic Compounds (VOC)	249
Hazardous Air Pollutants[2]	Potential Emissions
Total HAPs	39.8
Regulated Pollutants other than Criteria and HAP	Potential Emissions

[1] $PM_{2.5}$ and PM_{10} are components of TSP.
[2] For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)		
☒	1.	Air compressors and pneumatically operated equipment, including hand tools.
☒	2.	Air contaminant detectors or recorders, combustion controllers or shutoffs.
☒	3.	Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
☒	4.	Bathroom/toilet vent emissions.
☒	5.	Batteries and battery charging stations, except at battery manufacturing plants.
☐	6.	Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
☐	7.	Blacksmith forges.
☒	8.	Boiler water treatment operations, not including cooling towers.
☒	9.	Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
☐	10.	CO_2 lasers, used only on metals and other materials which do not emit HAP in the process.
☒	11.	Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
☐	12.	Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
☒	13.	Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
☐	14.	Demineralized water tanks and demineralizer vents.
☐	15.	Drop hammers or hydraulic presses for forging or metalworking.
☒	16.	Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
☐	17.	Emergency (backup) electrical generators at residential locations.
☐	18.	Emergency road flares.
☐	19.	Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO_x, SO_2, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____ _____ _____ _____ _____

24. Insignificant Activities (Check all that apply)		
☐	20.	Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____
☐	21.	Environmental chambers not using hazardous air pollutant (HAP) gases.
☐	22.	Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
☐	23.	Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
☐	24.	Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
☐	25.	Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
☒	26.	Fire suppression systems.
☒	27.	Firefighting equipment and the equipment used to train firefighters.
☐	28.	Flares used solely to indicate danger to the public.
☒	29.	Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
☐	30.	Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
☒	31.	Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
☐	32.	Humidity chambers.
☐	33.	Hydraulic and hydrostatic testing equipment.
☒	34.	Indoor or outdoor kerosene heaters.
☒	35.	Internal combustion engines used for landscaping purposes.
☐	36.	Laser trimmers using dust collection to prevent fugitive emissions.
☐	37.	Laundry activities, except for dry-cleaning and steam boilers.
☒	38.	Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
☐	39.	Oxygen scavenging (de-aeration) of water.
☐	40.	Ozone generators.
☒	41.	Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant

24. Insignificant Activities (Check all that apply)		
		owners/operators must still get a permit if otherwise requested.)
☒	42.	Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
☒	43.	Process water filtration systems and demineralizers.
☒	44.	Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
☐	45.	Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
☐	46.	Routing calibration and maintenance of laboratory equipment or other analytical instruments.
☐	47.	Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
☐	48.	Shock chambers.
☐	49.	Solar simulators.
☐	50.	Space heaters operating by direct heat transfer.
☒	51.	Steam cleaning operations.
☒	52.	Steam leaks.
☐	53.	Steam sterilizers.
☒	54.	Steam vents and safety relief valves.
☐	55.	Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
☒	56.	Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
☐	57.	Such other sources or activities as the Director may determine.
☒	58.	Tobacco smoking rooms and areas.
☒	59.	Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table

Fill out the **Title V Equipment Table** and provide it as **ATTACHMENT D**.

26. Emission Units

For each emission unit listed in the **Title V Equipment Table**, fill out and provide an **Emission Unit Form** as **ATTACHMENT E**.

For each emission unit not in compliance with an applicable requirement, fill out a **Schedule of Compliance Form** as **ATTACHMENT F**.

27. Control Devices

For each control device listed in the **Title V Equipment Table**, fill out and provide an **Air Pollution Control Device Form** as **ATTACHMENT G**.

For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the **Compliance Assurance Monitoring (CAM) Form(s)** for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as **ATTACHMENT H**.

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. 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.

Responsible official (type or print)

Name: Timothy Sagraves	Title: Mill Manager

Responsible official's signature:

Signature: T Sagraves Signature Date: 1-5-23

(Must be signed and dated in blue ink)

Note: Please check all applicable attachments included with this permit application:

☒	ATTACHMENT A: Area Map
☒	ATTACHMENT B: Plot Plan(s)
☒	ATTACHMENT C: Process Flow Diagram(s)
☒	ATTACHMENT D: Equipment Table
☒	ATTACHMENT E: Emission Unit Form(s)
☐	ATTACHMENT F: Schedule of Compliance Form(s)
☒	ATTACHMENT G: Air Pollution Control Device Form(s)
☒	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/daq, requested by phone (304) 926-0475, and/or obtained through the mail.

ATTACHMENT A

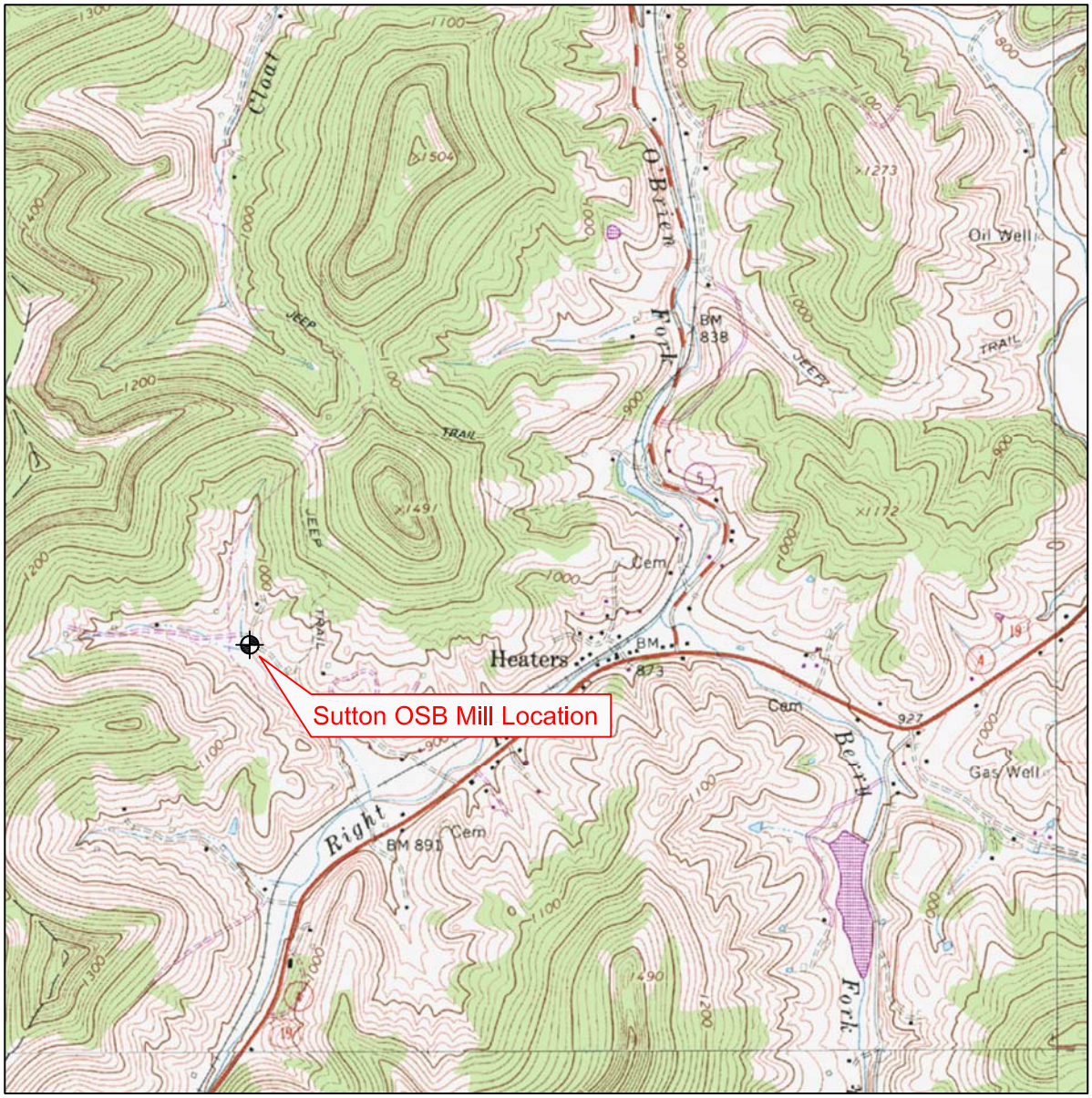
AREA MAP – FACILITY LOCATION

Title V Renewal Permit Application

Sutton OSB Mill, 007-00016
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

January 2023



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Map Scale: 1:24000

0 1000 2000 3000 4000 5000

Graphic Scale (Feet)

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

SLR
#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:
Title V Permit Renewal Application

Drawing
Attachment B - Map (Topographic)

Date: January 2023	Scale: 1" = 2000'	Fig. No.
Drawn By: CLB	Project #: 116.00687.00035	

DWG File Name: Attachment A_Weyerhaeuser_Map_Topo.dwg

ATTACHMENT B

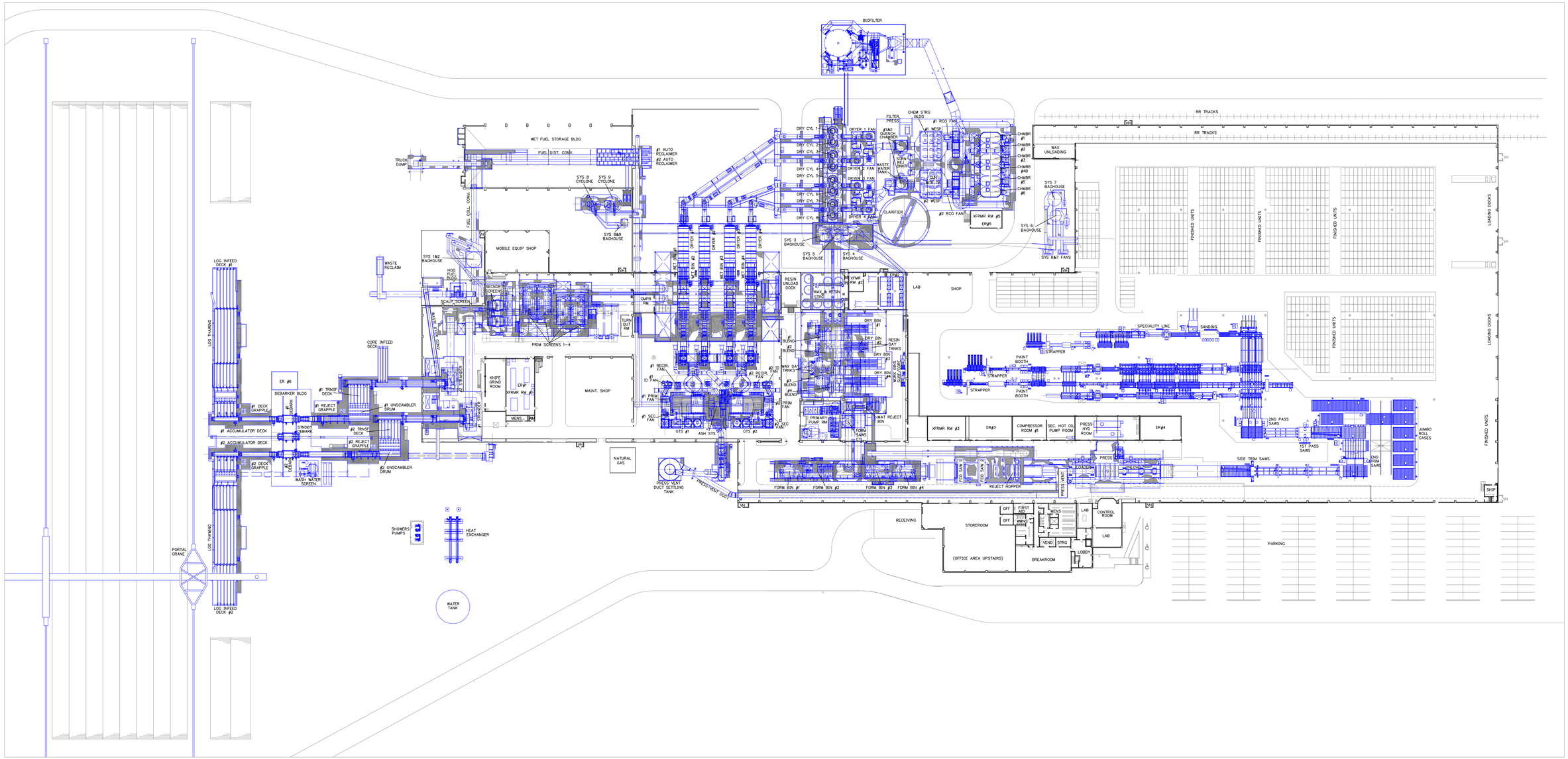
PLOT PLAN – FACILITY LAYOUT

Title V Renewal Permit Application

Sutton OSB Mill, 007-00016
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

January 2023



1	09/14/17	MHR		ADDED BIOFILTER EQUIPMENT
Ø	12/12/01	BW		RELEASED FOR REVIEW
REV	DATE	BY	APP'D	DESCRIPTION OF REVISION

Weyerhaeuser

Engineered Strand Products

Sutton OSB

Heaters, West Virginia

APPROVED	SCALE	1"=60'	MO	DAY	YR
	DRAWN	B. WICKS	12	12	Ø1
DATE	CHK'D				
	APP'D				
PROJECT	APP'D				

GENERAL FACILITY
EQUIPMENT LAYOUT

DRAWING NUMBER 800-G-7002-D-02 REV 1

ATTACHMENT C

PROCESS FLOW DIAGRAM

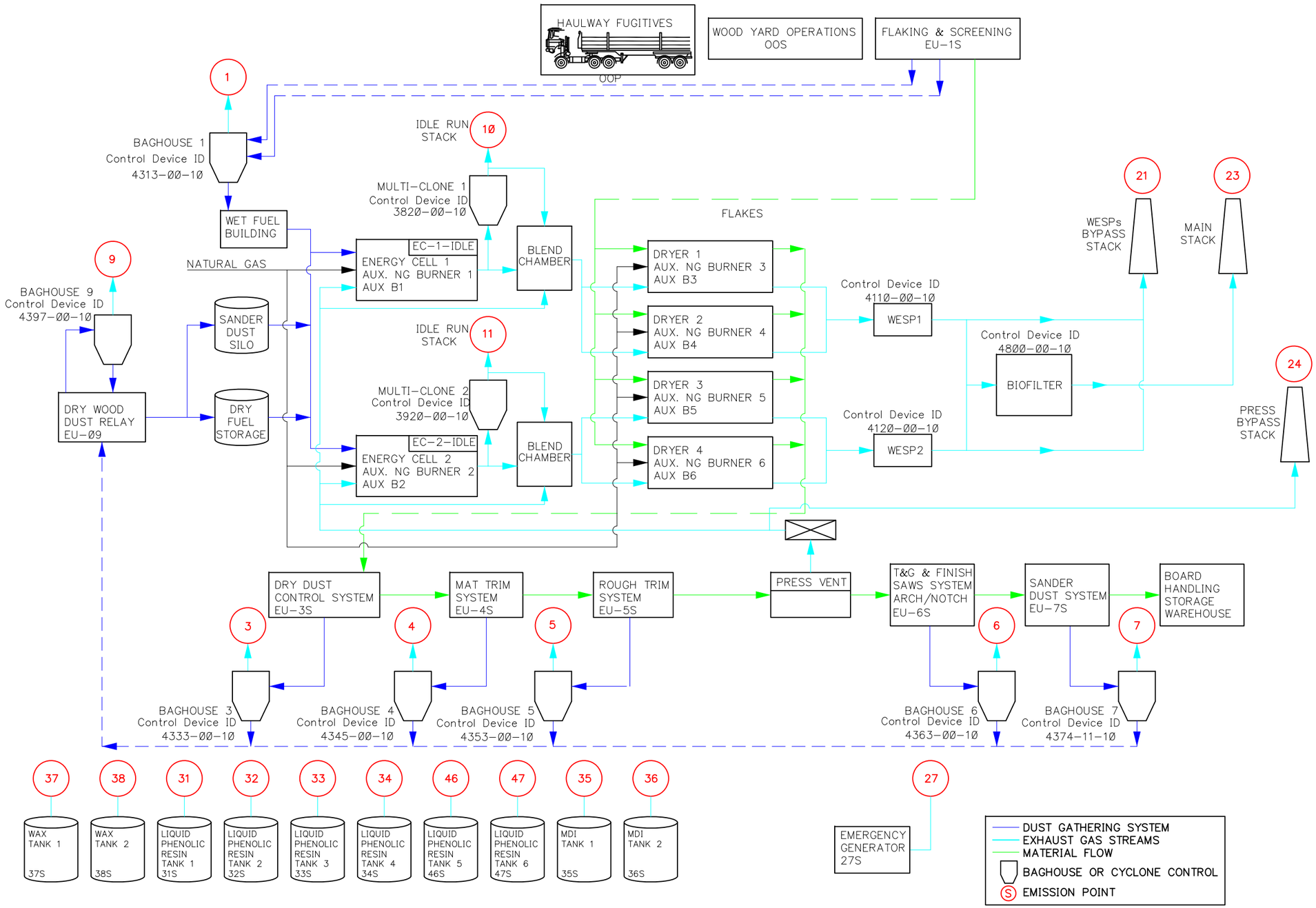
Title V Renewal Permit Application

Sutton OSB Mill, 007-00016
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

January 2023

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
9	9/14/17	MHR	–	REMOVED WAX TANK HEATER	4	1/9/08	DEK	–	ADDED RTOS.
8	2/16/16	MHR	–	REVISED PRESS VENT TO SHOW TO BLEND CHAMBERS	3	2/10/05	DEK	–	ADDED 2 TANKS, REMOVED RCOS.
7	2/8/16	MHR	–	REMOVED RCOS/RTOS & ADDED BIOFILTER W/ NEW STACK	2	5/30/02	BW	–	ADDED BAGHOUSE 3, RENUMBERED OTHERS
6	10/28/11	MHR	–	ADDED BLEND CHAMBERS	1	4/23/02	BW	–	REVISED PRESS VENT BYPASS LINE
5	10/13/11	MHR	–	ADDED ARCH/NOTCH SYSTEM TO BAGHOUSE 6	0	7/16/01	BW	–	ISSUED FOR RECORD

Weyerhaeuser

Sutton OSB
Heaters, West Virginia

APPROVED	SCALE	NTS	MO	DAY	YR.
–	DRAWN	B. WICKS	04	23	02
PROJECT	CHK'D	M. RUTHERFORD	09	14	17

PROCESS DIAGRAM FOR
WEYERHAEUSER WEST VIRGINIA
SUTTON OSB FACILITY

DRAWING NUMBER 800–G–7003–A–02 REV 9

ATTACHMENT D

EQUIPMENT TABLE

Title V Renewal Permit Application

Sutton OSB Mill, 007-00016
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

January 2023

ATTACHMENT D - Title V Equipment Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Point ID[1]	Control Device[1]	Emission Unit ID[1]	Emission Unit Description	Design Capacity	Year Installed/ Modified
1	4313-00-10 Fabric Filter	1S	Flaking and Screening System (consists of 2 flakers, 27 conveyor pickups, 6 green screens, and 1 hog and disk screen)	65,450 ACFM 50 lb/hr (oven dry)	1996
3	4333-00-10 Fabric Filter	3S	Dry Flake Area (consists of 4 dry bins, 17 conveyor pickups, 4 weigh belts, 4 blenders, and 4 forming bins)	53,400 ACFM 3,300 lb/hr (oven dry)	1996
4	4345-00-10 Fabric Filter	4S	Mat Trim System (consists of 2 mat side trim saws, 2 flying end saws, and 6 material collection hoppers)	43,100 ACFM 5,500 lb/hr (oven dry)	1996
5	4353-00-10 Fabric Filter	5S	Rough Trim System (consists of 4 rough trim hogging heads, material collection screw, and 5 press pit floor sweeps)	21,200 ACFM 5,730 lb/hr (oven dry)	1996
6	4363-00-10 Fabric Filter	6S	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)	30,970 ACFM 6,160 lb/hr (oven dry)	1996 / 2011
7	4374-00-10 Fabric Filter	7S	Sander Dust System (consists of a 6-head wide belt sander)	44,800 ACFM 2,200 lb/hr (oven dry)	1996
9	4397-00-10 Fabric Filter	9S	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)	13,200 ACFM 8,550 lb/hr (oven dry)	1996
10	3820-00-10 Multi-Clone No. 1	3816-00-11	Energy Cell No. 1 Auxiliary Burner - Idle Run	29 MMBTU/hr	1996
10	3820-00-10 Multi-Clone No. 1	3800-00-10	Energy Cell No. 1 - Idle Run	<30 MMBTU/hr	1996
21, 23	4110-00-10 Wet ESP No. 1	3816-00-11	Energy Cell No. 1 Auxiliary Burner - Normal Run	29 MMBTU/hr	1996
21, 23	4800-00-10 Biofilter	3800-00-10	Energy Cell No. 1 - Normal Run	175 MMBTU/hr	1996

11	3920-00-10 Multi-Clone No. 2	3916-00-11	Energy Cell No. 2 Auxiliary Burner - Idle Run	29 MMBTU/hr	1996
11	3920-00-10 Multi-Clone No. 2	3900-00-10	Energy Cell No. 2 - Idle Run	<30 MMBTU/hr	1996
21, 23	4120-00-10 Wet ESP No. 2	3916-00-11	Energy Cell No. 2 Auxiliary Burner - Normal Run	29 MMBTU/hr	1996
21, 23	4800-00-10 Biofilter	3900-00-10	Energy Cell No. 2 - Normal Run	175 MMBTU/hr	1996
21, 23	4110-00-10 Wet ESP No. 1	3130-00-11	Auxiliary Burner - Dryer No. 1	55 MMBTU/hr	1996
21, 23	4800-00-10 Biofilter	3230-00-11	Auxiliary Burner - Dryer No. 2	55 MMBTU/hr	1996
21, 23	4120-00-10 Wet ESP No. 2	3330-00-11	Auxiliary Burner - Dryer No. 3	55 MMBTU/hr	1996
21, 23	4800-00-10 Biofilter	3430-00-11	Auxiliary Burner - Dryer No. 4	55 MMBTU/hr	1996
21, 23	4110-00-10 Wet ESP No. 1 4120-00-10 Wet ESP No. 2 4800-00-10 Biofilter	4700-00-10	OSB Press Vent Exhaust	60.4 Tons/hr	1996 / 2008
24	None	4700-00-10	OSB Press Vent Exhaust (Bypass Mode)	60.4 Tons/hr	1996 / 2008
27	None	27S	Emergency Diesel Generator	1030 hp	1996
31	None	31S	Liquid Phenolic Resin Tank No. 1	15,000 Gallons	1996
32	None	32S	Liquid Phenolic Resin Tank No. 2	15,000 Gallons	1996

33	None	33S	Liquid Phenolic Resin Tank No. 3	15,000 Gallons	1996
34	None	34S	Liquid Phenolic Resin Tank No. 4	15,000 Gallons	1996
46	None	46S	Liquid Phenolic Resin Tank No. 5	15,000 Gallons	2005
47	None	47S	Liquid Phenolic Resin Tank No. 6	15,000 Gallons	2005
35	None	35S	MDI Tank No. 1	15,000 Gallons	1996
36	None	36S	MDI Tank No. 2	15,000 Gallons	1996
37	None	37S	Wax Tank No. 1	15,000 Gallons	1996
38	None	38S	Wax Tank No. 2	15,000 Gallons	1996
40 and 41	Filters	40S and 41S	Paint Booth No. 1	26 Gallons/hr	2002/2016
42 and 43	Filters	42S and 43S	Paint Booth No. 2	26 Gallons/hr	2002
44 and 45	Filters	44S and 45S	Paint Booth No. 3	26 Gallons/hr	2002/2016

[1]For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT E

EMISSION UNIT FORMS

Title V Renewal Permit Application

Sutton OSB Mill, 007-00016
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

January 2023

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Fabric Filter
1S	Flaking and Screening System	4313-00-10

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Fabric Filter for the Flaking and Screening System which contains 2 flakers, 27 conveyor pickups, 6 green screens and 1 hog and disk screen

Manufacturer:	**Model number:**	**Serial number:**
Construction date:	**Installation date:** MM/DD/1996	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 65,450 ACFM

Maximum Hourly Throughput: 50 lb/hr (oven dry)	**Maximum Annual Throughput:**	**Maximum Operating Schedule:** 8760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X_ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})	See Appendix B	
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	See Appendix B	
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM Removal Efficiency 99.9% - Permit Condition: 4.1.1.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.1

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Particulate/Opacity - Permit Conditions: 4.1.15., 4.1.16.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-3.1, 45CSR§7-3.2

PM Limit - Permit Condition: 4.1.18.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-4.1.

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM Removal Efficiency 99.9% - Recordkeeping/Original Design - Permit Condition 4.1.1.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.1

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Conditions: 4.1.2., 4.1.18.
Underlying rule/regulation: 45CSR13, R13-1761,4.1.2

Opacity - Permit Conditions: 4.2.7., 4.4.8.
VEs/Inspections/Monitoring - M22 monitoring every two weeks and keep records
Underlying rule/regulation: 40 CFR 60 Appendix A, Method 22; 45CSR7A; 45CSR§30-5.1.c

Control Devices - Permit Conditions: 4.4.1., 4.4.2.
Record of maintenance and malfunctions of control devices
Underlying rule/regulation: 45CSR13, R13-1761, 4.4.2, 4.4.3

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Fabric Filter
3S	Dry Flake Area	4333-00-10

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Fabric Filter for the Dry Flake Area which contains 4 dry bins, 17 conveyor pickups, 4 weigh belts, 4 blenders and 4 forming bins.

Manufacturer:	**Model number:**	**Serial number:**
Construction date:	**Installation date:** MM/DD/1996	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 53,400 ACFM

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
3,300 lb/hr (oven dry)		8760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X_ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})	See Appendix B	
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	See Appendix B	
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM Removal Efficiency 99.9% - Permit Condition: 4.1.1.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.1

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761,4.1.2

Particulate/Opacity - Permit Conditions: 4.1.15., 4.1.16.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-3.1, 45CSR§7-3.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM Removal Efficiency 99.9% - Recordkeeping/Original Design - Permit Condition 4.1.1.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.1

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761,4.1.2

Opacity - Permit Conditions: 4.2.7., 4.4.8.
VEs/Inspections/Monitoring - M22 monitoring every two weeks and keep records.
Underlying rule/regulation: 40 CFR 60 Appendix A, Method 22; 45CSR7A; 45CSR§30-5.1.c

Control Devices - Permit Conditions: 4.4.1., 4.4.2.
Record of maintenance and malfunctions of control devices
Underlying rule/regulation: 45CSR13, R13-1761,4.4.2, 4.4.3

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Fabric Filter
4S	Mat Trim System	4345-00-10

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Fabric Filter, consists of 2 mat side trim saws, 2 flying end saws, and 6 material collection hoppers forming bins.

Manufacturer:	**Model number:**	**Serial number:**
Construction date:	**Installation date:** MM/DD/1996	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 43,100 ACFM

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
5,500 lb/hr (oven dry)		8760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X_ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})	See Appendix B	
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	See Appendix B	
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM Removal Efficiency 99.9% - Permit Condition: 4.1.1.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.1

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Particulate/Opacity - Permit Conditions: 4.1.15., 4.1.16.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-3.1, 45CSR§7-3.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM Removal Efficiency 99.9% - Recordkeeping/Original Design - Permit Condition 4.1.1.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.1

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Opacity - Permit Conditions: 4.2.7., 4.4.8.
VEs/Inspections/Monitoring - M22 monitoring every two weeks and keep records.
Underlying rule/regulation: 40 CFR 60 Appendix A, Method 22; 45CSR7A; 45CSR§30-5.1.c

Control Devices - Permit Conditions: 4.4.1., 4.4.2.
Record of maintenance and malfunctions of control devices
Underlying rule/regulation: 45CSR13, R13-1761, 4.4.2, 4.4.3

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Fabric Filter
5S	Rough Trim System	4353-00-10

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Fabric Filter for the Rough Trim System which contains 4 rough trim and hogging heads, material collection screw and 5 press pit floor sweeps.

Manufacturer:	**Model number:**	**Serial number:**
Construction date:	**Installation date:** MM/DD/1996	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 21,200 ACFM

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
5,730 lb/hr (oven dry)		8760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X_ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})	See Appendix B	
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	See Appendix B	
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM Removal Efficiency 99.9% - Permit Condition: 4.1.1.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.1

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Particulate/Opacity - Permit Conditions: 4.1.15., 4.1.16.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-3.1, 45CSR§7-3.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM Removal Efficiency 99.9% - Recordkeeping/Original Design - Permit Condition 4.1.1.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.1

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Opacity - Permit Conditions: 4.2.7., 4.4.8.
VEs/Inspections/Monitoring - M22 monitoring every two weeks and keep records.
Underlying rule/regulation: 40 CFR 60 Appendix A, Method 22; 45CSR7A; 45CSR§30-5.1.c

Control Devices - Permit Conditions: 4.4.1., 4.4.2.
Record of maintenance and malfunctions of control devices
Underlying rule/regulation: 45CSR13, R13-1761, 4.4.2, 4.4.3

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Fabric Filter
6S	Tongue & Groove and Sawing System	4363-00-10

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
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.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
	MM/DD/1996	11/21/2011

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 30,970 ACFM

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
6,200 lb/hr (oven dry)		8760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X_ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})	See Appendix B	
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	See Appendix B	
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM Removal Efficiency 99.9% - Permit Condition: 4.1.1.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.1

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Particulate/Opacity - Permit Conditions: 4.1.15., 4.1.16.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-3.1, 45CSR§7-3.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM Removal Efficiency 99.9% - Recordkeeping/Original Design - Permit Condition 4.1.1.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.1

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Opacity - Permit Conditions: 4.2.7., 4.4.8.
VEs/Inspections/Monitoring - M22 monitoring every two weeks and keep records.
Underlying rule/regulation: 40 CFR 60 Appendix A, Method 22; 45CSR7A; 45CSR§30-5.1.c

Control Devices - Permit Conditions: 4.4.1., 4.4.2.
Record of maintenance and malfunctions of control devices
Underlying rule/regulation: 45CSR13, R13-1761, 4.4.2, 4.4.3

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Fabric Filter
7S	Sander Dust System	4374-00-10

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Fabric Filter for the Sander Dust System which contains a 6-head wide belt sander.

Manufacturer:	**Model number:**	**Serial number:**
Construction date:	**Installation date:** MM/DD/1996	**Modification date(s):** MM/DD/2016

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 44,800 ACFM

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
2,200 lb/hr (oven dry)		8760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X_ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})	See Appendix B	
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	See Appendix B	
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM Removal Efficiency 99.9% - Permit Condition: 4.1.1.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.1

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Visible Emissions from Storage Structure - Permit Condition: 4.1.17.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-3.7

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM Removal Efficiency 99.9% - Recordkeeping/Original Design - Permit Condition 4.1.1.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.1

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Opacity - Permit Conditions: 4.2.7., 4.4.8.
VEs/Inspections/Monitoring - M22 monitoring every two weeks and keep records.
Underlying rule/regulation: 40 CFR 60 Appendix A, Method 22; 45CSR7A; 45CSR§30-5.1.c

Control Devices - Permit Conditions: 4.4.1., 4.4.2.
Record of maintenance and malfunctions of control devices
Underlying rule/regulation: 45CSR13, R13-1761, 4.4.2, 4.4.3

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Fabric Filter
9S	Dry Waste System	4397-00-10

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Fabric Filter for the Dry Waste System which 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.

Manufacturer:	**Model number:**	**Serial number:**
Construction date:	**Installation date:** MM/DD/1996	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 13,200 ACFM

Maximum Hourly Throughput: 8,550 lb/hr (oven dry)	**Maximum Annual Throughput:**	**Maximum Operating Schedule:** 8760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X_ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})	See Appendix B	
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	See Appendix B	
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM Removal Efficiency 99.9% - Permit Condition: 4.1.1.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.1

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Visible Emissions from Storage Structure - Permit Condition: 4.1.17.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-3.7

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

PM Removal Efficiency 99.9% - Recordkeeping/Original Design - Permit Condition 4.1.1. and
PM Emission Rate Limits of 4.1.2.
Compliance methods –
4.2.10 - Maintaining pressure drop across baghouse
4.2.8- Monthly visual inspection of capture system with annual inspection of baghouse internals

Opacity - Permit Conditions: 4.2.7., 4.4.8.
Must conduct Method 22 checks every two weeks and verify compliance with 45CSR7A evaluation if emissions are observed by Method 22. These records are maintained in accordance with 4.4.8.
Underlying rule/regulation: 40 CFR 60 Appendix A, Method 22; 45CSR7A; 45CSR§30-5.1.c

VEs/Inspections/Monitoring - Permit Conditions: 4.2.7., 4.2.8., 4.2.10., 4.4.8., 4.4.11., 4.4.13., 4.4.14.
Underlying rule/regulation: 45CSR§30-5.1.c; 40 C.F.R. §§64.6(c), 64.7(c), 64.7(d), 64.9(a), 64.9(b)

Control Devices - Permit Conditions: 4.4.1., 4.4.2.
Records of Maintenance and Malfunction of Air Pollution Control Equipment
Underlying rule/regulation: 45CSR13, R13-1761, 4.4.2, 4.4.3

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
3800-00-10	Energy Cell No. 1	Wet Electrostatic Precipitator No. 1 (4110-00-10)
3816-00-11	Energy Cell No. 1 Aux NG Burner	Wet Electrostatic Precipitator No. 2 (4120-00-10)
3900-00-10	Energy Cell No 2	Biofilter (4800-00-10)
3916-00-11	Energy Cell No. 2 Aux NG Burner	Multiclone No. 1 (3820-00-10)(Cell No.1 Idle)
		Multiclone No. 2 (3920-00-10)(Cell No.2 Idle)

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
The Energy Cells provide the energy to dry to wood flakes in the Dryers. Both Energy Cells primarily burn wood fuel. Each Energy Cell has a heat input rate of 175 MMBTU/hr while burning wood. The Energy Cells are also equipped with burners that burn natural gas. The heat input rate while burning natural gas is 29 MMBTU/hr.

The combustion air for both Energy Cells is drawn from VOC-laden exhaust from the OSB Press. The hot gases from the Energy Cells are used to dry the wood flakes in the Dryers. The hot air exiting the Dryers is then routed through two (2) wet electrostatic precipitators (WESPs), and one (1) biofilter prior to discharging to the atmosphere via Main Stack (Emission Point ID 23). The WESP units are used for controlling the emissions of particulate matter (PM) resulting from the combustion and the drying operations. The WESP units are estimated to have a PM reduction efficiency of 80% and the biofilter is used to control organics.

The Energy Cells can also operate in idle mode. The current Title V air permit limits the operation of both Energy Cells in idle mode to 2,800 hours per year combined. When the Energy Cells operate in idle mode, they burn wood fuel and the emissions are routed through two Multiclones (one for each Energy Cell) prior to discharging to the atmosphere via (Emission Point IDs 10 and 11). The Multiclones are used for controlling the PM emissions resulting from the combustion of wood and are estimated to have a PM control efficiency of 80%.

When the energy cells are online under normal drier operations they are allowed to bypass the Biofilter and vent through (Emission Point ID 21) only during times defined within the site's routine control device maintenance exemption plan as approved by WV DAQ.

Manufacturer:	**Model number:**	**Serial number:**
Geka Thermal Systems (GTS)		
Construction date:	**Installation date:**	**Modification date(s):**
	MM/DD/1996	MM/DD/2008

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
See Description Above

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
See Fuel Information Below		2,800 hours (EC1 & EC2 - combined during idle run mode)

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_Yes ___ No	**If yes, is it?**

	___ Indirect Fired _X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: See Fuel Information Below	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

1. 19.4 tons per hour of wood fuel is burned (on a green basis) during normal operating mode and has a heat input capacity of 175 MMBTU/hr (worst case)
2. The Energy Cell also has the ability to burn natural gas with a heat input capacity of 29 MMBTU/hr.
3. The Energy Cell also operates in idle mode when wood fuel is burned, and if only one cell is operated in idle mode, the maximum heat input rate is less than 30 MMBTU/hr. If both Energy Cells are operated in idle mode, the combined heat input is limited to 40 MMBTU/hr. Both Energy Cells combined can operate a total of 2,800 hours.
4. Combustion air for Energy Cell No. 1 is drawn from the VOC-laden exhaust from the OSB press.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Wood Fuel (barks, fines, dust)	< 0.01% by weight		4,500 BTU/lb (wet avg.)
Auxiliary Fuel (Natural Gas)	< 0.01% by weight		1,020 BTU/scf

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
	See Appendix B	

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

PM Removal Efficiency 80% - Permit Condition: 4.1.1.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.1

Emission Rate Limits - Permit Condition: 4.1.2. Table (Emission Point ID 10, 11, 21 & 23)
Underlying rule/regulation: 45CSR13, 45CSR§7-4.1, 4.1.2

Modes of Operation – Permit Condition: 4.1.3
Underlying rule/regulation; 45CSR13, R13-1761, 4.1.3

Fuels & Heat Input Rates - Permit Conditions: 4.1.4., 4.1.5.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.4., 4.1.5.

Energy Cell(s) - Permit Conditions: 4.1.3., 4.1.4., 4.1.5., 4.1.6.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.3., 4.1.4., 4.1.5., 4.1.6.

Particulates - Permit Conditions: 4.1.14.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.13., 4.1.14.; 45CSR§2-5.1., 45CSR§7-3.2, 45CSR§7-4.1

Opacity - Reg 2 Permit Conditions: 4.1.13., 4.1.14.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.13, 4.1.14; 45CSR§2-3.1, 45CSR§2-5.1

HCl - Permit Condition: 4.1.19.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-4.2 and Table 45-7B

SO2 - Permit Condition: 4.1.25.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.15.; 45CSR§10-4.1

TAPs - Permit Condition: 4.1.26.
Underling rule/regulation: 45CSR13, R13-1761, 4.1.16; 45CSR§27-3.1

PCWP MACT - Permit Conditions: 4.1.6., 4.1.27., 4.1.28., 4.1.29., 4.1.31., 4.1.32., 4.1.33
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.6, 4.1.17, 4.1.18, 4.1.19, 4.1.20; 40 CFR 63 Subpart DDDD; 45CSR43

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)
Energy Cell(s) - Permit Conditions: 4.2.1., 4.4.6.
Underlying rule/regulation: 45CSR13, R13-1761

Opacity - Permit Conditions: 4.2.5., 4.2.6., 4.4.8.
Underlying rule/regulation: 40 CFR 60 Appendix A, Method 22; 45CSR7A; 45CSR§30-5.1.c

VEs/Inspections/Monitoring - Permit Conditions: 4.2.5., 4.2.6., 4.2.8., 4.4.8., 4.4.11., 4.4.14., 4.5.1.
Underlying rule/regulation: 45CSR§30-5.1.c; 40 C.F.R. §§64.6(c), 64.7(c), 64.7(d), 64.9(a), 64.9(b)

Voltage - Permit Conditions: 4.2.9., 4.4.12., 4.4.14.

Underlying rule/regulation: 45CSR§30-5.1.c; 40 C.F.R. §§64.6(c), 64.7(c), 64.7(d), 64.9(b)

Testing - Permit Conditions: 4.3.1., 4.3.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.3.1; 40 CFR 63 Subpart DDDD

Control Devices - Permit Conditions: 4.2.5., 4.2.7., 4.2.8., 4.2.9., 4.3.1., 4.3.2., 4.4.1., 4.4.2., 4.4.7., 4.4.11., 4.4.12., 4.4.14., 4.4.16.
Underlying rule/regulation: 45CSR13, R13-1761

Fuel Records & Quarterly Testing - Permit Condition: 4.4.6.
Underlying rule/regulation: 45CSR13, R13-1761, 4.4.9, 4.1.14; 40 C.F.R. §60.48c(g); 45CSR16; 45CSR§2-8.3.c; 45CSR§§2A-7.1.a.1 and 7.1.a.3

PCWP MACT - Permit Conditions: 4.2.5., 4.3.1., 4.3.2., 4.3.6., 4.4.7., 4.4.16., 4.4.17., 4.5.2., 4.5.3.
Underlying rule/regulation: 40 CFR 63 Subpart DDDD

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
3130-00-11	Auxiliary Burner - Dryer No. 1	Wet Electrostatic Precipitator No. 1 (4110-00-10)(Dryer No. 1 & 2)
3230-00-11	Auxiliary Burner – Dryer No. 2	Wet Electrostatic Precipitator No. 2 (Dryer No. 3 & 4)
3330-00-11	Auxiliary Burner – Dryer No. 3	Biofilter (4440-00-10)(All Dryers)
3420-00-11	Auxiliary Burner – Dryer No. 4	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
There are four (4) Dryers at the Facility. Each Dryer processes wood strands at a rate of 28 tons/hr (wet basis) or 14 tons/hr (dry basis). The energy for drying is normally provided by burning wood fuel in the Energy Cells Nos. 1 and 2.

The Dryers are also equipped to burn natural gas. The heat input rate while burning natural gas is 55 MMBTU/hr for each Dryer. Natural gas is burned only as back-up or during times when there is an upset conditions.

The hot gases from the Energy Cells are used to dry the wood strands in the Dryer. The hot air exiting the Dryers is then routed through two (2) wet electrostatic precipitators (WESPs), and one (1) biofilter prior to discharging to the atmosphere via Main Stack (Emission Point ID 23). The WESP units are used for controlling the emissions of particulate matter (PM) resulting from the combustion and the drying operations. The WESP units are estimated to have a PM reduction efficiency of 80% and the biofilter is used to control organics.

During routine control device maintenance allowed under the Plywood MACT exemption the Biofilter will be offline and the dryers will vent through bypass stack (Emission Point ID 21)

Manufacturer:	**Model number:**	**Serial number:**
Construction date:	**Installation date:** MM/DD/1996	**Modification date(s):** MM/DD/2008

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
See Description Above

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
See Fuel Information Below		8,760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_Yes ___ No	**If yes, is it?** ___ Indirect Fired _X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: 55 MMBTU/hr	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

1. The Dryer processes approx. 28 tons/hr of wood strands on a wet basis or 14 tons/hr on a dry basis.
2. Natural gas is burned only as back-up or during times when there is an upset condition. Heat input capacity is 55 MMBTU/hr.
3. During normal operations, the heat for Drying is supplied by burning wood fuel in Energy Cell No. 1.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Auxiliary Fuel (Natural Gas)	< 0.01% by weight		1,020 BTU/scf

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
	See Appendix B	

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table (Emission Point ID 21 & 23)
Underlying rule/regulation: 45CSR13, 45CSR§7-4.1, 4.1.2

Routine Control Device Maintenance Exemption for Biofilter: Permit Condition 4.1.6
Underlying rule/regulation; 40CFR63, subpart DDDD and 45CSR13, R13-1761, Condition 4.1.6.

Dryer Burner(s) - Permit Condition: 4.1.8.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.8

Particulate/Opacity - Permit Conditions: 4.1.15., 4.1.16.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-3.1, 45CSR§7-3.2

HCl - Permit Condition: 4.1.19.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-4.2 and Table 45-7B

SO2 - Permit Condition: 4.1.25.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.15.; 45CSR§10-4.1

TAPs - Permit Condition: 4.1.26.
Underling rule/regulation: 45CSR13, R13-1761, 4.1.16; 45CSR§27-3.1

PCWP MACT - Permit Conditions: 4.1.6., 4.1.29., 4.1.30., 4.1.31., 4.1.32., 4.1.33
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.6, 4.4.19., 4.1.20., 4.1.21., 4.1.22; 40 CFR 63 Subpart DDDD Table 3

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Biofilter Bed Temperature Records – Permit Condition 4.2.5.

Underlying rule/regulation: 45CSR13, R13-1761, Condition 4.2.5; 40CFR63.2270

Opacity - Permit Conditions: 4.2.7., 4.4.8.
Underlying rule/regulation: 40 CFR 60 Appendix A, Method 22; 45CSR7A; 45CSR§30-5.1.c

VEs/Inspections/Monitoring - Permit Conditions: 4.2.7., 4.2.8., 4.4.8., 4.4.11., 4.4.16
Underlying rule/regulation: 45CSR§30-5.1.c; 40 C.F.R. §§64.6(c), 64.7(c), 64.7(d), 64.9(a), 64.9(b), 40CSR13, R-13-1761, 4.4.7

Voltage - Permit Conditions: 4.2.9., 4.4.12., 4.4.14.
Underlying rule/regulation: 45CSR§30-5.1.c; 40 C.F.R. §§64.6(c), 64.7(c), 64.7(d), 64.9(b)

Testing - Permit Conditions: 4.3.1., 4.3.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.3.1; 40 CFR 63 Subpart DDDD

Control Devices - Permit Conditions: 4.2.5., 4.2.7., 4.2.8., 4.2.9., 4.3.1., 4.3.2., 4.3.4., 4.4.1., 4.4.2., 4.4.7., 4.4.8., 4.4.11., 4.4.12., 4.4.14., 4.4.16

Underlying rule/regulation: 45CSR13, R13-1761

PCWP MACT - Permit Conditions: 4.2.5., 4.3.1., 4.3.2., 4.3.6., 4.4.7., 4.4.16., 4.4.17., 4.5.2., 4.5.3.
Underlying rule/regulation: 40 CFR 63 Subpart DDDD

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
4700-00-10	OSB Press Vent Exhaust	Wet ESP No. 1 (4110-00-10) Biofilter (4440-00-10) Wet ESP No. 2 (4120-00-10)

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
The OSB Press has 12 openings, sized 12' x 24'. The mats are loaded into the Press where they are compressed into an OSB board under heat and pressure. During normal operations the Press exhaust fumes are routed to the Energy Cells and the Dryers, and subsequently through the two (2) wet electrostatic precipitators (WESPs), and one (1) biofilter prior to discharging to the atmosphere via Main Stack (Emission Point ID 23). Occasionally, during times when there is an upset condition, the Press vent exhaust is routed through the bypass stack (Emission Point ID 24). Emissions are limited to no more than 500 hrs/yr in this mode of operation. Additionally, during routine control device maintenance allowed under the Plywood MACT exemption the Biofilter will be offline and the press will vent through bypass stack (Emission Point ID 21).

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
	MM/DD/1996	MM/DD/2008

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1. The press processes approx. 56 tons/hr of wood strands on a dry basis. The wood strands are mixed with phenolic resins, MDI resins and wax.
2. The rate of phenolic resin use is estimated to range between 0.6 and 4.8 tons/hr; the average rate is estimated to be 2.3 tons/hr.
3. The rate of MDI resin use is estimated to range between 0.6 and 2.4 tons/hr; the average rate is estimated to be 1.2 tons/hr.
4. The rate of wax use is estimated to range between 0.6 and 1.2 tons/hr; the average rate is estimated to be 0.9 tons/hr.
5. The annual average production of OSB is 86 MSF/hr on a 3/8 inch basis.
6. Maximum hourly OSB production rates are based on 94 MSF/hr on a 3/8 inch basis

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
56 tons/hr of wood strands (dry basis)		8,760 hrs (Press - Stack 23) 500 hrs (Press bypass - Stack 24)

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___ Yes _X_ No	**If yes, is it?** ___ Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		

Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
	See Appendix B	

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

See following page.

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table (Emission Point ID 21, 23, 24)
Underlying rule/regulation: 45CSR13, 45CSR§7-4.1, 4.1.2

Routine Control Device Maintenance Exemption for Biofilter - Permit Condition 4.1.6
Underlying rule/regulation; 40CFR63, subpart DDDD and 45CSR13, R13-1761, Condition 4.1.6.

Press bypass for operations for no more than 500 hrs/yr
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.7.; 40CFR§63.2290

Particulate/Opacity - Permit Conditions: 4.1.15., 4.1.16.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-3.1, 45CSR§7-3.2

HCl - Permit Condition: 4.1.19.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-4.2 and Table 45-7B

SO2 - Permit Condition: 4.1.25.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.15.; 45CSR§10-4.1

TAPs - Permit Condition: 4.1.26.
Underling rule/regulation: 45CSR13, R13-1761, 4.1.16; 45CSR§27-3.1

PCWP MACT - Permit Conditions: 4.1.6., 4.1.29., 4.1.30., 4.1.31., 4.1.32,. 4.1.33
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.6, 4.1.17, 4.1.18, 4.1.19, 4.1.20; 40 CFR 63 Subpart DDDD; 45CSR43

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Monitoring of Operating Hours in Press Bypass - Permit Conditions: 4.2.2., 4.4.4.
Underlying rule/regulation: 45CSR13, R13-1761

Opacity - Permit Conditions: 4.2.6., 4.2.7., 4.4.8.
Underlying rule/regulation: 40 CFR 60 Appendix A, Method 22; 45CSR7A; 45CSR§30-5.1.c

VEs/Inspections/Monitoring - Permit Conditions: 4.2.6., 4.2.7., 4.4.8., 4.4.11., 4.4.14
Underlying rule/regulation: 45CSR§30-5.1.c; 40 C.F.R. §§64.6(c), 64.7(c), 64.7(d), 64.9(a), 64.9(b)

Voltage - Permit Conditions: 4.2.9., 4.4.12., 4.4.14.
Underlying rule/regulation: 45CSR§30-5.1.c; 40 C.F.R. §§64.6(c), 64.7(c), 64.7(d), 64.9(b)

Testing - Permit Conditions: 4.3.1., 4.3.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.3.1; 40 CFR 63 Subpart DDDD

Control Devices - Permit Conditions: 4.2.4., 4.2.7., 4.2.8., 4.2.9, 4.3.1., 4.3.2., 4.4.1., 4.4.2., 4.4.8., 4.4.11., 4.4.12., 4.4.14., 4.4.16
Underlying rule/regulation: 45CSR13, R13-1761

PCWP MACT - Permit Conditions: 4.2.4., 4.3.1., 4.3.2., 4.3.6., 4.4.7., 4.4.16., 4.4.17., 4.5.2., 4.5.3.
Underlying rule/regulation: 40 CFR 63 Subpart DDDD

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** N/A
27S	Emergency Diesel-fired Generator	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Emergency Diesel-fired Generator

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
	MM/DD/1996	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
5.32 MMBTU/hr		100 hrs/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_Yes ___ No	**If yes, is it?** _X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 1030 hp	**Type and Btu/hr rating of burners:** 5.32 MMBTU/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Diesel

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Diesel	0.015%		140,000 BTU/gal

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** N/A
31S	Liquid Phenolic Resin Tank No. 1	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Liquid phenolic resin tank

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
	MM/DD/1996	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 15,000 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
	526,187 gallons	8,760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___ Yes _X_ No	**If yes, is it?** ___Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** N/A
32S	Liquid Phenolic Resin Tank No. 2	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Liquid phenolic resin tank

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
	MM/DD/1996	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 15,000 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
	526,187 gallons	8,760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___ Yes _X_ No	**If yes, is it?** ___Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** N/A
33S	Liquid Phenolic Resin Tank No. 3	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Liquid phenolic resin tank

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
	MM/DD/1996	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 15,000 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
	526,187 gallons	8,760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___ Yes _X_ No	**If yes, is it?** ___Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** N/A
34S	Liquid Phenolic Resin Tank No. 4	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Liquid phenolic resin tank

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
	MM/DD/1996	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 15,000 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
	526,187 gallons	8,760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___ Yes _X_ No	**If yes, is it?** ___Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** N/A
35S	MDI Tank No. 1	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
MDI Tank No. 1

Manufacturer:	**Model number:**	**Serial number:**
Construction date:	**Installation date:** MM/DD/1996	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 15,000 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:** 753,268 gallons	**Maximum Operating Schedule:** 8,760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___ Yes _X_ No	**If yes, is it?** ___Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** N/A
36S	MDI Tank No. 2	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
MDI Tank No. 2

Manufacturer:	**Model number:**	**Serial number:**
Construction date:	**Installation date:** MM/DD/1996	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 15,000 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:** 753,268 gallons	**Maximum Operating Schedule:** 8,760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___ Yes _X_ No	**If yes, is it?** ___Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** N/A
37S	Wax Tank No. 1	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Wax Tank No. 1

Manufacturer:	**Model number:**	**Serial number:**
Construction date:	**Installation date:** MM/DD/1996	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 15,000 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:** 1,062,762 gallons	**Maximum Operating Schedule:** 8,760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___ Yes _X_ No	**If yes, is it?** ___Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** N/A
38S	Wax Tank No. 2	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Wax Tank No. 2

Manufacturer:	**Model number:**	**Serial number:**
Construction date:	**Installation date:** MM/DD/1996	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 15,000 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:** 1,062,762 gallons	**Maximum Operating Schedule:** 8,760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___ Yes _X_ No	**If yes, is it?** ___Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Filters
40S & 41S	Paint Booth No. 1	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Paint Booth equipped with 2 stacks, each stack has its own fan/filtration system

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
	MM/DD/2002	MM/DD/2016

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 26 gallons/hr

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
26 gallons/hr		8,760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___ Yes _X_ No	**If yes, is it?** ___Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Maintain Filter Systems - Permit Condition: 4.1.11.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.11

Particulate/Opacity - Permit Conditions: 4.1.15., 4.1.16.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-3.1, 45CSR§7-3.2

PCWP MACT (Group 1 Misc. Coatings) - Permit Condition: 4.1.30.
Underlying rule/regulation: 45CSR34; 40 C.F.R. §63.2241 and 40 C.F.R. 63, Subpart DDDD, Table 3

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Operation & Maint. of Air Pollution Control Equipment - Permit Condition: 4.1.31.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.22; 45CSR§13-5.11

Opacity - Permit Conditions: 4.2.7., 4.4.8.
VEs/Inspections/Monitoring - M22 monitoring every two weeks and keep records.
Underlying rule/regulation: 40 CFR 60 Appendix A, Method 22; 45CSR7A; 45CSR§30-5.1.c

Control Devices - Permit Conditions: 4.4.1., 4.4.2.
Record of maintenance and malfunctions of control devices
Underlying rule/regulation: 45CSR13, R13-1761, 4.4.2, 4.4.3

PCWP MACT (Group 1 Misc. Coatings) Records of Sealant used in Paint Booth - Permit Condition: 4.1.30.
Underlying rule/regulation: 45CSR34; 40 C.F.R. §63.2241 and 40 C.F.R. 63, Subpart DDDD, Table 3

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Filters
42S & 43S	Paint Booth No. 2	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Paint Booth equipped with 2 stacks, each stack has its own fan/filtration system

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:** MM/DD/2002	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 26 gallons/hr

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
26 gallons/hr		8,760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___ Yes _X_ No	**If yes, is it?** ___Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Maintain Filter Systems - Permit Condition: 4.1.11.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.11

Particulate/Opacity - Permit Conditions: 4.1.15., 4.1.16.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-3.1, 45CSR§7-3.2

PCWP MACT (Group 1 Misc. Coatings) - Permit Condition: 4.1.30.
Underlying rule/regulation: 45CSR34; 40 C.F.R. §63.2241 and 40 C.F.R. 63, Subpart DDDD, Table 3

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Operation & Maint. of Air Pollution Control Equipment - Permit Condition: 4.1.31.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.22; 45CSR§13-5.11

Opacity - Permit Conditions: 4.2.7., 4.4.8.
VEs/Inspections/Monitoring - M22 monitoring every two weeks and keep records.
Underlying rule/regulation: 40 CFR 60 Appendix A, Method 22; 45CSR7A; 45CSR§30-5.1.c

Control Devices - Permit Conditions: 4.4.1., 4.4.2.
Record of maintenance and malfunctions of control devices
Underlying rule/regulation: 45CSR13, R13-1761, 4.4.2, 4.4.3

PCWP MACT (Group 1 Misc. Coatings) Records of Sealant used in Paint Booth - Permit Condition: 4.1.30.
Underlying rule/regulation: 45CSR34; 40 C.F.R. §63.2241 and 40 C.F.R. 63, Subpart DDDD, Table 3

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** Filters
44S & 45S	Paint Booth No. 3	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Paint Booth equipped with 2 stacks, each stack has its own fan/filtration system

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
	MM/DD/2002	MM/DD/2016

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 26 gallons/hr

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
26 gallons/hr		8,760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___ Yes _X_ No	**If yes, is it?** ___Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Maintain Filter Systems - Permit Condition: 4.1.11.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.11

Particulate/Opacity - Permit Conditions: 4.1.15., 4.1.16.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.14; 45CSR§7-3.1, 45CSR§7-3.2

PCWP MACT (Group 1 Misc. Coatings) - Permit Condition: 4.1.30.
Underlying rule/regulation: 45CSR34; 40 C.F.R. §63.2241 and 40 C.F.R. 63, Subpart DDDD, Table 3

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Operation & Maint. of Air Pollution Control Equipment - Permit Condition: 4.1.31.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.22; 45CSR§13-5.11

Opacity - Permit Conditions: 4.2.7., 4.4.8.
VEs/Inspections/Monitoring - M22 monitoring every two weeks and keep records.
Underlying rule/regulation: 40 CFR 60 Appendix A, Method 22; 45CSR7A; 45CSR§30-5.1.c

Control Devices - Permit Conditions: 4.4.1., 4.4.2.
Record of maintenance and malfunctions of control devices
Underlying rule/regulation: 45CSR13, R13-1761, 4.4.2, 4.4.3

PCWP MACT (Group 1 Misc. Coatings) Records of Sealant used in Paint Booth - Permit Condition: 4.1.30.
Underlying rule/regulation: 45CSR34; 40 C.F.R. §63.2241 and 40 C.F.R. 63, Subpart DDDD, Table 3

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** N/A
46S	Liquid Phenolic Resin Tank No. 5	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Liquid phenolic resin tank

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
	MM/DD/2005	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 15,000 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
	526,187 gallons	8,760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___ Yes _X_ No	**If yes, is it?** ___Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** N/A
47S	Liquid Phenolic Resin Tank No. 6	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Liquid phenolic resin tank

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
	MM/DD/2005	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 15,000 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
	526,187 gallons	8,760 hrs

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___ Yes _X_ No	**If yes, is it?** ___Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix B	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Emissions Calculations in Appendix B

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Emission Rate Limits - Permit Condition: 4.1.2. Table
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

_X_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Emission Rate Limits - Recordkeeping/Reporting AEI - Permit Condition: 4.1.2.
Underlying rule/regulation: 45CSR13, R13-1761, 4.1.2

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT F

SCHEDULE OF COMPLIANCE FORM(S)

(Not Applicable)

Title V Renewal Permit Application

Sutton OSB Mill, 007-00016
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

January 2023

ATTACHMENT G

AIR POLLUTION CONTROL DEVICE FORMS

Title V Renewal Permit Application

Sutton OSB Mill, 007-00016
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

January 2023

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 4313-00-10	**List all emission units associated with this control device.** 1 - Flaking and Screening System	
Manufacturer:	**Model number:**	**Installation date:** MM/DD/1996

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter (PM)		99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Design Flow Rate = 65,450 ACFM

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes **_X_ No**

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Daily inspection to ensure proper operation (differential pressure checks, duct work inspection, etc.)

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 4333-00-10	**List all emission units associated with this control device.** 3 - Dry Flake Area	
Manufacturer:	**Model number:**	**Installation date:** MM/DD/1996

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter (PM)		99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Design Flow Rate = 53,400 ACFM

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes **_X_ No**

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Daily inspection to ensure proper operation (differential pressure checks, duct work inspection, etc.)

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 4345-00-10	**List all emission units associated with this control device.** 4 - Mat Trim System	
Manufacturer:	**Model number:**	**Installation date:** MM/DD/1996

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter (PM)		99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Design Flow Rate = 43,100 ACFM

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes **_X_ No**

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Daily inspection to ensure proper operation (differential pressure checks, duct work inspection, etc.)

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 4353-00-10	**List all emission units associated with this control device.** 5 - Rough Trim System	
Manufacturer:	**Model number:**	**Installation date:** MM/DD/1996

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter (PM)		99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Design Flow Rate = 21,200 ACFM

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes **_X_ No**

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Daily inspection to ensure proper operation (differential pressure checks, duct work inspection, etc.)

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 4363-00-10	**List all emission units associated with this control device.** 6 - Tongue & Groove and Sawing System	
Manufacturer:	**Model number:**	**Installation date:** MM/DD/1996

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter (PM)		99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Design Flow Rate = 30,970 ACFM

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes **_X_ No**

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Daily inspection to ensure proper operation (differential pressure checks, duct work inspection, etc.)

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 4374-00-10	**List all emission units associated with this control device.** 7 - Sander Dust System	
Manufacturer:	**Model number:**	**Installation date:** MM/DD/1996

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter (PM)		99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Design Flow Rate = 44,800 ACFM

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes **_X_ No**

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Daily inspection to ensure proper operation (differential pressure checks, duct work inspection, etc.)

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 4397-00-10	**List all emission units associated with this control device.** 9 - Dry Waste Relay System	
Manufacturer:	**Model number:**	**Installation date:** MM/DD/1996

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter (PM)		99.9%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Design Flow Rate = 13,200 ACFM

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes **_X_ No**

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Daily inspection to ensure proper operation (differential pressure checks, duct work inspection, etc.)

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 3820-00-10	**List all emission units associated with this control device.** Energy Cell No. 1	
Manufacturer:	**Model number:**	**Installation date:** MM/DD/1996

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter ___ Venturi Scrubber **_X_ Multiclone**

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter (PM)		80.0%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
29 MMBTU/hr

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes **_X_ No**

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Pressure drop across the Multiclone

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 3920-00-10	**List all emission units associated with this control device.** Energy Cell No. 2	
Manufacturer:	**Model number:**	**Installation date:** MM/DD/1996

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	**_X_ Multiclone**
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter (PM)		80.0%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
29 MMBTU/hr

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes **_X_ No**

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Pressure drop across the Multiclone

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 4110-00-10	**List all emission units associated with this control device.** Energy Cells 1 and 2; Dryers 1, 2, 3 and 4; and OSB Press	
Manufacturer: United McGill Corporation	**Model number:** 3-400 W	**Installation date:** MM/DD/1996

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
_X_ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter (PM)		80.0%
Condensable Organics		80.0%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Max: 180,000 ACFM at 250 degrees F
Particulate Emissions: 0.00415 grains / ACF, 6.4 lbs/hr
Pressure Drop: 2.5 in H2O
25% moisture in gas stream
Gas residence time: 3.49 seconds

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes **_X_ No**

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**
CAM Plan requirements were addressed in the October 2006 Title V Renewal Application

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Wet ESP voltage is measured using a voltmeter. An excursion triggers an inspection and corrective action. The parameter is recorded as a 6-minute average.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 4120-00-10	**List all emission units associated with this control device.** Energy Cells 1 and 2; Dryers 1, 2, 3 and 4; and OSB Press	
Manufacturer: United McGill Corporation	**Model number:** 3-400 W	**Installation date:** MM/DD/1996

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
_X_ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter (PM)		80.0%
Condensable Organics		80.0%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Max: 180,000 ACFM at 250 degrees F
Particulate Emissions: 0.00415 grains / ACF, 6.4 lbs/hr
Pressure Drop: 2.5 in H2O
25% moisture in gas stream
Gas residence time: 3.49 seconds

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes **_X_ No**

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**
CAM Plan requirements were addressed in the October 2006 Title V Renewal Application

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Wet ESP voltage is measured using a voltmeter. An excursion triggers an inspection and corrective action. The parameter is recorded as a 6-minute average.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 4800-00-10	**List all emission units associated with this control device.** Energy Cells 1 and 2; Dryers 1, 2, 3 and 4; and OSB Press	
Manufacturer: Process Combustion Corp (PCC)	**Model number:** P.C.C. 1046 – Biological Oxidizer System	**Installation date:** MM/DD/2016

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	**__X_ Other (describe) Biofilter Scrubber**
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Methanol		90%
Formaldehyde		0%
VOC		19.5%
HAPs		46.7%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Emission stream flow rate (cfm): 370,000
Emission stream gas temperature inlet: 140 degrees F

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes **_X_ No**

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**
CAM is not required for the Biofilter as it falls under PCWP MACT compliance

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Continuously monitor biofilter bed temperature for compliance with PCWP MACT
A QA/QC Plan has been put in place. The mill has developed a Startup, Shutdown, Malfunction (SSM) Plan as required for the Energy Cells, Dryers, Press, and Biofilter.

The biofilter bed temperature is averaged on a 24 hour basis and has to maintain 75% data availability in accordance with Subpart DDDD

Semiannual reports will be submitted per the PCWP MACT.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 4440-00-10	**List all emission units associated with this control device.** Energy Cells 1 and 2; Dryers 1, 2, 3 and 4; and OSB Press	
Manufacturer: Process Combustion Corp (PCC)	**Model number:** P.C.C. 1046 – Biological Oxidizer System	**Installation date:** MM/DD/2016

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	**__X_ Other (describe) Biofilter Scrubber**
___ Wet Plate Electrostatic Precipitator		___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Methanol		90%
Formaldehyde		0%
VOC		19.5%
HAPs		46.7%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).
Emission stream flow rate (cfm): 370,000
Emission stream gas temperature inlet: 140 degrees F

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes **_X_ No**

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**
CAM is not required for the Biofilter as it falls under PCWP MACT compliance

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Continuously monitor biofilter bed temperature for compliance with PCWP MACT
A QA/QC Plan has been put in place. The mill has developed a Startup, Shutdown, Malfunction (SSM) Plan as required for the Energy Cells, Dryers, Press, and Biofilter.

The biofilter bed temperature is averaged on a 24 hour basis and has to maintain 75% data availability in accordance with Subpart DDDD

Semiannual reports will be submitted per the PCWP MACT.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: Paint Booth Filters	**List all emission units associated with this control device.** Paint Booths 1, 2 and 3	
Manufacturer:	**Model number:**	**Installation date:** MM/DD/2002

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter
___ Carbon Bed Adsorber
___ Carbon Drum(s)
___ Catalytic Incinerator
___ Thermal Incinerator
___ Wet Plate Electrostatic Precipitator
___ Venturi Scrubber
___ Packed Tower Scrubber
___ Other Wet Scrubber
___ Condenser
___ Flare
___ Multiclone
___ Single Cyclone
___ Cyclone Bank
___ Settling Chamber
_X_ Other (describe)
Woven craft paper/fabric filters
___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter (PM)		98.5%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Is this device subject to the CAM requirements of 40 C.F.R. 64? ___ Yes **_X_ No**

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

Describe the parameters monitored and/or methods used to indicate performance of this control device.
Airflow / Pressure Drop indicates needed filter change

ATTACHMENT H

COMPLIANCE ASSURANCE MONITORING (CAM) FORM(S)

Not Applicable - CAM Plan Previously Approved

Title V Renewal Permit Application

Sutton OSB Mill, 007-00016
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

January 2023

APPENDIX A

ROUTINE CONTROL DEVICE MAINTENANCE EXEMPTION

Title V Renewal Permit Application

Sutton OSB Mill, 007-00016
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

January 2023

west virginia department of environmental protection

Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
Phone: (304) 926-0499
Fax: (304) 926-0479

Jim Justice, Governor
Austin Caperton, Cabinet Secretary
www.dep.wv.gov/daq

January 31, 2017

CERTIFIED MAIL
Article # 91 7108 2133 3936 1554 8832

Weyerhaeuser NR Company
c/o Jesse Merica, Mill Manager
3601 Gauley Turnpike
Heaters, WV 26627

RE: PCWP MACT
Maintenance Exemption Approval
Sutton OSB Facility
Plant ID# 007-00016

Dear Mr. Merica:

Your company's request for a routine control device maintenance exemption, per 40 CFR 63.2251, from certain requirements of the Plywood and Composite Wood Products (PCWP) MACT (40 CFR 63, subpart DDDD) was received by the West Virginia Division of Air Quality (DAQ) on January 9, 2017. DAQ received sufficient information to make a final review of your request and **grants** the routine control device maintenance exemption (RCDME) for the biofilter at the Sutton OSB facility subject to the following:

- The exemption allows process units subject to the Plywood and Composite Wood Products MACT to operate while the biofilter is offline for routine maintenance. But, for each process unit, only up to 3% of annual operating hours may be during periods when the biofilter is offline for routine maintenance. The process units subject to PCWP MACT compliance options and to which the exemption applies include each dryer (1-4), and the press.

- For each of the aforementioned process units the facility must keep a daily record of any start-up, any shut-down, total hours operated, and hours operated while the biofilter is offline for routine maintenance. And, as regards the biofilter, the facility must keep daily records of any start-up, any shut-down, total hours operated, and total hours off-line for routine maintenance.

- In order to minimize emissions when the biofilter is offline for routine maintenance, the facility shall (1) continue to use the wet ESP to control emissions from the process units subject to PCWP MACT compliance options, and (2) refrain from using the facility's

emergency generator, except during actual emergency situations (i.e. power outages, etc.).

- Prior to any routine biofilter maintenance being performed under this exemption, the facility will produce and subsequently follow a standard operating procedure (SOP) for enacting the above requirements. This SOP must be submitted as part of the next Rule 13 permit modification sought for the Sutton OSB facility located in Heaters, WV.

- As a minimization strategy, the facility shall to the greatest extent practically possible perform routine biofilter maintenance during periods when the press and dryers are already offline (not producing product) for maintenance or other reasons.

Also, please be aware that this exemption only applies to the units at the facility affected by the PCWP MACT requirements. If you operate with the biofilter offline and that causes some other rule, permit limit, or requirement to be violated, the exemption does not cover that. If you have any questions or comments, you may contact Richard "Eric" Ray by phone at (304) 926-0499 x 1382 or by e-mail at Richard.Eric.Ray@wv.gov.

Sincerely,

William F. Durham
Director

cc: David Campbell
Associate Director for the Office of Permits & State Programs
USEPA Region III (3AP10)
1650 Arch Street
Philadelphia, PA 19103

Cristina Fernandez
Director - Air Protection Division
USEPA Region III (3AP00)
1650 Arch Street
Philadelphia, PA 19103-2029

APPENDIX B
EMISSION CALCULATIONS

Title V Renewal Permit Application

Sutton OSB Mill, 007-00016
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

January 2023

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

Emission Point ID	Emision 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
23	Main Stack	96.3	221.6	79.4	79.4	79.4	17.9	117.1	0.03	32.0
21	RCDME (Biofilter Offline)	--	--	--	--	--	--	4.36	--	1.78
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	0.006	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	--	--	0.57	0.57	0.57	--	--	--	--
42 & 43	Paint Booth 2	--	--	0.57	0.57	0.57	--	--	--	--
44 & 45	Paint Booth 3	--	--	0.57	0.57	0.57	--	--	--	--
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)		98.7	222.9	95.3	95.3	87.7	17.9	149.5	0.03	39.5
Title V Allowable Emissions Proposed (tpy)		229.0	249.0	95.4	95.4	87.8	17.9	249.0	0.03	39.8

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 NOx Emissions from Main Stack #23:	221.6	tpy
Other:	1.24	tpy
NOx limit to avoid PSD:	249	tpy
Total NOx allowed from Main Stack:	247.76	tpy
PSD Compliance Margin	26.12	tpy

Estimated VOC Emissions from 1-9, 21,& 23:	143.8	tpy
Other:	5.7	tpy
VOC limit to avoid PSD:	249	tpy
Total VOC allowed 1-9, 21,& 23: :	243.3	tpy
PSD Compliance Margin	99.54	tpy

Estimated CO Emissions from Main Stack #23:	96.3	tpy
Other:	2.4	tpy
CO limit to avoid PSD:	229	tpy
Total CO allowed from Main Stack:	226.6	tpy
PSD Compliance Margin	130.3	tpy

Weyerhaeuser Company - Heaters, West Virginia
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Table B-2: Flaking and Screening

Emission Unit: **Flaking and Screening System (ID No. 1S)**
Flaking and screening system contains 2 flakers, 27 conveyor pickups, 6 green screens and one hog and silk screen.
Control Device: **Bagfilter (ID No. 4313-00-10)**
Emission Point: **ID No. 1**

Potential Process Throughput:

Material Processing Rate:	100	lb/hr (green)
	50	lb/hr (oven dry)
Dry/Green Wood Ratio:	0.5	lb/lb
Baghouse Contol Efficiency[3]:	99.99%	
Air Flow Rate:	65,450	ACFM
Operation:	8,760	hr/yr

Potential Emissions Summary:

Criteria Compounds	Emission Factor	Reference	Controlled Emissions	
			(lb/hr)	(ton/yr)
PM	100 lb/hr	1	0.010	0.044
PM-10	100 lb/hr	1	0.010	0.044
PM-2.5	45 lb/hr	4	0.0045	0.0197
VOC	0.04392 lb/ODT	2	0.001	0.005

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.
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-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 Contol Efficiency[3]:	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.

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 Contol Efficiency[3]:	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.

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 Contol Efficiency[3]:	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.

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 Contol Efficiency[3]:	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.

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 Contol Efficiency[3]:	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.

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 Contol Efficiency[3]:	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	Emission Factor	Control	Reference	Controlled Emissions		Uncontrolled Emissions	
Pollutant		Efficiency		(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

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 Nos. 1 and 2 (ID No. 4110-00-10 and 4120-00-10)**
Biofilter (ID Nos. 4800-00-10)
Emission Point: **ID No. 23**

Main Stack (ID No. 23) Potential Emissions Summary:

Criteria Compound (ton/yr)	Energy Cells - Wood Combustion	Wet ESP Stack Test		Main Stack (ID No. 23) Uncontrolled Emission Rate[1]
CO [2]	-	96.31		96.3 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)	-	104.63		104.6 tpy
VOC (as WPP1)	-	117.14		117.1 tpy

Minimum RCO Control Efficiency: [4] 0.00%
Minimum Biofilter Control For Methanol 90.00%

Hazardous Air Pollutant	Energy Cells - Wood Combustion (lb/hr)	Wet ESP Stack Test (lb/hr)		Main Stack (ID No. 21) Uncontrolled Emission Rate[1] (lb/hr)	(tpy)	Main Stack (ID No. 21) Controlled Emission Rate[1] (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

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 Nos. 1 and 2 (ID No. 4110-00-10 and 4120-00-10)**
Biofilter (ID Nos. 4800-00-10)
Emission Point: **ID No. 23**

Main Stack (ID No. 23) Potential Emissions Summary (continued):

Hazardous Air Pollutant	Energy Cells - Wood Combustion (lb/hr)	Wet ESP Stack Test (lb/hr)		Main Stack (ID No. 21) Uncontrolled Emission Rate[1] (lb/hr)	(tpy)	Main Stack (ID No. 23) 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	1.05	3.15	
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	% MACT HAP
Total MACT HAP	-	19.37		19.37	48.72	9.93	20.38	41.83355881
Total HAP	0.23	26.21		26.45	60.32	17.01	31.98	

% HAP Control 53.01421936

References:

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 23) 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 replaced by a biofilter RCO data deleted from column F since RCO has been removed.
5. PM values are after going through controls (Multiclones, Cyclonic Separators & WESPs)

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 Nos. 1 and 2 (ID No. 4110-00-10 and 4120-00-10)**
Biofilter (ID Nos. 4800-00-10)
Emission Point: **ID No. 23**

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)	Uncontrolled Emissions (ton/yr)
CO	0.433 lb/MSF	2	0.256 lb/MSF	3	40.66	96.3
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
SO2	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	23.89	104.6
VOC (as WPP1)	- lb/MSF	-	0.311 lb/MSF	7, 8	26.75	117.1

Hazardous Air Pollutant	Hourly Emission Factor	Reference	Annual Emission Factor	Reference	Uncontrolled Emissions (lb/hr)	Uncontrolled Emissions (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 Nos. 1 and 2 (ID No. 4110-00-10 and 4120-00-10)**
Biofilter (ID Nos. 4800-00-10)
Emission Point: **ID No. 23**

Potential Emissions Summary (continued): [1]

Hazardous Air Pollutant	Hourly Emission Factor	Reference	Annual Emission Factor	Reference	Uncontrolled Emissions (lb/hr)	Uncontrolled Emissions (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 90% controlled based on Biofilter

Methanol Adjustment for VOC Calculation	**Uncontrolled (lb/hr)**	**Controlled (lb/hr)**		**Uncontrolled (ton/yr)**	**Controlled (ton/yr)**
Methanol (lb/hr):	10.49	1.05	Methanol (tpy):	31.49	3.15
Methanol as propane (lb/hr):	4.81	0.48	Methanol as propane (tpy):	14.43	1.44
Methanol Response Factor:	65%	65%		65%	65%
Methanol Adjustment as propane (lb/hr):	3.13	0.31	Methanol Adjustment as propane (tpy):	9.38	0.94
Total WPP1 VOC(lb/hr)[4]:	**59.1**	**48.60**	**Total WPP1 VOC(tpy)[4]:**	**145.5**	**117.14**
Total VOC as Propane (lb/hr):	**47**	**44.36**	Total VOC as Propane (tpy)	**113**	**104.63**
Total HAP (lb/hr)	**26**	**16.77**	Total HAP	**59**	**30.95**

References:

1. 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. Uncontrolled values are without biofilter control.
2. Emission factor based on stack testing conducted on the Wet ESP. Emission factor represents the 95th % Confidence Level.
3. Emission factor based on stack testing conducted on the Wet ESP. Emission factor represents the average of test runs.
4. 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.
5. Reportable Compound Estimating Guide OSB Mills, 2002, prepared by Weyerhaeuser Environmental Technology and Science. Emission factors for direct wood-fired OSB dryers.
6. Phenol resulted in non-detect on all runs and the detection limit is less than 1 ppm.
7. 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 WESP therefore VOC and Methanol were measured simultaneously.
8. 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.

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: **Wet Electrostatic Precipitator Nos. 1 and 2 (ID No. 4110-00-10 and 4120-00-10)**

Emission Point: **ID No. 21 (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	-	-

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: **Wet Electrostatic Precipitator Nos. 1 and 2 (ID No. 4110-00-10 and 4120-00-10)**

Emission Point: **ID No. 21 (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-14: Routine Control Device Maintenance Exemption (RCDME)

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 Nos. 1 and 2 (ID No. 4110-00-10 and 4120-00-10)**
Emission Point: **ID No. 21**

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:	263	hr/yr

Potential Emissions Summary: [1]

Criteria Compounds	Hourly Emission Factor	Reference	Annual Emission Factor	Reference	Uncontrolled Emissions	
					(lb/hr)	(ton/yr)
VOC (as propane)	0.502 lb/MSF	2, 4	0.300 lb/MSF	3	47	3

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	0.147
Acrolein	9.88E-03 lb/MSF	2	3.21E-03 lb/MSF	3	0.929	0.036
Arsenic	1.05E-05 lb/MSF	2	6.09E-06 lb/MSF	3	0.001	0.000
Benzene	6.93E-04 lb/MSF	2	2.97E-04 lb/MSF	3	0.065	0.003
Beryllium	3.63E-07 lb/MSF	2	1.49E-07 lb/MSF	3	3.41E-05	1.68E-06
Cadmium	2.37E-05 lb/MSF	2	1.15E-05 lb/MSF	3	0.002	0.000
Chlorine	2.11E-03 lb/MSF	2	1.01E-03 lb/MSF	3	0.199	0.011
Chromium	1.16E-04 lb/MSF	2	4.52E-05 lb/MSF	3	0.011	0.001
Cumene	5.04E-02 lb/MSF	2	1.50E-02 lb/MSF	3	4.739	0.170
Dichloromethane	1.54E-03 lb/MSF	2	5.73E-04 lb/MSF	3	0.144	0.006
Formaldehyde	4.84E-02 lb/MSF	2	2.73E-02 lb/MSF	3	4.552	0.309
Hexane	2.74E-03 lb/MSF	2	1.00E-03 lb/MSF	3	0.258	0.011
Hydrogen Chloride	4.82E-03 lb/MSF	2	2.82E-03 lb/MSF	3	0.453	0.032
Lead	1.24E-04 lb/MSF	2	7.90E-05 lb/MSF	3	0.012	0.001
Manganese	1.95E-03 lb/MSF	2	4.72E-04 lb/MSF	3	0.183	0.005
MDI	2.51E-04 lb/MSF	2	7.18E-05 lb/MSF	3	0.024	0.001
Methanol	1.12E-01 lb/MSF	2	8.36E-02 lb/MSF	3	10.49	0.94

Table B-14: Routine Control Device Maintenance Exemption (RCDME)

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 Nos. 1 and 2 (ID No. 4110-00-10 and 4120-00-10)**
Emission Point: **ID No. 21**

Potential Emissions Summary (continued): [1]

Hazardous Air Pollutant	Hourly Emission Factor	Reference	Annual Emission Factor	Reference	Uncontrolled Emissions (lb/hr)	Uncontrolled Emissions (ton/yr)
Methyl isobutyl ketone	1.47E-03 lb/MSF	2	7.52E-04 lb/MSF	3	0.138	0.009
Naphthalene	2.29E-07 lb/ODT	5	2.29E-07 lb/ODT	5	1.28E-05	1.69E-06
Nickel	4.32E-05 lb/MSF	2	1.82E-05 lb/MSF	3	0.004	0.000
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	2.38E-06
Propionaldehyde	1.06E-02 lb/MSF	2	2.21E-03 lb/MSF	3	0.999	0.025
Toluene	1.72E-03 lb/MSF	2	6.29E-04 lb/MSF	3	0.161	0.007
Xylenes	8.00E-03 lb/ODT	5	8.00E-03 lb/ODT	5	0.448	0.059
Total MACT HAP	- -	-	- -	-	19.37	1.46
Total HAP	- -	-	- -	-	26.21	1.78

Methanol Adjustment for VOC calculation			
Methanol as propane (lb/hr):	4.81	Methanol as propane (tpy):	0.43
Methanol Response Factor:	65%		
Methanol Adjusted as propane (lb/hr):	3.13	Methanol Adjusted as propane (tpy):	0.28
Total WPP1 VOC(lb/hr)[4]:	**59.1**	**Total WPP1 VOC(tpy)[4]:**	**4.4**

References:

1. 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. Uncontrolled values are without RCO control.
2. Emission factor based on stack testing conducted on the Wet ESP. Emission factor represents the 95th % Confidence Level.
3. Emission factor based on stack testing conducted on the Wet ESP. Emission factor represents the average of test runs.
4. 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.
5. Reportable Compound Estimating Guide OSB Mills, 2002, prepared by Weyerhaeuser Environmental Technology and Science. Emission factors for direct wood-fired OSB dryers.
6. Phenol resulted in non-detect on all runs and the detection limit is less than 1 ppm.
7. VOC annual emission factor based on stack testing of the RCO, June 11, 2009. Stack testing included contributions from strand drying, direct wood-firing, and the press. Emission factor represents the average of test runs.
8. 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.

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)
Maximum Hourly OSB Production:	94	MSF/hr (3/8 inch)
Maximum Bypass Venting:	500	hr/yr

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:

1. Hourly emission rates are based on the Maximum Hourly OSB Production. Annual emission rates are based on the Average Annual OSB Production.
2. Reportable Compound Estimating Guide OSB Mills, 2002, prepared by Weyerhaeuser Environmental Technology and Science. Emission factors represent average uncontrolled values.
3. Emission factor based on stack testing conducted on the Press. Emission factor represents the 95th % Confidence Level.
4. Emission factor based on stack testing conducted on the Press. Emission factor represents the average of test runs.
5. VOC emission factors are the sum of VOC classified HAP compounds.
6. 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.

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:	0.015	% 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	1.21E-04 lb/hp-hr	1	0.12	0.006
VOC	6.46E-04 lb/hp-hr	1	0.66	0.033
Sulfuric Acid Mist	2.63E-04 lb/MMBtu	3	1.89E-03	9.46E-05

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 SO_3 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 SO_3 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.

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.

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. Fugitive (Booth 1); 42, 43 (Booth 2); Fugitive (Booth 3)**

Potential Process Throughput:

Paint Booth No. 1 Edgeseal Usage:	26.0	gal/hr
Paint Booth No. 2 Edgeseal Usage:	26.0	gal/hr
Paint Booth No. 3 Edgeseal Usage:	26.0	gal/hr
Edgeseal Density:	8.09	lb/gal

Potential Emissions Summary:

Criteria Compound	Solids Content	Overspray	Control Efficiency	Reference	Paint Booth No. 1 Controlled Emission Rate		Paint Booth No. 1 Uncontrolled Emission Rate	
					(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
PM	41.3%	10%	98.5%	1	0.13	0.57	8.69	38.05
PM-10	41.3%	10%	98.5%	1	0.13	0.57	8.69	38.05
PM-2.5	41.3%	10%	98.5%	1	0.13	0.57	8.69	38.05

Criteria Compound	Solids Content	Overspray	Control Efficiency	Reference	Paint Booth No. 2 Controlled Emission Rate		Paint Booth No. 2 Uncontrolled Emission Rate	
					(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
PM	41.3%	10%	98.5%	1	0.13	0.57	8.69	38.05
PM-10	41.3%	10%	98.5%	1	0.13	0.57	8.69	38.05
PM-2.5	41.3%	10%	98.5%	1	0.13	0.57	8.69	38.05

Criteria Compound	Solids Content	Overspray	Control Efficiency	Reference	Paint Booth No. 3 Controlled Emission Rate		Paint Booth No. 3 Uncontrolled Emission Rate	
					(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
PM	41.3%	10%	98.5%	1	0.13	0.57	8.69	38.05
PM-10	41.3%	10%	98.5%	1	0.13	0.57	8.69	38.05
PM-2.5	41.3%	10%	98.5%	1	0.13	0.57	8.69	38.05

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.

Table B-9: Pneumatic Systems - Pine VOC Calcs.

Emission Unit: **Pneumatic Systems (ID No. 1S - 9S)**
Emission Point: **ID No. 1 - 9**

Hardwood Calcs for VOC

Emission Point ID	Process Rate		VOC emission factor		VOC emission rate (tons/year)
1	0.025	ton wood/hr	0.0439	lb VOC/ton wood	0.0048
3	1.65	ton wood/hr	0.0494	lb VOC/ton wood	0.357
4	2.75	ton wood/hr	0.0298	lb VOC/ton wood	0.359
5	2.865	ton wood/hr	0.0298	lb VOC/ton wood	0.374
6	3.08	ton wood/hr	0.0298	lb VOC/ton wood	0.402
7	1.10	ton wood/hr	0.0357	lb VOC/ton wood	0.172
9	4.275	ton wood/hr	0.0298	lb VOC/ton wood	0.558
				Total	2.2

Pine Calcs for VOC

(Assume only pine wood processed. Conservatively assume 10% increase in emission factor for pine wood processed.)

Emission Point ID	Process Rate	VOC Emission Factor Pine	VOC Emission Factor Hardwood	VOC Emission Rate (pounds per hour)	
1	0.025	0.439	0.0439	0.0110X	
3	1.65	0.494	0.0494	0.8151X	
4	2.75	0.298	0.0298	0.8195X	
5	2.865	0.298	0.0298	0.8538X	
6	3.08	0.298	0.0298	0.9178X	
7	1.10	0.357	0.0357	0.3927X	
9	4.275	0.298	0.0298	1.2740X	
			Total	5.0838X	lb/hr

Total VOC Based on Pine Wood Processed

Emission Point ID	Process Rate	VOC Emission Factor Pine	VOC Emission Factor Hardwood	VOC Emission Rate (lb/hr)	VOC Emission Rate (ton/yr)
1	0.025	0.439	0.0439	0.01	0.05
3	1.65	0.494	0.0494	0.82	3.57
4	2.75	0.298	0.0298	0.82	3.59
5	2.865	0.298	0.0298	0.85	3.74
6	3.08	0.298	0.0298	0.92	4.02
7	1.10	0.357	0.0357	0.3927	1.72
9	4.275	0.298	0.0298	1.27	5.58
			Total	5.1	22.3

APPENDIX C

PROPOSED PERMIT LANGUAGE

Title V Renewal Permit Application

Sutton OSB Mill, 007-00016
Heaters, West Virginia

Weyerhaeuser NR Company
3601 Gauley Turnpike
Heaters, West Virginia

January 2023

West Virginia Department of Environmental Protection

Harold D. Ward
Cabinet Secretary

Title V Operating Permit Revision

For Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Action Number: SM01 **SIC:** 2493
Name of Permittee: Weyerhaeuser NR Company
Facility Name/Location: Sutton OSB Mill
County: Braxton
Permittee Mailing Address: 3601 Gauley Turnpike, Heaters, VW 26627

Description of Permit Revision: Pursuant to the requirements of Consent Order CO-R34-E-2020-10, R13-1761K incorporated the requirements of paragraphs 6 through 11 of the Consent Order (relating to operation of the Biofilter fan-wheel) into the permit as condition 4.1.10. This significant modification incorporates the requirements of R13-1761K, condition 4.1.10, into the Title V permit.

Title V Permit Information:
Permit Number: R30-00700016-2018
Issued Date: July 23, 2018
Effective Date: August 6, 2018
Expiration Date: July 23, 2023

Directions To Facility: 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.

THIS PERMIT REVISION IS ISSUED IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL ACT (W.VA. CODE §§ 22-5-1 ET SEQ.) AND 45CSR30 - "REQUIREMENTS FOR OPERATING PERMITS." THE PERMITTEE IDENTIFIED AT THE FACILITY ABOVE IS AUTHORIZED TO OPERATE THE STATIONARY SOURCES OF AIR POLLUTANTS IDENTIFIED HEREIN IN ACCORDANCE WITH ALL TERMS AND CONDITIONS OF THIS PERMIT.

Laura M. Crowder

Laura M. Crowder
Digitally signed by: Laura M. Crowder
DN: CN = Laura M. Crowder email = Laura.M.Crowder@wv.gov C = US O = West Virginia Department of Environmental Protection OU = Division of Air Quality
Date: 2021.09.07 12:47:59 -04'00'

Laura M. Crowder
Director, Division of Air Quality

September 7, 2021
Date Issued

Permit Number: **R30-00700016-2018**
Permittee: **Weyerhaeuser NR Company**
Facility Name: **Sutton OSB Mill**
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
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 45CSR13, 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.

Table of Contents

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

1.1. Emission Units

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	65,450 ACFM 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	53,400 ACFM 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	43,100 ACFM 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	21,200 ACFM 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	30,970 ACFM 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	44,800 ACFM 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	13,200 ACFM 8,550 lb/hr (oven dry)	Fabric Filter 4397-00-10
3816-00-11	10	Energy Cell No. 1 Auxiliary Burner – Idle Run(1)	1996	29 MMBTU/hr	Multi-Clone No.1 3820-00-10

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
3800-00-10	10	Energy Cell No. 1 - Idle Run(1)	1996	<30 MMBTU/hr	Multi-Clone No.1 3820-00-10
3816-00-11	21 23	Energy Cell No. 1 Auxiliary Burner – Normal Run(1)	1996	29 MMBTU/hr	Wet ESP No. 1 4110-00-10 Biofilter 4800-00-10
3800-00-10	21 23	Energy Cell No. 1 – Normal Run(1)	1996	175 MMBTU/hr	
3916-00-11	11	Energy Cell No. 2 Auxiliary Burner – Idle Run(1)	1996	29 MMBTU/hr	Multi-Clone No.2 3920-00-10
3900-00-10	11	Energy Cell No. 2 - Idle Run(1)	1996	< 30 MMBTU/hr	Multi-Clone No.2 3920-00-10
3916-00-11	21 23	Energy Cell No. 2 Auxiliary Burner – Normal Run(1)	1996	29 MMBTU/hr	Wet ESP No. 2 4120-00-10 Biofilter 4800-00-10
3900-00-10	21 23	Energy Cell No. 2 – Normal Run(1)	1996	175 MMBTU/hr	
3130-00-11	21 23	Auxiliary Burner – Dryer No. 1	1996	55 MMBTU/hr	Wet ESP No. 1 4110-00-10 Biofilter 4800-00-10
3230-00-11	21 23	Auxiliary Burner – Dryer No. 2	1996	55 MMBTU/hr	
3330-00-11	21 23	Auxiliary Burner – Dryer No. 3	1996	55 MMBTU/hr	Wet ESP No.2 4120-00-10 Biofilter 4800-00-10
3430-00-11	21 23	Auxiliary Burner – Dryer No. 4	1996	55 MMBTU/hr	
4700-00-10	21 23	OSB Press Vent Exhaust	1996	60.4 Ton/hr	Wet ESP No. 1 4110-00-10 Wet ESP No. 2 4120-00-10 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	1030 hp	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

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
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
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 Booth 1&3 vent inside bldg.	Wax Tank No. 2	1996	15,000 Gallons	None
40S and 41S	~~40 and 41~~ Fugitive	Paint Booth No. 1	2002/2016	26 Gal./hr	Filters
42S and 43S	42 and 43	Paint Booth No. 2	2002	26 Gal./hr	Filters
44S and 45S	~~44 and 45~~ Fugitive	Paint Booth No. 3	2002/2016	26 Gal./hr	Filters

(1) Energy Cells are authorized to operate in the following scenarios: During "normal operations," gases will be vented through Wet ESPs and Biofilter and out Emission Point 23. During RCDME, gases will be vented through Wet ESPs 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 Wet ESPs and out Emission Point 21

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
R13-1761K~~-~~	May 24, 2021

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 such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). 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	**NSPS**	New Source Performance Standards
CBI	Confidential Business Information	**PM**	Particulate Matter
CEM	Continuous Emission Monitor	**PM_{10}**	Particulate Matter less than 10μm in diameter
CES	Certified Emission Statement	**pph**	Pounds per Hour
C.F.R. *or* CFR	Code of Federal Regulations	**ppm**	Parts per Million
CO	Carbon Monoxide	**PSD**	Prevention of Significant Deterioration
C.S.R. *or* CSR	Codes of State Rules	**psi**	Pounds per Square Inch
DAQ	Division of Air Quality	**SIC**	Standard Industrial Classification
DEP	Department of Environmental Protection	**SIP**	State Implementation Plan
FOIA	Freedom of Information Act	**SO_2**	Sulfur Dioxide
HAP	Hazardous Air Pollutant	**TAP**	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	**TPY**	Tons per Year
HP	Horsepower	**TRS**	Total Reduced Sulfur
lbs/hr *or* lb/hr	Pounds per Hour	**TSP**	Total Suspended Particulate
LDAR	Leak Detection and Repair	**USEPA**	United States Environmental Protection Agency
m	Thousand	**UTM**	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	**VEE**	Visual Emissions Evaluation
mm	Million	**VOC**	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
$mmft^3$/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour		
NA *or* N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

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§30-2.39]

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. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

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.
[45CSR§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. and 45CSR38]

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 57th Street SE
Charleston, WV 25304

US EPA:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air Section (3ED21)
1650 Arch Street
Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

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

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. **[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. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

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. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

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 telefax. 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 75m^3 (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 m^3.

4.0 Source-Specific Requirements [emission point ID(s): 1, 3 – 7, 9 – 11, 21, 23, 24, 27, 31 – 38, and 40 – 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 (4110-00-10)	80.0
175 MMBTU/hr Energy Cell (3900-00-10)	WESP (4120-00-10)	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} VOC	0.59 0.01	2.58 0.05
3	Dry Flake Area	Fabric Filter (4333-00-10)	PM_{10} VOC	0.48 0.82	2.11 3.57
4	Mat Trim System	Fabric Filter (4345-00-10)	PM_{10} VOC	0.55 0.82	2.41 3.59
5	Rough Trim System	Fabric Filter (4353-00-10)	PM_{10} VOC	0.57 0.85	2.51 3.74
6	Tongue & Groove and Sawing System	Fabric Filter (4363-00-10)	PM_{10} 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

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
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)	PM_{10}	6.8	9.5
			SO_2	1.0	1.4
			CO	6.0	8.4
			VOC	9.1	12.8
			NO_x	8.0	11.2
			Benzene	0.45	0.63
			Hydrochloric Acid	0.22	0.31
			Lead Compounds	0.01	0.01
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)	Methylene Chloride	0.07	0.10
			Napthalene	0.43	0.60
			POM	0.43	0.60
			Total HAP	2.71	3.79
21[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)	Wet ESP No. 1 (4110-00-10) Wet ESP No. 2 (4210-00-10)	$PM_{2.5}/PM_{10}/PM$	34.68	N/A[3]
			SO_2	12.26	
			CO	40.66	
			VOC	59.09	
			NO_x	88.23	
			Acetaldehyde	2.40	
			Acrolein	0.93	
			Formaldehyde	4.55	
			Lead Compounds	0.01	
			Methanol	10.49	
			Phenol	0.00	
			Proprionaldehyde	1.00	
			Total HAP	26.21	
23[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)	Wet ESP No. 1 (4110-00-10) Wet ESP No. 2 (4210-00-10) Biofilter (4800-00-10)	$PM_{2.5}/PM_{10}/PM$	34.68	79.40
			SO_2	12.26	17.90
			CO	44.66	225.40
			VOC	48.60	118.40
			NO_x	88.23	246.55
			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	1.05	3.15
			Phenol	0.00	0.00
			Propionaldehyde	1.00	0.83
			Xylenes	0.45	1.96
			Total HAP	17.01	33.16
24	OSB Press (4700-00-10) (Bypass Mode)	N/A	PM_{10}	2.5	0.48
			CO	9.0	2.95
			VOC	36.0	7.86
			Acetaldehyde	1.94	0.33
			Chlorine	1.14	0.09
			Cumene	12.0	1.10
			Formaldehyde	6.00	1.49
			Methanol	15.5	4.88
			MDI	0.03	0.01
			Phenol	0.52	0.06
			Total HAP	37.3	7.96

Emission Point	Source	Control Device	Pollutant	Emission Limit	
				Hourly (pph)	Annual (tpy)
27	Emergency diesel-fired generator	N/A	PM_{10} SO_2 CO VOC NO_x	0.44 3.1 4.2 0.50 18.2	0.03 0.16 0.21 0.03 0.92
31	Liquid Phenolic Resin Tank No. 1	N/A	VOC	---	0.01
32	Liquid Phenolic Resin Tank No. 2	N/A			
33	Liquid Phenolic Resin Tank No. 3	N/A			
34	Liquid Phenolic Resin Tank No. 4	N/A			
35	MDI Tank No. 1	N/A	VOC	---	---
36	MDI Tank No. 2	N/A			
37	Wax Tank No. 1	N/A	VOC	---	0.01
38	Wax Tank No. 2	N/A			
40 & 41	Paint Booth No. 1	Filters	PM_{10}	0.39	1.71
42 & 43	Paint Booth No. 2	Filters			
44 & 45	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 (6) as applicable. Although the RCDME Emissions are contributed toward the limits under Emission Point 23 they are actually vented through Emission Point 21.
(4) The hourly emission limits are applicable when the Biofilter 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.

Compliance with the hourly PM_{10} emission limits for emission points 3, 4, 5, 6, 7, 9, 21, 23, 24, 40, 41, 42, 43, 44, and 45 shall streamline compliance with the less stringent hourly particulate matter emission limits of 45CSR§7-4.1. Compliance with the hourly PM_{10} emission limit for emission points 10 and 11 shall streamline compliance with the less stringent 45CSR§2-4.1.b hourly particulate matter emission limit. Compliance with the hourly SO_2 emission limit for emission points 10 and 11 shall streamline compliance with the less stringent 45CSR§10-3.3.f hourly SO_2 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 operating WESPs and Biofilter, and emitted from Emission Point 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 operating WESPs, and emitted from Emission Point 21.

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 operating WESPs, and emitted from Emission Point 21.

[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 DDDD, 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. Reserved.

c. 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;

d. Reserved.

e. Reserved.

f. 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 DDDD) 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.

With the exception of times meeting the facility's routine control device maintenance exemption (RCDME) criteria, the permittee shall not bypass control equipment at any time, except as allowed under "Startup, Shutdown, and/or Malfunction" (SSM) events as defined within 40 CFR §63.2. During any SSM event the permittee shall have the general duty to reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. Therefore, the permittee shall maintain a startup, shutdown, and malfunction plan in accordance with 40 CFR §63.6(e)(3). Each of these events shall be reported in accordance with 40 CFR §63.10(d)(5) and thus 4.5.3 of this permit.
[45CSR13, R13-1761, 4.1.7, 45CSR34, 40 C.F.R. §63.2290]

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.
[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, 21, 23, 24, 40, 41, 42, 43, 44, 45)]

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, 21, 23, 24, 40, 41, 42, 43, 44, and 45)]

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 (21 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 (21 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, 21, 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. Reserved.

4.1.28. The permittee shall develop a written SSM plan according to 40 C.F.R. §63.6(e)(3).
[45CSR13, R13-1761, 4.1.21; 45CSR34; 40 C.F.R. §63.2250(c)]

4.1.29. The permittee shall abide by the work practice standards associated with Group 1 miscellaneous coating operations by using non-HAP coatings as defined in 40CFR§63.2292.
[45CSR34; 40 C.F.R. §63.2241 and 40 C.F.R. 63, Subpart DDDD, Table 3]

4.1.30. **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, 4.1.22; 45CSR§13-5.10]

4.1.31. **40 CFR 63, Subpart DDDD Add-on Control Systems Compliance Options (Biofilter)**
Except for periods when the mill is operating under the RCDME or during times of SSM, the permittee shall, while using the Biofilter:

a. Limit emissions of total HAP, measured as THC (as carbon), to 20 ppmvd; or

b. Reduce methanol emissions by 90 percent; or

c. Reduce formaldehyde emissions by 90 percent.

[45CSR13, R13-1761, 4.1.19; 45CSR34; 40 C.F.R. §63.2240(b) and Table 1B of 40 CFR 63, Subpart DDDD]

4.1.32. **40 CFR 63, Subpart DDDD Operating Requirements (Biofilters)**
The permittee shall meet the following Biofilter operating requirements:

a. Maintain the 24-hour block Biofilter bed temperature within the range established according to §63.2262(m); or

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

[45CSR13, R13-1761, 4.1.20; 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. The permittee shall meet all applicable Biofilter monitoring requirements pursuant to 40 C.F.R. 63, Subpart DDDD. This shall include Biofilter bed temperature 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 operating hours. For 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(f), 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, 4.2.5., 45CSR34, 40C.F.R.§63.2270]

4.2.6. 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)]

4.2.7. 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, 21, 23, 24, 40, 41, 42, 43, 44, and 45, 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, 21, 23, 24, 40, 41, 42, 43, 44, and 45)]

4.2.8. For Wet ESP No. 1 (4110-00-10), Wet ESP No. 2 (4120-00-10), 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)]

4.2.9. The permittee shall continuously monitor the voltage of Wet ESP No. 1 (4110-00-10) and Wet ESP No. 2 (4120-00-10). The voltage on each Wet ESP 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 Wet ESP is not operating. During normal operation, each Wet ESP shall have at least 2 fields in service and the voltage shall be maintained at or above 10 kV. If the voltage falls below 10 kV for 30 seconds, an alarm will sound and corrective action shall be taken to return the voltage to a value at or above 10 kV.
[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 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 H_2O. 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 H_2O or less than 0.2 inches of H_2O, 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 H_2O.
[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. Performance testing shall be in accordance with the following:

a. At the same time as the initial performance test required under 40 C.F.R. 63, Subpart DDDD, the permittee shall conduct, or have conducted, a performance test during "normal mode" as defined under 4.1.3.a.~~2~~ to determine compliance at Emission Point 23 with the hourly emission limits of VOCs and the HAPs targeted by 40 CFR 63, Subpart DDDD;

b. Use of test methods shall be in accordance, where applicable, with 40 CFR 63, Subpart DDDD or in accordance with information contained in an approved test protocol; and

c. Any required performance test shall be in accordance with 3.3.1.

[45CSR13, R13-1761, 4.3.1]

4.3.2. The permittee shall meet all applicable Biofilter testing requirements pursuant to 40 C.F.R. 63, Subpart DDDD. This shall include the repeat Biofilter performance testing as specified in 40 C.F.R. 63 Subpart DDDD Table 7 Row (3) as well as any additional confirmatory testing determined necessary by the Director. **[45CSR13, R13-1761, 4.3.2., 45CSR34, 40 C.F.R. §63.2271(a), 40 C.F.R. 63, subpart DDDD, Table 7 row (3), 45CSR§30-5.1.c.]**

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]

SLR Comment: Applicant requests to remove the requirement of quarterly ash and BTU analysis of the wood combusted, and proposes to replace the quarterly analysis with an annual analysis. The majority of wood fuel is used for direct firing. Applicant has records establishing a reliable range of results of ash and BTU analysis of wood combusted.

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~~ an annual ash and BTU analysis of the wood combusted. (10, 11)
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, 4.4.9 and 4.1.13; 40 C.F.R. §60.48c(g); 45CSR16; 45CSR§2-8.3.c; 45CSR§§2A-7.1.a.1 and 7.1.a.3]

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. Reserved.

b. Reserved.

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

d. Records of performance tests and performance evaluations.

[45CSR13, R13-1761, 4.4.10, 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 4.2.6 and 4.2.7 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 4.2.8 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 Wet ESP No. 1 (4110-00-10) and Wet ESP No. 2 (4120-00-10) shall be recorded as a 6-minute 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 10 kV for more than 30 seconds and any corrective actions taken during these periods. Maintenance and malfunction records for Wet ESP No. 1 and Wet ESP No. 2 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 H_2O or less than 0.2 inches of H_2O, 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). *(Wet ESP No. 1 {4110-00-10}, Wet ESP No. 2 {4120-00-10}, 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 is offline for routine control device maintenance. And, as regards the Biofilter, 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, 4.4.7]

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.

(Wet ESP No. 1 {4110-00-10}, Wet ESP No. 2 {4120-00-10}, 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)-(f). 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)]

4.5.3. The permittee shall submit all startup, shutdown, and malfunction (SSM) notifications and semiannual reports in accordance with 40 CFR §63.6(e)(3) and §63.10(d)(5).
[45CSR34, 40 C.F.R.§63.2290]

4.6. Compliance Plan

4.6.1. None.

5.0 40CFR63, 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, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 5.1.1.a through 5.1.1.c of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs 5.1.1.a through 5.1.1.c of this section, 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 any combination of the purposes 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.

i. 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 and emergency demand response 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(f)(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.