Weyerhaeuser NR Company

Buckhannon Facility

097-00029

Buckhannon, West Virginia

Rule 13 Construction/Title V Modification Application

SLR Ref: 116.00687.00025

August 2015

Buckhannon Rule 13 Construction/Title V Modification Application

Prepared for:

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia 26201

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

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ATTACHMENTS

APPLICATION FOR PERMIT

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

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):***
2 6 3 4 8 1 2 5 7

3. Name of facility *(if different from above):*
Buckhannon Facility

4. The applicant is the:
☐ **OWNER** ☐ **OPERATOR** ☒ **BOTH**

5A. Applicant's mailing address:
100 TJM Drive
Buckhannon, WV, 26201

5B. Facility's present physical address:
100 TJM Drive
Buckhannon, WV, 26201

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: Owns

- 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

10. North American Industry Classification System **(NAICS)** code for the facility:
321214

11A. DAQ Plant ID No. (for existing facilities only):
0 9 7 – 0 0 0 2 9

11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only):
R13-1843B R30-09700029-2011

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**.

From Charleston, Take Interstate 79 North to the Weston/Buckhannon Exit (Exit #99),
Proceed on route US 33 East towards Buckhannon, approx. 14 miles, after passing by Route 20 (Phillipi/Buckhannon) Exit - Take the 2nd Exit on the left onto Industrial Park Road (Route 15/33)
Continue on Industrial Park Road for approx. 1 mile until coming to Stop sign, Plant straight ahead

12.B. New site address (if applicable):	12C. Nearest city or town: Buckhannon	12D. County: Upshur
12.E. UTM Northing (KM): 4318.0	12F. UTM Easting (KM): 569.0	12G. UTM Zone: 17

13. Briefly describe the proposed change(s) at the facility:
Installation of a wood sealer application booth, sealer storage and day application tanks. The spray booth will have ducting which removes any overspray PM and vents its exhaust outside the building. The type of pleated filters proposed for control are very efficient and meet the MERV 8 standards for mechanical air filter media.

14A. Provide the date of anticipated installation or change: 02/01/2016 – If this is an **After-The-Fact** permit application, provide the date upon which the proposed change did happen: / /	14B. Date of anticipated Start-Up if a permit is granted: 04/01/2016

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; sealer coating booth

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; pleated cartridge filters

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.

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 _____ *(Please use blue ink)* DATE: 8/6/15 *(Please use blue ink)*

35B. Printed name of signee: Lance Miller		35C. Title: Plant Manager
35D. E-mail: lance.miller@weyerhaeuser.com	36E. Phone: (304) 473-5490	36F. FAX: (304) 472-7395
36A. Printed name of contact person (if different from above):		36B. Title:
36C. E-mail:	36D. Phone:	36E. FAX:

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

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

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

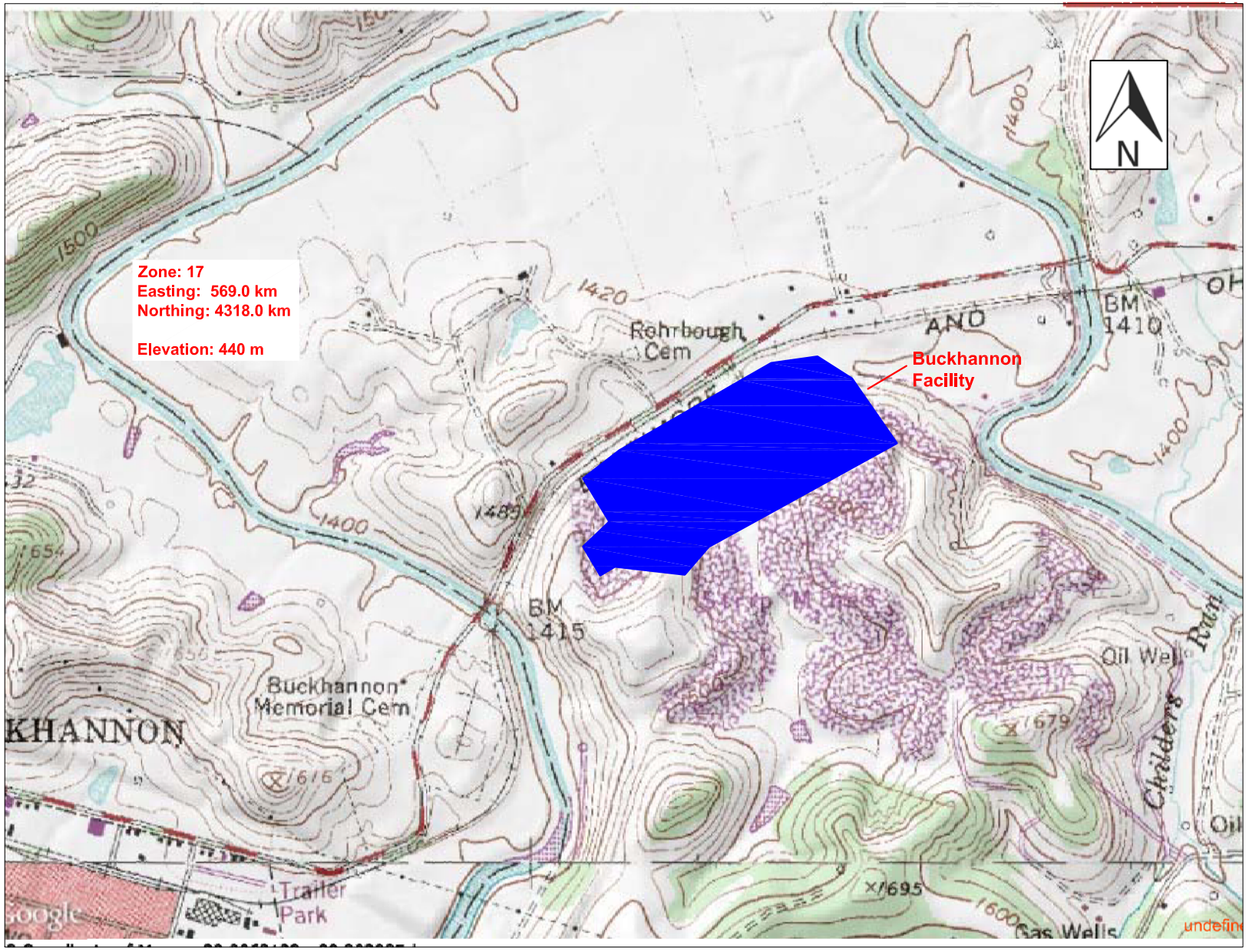
MAP

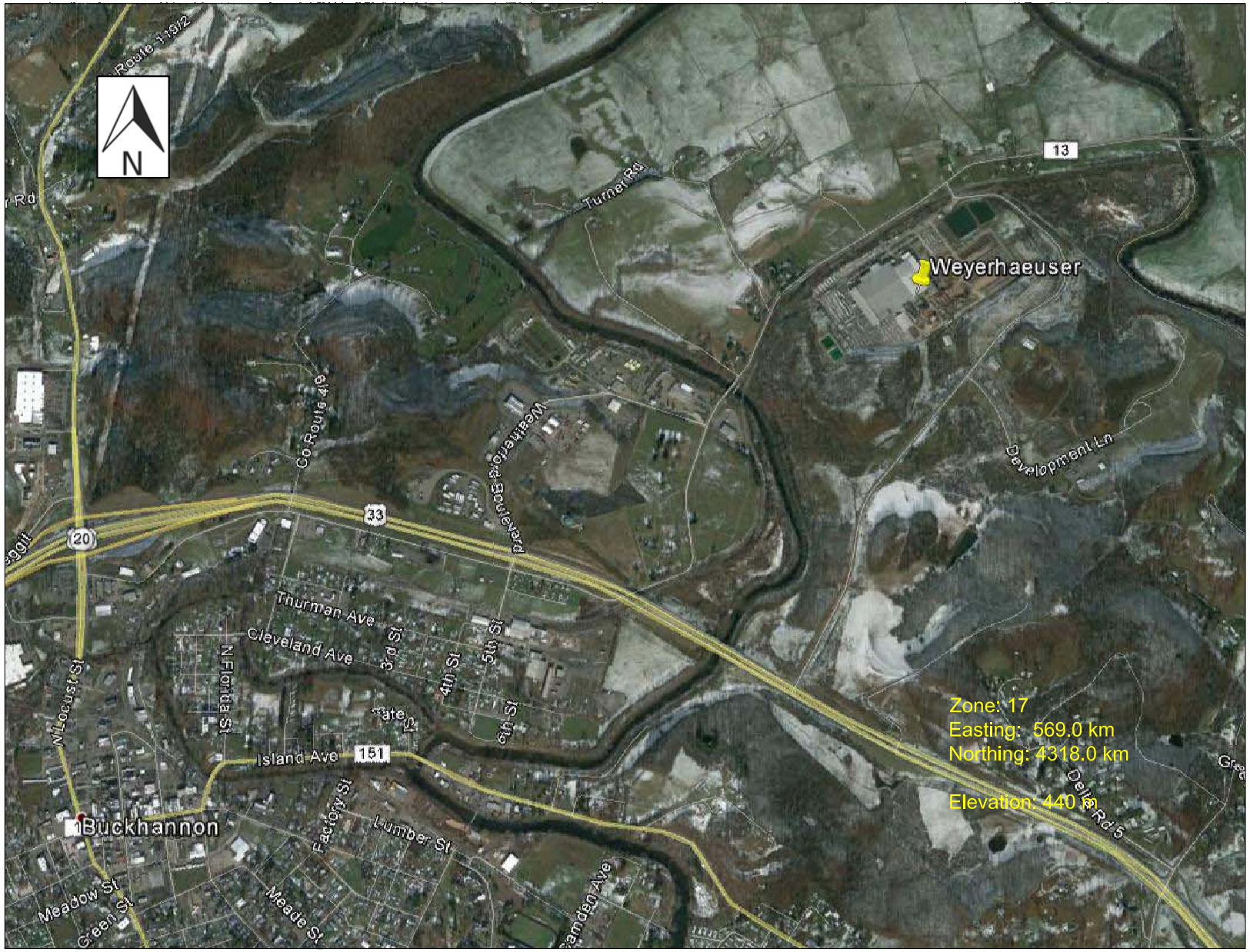
Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015


Zone: 17
Easting: 569.0 km
Northing: 4318.0 km
Elevation: 440 m
Buckhannon Facility
N
Rohrbough Cem
BM 1410
BM 1415
Buckhannon Memorial Cem
KHANNON
Trailer Park
Oil Well
Gas Wells
1500
1420
1400
1485
1654
1679
1695
1600


N
Weyerhaeuser
Turner Rd
13
Co Route 49
Weirton Boulevard
Development Ln
33
20
Thurman Ave
Cleveland Ave
3rd St
4th St
5th St
6th St
N Locust St
N Florida St
State St
Island Ave
151
Buckhannon
Factory St
Lumber St
Meadow St
Green St
Meade St
Camden Ave
Delk Rd 5
Zone: 17
Easting: 569.0 km
Northing: 4318.0 km
Elevation: 440 m

ATTACHMENT C

INSTALLATION AND START-UP

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

INSTALLATION AND STARTUP SCHEDULE

The permittee will start construction as soon as the 45CSR13 permit is issued. However, construction is anticipated to begin early 2016 and startup in the 2nd Quarter of 2016.

ATTACHMENT D

REGULATORY DISCUSSION

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

REGULATORY DISCUSSION

APPLICABLE REGULATIONS

The spray booth and ancillary equipment have been found to be subject to the following applicable rules and regulations:

Federal and State:

45 CSR 11 - Standby Plans for Emergency Episodes.

45 CSR 7 – Prevention of PM from Manufacturing Sources

The spray booth was evaluated as a manufacturing source operation due to its potential to generate PM. The source is considered a "type a source operations" where the application of the sealer constitutes a physical change to the product being manufactured. Therefore the source is subject to the 20% opacity limitation and a PM limit based on process weight rate. The weight of the wood products being sealed is 19,200 lb/hr based on an average density of 42 lb/ft^3. Therefore the emission limit from the Reg. 7 is approximately 16 lb/hr PM. Assuming a 70% transfer efficiency and a 90% average PM control efficiency the spraybooth source is not expected to exceed 2.74 lb/hr PM. Therefore the source will be designed for compliance with this State Rule.

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

The addition of a sealer spray line, curing tunnel, and associated sealer storage tanks constitute a modification under Rule 13 as a result of exhibiting a potential of 27.9 lb/hr of PM from the uncontrolled spray booth based on 70% transfer efficiency. Under this permit application 90% control of this PM stream is proposed, but actual efficiency is expected to be even higher due to the tendency of this material to polymerize and form large diameter PM. Emissions from all other ancillary activities related to the curing tunnel and storage vessels will be insignificant based on the low vapor pressure exhibited by the MDI sealer. It should be noted the spray booth PM emissions are also classified as a hazardous air pollutant (HAP) under the methylene diphenyl diisocyanate (MDI) compound.

45 CSR 30 - Operating Permit Requirements.

As a result of the additional equipment to be installed at Weyerhaeuser's Buckhannon Trus Joist facility as described within the 45CSR13 section above the process changes will be classified as a significant modification to the Title V permit.

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 proposed sealer spray line was evaluated with respect to the requirements defined within this subpart. The spray application is defined within the definition of "Miscellaneous Coating Operations" as a moisture sealant. As a result, the work practice standards found in Table 3 of Subpart DDDD, specific to "Group 1 Miscellaneous Coating Operations", do not apply.

The moisture sealant proposed by this modification and referred to as W18 is emitted as PM and also classified as an MDI, HAP. Due to the large molecular weight of MDI and its willingness to polymerize when reacted with water, the emissions are expected to be 100% Particulate Matter. Therefore the exhaust lends itself to a high level of control by utilizing particulate filters as designed for painting booth applications.

Although the HAP emissions will be highly controlled under the proposed modification, Subpart DDDD does not appear to specify any control requirements applicable to miscellaneous coating operations at this time. This determination is supported by 2004 Preamble to the final Regulation in Table 1. – Process Units That Are Subject to the Final Control Requirements in Federal Register/ Vol. 69, No.146/ Friday, July 30, 2004/ Rules and Regulations (45949). This Federal Register Reference is included for reference.

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 60 Subpart K, Ka, Kb - Storage Vessel.

The storage tanks defined by this modification consist of 1 6,000 gallon storage vessel and one 350 gallon day/mix tank. Both of these are under the lowest applicability threshold of 20,000 gallons. Additionally, due to the very low vapor pressure (0.0006 mm Hg) exhibited by MDI at atmospheric conditions the emissions from this tank would not be considered VOC.

40 CFR 63 Subpart QQQQ - National Emission Standards for Hazardous Air Pollutants from the Surface Coating of Wood Building Products

This subpart was evaluated for applicability and found not to apply because of the overlap with the PCWP MACT, Subpart DDDD. Therefore if the surface coating

operations are included as part of an affected source under another standard the coating activities are not covered by Subpart QQQQ standards.

EPA's intent was discussed in Federal Register Notice/ Vol. 68, No. 6/Thursday, January 9, 2003/ Proposed Rules, 1303 as follows:

V. Relationship to Other Standards and Programs Under the CAA and Other Statutes.

A. Wood Building Products Surface Coating NESHAP Proposal
The proposed PCWP rule includes some miscellaneous coating operations that are performed where the substrate is manufactured. We included this miscellaneous coating operations in the PCWP rule instead of the upcoming Wood Building Products Surface Coating NESHAP (subpart QQQQ) so that most facilities would be subject to only one of the rules.

40 CFR 64 - Compliance Assurance Monitoring

The coating operations are included as an affected source under the PWCP MACT, 40 CFR 63, Subpart DDDD, which would qualify them as a 112 exemption under the CAM applicability section.

45 CSR 21 - To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds.

The facility is not located in a WV County designated applicable to the RACT requirements of this state standard. Should Upshur County become an ozone maintenance area Weyerhaeuser shall comply with all Rule 21 requirements.

45 CSR 27 - To Prevent and Control the Emissions of Toxic Air Pollutants.

This rule is applicable to all Toxic Air Pollutants listed in this regulation and defines Best Available Control measures to abate emissions from sources exceeding the applicability thresholds. The MDI emissions from the proposed modification are not listed as a regulated pollutant under this State Rule.

utility emissions. We did not quantify or monetize these impacts.

Every benefit-cost analysis examining the potential effects of a change in environmental protection requirements is limited to some extent by data gaps, limitations in model capabilities (such as geographic coverage), and uncertainties in the underlying scientific and economic studies used to configure the benefit and cost models. Deficiencies in the scientific literature often result in the inability to estimate changes in health and environmental effects, such as potential increases in premature mortality associated with increased exposure to carbon monoxide. Deficiencies in the economics literature often result in the inability to assign economic values even to those health and environmental outcomes which can be quantified. These general uncertainties in the underlying scientific and economics literatures are discussed in detail in the RIA and its supporting documents and references.

A full listing of the benefit categories that could not be quantified or monetized in our analysis are provided in Table 3 of this preamble. A full appreciation of the overall economic consequences of the proposed PCWP standards requires consideration of all benefits and costs expected to result from today's proposed rule, not just those benefits and costs which could be expressed here in dollar terms.

TABLE 3.—UNQUANTIFIED BENEFIT CATEGORIES FROM HAP, OZONE-RELATED, AND PM EMISSIONS REDUCTIONS

	Unquantified effect categories associated with HAP	Unquantified effect categories associated with ozone	Unquantified effect categories associated with PM
Health Categories	Carcinogenicity mortality, Genotoxicity mortality, Noncancer lethality, Pulmonary function, decrement, Dermal irritation, Eye irritation, Neurotoxicity, Immunotoxicity, Pulmonary function decrement, Liver damage, Gastrointestinal toxicity, Kidney damage, Cardiovascular impairment, Hematopoietic (Blood disorders), Reproductive/Developmental toxicity.	Airway responsiveness, Pulmonary inflammation, Increased susceptibility to respiratory infection, Acute inflamation and respiratory cell damage, Chronic respiratory damage/Premature aging of lungs, Emergency room visits for asthma, Hospital admissions for respiratory diseases, Asthma attacks, Minor restricted activity days.	Premature mortality, Chronic bronchitis, Hospital admissions for chronic obstructive pulmonary disease, pneumonia, cardiovascular diseases, and asthma, Changes in pulmonary function, Morphological changes, Altered host defense mechanisms, Cancer, Other chronic respiratory disease, Emergency room visits for asthma, Lower and upper respiratory symptoms, Acute bronchitis, Shortness of breath, Minor restricted activity days, Asthma attacks, Work loss days.
Welfare Categories	Corrosion/Deterioration, Unpleasant odors, Transportation safety concerns, Yield reductions/Foliar injury, Biomass decrease, Species richness decline, Species diversity decline, Community size decrease, Organism lifespan, decrease, Trophic web shortening.	Ecosystem and vegetation effects in Class I areas (*e.g.*, national parks), Damage to urban ornamentals (*e.g.*, grass, flowers, shrubs, and trees in urban areas), Commercial field crops, Fruit and vegetable crops, Reduced yields of tree seedlings, commercial and non-commercial forests, Damage to ecosystems, Materials damage, Reduced worker productivity.	Materials damage, Damage to ecosystems (*e.g.*, acid sulfate deposition), Nitrates in drinking water.

V. Relationship to Other Standards and Programs Under the CAA and Other Statutes

A. Wood Building Products Surface Coating NESHAP Proposal

The proposed PCWP rule includes some miscellaneous coating operations that are performed where the substrate is manufactured. We included these miscellaneous coating operations in the proposed PCWP rule instead of the upcoming Wood Building Products Surface Coating NESHAP (40 CFR part 63, subpart QQQQ) so that most facilities would be subject to only one of the rules. The miscellaneous coating operations proposed today include the application of any of the following to plywood or composite wood products: edge seals, moisture sealants, anti-skid coatings, company logos, trademark or grade stamps, nail lines, synthetic patches, wood patches, wood putty, concrete forming oils, glues for veneer composing, and shelving edge fillers. In addition, miscellaneous coating operations also include the application of primer to OSB siding that occurs at the same site as the OSB manufacture.

B. Wood Furniture Manufacturing Operations NESHAP (40 CFR Part 63, Subpart JJ)

The Wood Furniture Manufacturing Operations NESHAP apply to wood furniture manufacturing facilities that are engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components that are located at a plant site that is a major source of HAP emissions. In the preamble to the final rule (60 FR 62936, December 7, 1995), we stated that wood furniture manufacturing operations involving urea-formaldehyde resins were excluded from the Wood Furniture Manufacturing Operations NESHAP and would be covered by the proposed PCWP rule. Today's proposed rule covers manufacturing operations at wood furniture manufacturing facilities that use urea-formaldehyde resins. These operations include, but are not limited to, the manufacture of hardwood plywood, particleboard, and medium density fiberboard, all of which are included in the definition of a PCWP manufacturing facility. Although some wood furniture plants may be subject to both the Wood Furniture Manufacturing Operations NESHAP and today's proposed rule, there are no overlapping

§ 63.2232 What parts of my plant does this subpart cover?

* * * * *

(b) The affected source is the collection of dryers, refiners, blenders, formers, presses, board coolers, and other process units associated with the manufacturing of plywood and composite wood products. The affected source includes, but is not limited to, green end operations, refining, drying operations (including any combustion unit exhaust stream routinely used to direct fire process unit(s)), resin preparation, blending and forming operations, pressing and board cooling operations, and miscellaneous finishing operations (such as sanding, sawing, patching, edge sealing, and other finishing operations not subject to other national emission standards for hazardous air pollutants (NESHAP)). The affected source also includes onsite storage and preparation of raw materials used in the manufacture of plywood and/or composite wood products, such as resins; onsite wastewater treatment operations specifically associated with plywood and composite wood products manufacturing; and miscellaneous coating operations (§ 63.2292). The affected source includes lumber kilns at PCWP manufacturing facilities and at any other kind of facility.

* * * * *

■ 4. Section 63.2233 is amended by revising paragraphs (b) and (c) to read as follows:

§ 63.2233 When do I have to comply with this subpart?

* * * * *

(b) If you have an existing affected source, you must comply with the compliance options, operating requirements, and work practice requirements for existing sources no later than October 1, 2008.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, you must be in compliance with this subpart by October 1, 2008 or upon initial startup of your affected source as a major source, whichever is later.

* * * * *

■ 5. Section 63.2250 is amended by revising paragraph (a) to read as follows:

§ 63.2250 What are the general requirements?

(a) You must be in compliance with the compliance options, operating requirements, and the work practice requirements in this subpart at all times, except during periods of process unit or control device startup, shutdown, and malfunction; prior to process unit initial startup; and during the routine control device maintenance exemption specified in § 63.2251. The compliance options, operating requirements, and work practice requirements do not apply during times when the process unit(s) subject to the compliance options, operating requirements, and work practice requirements are not operating, or during periods of startup, shutdown, and malfunction. Startup and shutdown periods must not exceed the minimum amount of time necessary for these events.

* * * * *

■ 6. Section 63.2252 is added to read as follows:

§ 63.2252 What are the requirements for process units that have no control or work practice requirements?

For process units not subject to the compliance options or work practice requirements specified in § 63.2240 (including, but not limited to, lumber kilns), you are not required to comply with the compliance options, work practice requirements, performance testing, monitoring, SSM plans, and recordkeeping or reporting requirements of this subpart, or any other requirements in subpart A of this part, except for the initial notification requirements in § 63.9(b).

■ 7. Section 63.2262 is amended by revising paragraph (d)(1) to read as follows:

§ 63.2262 How do I conduct performance tests and establish operating requirements?

* * * * *

(d) * * *

(1) Sampling sites must be located at the inlet (if emission reduction testing or documentation of inlet methanol or formaldehyde concentration is required) and outlet of the control device (defined in § 63.2292) and prior to any releases to the atmosphere. For control sequences with wet control devices (defined in § 63.2292) followed by control devices (defined in § 63.2292), sampling sites may be located at the inlet and outlet of the control sequence and prior to any releases to the atmosphere.

* * * * *

■ 8. Section 63.2269 is amended by revising the introductory text of paragraph (c) to read as follows:

§ 63.2269 What are my monitoring installation, operation, and maintenance requirements?

* * * * *

(c) Wood moisture monitoring. For each furnish or veneer moisture meter, you must meet the requirements in paragraphs (a)(1) through (3) and paragraphs (c)(1) through (5) of this section.

* * * * *

■ 9. Section 63.2292 is amended by revising the definitions for "Affected source," "Combustion unit," "Fiberboard mat dryer," "Laminated veneer lumber," "Lumber kiln," "Plywood," "Plywood and composite wood products manufacturing facility," "Press predryer," "Tube dryer," and "Rotary strand dryer"; and adding definitions for "Direct-fired process unit," "Engineered wood product," "Lumber," "Molded particleboard," and "Parallel strand lumber" to read as follows:

§ 63.2292 What definitions apply to this subpart?

* * * * *

Affected source means the collection of dryers, refiners, blenders, formers, presses, board coolers, and other process units associated with the manufacturing of plywood and composite wood products. The affected source includes, but is not limited to, green end operations, refining, drying operations (including any combustion unit exhaust stream routinely used to direct fire process unit(s)), resin preparation, blending and forming operations, pressing and board cooling operations, and miscellaneous finishing operations (such as sanding, sawing, patching, edge sealing, and other finishing operations not subject to other NESHAP). The affected source also includes onsite storage of raw materials used in the manufacture of plywood and/or composite wood products, such as resins; onsite wastewater treatment operations specifically associated with plywood and composite wood products manufacturing; and miscellaneous coating operations (defined elsewhere in this section). The affected source includes lumber kilns at PCWP manufacturing facilities and at any other kind of facility.

* * * * *

Combustion unit means a dryer burner, process heater, or boiler. Combustion units may be used for combustion of organic HAP emissions.

* * * * *

Direct-fired process unit means a process unit that is heated by the passing of combustion exhaust through the process unit such that the process material is contacted by the combustion exhaust.

* * * * *

Engineered wood product means a product made with lumber, veneers,

TABLE 2A TO APPENDIX B TO SUBPART DDDD OF 40 CFR PART 63.—TESTING AND EMISSIONS ESTIMATION SPECIFICATIONS FOR PROCESS UNITS—Continued

Process unit type	Acetaldehyde	Acrolein	Formaldehyde	Phenol	Benzene	MDI	HAP metals from direct-fired process units [a]
Stand-alone digesters	0.030 lb/ODT	0.0024 lb/ODT.	0.0045 lb/ODT.	0.0012 lb/ODT.	NA	NA	NA.
Wastewater/process water operations.	Engineering estimate (such as WATER9[c] or other method).	Engineering estimate (such as WATER9[c] or other method).	Engineering estimate (such as WATER9[c] or other method).	Engineering estimate (such as WATER9[c] or other method).	Engineering estimate (such as WATER9[c] or other method).	NA	NA.
Wet forming—fiberboard and hardboard (without PF resin).	0.0075 lb/MSF ½".	NA	0.0036 lb/MSF ½".	NA	NA	NA	NA.
Wet forming—hardboard (PF resin).	0.0067 lb/ODT.	NA	0.00039 lb/ODT.	0.00075 lb/ODT.	NA	NA	NA.
Miscellaneous coating operations, Log chipping, Softwood veneer dryer fugitive emissions.	NA	NA	NA	NA	NA	NA	NA.
Other ancillary processes (not listed elsewhere in this table) that may emit HAP listed in this table.	Engineering estimate.	Engineering estimate.	Engineering estimate.	Engineering estimate.	Engineering estimate.	Engineering estimate.	Engineering estimate.

Test: Emissions testing must be conducted for the process unit and pollutant according to the test methods specified in table 2B to appendix B to subpart DDDD.

NA: Not applicable. No emission estimates or emissions tests are required for purposes of the low-risk demonstration.

lb/MSF: Pounds of HAP per thousand square feet of board of the inches thickness specified (e.g., lb/MSF ¾ = pounds of HAP per thousand square feet of ¾-inch board). See equation in § 63.2262(j) of subpart DDDD to convert from one thickness basis to another.

lb/ODT: Pounds of HAP per oven dried ton of wood material.

lb/MBF: Pounds of HAP per thousand board feet.

lb/MLF: Pounds of HAP per thousand linear feet

[a] Direct-fired process units firing natural gas or propane are NA; thus, no emissions estimates, emissions tests, or fuel analyses are required for the purposes of the low-risk demonstration.

[b] Estimation of formaldehyde emissions is only necessary for facilities that use resin containing formaldehyde.

[c] TANKS and WATER9 software is available at *http://www.epa.gov/ttn/chief/software/index.html.*

TABLE 2B TO APPENDIX B TO SUBPART DDDD OF 40 CFR PART 63.—EMISSION TEST METHODS

For . . .	You must . . .	Using . . .
(1) each process unit required to be tested according to table 2A to this appendix.	select sampling ports' location and the number of traverse points.	Method 1 or 1A of 40 CFR part 60, appendix A (as appropriate).
(2) each process unit required to be tested according to table 2A to this appendix.	determine velocity and volumetric flow rate; ...	Method 2 in addition to Method 2A, 2C, 2D, 2F, or 2G in appendix A to 40 CFR part 60 (as appropriate).
(3) each process unit required to be tested according to table 2A to this appendix.	conduct gas molecular weight analysis	Method 3, 3A, or 3B in appendix A to 40 CFR part 60 (as appropriate).
(4) each process unit required to be tested according to table 2A to this appendix.	measure moisture content of the stack gas	Method 4 in appendix A to 40 CFR part 60.
(5) each process unit required to be tested according to table 2A to this appendix.	measure emissions of acetaldehyde	NCASI Method IM/CAN/WP–99.02 (IBR, see 40 CFR 63.14(f)); OR Method 320 in appendix A to 40 CFR part 63; OR the NCASI Method ISS/FP–A105.01 (IBR, see § 63.14(f)); OR Method 0011 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA Publication No. SW–846); OR ASTM D6348–03[b] (IBR, see 40 CFR 63.14(b)).
(6) each process unit required to be tested according to table 2A to this appendix.	measure emissions of acrolein	NCASI Method IM/CAN/WP–99.02 (IBR, see 40 CFR 63.14(f)); OR Method 320 in appendix A to 40 CFR part 63; OR the NCASI Method ISS/FP–A105.01 (IBR, see § 63.14(f)); OR ASTM D6348–03[b] (IBR, see 40 CFR 63.14(b)).

TABLE 1.—PROCESS UNITS THAT ARE SUBJECT TO THE FINAL CONTROL REQUIREMENTS

For the following process units . . .	Does today's final rule include control requirements for . . .	
	Existing affected sources?	New affected sources?
Softwood veneer dryers[a]; primary tube dryers; secondary tube dryers; rotary strand dryers; conveyor strand dryers; green rotary dryers; hardboard ovens; reconstituted wood product presses; and pressurized refiners.	Yes.	Yes.
Press predryers; fiberboard mat dryers; and board coolers	No.	Yes.
Dry rotary dryers[a]; veneer redryers[a]; softwood plywood presses; hardwood plywood presses; engineered wood products presses; hardwood veneer dryers[a]; humidifiers; atmospheric refiners; formers; blenders; rotary agricultural fiber dryers; agricultural fiber board presses; sanders; saws; fiber washers; chippers; log vats; lumber kilns; storage tanks; wastewater operations; miscellaneous coating operations (including group 1 miscellaneous coating operations[a]); and stand-alone digesters.	No.	No.

[a] These process units have work practice requirements in today's final rule in addition to or instead of control requirements. Group 1 miscellaneous coating operations include application of edge seals, nail lines, logo (or other information) paint, shelving edge fillers, trademark/grade-stamp inks, and wood putty patches to PCWP (except kiln-dried lumber) on the same site where the PCWP are manufactured. Group 1 miscellaneous coating operations also include application of synthetic patches to plywood at new affected sources.

B. What Pollutants Are Regulated by the Final Rule?

The final rule regulates HAP emissions from PCWP facilities. For the purpose of compliance with 40 CFR part 63, subpart DDDD, we defined "total HAP" to be the sum of the emissions of six primary HAP emitted from PCWP manufacturing. The six HAP that define total HAP make up 96 percent of the nationwide HAP emissions from PCWP facilities and are acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde. Other HAP are sometimes emitted and controlled along with these six HAP, but in lower quantities. Depending upon which of the compliance alternatives you choose, you could be required to measure emissions of total HAP, total hydrocarbon (THC), methanol, or formaldehyde as surrogates for measuring all HAP. For the purpose of determining whether your facility is a major source, you would have to include all HAP as prescribed by rules and guidance pertaining to determination of major source.

C. What Are the Compliance Options?

Today's final rule includes a range of compliance options, which are summarized in the following subsections. You must use one of the compliance options to show compliance with the final rule. In most cases, the compliance options are the same for new and existing sources. Dilution to achieve compliance is prohibited, as specified in 40 CFR 63.4.

1. Production-Based Compliance Options

Today's final rule includes production-based compliance options (PBCO), which are based on total HAP and vary according to type of process unit. Total HAP emissions are defined in today's final rule as the total mass emissions of the following six HAP: acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde. The PBCO are in units of mass of pollutant per unit of production. Add-on control systems may not be used to meet the production-based compliance options. For pressurized refiners and most dryers, the PBCO are expressed as pounds per oven-dried-ton of wood (lb/ODT). For presses, hardboard ovens, and some dryers, the PBCO are expressed as pounds per thousand square feet of board (lb/MSF), with a reference board thickness. There is no PBCO for conveyor strand dryers.

2. Add-On Control System Compliance Options

If you operate a process unit equipped with an add-on control system, you may use any one of the following six compliance options. "Add-on control system" or "control system" means the combination of capture and control devices used to reduce HAP emissions to the atmosphere.

(1) Reduce THC emissions (as carbon, and minus methane if you wish to subtract methane) by 90 percent.

(2) Reduce methanol emissions by 90 percent.

(3) Reduce formaldehyde emissions by 90 percent.

(4) Limit the concentration of THC (as carbon, and minus methane if you wish to subtract methane) in the outlet of the add-on control system to 20 parts per million by volume, dry basis (ppmvd).

(5) Limit the concentration of methanol in the exhaust from the add-on control system to 1 ppmvd (can be used only if the concentration of methanol entering the control device is greater than or equal to 10 ppmvd).

(6) Limit the concentration of formaldehyde in the exhaust from the add-on control system to 1 ppmvd (can be used only if the concentration of formaldehyde entering the control device is greater than or equal to 10 ppmvd).

In the first three options ((1) through (3)), the 90 percent control efficiency represents a total control efficiency. Total control efficiency is defined as the product of the capture efficiency and the control device efficiency. For process units such as rotary strand dryers, capture efficiency is not an issue because the rotary strand dryer has a single exhaust point which is easily captured by the control device. However, for presses and board coolers, the HAP emissions cannot be completely captured without installing an enclosure. If the enclosure meets the criteria for a wood products enclosure as defined in § 63.2292 in today's final rule, then you would assign the enclosure a capture efficiency of 100 percent. You must test other enclosures to determine capture efficiency using EPA Test Methods 204 and 204A through 204F (as appropriate) found in 40 CFR part 51, appendix M, or the alternative tracer gas procedure in appendix A to today's final rule. For the three concentration options ((4) through (6)), you must have an enclosure that either meets the criteria for a wood products enclosure or achieves a capture efficiency greater than or equal to 95 percent.

The six compliance options are equivalent ways to express the HAP control levels that represent the MACT floor. Because the compliance options are equivalent for controlling HAP emissions, you are required to meet only

one of the six compliance options for add-on control systems. However, you must designate in your permit which one of the six options you have selected for the affected process unit. If you plan to operate a given process unit under different conditions, you may incorporate multiple compliance options for the add-on control system into your permit, as long as each separate operating condition is identified along with the compliance option that corresponds to that operating condition.

3. Emissions Averaging Compliance Option

Emissions averaging is a means of achieving the required emissions reductions in a less costly way. Therefore, if you operate an existing affected source, for each process unit you could choose to comply with the emissions averaging provisions instead of the production-based compliance options or add-on control system compliance options.

Emissions averaging is a system of debits and credits in which the credits must equal or exceed the debits. ''Debit-generating process units'' are the PCWP process units that are required to meet the control requirements but that you choose to either not control or under-control. ''Credit-generating process units'' are the PCWP process units that you choose to control that are not required to be controlled under the standards. When determining your actual mass removal (AMR) of HAP, you may include partial credits generated from debit-generating process units that are under-controlled (*e.g.,* you may receive credit for 25 percent control of a debit-generating process unit). Control devices used for credit-generating process units may not be assigned more than 90 percent control efficiency.

Under the emissions averaging provisions, you would determine the required mass removal (RMR) of total HAP from debit-generating process units for a 6-month compliance period. Total HAP is defined in today's final rule to include acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde. The RMR would be based on initial total HAP measurements for each debit-generating process unit, your process unit operating hours for a 6-month period, and the required 90 percent control system efficiency. One hundred percent of the RMR for debit-generating process units would have to be achieved or exceeded by the AMR of total HAP achieved by credit-generating process units. The AMR is determined based on initial performance tests, the total HAP removal efficiency (not to exceed 90 percent) of the control systems used to control the credit-generating process units, and your process unit operating hours over the 6-month period.

There are some restrictions on use of the emissions averaging provisions in today's final rule. You must limit emissions averaging to the process units located within your affected source. Emissions averaging may not be used at new affected sources. You may not include in an emissions average those process units that are not operating or that are shut down. Only PCWP process units using add-on control systems may be used to generate credits.

D. What Operating Requirements Are in the Final Rule?

The operating requirements in today's final rule apply to add-on control systems used to comply with the final rule and to process units meeting the final production-based compliance options or emissions averaging provisions without an add-on control device (*e.g.,* debit-generating process units). For incineration-based control devices and biofilters, the final rule specifies that you must either monitor operating parameters or use a THC continuous emission monitoring system (CEMS) to demonstrate continuous compliance. The final operating requirements are summarized below:

- If you operate a thermal oxidizer, such as a regenerative thermal oxidizer (RTO), you must maintain the firebox temperature at a level that is greater than or equal to the minimum temperature established during the performance test. If you operate a combustion unit that accepts process exhaust into the flame zone, you are exempt from the testing and monitoring requirements described above for thermal oxidizers.
- If you operate a catalytic oxidizer, such as a regenerative catalytic oxidizer (RCO) or thermal catalytic oxidizer (TCO), you must maintain the average catalytic oxidizer temperature at or above the minimum temperature established during the performance test. You must also check the activity level of a representative sample of the catalyst at least every 12 months.
- If you operate a biofilter, you must maintain the average biofilter bed temperature within the range you develop during the initial performance test or during qualifying previous performance tests using the required test methods. If you use values from previous performance tests to establish the operating parameter ranges, you must certify that the biofilter and associated process unit(s) have not been modified subsequent to the date of the performance tests.
- If you operate an add-on control system not listed in today's final rule, you must establish operating parameters to be monitored and parameter values that represent your operating requirements during the performance test, subject to prior written approval by the Administrator.
- If you operate a process unit that meets the production-based compliance options or a process unit that generates debits in an emissions average without an add-on control device, you must maintain on a daily basis the process unit controlling operating parameter(s) within the ranges established during the performance test corresponding to the representative operating conditions identified during the performance test.
- As an alternative to monitoring the operating parameters specified above for thermal oxidizers, catalytic oxidizers, biofilters, other control devices, and process units that meet compliance options without add-on control systems, you may monitor THC concentration in the outlet stack with a THC CEMS. If you select this option, you must maintain the outlet THC concentration below the maximum concentration established during the performance test. You may choose to subtract methane from the THC concentration measured by the CEMS if you wish to do so.

E. What Are the Work Practice Requirements?

The work practice requirements in today's final rule apply to softwood veneer dryers, dry rotary dryers, veneer redryers, hardwood veneer dryers, and group 1 miscellaneous coating operations. For softwood veneer dryers, the work practice requirements require you to minimize fugitive emissions from the veneer dryer doors (by applying appropriate operation and maintenance procedures) and from the green end of the dryers (through proper balancing of hot zone exhausts). For group 1 miscellaneous coating operations, the work practice requirements specify that you must use a non-HAP coating. The work practice requirements also specify parameters that you must monitor to demonstrate that each dry rotary dryer, veneer redryer, and hardwood veneer dryer continuously operates in a manner consistent with the definitions of these process units provided in today's final rule, as follows:

- If you operate a dry rotary dryer, you must maintain the inlet dryer temperature at or below 600°F and maintain the moisture content of the wood particles entering the dryer at or below 30 weight percent, on a dry basis.

operating the process unit at typical operating temperature ranges.

4. Work Practice Requirements

The work practice requirements in today's final rule do not require you to conduct any initial performance tests. To demonstrate initial compliance with the work practice requirements for dry rotary dryers, you must install parameter monitoring devices to continuously monitor the dryer inlet operating temperature and the moisture content (dry basis) of the wood furnish (*i.e.,* wood fibers, particles, or strands used for making board) entering the dryer. You must then use the parameter monitoring devices to continuously monitor and record the dryer temperature and wood furnish moisture content for a minimum of 30 days. If the monitoring data indicate that during the minimum 30-day demonstration period, your dry rotary dryer continuously processed wood furnish with an inlet moisture content less than or equal to 30 percent, and the dryer was continuously operated at an inlet dryer temperature less than or equal to 600°F, then your dryer meets the definition of a dry rotary dryer in today's final rule. You must submit the monitoring data as part of your notification of compliance status report.

To demonstrate initial compliance with the work practice requirements for hardwood veneer dryers, you must calculate the annualized percentage of softwood veneer processed in the dryer by volume, using veneer dryer production records for the 12-month period prior to the compliance date. If the total annual percentage by volume of softwood veneer is less than 30 percent, your veneer dryer meets the definition of hardwood veneer dryer. You must then submit a summary of the production data for the 12-month period and a statement verifying that the veneer dryer will continue to process less than 30 percent softwoods as part of your notification of compliance status report.

To demonstrate initial compliance with the work practice requirements for softwood veneer dryers, you must develop a plan for minimizing fugitive emissions from the veneer dryer green end and heated zones. You must submit the plan with your notification of compliance status report.

To demonstrate initial compliance with the work practice requirements for veneer redryers, you must install a device that can be used to continuously monitor the moisture content (dry basis) of veneer entering the dryer. You must then use the moisture monitoring device to continuously monitor and record the inlet moisture content of the veneer for a minimum of 30 days. If the monitoring data indicate that your veneer dryer continuously processed veneer with a moisture content less than or equal to 25 percent during the minimum 30-day demonstration period, then your veneer dryer meets the definition of a veneer redryer in today's final rule. You must submit the monitoring data as part of your notification of compliance status report.

To demonstrate initial compliance with the work practice requirement for group 1 miscellaneous coating operations, you must submit a signed statement with your notification of compliance status report stating that you are using non-HAP coatings. You must also have a record (*e.g.,* material safety data sheets) showing that you are using non-HAP coatings as defined in today's final rule.

H. How Do I Demonstrate Continuous Compliance With the Final Rule?

The continuous compliance requirements in today's final rule vary with the different types of compliance options.

1. Production-Based Compliance Options

If you comply with the PBCO, then you must monitor and/or record the controlling operating parameter(s) identified as affecting total HAP emissions from the process unit(s) in the performance test. For each parameter, you must use the monitoring methods, monitoring frequencies, and averaging times (for continuously monitored parameters not to exceed 24 hours) specified in your performance test and Notification of Compliance Status. For each operating parameter, you must maintain on a daily basis the parameter at or above the minimum, at or below the maximum, or within the range (whichever applies) established during the performance test.

Instead of monitoring process operating parameters, you may operate a CEMS for monitoring THC concentration to demonstrate compliance with the operating requirements in today's final rule. If you choose to operate a THC CEMS in lieu of a continuous parameter monitoring systems (CPMS), you must demonstrate continuous compliance, as described in the following subsection.

2. Add-On Control System Compliance Options

For add-on control systems, you must install a CPMS to monitor the temperature or install a CEMS to monitor THC concentration to demonstrate compliance with the operating requirements in today's final rule. If you operate a CPMS, you must have at least 75 percent of the required recorded readings for each 3-hour or 24-hour block averaging period to calculate the data averages. You must operate the CPMS at all times the process unit is operating. You must also conduct proper maintenance of the CPMS and maintain an inventory of necessary parts for routine repairs of the CPMS. Using the data collected with the CPMS, you must calculate and record the average values of each operating parameter according to the specified averaging times.

For thermal oxidizers, you must continuously maintain the 3-hour block average firebox temperature at or above the minimum temperature established during the performance test. For catalytic oxidizers, you must continuously maintain the 3-hour block average catalytic oxidizer temperature at or above the minimum value established during the performance test. You must also check the activity level of a representative sample of the catalyst at least every 12 months and take any necessary corrective action to ensure that the catalyst is performing within its design range.

For biofilters, you must continuously maintain the 24-hour block average biofilter bed temperature within the operating range you establish during the performance test. You must also conduct a repeat performance test using the applicable method(s) within 2 years following the previous performance test and within 180 days after each replacement of any portion of the biofilter bed with a different media or each replacement of more than 50 percent (by volume) of the biofilter bed media with the same type of media.

If you choose to operate a CEMS for monitoring THC concentration instead of operating a CPMS, you must install, operate, and maintain the CEMS according to Performance Specification 8 in 40 CFR part 60, appendix B. You must also comply with the CEMS data quality assurance requirements in Procedure 1 of appendix F of 40 CFR part 60. You must conduct a performance evaluation of the CEMS according to 40 CFR 63.8 and Performance Specification 8. The CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. Using the data collected with the CEMS, you must calculate and record the 3-hour block average THC concentration for thermal or catalytic oxidizers. For biofilters, you must calculate and record the 24-hour block

ATTACHMENT E

PLOT PLAN

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

ENTRANCE

PLANT NORTH

N

N

REMAN HOG

EU 005-01 PARALLAM PRESS

EU 005-06 & EU 005-07 RESIN STORAGE ROOM

SAW SHOP

EU 005-03 PARALLAM LAYUP AREA

EU 005-04, EU 005-05 EU 005-08, EU 005-09 PARALLAM REMANUFACTURING AREA

EU 003-01

VENEER DRYER #2

VENEER DRYER #1

EU 004-02, EU 004-03, & EU 004-06 MICROLLAM REMANUFACTURING AREA

EU 004-01

MICROLLAM PRESS #11

MICROLLAM PRESS #12

EU 004-04 RESIN STORAGE ROOM

Southwest Corner of Building UTM: 4317.78 N, 568.248 E

LOG STORAGE

HEAT ENERGY BUILDING

HEAT ENERGY SYSTEM

LOG PROCESSING AREA

BAGHOUSE SYSTEM

EU 004-08 FUEL HOUSE

EU 004-05 DRY FUEL SILO

CHIP BIN EU 004-07

NOTES:

1. THE HEAT ENERGY SYSTEM INCLUDES: WOOD-FIRED FURNACE (EU 001-01), STAND-BY FURNACE (EU 001-02), ELECTROSTATIC PRECIPITATOR (ESP), AND MULTICLONE
2. THE BAGHOUSE SYSTEM INCLUDES: BGHS1, BGHS2A, BGHS2B, BGHS3, BGHS4, AND BGHS5

MID-SOUTH Engineering Co.
1658 Malvern Ave.– P.O. Box 1309
Hot Springs, Arkansas 71901

PLANT GENERAL EQUIPMENT LAYOUT

WEYERHAEUSER NR COMPANY
BUCKHANNON, WEST VIRGINIA

SCALE	DRN.	JDC	4-12-1994	DRAWING NO.
1"=50'	REV.	MHR	11-11-2014	1518-10000-M03

ATTACHMENT F

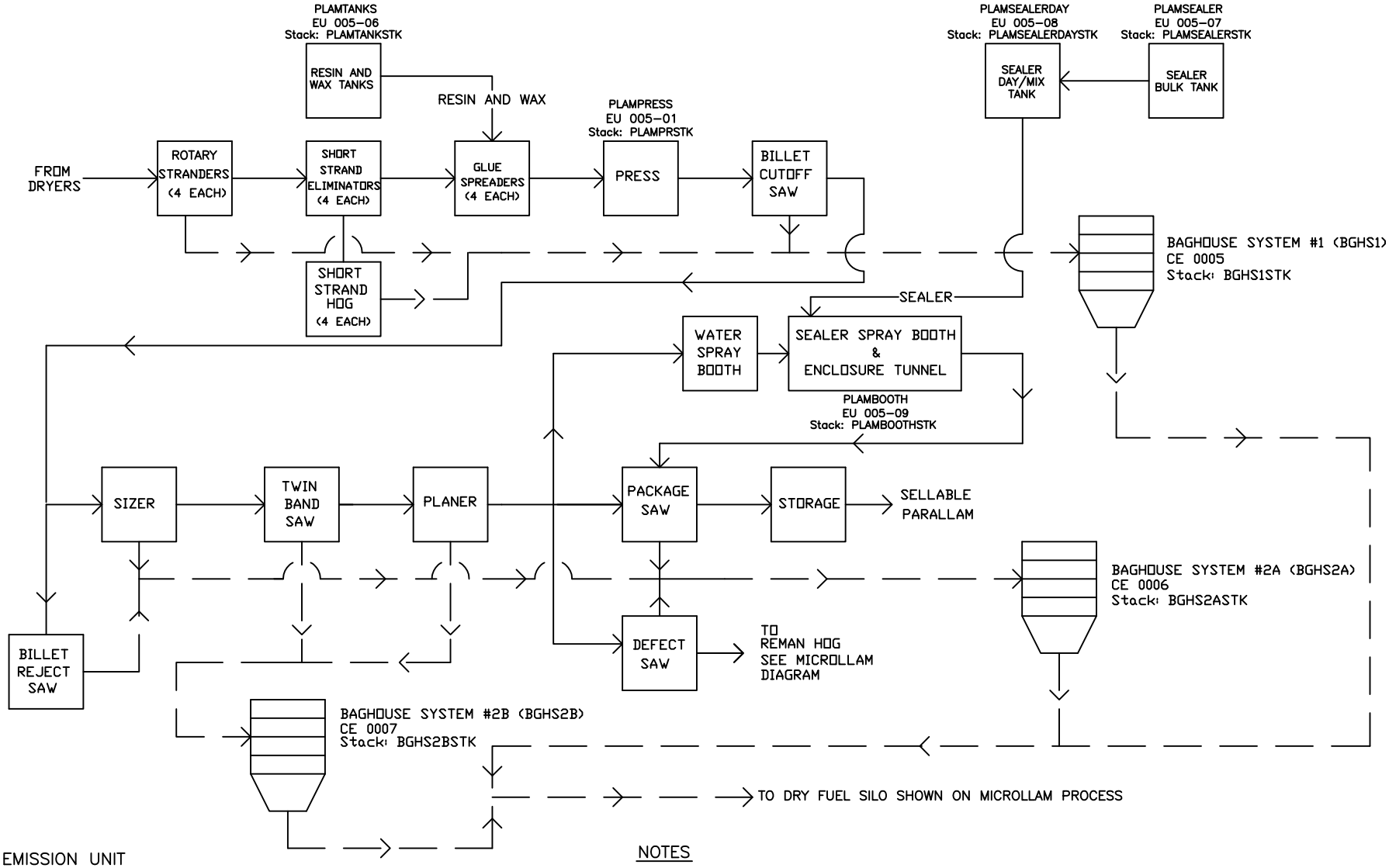
PROCESS FLOW DIAGRAM

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015



EU = EMISSION UNIT
CE = CONTROL EQUIPMENT

LEGEND

- MAIN PROCESS
- PNEUMATIC TRANSFER FOR WOOD WASTE
- MECHANICAL CONVEYANCE FOR WOOD WASTE

NOTES

ENTIRE AREA IS CONTAINED IN EMISSION GROUP 005.

EMISSION UNIT 005-03 (PLAMLAYUP) CONTAINS THE FOLLOWING EQUIPMENT: STRANDERS, SHORT STRAND HOGS, AND THE BILLET CUTOFF SAW.

EMISSION UNIT 005-04 (PLAMREMAN1) CONTAINS THE FOLLOWING EQUIPMENT: SIZER, BILLET REJECT SAW, PACKAGE SAW, AND DEFECT SAW.

EMISSION UNIT 005-05 (PLAMREMAN2) CONTAINS THE FOLLOWING EQUIPMENT: TWIN BAND SAW AND THE PLANER.

UNLESS LISTED IN THE NOTES SECTION, THE UNIT I.D. NUMBERS AND THE LOCAL I.D.'S ARE LISTED AT THE INDIVIDUAL UNITS.

Weyerhaeuser NR Company
Buckhannon, WV Plant

PARALLAM MANUFACTURING PROCESS

DRAWING NO: TFPFD2.DWG

ATTACHMENT G

PROCESS DESCRIPTION

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

PROCESS DESCRIPTION

PROPOSED MODIFCATION TO OPERATIONS

Weyerhaeuser has plans to upgrade their Parallam product line to increase its water resistance. In order to accomplish this value added application a spray booth will be installed to apply a MDI sealer to the outside surface of the beams. After the sealer is applied the product will be allowed to cure within a ventilation tunnel, which is integrally attached to the paint booth and final water quench stages. This tunnel is to allow a sufficient cure time before a water deluge is applied to the product as the final setting stage.

The new product treatment line will utilize a 6,000 gallon MDI bulk storage tank to receive new raw material shipments of the sealer. Additionally, a 350 gallon day tank will be used also as a mix tank for a small amount of colorant that is added. Each of these tanks will be blanketed with dry air from a conditioning system which keeps the pressure on the tanks at between 10 and 20 psig.

Emissions will be controlled at the sealer spray booth and its attached ventilation tunnel using 90% efficient paint booth cartridge style PM filters. Additionally, the MDI emissions evolved from the tanks are expected to be minimal due to the conservation vent settings and MDI's relatively low vapor pressure of 0.0006 mm Hg at 100F.

ATTACHMENT H

SAFETY DATA SHEETS (SDS)

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

Safety Data Sheet (SDS)

Weyerhaeuser

W18.G1

1. Identification

TRADE NAME (AS LABELED):	W18.G1
SYNONYMS:	None
PRODUCT USES:	Used in the production of wood products
CHEMICAL NAME/CLASS:	Aromatic Isocyanates
MANUFACTURER'S NAME:	Weyerhaeuser
ADDRESS:	PO Box 9777, Federal Way WA 98063-9777
EMERGENCY PHONE:	(800) 424-9300 (CHEMTREC)
BUSINESS PHONE:	(253) 924-3865
INTERNET ACCESS:	See Section 16
DATE:	June 12, 2015

2. Hazard(s) Identification

Signal Word(s): Danger

Product Classification (GHS)	Hazard Statement(s)	Pictogram
HEALTH		
Respiratory sensitization (Category 1) H334*	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
Skin sensitization (Category 1) H317	May cause an allergic skin reaction.	
Carcinogenicity (Category 2) H351	Suspected of causing cancer.	
Specific target organ toxicity - repeated exposure, Inhalation (Category 2), Respiratory system H373	May cause damage to organs (Respiratory system) through prolonged or repeated exposure if inhaled	

2. Hazard(s) Identification (cont'd.)

Specific target organ toxicity - single exposure (Category 3), Respiratory system H335	May cause respiratory irritation.	
Acute toxicity Inhalation - Category 4 H332	Harmful if inhaled (mists)	
Acute toxicity oral - Category 4 H302	Harmful if swallowed	
Skin irritation (Category 2) H315	Causes skin irritation.	
Eye irritation (Category 2A) H319	Causes serious eye irritation.	None

*****Hazard codes (GHS)

HMIS Rating (Scale 0-4):	**Health =**	3	**Fire =**	1	**Physical Hazard =**	0
NFPA Rating (Scale 0-4):	**Health =**	3	**Fire =**	1	**Reactivity =**	1

Precautionary Statement(s):

Prevention Statements-

P260: Do not breathe fume/ gas/ mist/ vapors/ spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P284: Wear respiratory protection as recommended following exposure evaluations.
P285: In case of inadequate ventilation wear an approved respirator suitable for conditions of use.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing should not be allowed out of the workplace.
P403 and P233: Store in well ventilated place. Keep containers tightly closed.

Response Statements-

P304 and P340: If inhaled and breathing is difficult, remove person to fresh air and keep comfortable for breathing.
P308, P313 and P280: If experiencing respiratory symptoms, following removal to fresh air, call a doctor or other qualified medical professional. Wear appropriate protective equipment for skin exposure.
P301 and P311: If swallowed: Call a POISON CENTER or doctor/ physician.
P313: If skin irritation or rash occurs get medical advice/attention.
P333 and P313: If skin irritation or rash occurs: Get medical advice/ attention if you feel unwell.
P337 and P311: If eye irritation persists call a doctor/physician.
P362 and P363: Take off contaminated clothing and wash before reuse.
P352 and P302: If on skin wash with plenty of soap and water.
P305, P351 and P338: If in eyes, rinse cautiously for several minutes. Remove contact lenses if present and easy to do so.

Disposal-

P501: Dispose of contents in accordance with Federal, state and local regulations.

Ingredients of Unknown Acute Toxicity (>1%): NAP

3. Composition/Information on Ingredients

Ingredients	CAS#	EC#	Wt %
Diphenylmethane-4,4'-diisocyanate (MDI)	101-68-8	202-966-0	10-40
Isocyanate Mixture*	NAP	NAP	60-90
Triethyl Phosphate	78-80-4	201-114-5	4-5
Colorants and additives*	NAP	NAP	1-2

* The specific chemical identities of the additives are considered trade secrets.

4. First Aid Measures

Inhalation: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician if symptoms persist or for excessive exposure.

Eye Contact: In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Immediate medical attention may be required.

Skin Contact: Wash off with soap and plenty of water. If irritation develops, seek medical attention.

Skin Absorption: Skin contact may play a role in sensitization.

Ingestion: If swallowed, can produce nausea, or serious illness. DO NOT INDUCE VOMITING. Get immediate medical help.

Symptoms or Effects:

Acute Symptoms/Effects: Cough, shortness of breath, asthma like symptoms, headache, nausea, vomiting, pulmonary edema. Effects may be delayed.

Delayed Symptoms/Effects: Chronic skin or inhalation exposures may produce allergic sensitization with delayed symptoms which may not be reversible.

5. Fire-fighting Measures

Extinguishing Media and Restrictions: water spray, dry powder, carbon dioxide or foam.

Specific Hazards, Anticipated Combustion Products: Combustion products may be nitrous gases, fumes/smoke, oxides of phosphorous and Isocyanate gases/vapor.

Autoignition Temperature: > 250°C.

Special Firefighting Equipment/Procedures: Toxic gases may be released during fire. Use SCBA with full face piece and operated in pressure-demand or other positive-pressure mode.

Unusual Fire and Explosion Hazards: No data available.

6. Accidental Release Measures

Steps to be Taken In Case Material Is Released or Spilled: Immediately notify safety and environmental personnel. Clear area. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment. Dike the spillage. For small amounts: Absorb Isocyanate with suitable absorbent material (see 40 CFR, sections 260, 264 and 265 for further information). Shovel into open container. Do not make container pressure tight. Move container to a well-ventilated area (outside). Spill area can be decontaminated with the following recommended decontamination solution: Mixture of 90 % water, 8 % concentrated ammonia, 2 % detergent. Add at a 10 to 1 ratio. Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide. For large amounts: If temporary control of Isocyanate vapor is required, a blanket of protein foam or other suitable foam (available from most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal. For residues: The following measures should be taken for final cleanup: Wash down spill area with decontamination solution. Allow solution to stand for at least 10 minutes**.**

7. Handling and Storage

Precautions to be Taken In Handling and Storage: Store in a well-ventilated, cool place (Storage temperature: 60 - 80°F). Formation of CO2 and a buildup of pressure are possible. Keep container tightly closed. When handling heated product, vapors of the product should be ventilated, and respiratory protection used. Wear respiratory protection and proper personal protective equipment when handling/spraying.

8. Exposure Control Measures/Personal Protection

Exposure Limits/Guidelines:

Ingredient(s)	Agency	Exposure Limit(s)	Comments
Diphenylmethane-4,4'-diisocyanate (MDI)	OSHA ACGIH	PEL- .02 mg/m^3 (C) TLV-TWA 0.05 mg/m^3	Ceiling Limit Sensitizer

Ventilation:

LOCAL EXHAUST – Provide local exhaust as needed so that exposure limits are met.

MECHANICAL (GENERAL) – Provide general ventilation in processing and storage areas so that exposure limits are met.

SPECIAL – NAP

Other Engineering Controls: NAP

PESONAL PROTECTIVE EQUIPMENT – Where risk assessment shows air-purifying respirators are appropriate use a full-face particle NIOSH approved respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU) following a determination of risk from potential exposures.

PROTECTIVE GLOVES – Chemical resistant protective gloves should be worn to prevent all skin contact. Suitable materials may include chloroprene rubber (Neoprene), nitrile rubber (Buna N), chlorinated polyethylene, polyvinylchloride (Pylox), butyl rubber, depending upon conditions of use.

EYE PROTECTION – Tightly fitting safety goggles (chemical goggles) should be worn. Wear face shield if splashing hazard exists.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT – Cover as much of the exposed skin as possible to prevent all skin contact. Suitable materials may include, saran-coated material, depending upon conditions of use.

WORK/HYGIENE PRACTICES – Wear protective clothing as necessary to prevent contact. Eye wash fountains and safety showers must be easily accessible where splash hazards occur. Observe the appropriate PEL or TLV value. Wash soiled clothing immediately. Contaminated equipment or clothing should be cleaned after each use or disposed of.

9. Physical/Chemical Properties

Appearance: A light amber liquid with a faint aromatic odor.

Odor/ Odor Threshold(s):	No reliable odor threshold
pH:	NAV
Melting/Freezing Point:	NAV
Boiling Point (@ 760 mm Hg) and Range:	246° – 344°F (119° – 173°C)
Flash Point:	Approx. 200 °C (5 mmHg)
Evaporation Rate:	NAV
Flammability:	Combustible
Lower / Upper Explosive Limits:	NAV
Vapor Pressure (mm Hg):	0.00001 mmHg, 77^{o}F (25^{o}C)

Vapor Density (air = 1; 1 atm):	NAV
Relative Density:	NAV
Solubility:	Reacts with water
Partition Coefficient (n-octonal/water):	NAV
Autoignition Temperature:	Not self igniting
Decomposition Temperature:	NAV
Viscosity:	NAV
Other Properties:	NAP

10. Stability and Reactivity

Reactivity: NAP

Hazardous Polymerization: ☐ May occur ☒ will not occur

Stability: ☐ Unstable ☒ Stable

Conditions to Avoid: Avoid moisture.

Incompatibility (Materials to Avoid): Avoid water, alcohols, strong acids and bases and substances/products that react with Isocyanates.

Hazardous Decomposition or By-Products: Carbon monoxide, hydrogen cyanide, nitrogen oxides, oxides of phosphorous, and aromatic Isocyanate gases/vapors.

Sensitivity to Static Discharge: NAP

11. Toxicological Information

Likely Route(s) of Exposure:

- ☐ Ingestion:
- ☒ Skin:
- ☒ Inhalation:
- ☒ Eye:

Signs and Symptoms of Exposure:

Acute Health Hazards: Cough, shortness of breath, headache, nausea, vomiting, pulmonary edema.
Chronic Health Hazards: Contains isocyanates. Inhalation of isocyanate mists or vapors may cause respiratory irritation, breathlessness, chest discomfort and reduced pulmonary function. Overexposure well above the permissible exposure limit may result in bronchitis, bronchial spasms and pulmonary edema. Long-term exposure to isocyanates has been reported to cause lung damage, including reduced lung function which may be permanent. Acute or chronic overexposure to isocyanates may cause sensitization in some individuals, resulting in allergic respiratory reactions including wheezing, shortness of breath and difficulty breathing. Animal tests and other research indicate that skin contact may play a role in causing respiratory sensitization.

Carcinogenicity Listing:

- ☐ NTP:
- ☒ IARC Monographs: Diphenylmethane-4, 4'- diisocyanate, Group 3 – Not Classifiable as to Carcinogenic to Humans.
- ☐ OSHA Regulated:

Toxicity Data: No toxicological information for mixture available.

Components:

Diphenylmethane-4, 4'-diisocyanate (MDI):
LD_{50} Oral - Rat - 9,200 mg/kg
LC_{50} Inhalation - Rat - male and female - 1 h - > 2.24 mg/l
(OECD Test Guideline 403)
LD_{50} Dermal-Rabbit- Male/Female- > 9,400 mg/kg
Triethyl Phosphate: Oral LD_{50}: (Rat): 1,311 mg/kg

Target Organs: Eyes skin and respiratory system. Specific target organ toxicity - may cause damage to the kidneys and respiratory irritation.

12. Ecological Information

Ecotoxicity:
Fish- Acute: OECD Guideline 203 static, Brachydanio rerio/LC0 (96 h): > 1,000 mg/l.
Microorganisms - Toxicity to microorganisms: OECD Guideline 209 aquatic aerobic bacteria from a domestic water treatment plant/EC_{50} (3 h): > 100 mg/l
Biopersistance and Degradability:
Biological / Abiological Degradation
Test method: OECD Guideline 302 C (aerobic), activated sludge
Evaluation: Poorly biodegradable. The product is unstable in water. The elimination data also refer to products of hydrolysis.
Hydrolysis - Test method: (abiotic) Half-life: 20 h (25°C)
Bioaccumulation: OECD Guideline 305 E carp (28 d) Bioconcentration factor 200.
Soil Mobility: No information available.
Other Adverse Effects: NAP

13. Disposal Considerations

Waste Disposal Method: Do not dispose of this material into the sewer, ground or body of water. Incineration is recommended for waste disposal, using an approved incineration process for appreciable amounts in accordance with federal, state, and local and provincial environmental regulations. Do not incinerate sealed containers. Steel drums must be emptied and can be sent to a licensed drum re-conditioner for reuse, a scrap metal dealer or an approved landfill. Do not attempt to refill or clean containers since residue is difficult to remove. Under no circumstances should empty drums be burned or cut open with gas or electric torch as toxic decomposition products may be liberated. Do not reuse empty containers.

14. Transport Information

Mode: (Air, Land, water) Transportation of W18.G1 is regulated by the U.S. Department of Transportation and Canada's Transportation of Dangerous Goods.

UN Proper Shipping Name:	Environmentally hazardous substances, liquid N.O.S. (diphenylmethane-4,4'-diisocyanate isomers and homologues)
UN/NA ID Number:	UN3082
Hazard Class:	9
Packing Group:	III
Environmental Hazards (Marine Pollutant):	Yes

15. Regulatory Information

TSCA: All ingredients are on the TSCA Inventory.
CERCLA: Reportable Quantity: 5000 pounds Diphenylmethane-4, 4'-diisocyanate (MDI).
DSL: All ingredients are on the Canadian Domestic Substance List Inventory.
OSHA: This product would be a regulated hazard under the OSHA Hazard Communication Standard (29 CFR 1910.1200) as a hazardous chemical.
STATE RIGHT-TO-KNOW:
California Proposition 65 – This product does not contain substances identified on the Proposition 65 list.

New Jersey – This product contains Diphenylmethane-4, 4'-diisocyanate (MDI), triethyl phosphate and P-MDI, substances listed by the State of New Jersey.

Pennsylvania – This product contains Diphenylmethane-4, 4'-diisocyanate (MDI), P-MDI and triethyl phosphate, substances listed by the State of Pennsylvania.

SARA 313 Information: This product contains Diphenylmethane-4, 4'-diisocyanate (MDI), a chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA 311/312 Hazard Category: This product has been reviewed according to the EPA "Hazard Categories" promulgated under SARA Title III Sections 311 and 312 and is considered, under applicable definitions, to meet the following categories:

An immediate (acute) health hazard	Yes
A delayed (chronic) health hazard	Yes
A corrosive hazard	No
A fire hazard	No
A reactivity hazard	No
A sudden release hazard	No

FDA: Not intended to be ingested or used in a direct /indirect food contact item.

WHMIS Classification: Controlled Product: Class D1A Very Toxic Material Causing Immediate and Serious Toxic Effects, D2A Very Toxic Material Causing Other Toxic Effects- respiratory tract sensitization in humans, D2B Toxic Material Causing Other Toxic Effects- skin sensitization in humans; skin irritation in animals.

16. Other Information

Date Prepared: 06/12/2015

Date Revised: NAP

Prepared By: Weyerhaeuser Company Corporate Environment, Health, and Safety.

Weyerhaeuser SDS available on: product in trial, not available on web

User's Responsibility: The information contained in this Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if the product is suitable for its proposed application(s) and to follow necessary safety precautions. The user has the responsibility to make sure that this SDS is the most up-to-date issue.

Definition of Common Terms:

ACGIH	=	American Conference of Governmental Industrial Hygienists
C	=	Ceiling Limit
CAS#	=	Chemical Abstracts System Number
DOT	=	U. S. Department of Transportation
DSL	=	Domestic Substance List
EC#	=	Identifying Number Assigned to Chemicals Contained in the European Inventory of Existing Chemical Substances (EINECS)
EC50	=	Effective Concentration That Inhibits the Endpoint to 50% of Control Population
EPA	=	U.S. Environmental Protection Agency
HMIS	=	(Canada) Hazardous Materials Identification System
IARC	=	International Agency for Research on Cancer
IATA	=	International Air Transport Association
IMDG	=	International Maritime Dangerous Goods
LC50	=	Concentration in Air Resulting in Death To 50% of Experimental Animals
LCLo	=	Lowest Concentration in Air Resulting in Death
LD50	=	Administered Dose Resulting in Death to 50% of Experimental Animals
LDLo	=	Lowest Dose Resulting in Death
LEL	=	Lower Explosive Limit
LFL	=	Lower Flammable Limit
MSHA	=	Mine Safety and Health Administration
NAP	=	Not Applicable

NAV	=	Not Available
NIOSH	=	National Institute for Occupational Safety and Health
NFPA	=	National Fire Protection Association
NPRI	=	(Canada) National Pollution Release Inventory
NTP	=	National Toxicology Program
OSHA	=	Occupational Safety and Health Administration
PEL	=	Permissible Exposure Limit
PNOR	=	Particulate Not Otherwise Regulated
PNOS	=	Particulate Not Otherwise Specified
RCRA	=	Resource Conservation and Recovery Act
STEL	=	Short-Term Exposure Limit (15 minutes)
STP	=	Standard Temperature and Pressure
TCLo	=	Lowest Concentration in Air Resulting in a Toxic Effect
TDG	=	(Canada) Transportation of Dangerous Goods
TDLo	=	Lowest Dose Resulting In a Toxic Effect
TLV	=	Threshold Limit Value
TSCA	=	Toxic Substance Control Act
TWA	=	Time-Weighted Average (8 hours)
UFL	=	Upper Flammable Limit
WHMIS	=	(Canada) Workplace Hazardous Materials Information System

SAFETY DATA SHEET

Version: 2.0
Date:
06/22/2011

Responsible Care®
Good Chemistry at Work

1. PRODUCT AND COMPANY IDENTIFICATION

REACTINT® YELLOW X15

Product Information: REACTINT® YELLOW X15

Company Identification:

Milliken Chemical
P.O. Box 1926
Spartanburg, SC, 29303 USA
1-864-472-9041
msds@milliken.com

Milliken™

Emergency telephone number:

Chemtrec:
1-800-424-9300 (Chemtrec - US)
1-703-527-3887 (International)

Intended Use: colorant

2. HAZARDS IDENTIFICATION

Emergency Overview

This material is a concentrated colorant. The health hazards of this product should be low under normal industrial and commercial uses. Do not allow material to enter soil or surface water.

HFRP Rating

Health	1
Flammability	0
Reactivity	0
Personal protection	B

Eye

May cause eye irritation. Not known to cause permanent injury to eye tissue.

Inhalation

No information regarding inhalation available.

Skin

Not expected to be a skin irritant

Ingestion

No adverse effects due to ingestion are expected.

The product has been classified according to the legislation in force.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Product name	CAS Number	Amount
Proprietary Colorant Blend		100.0 %

4. FIRST AID MEASURES

Eye

Flush thoroughly with water. If irritation occurs, get medical assistance.

Inhalation

Under normal conditions of intended use, this material is not expected to be an inhalation hazard. When breathing is difficult, properly trained personnel may assist affected person by administering 100% oxygen. Get medical attention if any discomfort continues.

Skin

Wash skin thoroughly with soap and water for several minutes. Immediately remove contaminated clothing. Get medical attention if any discomfort continues.

Ingestion

Give one or two glasses or water if patient is alert and able to swallow. Seek immediate medical attention. Do not induce vomiting.

5. FIRE-FIGHTING MEASURES

Fire Fighting Media

Water spray, foam, dry powder or carbon dioxide.

Fire Fighting Instructions

Use standard firefighting procedures and consider the hazards of other involved materials. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Unusual Fire & Explosion Hazards

Decomposition may produce fumes, smoke, oxides of carbon and hydrocarbons.

ACCIDENTAL RELEASE MEASURES

Do not allow to enter drains, sewers or watercourses., In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations., Collect and dispose of spillage as indicated in section 13 of the MSDS.

6. ACCIDENTAL RELEASE MEASURES

Safety Advice	Wear appropriate personal protective equipment.
Spill Cleanup Methods	This material is a concentrated colorant. Do not allow material to enter soil or surface water. Dam and absorb spillage with sand, sawdust or other absorbent. In case of spills, beware of slippery floors and surfaces. Report spills as required to appropriate authorities.

7. HANDLING AND STORAGE

Handling	No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. Wash promptly with soap and water if skin becomes contaminated. Practice good housekeeping. Provide adequate ventilation if fumes or vapors are generated. Avoid prolonged contact with skin or eyes.
Handling / Physical hazards	Store in a cool place but keep from freezing. Store at temperature below 50°C.
Storage Precautions	Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures. Keep containers tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls	No special requirements under ordinary conditions of use and with adequate ventilation.
Eye protection	Wear necessary protective equipment. Avoid contact with eyes and prolonged skin contact. Where contact with this material is likely, chemical goggles are recommended.
Skin and Body Protection	Wash promptly with soap and water if skin becomes contaminated. Wear protective gloves to minimize skin contamination. When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material.
Personal protection	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Respiratory Protection	No protection is ordinarily required under normal conditions of use and with

adequate ventilation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color	Dark yellow
Odor	Mild sweet
Specific Gravity	1.1
Vapor density (air=1)	>1
Volatiles	< 0.5 % @ 100 °C
Solubility	Miscible
Boiling Point	> 200 °C
Melting/Freezing Point	< 0 °C

10. STABILITY AND REACTIVITY

Conditions to avoid	No special precautions are necessary beyond normal good hygiene practices. See Section 8 of the MSDS for additional personal protection advice when handling this product.
Hazardous Polymerization	Hazardous polymerization will not occur.
Hazardous decomposition products	Decomposition will not occur if handled and stored properly.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity : Oral

Species: Rat
Result: > 5,000 mg/kg

Genetic Toxicity in vitro

Type: Ames Assay
Result: Negative

12. ECOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

Disposal Recommendations

This material is a concentrated colorant. Avoid washing material into sewer systems without proper treatment and authorization by the treatment facility management. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Recycle empty drums at an appropriate facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal. Ensure drums are tightly sealed.

14. TRANSPORT INFORMATION

Department of Transportation (DOT)

Not regulated.

Sea (IMDG)

Not regulated.

Air (ICAO/IATA)

Not regulated.

15. REGULATORY INFORMATION

This material or all of its components are listed on the Inventory of Existing Chemical Substance under the Toxic Substance Control Act (TSCA).

Additional information is available by request.

16. OTHER INFORMATION

The information contained in this Material Safety Data Sheet is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Milliken Chemical.

ATTACHMENT I

EMISSION UNITS TABLE

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

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]
005-07	E07	Sealer Bulk Tank	2016	6,000 gal	New	
005-08	E08	Sealer Day/Mix Tank	2016	350 gal	New	
005-09	E09	Parallam Sealer Spray Booth	2016	9.12 gal/hr	New	Booth Filter (3C)

[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.

ATTACHMENT J

EMISSION POINTS DATA SUMMARY SHEET

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

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^4)
		ID No.	Source	ID No.	Device Type	Short Term[2]	Max (hr/yr)		lb/hr	ton/yr	lb/hr	ton/yr			
E09	Vertical Stack	005-07	Spray – Booth	3C	Filter	NA	8760	PM10 (MDI HAP)/101-68-8	28	122.64	2.78	12.20	Solid	EE	Can provide upon request
E08	Vertical Stack	005-08	MDI Day/mix Tank	NA	NA	NA	8760	PM10 (MDI HAP)/101-68-8	0.00	0.00	0.00	0.00	NA	EE	NA
E07	Vertical Stack	005-09	MDI Bulk Tank	NA	NA	NA	8760	PM10 (MDI HAP)/101-68-8	0.00	0.00	0.00	0.00	NA	EE	NA

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
E09	1.5	80	6000	57	1430	50		

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

ATTACHMENT K

FUGITIVE EMISSIONS DATA SHEET

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

Attachment K

FUGITIVE EMISSIONS DATA SUMMARY SHEET

The FUGITIVE EMISSIONS SUMMARY SHEET provides a summation of fugitive emissions. Fugitive emissions are those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening. Note that uncaptured process 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).

APPLICATION FORMS CHECKLIST - FUGITIVE EMISSIONS
1.) Will there be haul road activities? ☐ Yes ☒ No ☐ If YES, then complete the HAUL ROAD EMISSIONS UNIT DATA SHEET.
2.) Will there be Storage Piles? ☐ Yes ☒ No ☐ If YES, complete Table 1 of the NONMETALLIC MINERALS PROCESSING EMISSIONS UNIT DATA SHEET.
3.) Will there be Liquid Loading/Unloading Operations? ☒ Yes ☐ No ☐ If YES, complete the BULK LIQUID TRANSFER OPERATIONS EMISSIONS UNIT DATA SHEET.
4.) Will there be emissions of air pollutants from Wastewater Treatment Evaporation? ☐ Yes ☒ No ☐ If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET.
5.) Will there be Equipment Leaks (e.g. leaks from pumps, compressors, in-line process valves, pressure relief devices, open-ended valves, sampling connections, flanges, agitators, cooling towers, etc.)? ☐ Yes ☒ No ☐ If YES, complete the LEAK SOURCE DATA SHEET section of the CHEMICAL PROCESSES EMISSIONS UNIT DATA SHEET.
6.) Will there be General Clean-up VOC Operations? ☐ Yes ☒ No ☐ If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET.
7.) Will there be any other activities that generate fugitive emissions? ☐ Yes ☒ No ☐ If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET or the most appropriate form.
If you answered "NO" to all of the items above, it is not necessary to complete the following table, "Fugitive Emissions Summary."

FUGITIVE EMISSIONS SUMMARY	All Regulated Pollutants - Chemical Name/CAS [1]	Maximum Potential Uncontrolled Emissions [2]		Maximum Potential Controlled Emissions [3]		Est. Method Used [4]
		lb/hr	ton/yr	lb/hr	ton/yr	
Haul Road/Road Dust Emissions Paved Haul Roads	NA					
Unpaved Haul Roads	NA					
Storage Pile Emissions	NA					
Loading/Unloading Operations	101-68-8	Included in Tank Working losses	Calculated on an uncontrolled	Basis using Tanks 4.09		
Wastewater Treatment Evaporation & Operations	NA					
Equipment Leaks	NA					
General Clean-up VOC Emissions	NA					
Other	NA					

[1] 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.

[2] Give 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).

[3] Give 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).

[4] 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).

ATTACHMENT L

EMISSION UNIT DATA SHEET

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** PM Filter Bank
005-09	Plam Sealer Booth	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Designed to efficiently apply sealer to the parallam using advanced spray technology.
A state-of-the-art, air filtration system will bring air in through the inlet and outlet openings of the booth and direct emissions through high efficiency cartridge filters before exhausting outside the building through a common stack.

Manufacturer: Spray Systems	**Model number: Custom**	**Serial number:** N/A
Construction date: 2/15/2016	**Installation date:** 4/15/2016	**Modification date(s):** MM/DD/YYYY

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
9.12 gallons/hr of sealer

Maximum Hourly Throughput: 9.12 gal/hr	**Maximum Annual Throughput:** 79,842 gallons/yr	**Maximum Operating Schedule:** 8760 hrs/yr

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})	28.00	122.64
Total Particulate Matter (TSP)	28.00	122.64
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
MDI	28	122.64
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.).

Engineering Estimates based on the amount of material needed for a given sealer thickness (g/sq ft) on product. These estimates equate to 9.12gal/hr of sealer sprayed while maintaining a 70% transfer efficiency.

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.

The spray booth is identified as an affected source under MACT Subpart DDDD for PCWP Manufacturing Sources. However, due to being classified as a sealer under miscellaneous coatings operations there are no specific control requirements prescribed.

The source plans to control the PM, HAP using highly efficient spray booth particulate filters. It is expected that under Rule 13 the production rate will be limited to that defined by the application and control equipment operating parameters such as pressure drop will be monitored to assure the maximum degree of control is maintained.

_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.)

The production rate of sealer sprayed will be monitored and limited to that defined by the application. Additionally, the key control equipment operating parameter, pressure drop, will be monitored to assure a maximum degree of control is maintained and an appropriate filter replacement schedule is adhered to.

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 L

EMISSIONS UNIT DATA SHEET
STORAGE TANKS

Provide the following information for each new or modified bulk liquid storage tank as shown on the *Equipment List Form* and other parts of this application. A tank is considered modified if the material to be stored in the tank is different from the existing stored liquid.

IF USING US EPA'S TANKS EMISSION ESTIMATION PROGRAM (AVAILABLE AT **www.epa.gov/tnn/tanks.html**), APPLICANT MAY ATTACH THE SUMMARY SHEETS IN LIEU OF COMPLETING SECTIONS III, IV, & V OF THIS FORM. HOWEVER, SECTIONS I, II, AND VI OF THIS FORM MUST BE COMPLETED. US EPA'S AP-42, SECTION 7.1, "ORGANIC LIQUID STORAGE TANKS," MAY ALSO BE USED TO ESTIMATE VOC AND HAP EMISSIONS (**http://www.epa.gov/tnn/chief/**).

I. GENERAL INFORMATION (required)

1. Bulk Storage Area Name Plam Sealer Day Tanks	2. Tank Name Sealer Day/Mix Tank
3. Tank Equipment Identification No. (as assigned on *Equipment List Form*) 005-08	4. Emission Point Identification No. (as assigned on *Equipment List Form*) PLAMSEALERDAY
5. Date of Commencement of Construction (for existing tanks)	
6. Type of change ☒ New Construction ☐ New Stored Material ☐ Other Tank Modification	
7. Description of Tank Modification (if applicable) Installation of a 350 gallon MDI Sealer day/mix tank	
7A. Does the tank have more than one mode of operation? (e.g. Is there more than one product stored in the tank?) ☐ Yes ☒ No	
7B. If YES, explain and identify which mode is covered by this application (Note: A separate form must be completed for each mode).	
7C. Provide any limitations on source operation affecting emissions, any work practice standards (e.g. production variation, etc.): The tank will incorporate a dry air blanket with conservation venting at 20 psig.	

II. TANK INFORMATION (required)

8. Design Capacity (specify barrels or gallons). Use the internal cross-sectional area multiplied by internal height. 350 gallons	
9A. Tank Internal Diameter (ft) 3.1	9B. Tank Internal Height (or Length) (ft) 6.2
10A. Maximum Liquid Height (ft) 6.0	10B. Average Liquid Height (ft) 3.5
11A. Maximum Vapor Space Height (ft) 3	11B. Average Vapor Space Height (ft) 2
12. Nominal Capacity (specify barrels or gallons). This is also known as "working volume" and considers design liquid levels and overflow valve heights. 350	

13A. Maximum annual throughput (gal/yr) 79,842	13B. Maximum daily throughput (gal/day) 218.75

14. Number of Turnovers per year (annual net throughput/maximum tank liquid volume) 228.12

15. Maximum tank fill rate (gal/min) NA

16. Tank fill method ☒ Submerged ☐ Splash ☐ Bottom Loading

17. Complete 17A and 17B for Variable Vapor Space Tank Systems ☒ Does Not Apply

17A. Volume Expansion Capacity of System (gal)	17B. Number of transfers into system per year

18. Type of tank (check all that apply):
- ☒ Fixed Roof ___ vertical ___ horizontal ___ flat roof ___ cone roof ___ dome roof ___ other (describe)
- ☐ External Floating Roof ___ pontoon roof ___ double deck roof
- ☐ Domed External (or Covered) Floating Roof
- ☐ Internal Floating Roof ___ vertical column support ___ self-supporting
- ☐ Variable Vapor Space ___ lifter roof ___ diaphragm
- ☐ Pressurized ___ spherical ___ cylindrical
- ☐ Underground
- ☐ Other (describe)

III. TANK CONSTRUCTION & OPERATION INFORMATION (optional if providing TANKS Summary Sheets)

19. Tank Shell Construction:
☐ Riveted ☐ Gunite lined ☐ Epoxy-coated rivets ☒ Other (describe) welded

20A. Shell Color	20B. Roof Color	20C. Year Last Painted

21. Shell Condition (if metal and unlined):
☐ No Rust ☐ Light Rust ☐ Dense Rust ☐ Not applicable

22A. Is the tank heated? ☒ YES ☐ NO

22B. If YES, provide the operating temperature (°F) 90 -100

22C. If YES, please describe how heat is provided to tank. Electic

23. Operating Pressure Range (psig): 10 to 20

24. Complete the following section for **Vertical Fixed Roof Tanks** ☐ Does Not Apply

24A. For dome roof, provide roof radius (ft)

24B. For cone roof, provide slope (ft/ft)

25. Complete the following section for **Floating Roof Tanks** ☐ Does Not Apply

25A. Year Internal Floaters Installed:

25B. Primary Seal Type: (check one)
☐ Metallic (Mechanical) Shoe Seal ☐ Liquid Mounted Resilient Seal
☐ Vapor Mounted Resilient Seal ☐ Other (describe):

25C. Is the Floating Roof equipped with a Secondary Seal? ☐ YES ☐ NO

25D. If YES, how is the secondary seal mounted? (check one) ☐ Shoe ☐ Rim ☐ Other (describe):

25E. Is the Floating Roof equipped with a weather shield? ☐ YES ☐ NO

25F. Describe deck fittings; indicate the number of each type of fitting:		
ACCESS HATCH		
BOLT COVER, GASKETED:	UNBOLTED COVER, GASKETED:	UNBOLTED COVER, UNGASKETED:
AUTOMATIC GAUGE FLOAT WELL		
BOLT COVER, GASKETED:	UNBOLTED COVER, GASKETED:	UNBOLTED COVER, UNGASKETED:
COLUMN WELL		
BUILT-UP COLUMN – SLIDING COVER, GASKETED:	BUILT-UP COLUMN – SLIDING COVER, UNGASKETED:	PIPE COLUMN – FLEXIBLE FABRIC SLEEVE SEAL:
LADDER WELL		
PIP COLUMN – SLIDING COVER, GASKETED:	PIPE COLUMN – SLIDING COVER, UNGASKETED:	
GAUGE-HATCH/SAMPLE PORT		
SLIDING COVER, GASKETED:	SLIDING COVER, UNGASKETED:	
ROOF LEG OR HANGER WELL		
WEIGHTED MECHANICAL ACTUATION, GASKETED:	WEIGHTED MECHANICAL ACTUATION, UNGASKETED:	SAMPLE WELL-SLIT FABRIC SEAL (10% OPEN AREA)
VACUUM BREAKER		
WEIGHTED MECHANICAL ACTUATION, GASKETED:	WEIGHTED MECHANICAL ACTUATION, UNGASKETED:	
RIM VENT		
WEIGHTED MECHANICAL ACTUATION GASKETED:	WEIGHTED MECHANICAL ACTUATION, UNGASKETED:	
DECK DRAIN (3-INCH DIAMETER)		
OPEN:	90% CLOSED:	
STUB DRAIN		
1-INCH DIAMETER:		
OTHER (DESCRIBE, ATTACH ADDITIONAL PAGES IF NECESSARY)		

26. Complete the following section for Internal Floating Roof Tanks ☐ Does Not Apply	
26A. Deck Type: ☐ Bolted ☐ Welded	
26B. For Bolted decks, provide deck construction:	
26C. Deck seam: ☐ Continuous sheet construction 5 feet wide ☐ Continuous sheet construction 6 feet wide ☐ Continuous sheet construction 7 feet wide ☐ Continuous sheet construction 5 × 7.5 feet wide ☐ Continuous sheet construction 5 × 12 feet wide ☐ Other (describe)	
26D. Deck seam length (ft)	26E. Area of deck (ft^2)
For column supported tanks: 26F. Number of columns:	26G. Diameter of each column:

IV. SITE INFORMANTION (optional if providing TANKS Summary Sheets)

27. Provide the city and state on which the data in this section are based. See TANKS Summary Sheets
28. Daily Average Ambient Temperature (°F)
29. Annual Average Maximum Temperature (°F)
30. Annual Average Minimum Temperature (°F)
31. Average Wind Speed (miles/hr)
32. Annual Average Solar Insulation Factor (BTU/(ft^2·day))
33. Atmospheric Pressure (psia)

V. LIQUID INFORMATION (optional if providing TANKS Summary Sheets)

34. Average daily temperature range of bulk liquid: See TANKS Summary Sheets	
34A. Minimum (°F)	34B. Maximum (°F)
35. Average operating pressure range of tank:	
35A. Minimum (psig)	35B. Maximum (psig)
36A. Minimum Liquid Surface Temperature (°F)	36B. Corresponding Vapor Pressure (psia)
37A. Average Liquid Surface Temperature (°F)	37B. Corresponding Vapor Pressure (psia)
38A. Maximum Liquid Surface Temperature (°F)	38B. Corresponding Vapor Pressure (psia)

39. Provide the following for <u>each</u> liquid or gas to be stored in tank. Add additional pages if necessary.

39A. Material Name or Composition			
39B. CAS Number			
39C. Liquid Density (lb/gal)			
39D. Liquid Molecular Weight (lb/lb-mole)			
39E. Vapor Molecular Weight (lb/lb-mole)			

Maximum Vapor Pressure 39F. True (psia) 39G. Reid (psia)			
Months Storage per Year 39H. From 39I. To			

VI. EMISSIONS AND CONTROL DEVICE DATA (required)

40. Emission Control Devices (check as many as apply): ☒ Does Not Apply

- ☐ Carbon Adsorption[1]
- ☐ Condenser[1]
- ☐ Conservation Vent (psig)
  - Vacuum Setting — Pressure Setting
- ☐ Emergency Relief Valve (psig)
- ☐ Inert Gas Blanket of
- ☐ Insulation of Tank with
- ☐ Liquid Absorption (scrubber)[1]
- ☐ Refrigeration of Tank
- ☐ Rupture Disc (psig)
- ☐ Vent to Incinerator[1]
- ☐ Other[1] (describe):

[1] Complete appropriate Air Pollution Control Device Sheet.

41. Expected Emission Rate (submit Test Data or Calculations here or elsewhere in the application).

Material Name & CAS No.	Breathing Loss (lb/hr)	Working Loss		Annual Loss (lb/yr)	Estimation Method[1]
		Amount	Units		
MDI (101-68-8)					

[1] EPA = EPA Emission Factor, MB = Material Balance, SS = Similar Source, ST = Similar Source Test, Throughput Data, O = Other (specify)

☐ Remember to attach emissions calculations, including TANKS Summary Sheets if applicable.

Attachment L

EMISSIONS UNIT DATA SHEET
STORAGE TANKS

Provide the following information for each new or modified bulk liquid storage tank as shown on the *Equipment List Form* and other parts of this application. A tank is considered modified if the material to be stored in the tank is different from the existing stored liquid.

IF USING US EPA'S TANKS EMISSION ESTIMATION PROGRAM (AVAILABLE AT **www.epa.gov/tnn/tanks.html**), APPLICANT MAY ATTACH THE SUMMARY SHEETS IN LIEU OF COMPLETING SECTIONS III, IV, & V OF THIS FORM. HOWEVER, SECTIONS I, II, AND VI OF THIS FORM MUST BE COMPLETED. US EPA'S AP-42, SECTION 7.1, "ORGANIC LIQUID STORAGE TANKS," MAY ALSO BE USED TO ESTIMATE VOC AND HAP EMISSIONS (**http://www.epa.gov/tnn/chief/**).

I. GENERAL INFORMATION (required)

1. Bulk Storage Area Name Plam Sealer Storage	2. Tank Name Bulk Sealer Tank
3. Tank Equipment Identification No. (as assigned on *Equipment List Form*) 005-07	4. Emission Point Identification No. (as assigned on *Equipment List Form*) Plam Sealer Tank
5. Date of Commencement of Construction (for existing tanks)	
6. Type of change ☒ New Construction ☐ New Stored Material ☐ Other Tank Modification	
7. Description of Tank Modification (if applicable) Installation of a 6,000 gallon MDI Sealer bulk storage tank	
7A. Does the tank have more than one mode of operation? (e.g. Is there more than one product stored in the tank?) ☐ Yes ☒ No	
7B. If YES, explain and identify which mode is covered by this application (Note: A separate form must be completed for each mode).	
7C. Provide any limitations on source operation affecting emissions, any work practice standards (e.g. production variation, etc.): The tank will incorporate a dry air blanket with conservation venting at 20 psig.	

II. TANK INFORMATION (required)

8. Design Capacity (specify barrels or gallons). Use the internal cross-sectional area multiplied by internal height. 6,000 gallons	
9A. Tank Internal Diameter (ft) 8	9B. Tank Internal Height (or Length) (ft) 16
10A. Maximum Liquid Height (ft) 15	10B. Average Liquid Height (ft) 8
11A. Maximum Vapor Space Height (ft) 15	11B. Average Vapor Space Height (ft) 8
12. Nominal Capacity (specify barrels or gallons). This is also known as "working volume" and considers design liquid levels and overflow valve heights. 6,000	

13A. Maximum annual throughput (gal/yr)	13B. Maximum daily throughput (gal/day)
79,842	218.74

14. Number of Turnovers per year (annual net throughput/maximum tank liquid volume): 13.31

15. Maximum tank fill rate (gal/min)

16. Tank fill method: ☒ Submerged ☐ Splash ☐ Bottom Loading

17. Complete 17A and 17B for Variable Vapor Space Tank Systems ☒ Does Not Apply

17A. Volume Expansion Capacity of System (gal)	17B. Number of transfers into system per year

18. Type of tank (check all that apply):
- ☒ Fixed Roof ___ vertical ___ horizontal ___ flat roof ___ cone roof ___ dome roof ___ other (describe)
- ☐ External Floating Roof ___ pontoon roof ___ double deck roof
- ☐ Domed External (or Covered) Floating Roof
- ☐ Internal Floating Roof ___ vertical column support ___ self-supporting
- ☐ Variable Vapor Space ___ lifter roof ___ diaphragm
- ☐ Pressurized ___ spherical ___ cylindrical
- ☐ Underground
- ☐ Other (describe)

III. TANK CONSTRUCTION & OPERATION INFORMATION (optional if providing TANKS Summary Sheets)

19. Tank Shell Construction:
☐ Riveted ☐ Gunite lined ☐ Epoxy-coated rivets ☒ Other (describe) welded

20A. Shell Color	20B. Roof Color	20C. Year Last Painted

21. Shell Condition (if metal and unlined):
☐ No Rust ☐ Light Rust ☐ Dense Rust ☐ Not applicable

22A. Is the tank heated? ☐ YES ☐ NO

22B. If YES, provide the operating temperature (°F)

22C. If YES, please describe how heat is provided to tank.

23. Operating Pressure Range (psig): 10 to 20

24. Complete the following section for **Vertical Fixed Roof Tanks** ☐ Does Not Apply

24A. For dome roof, provide roof radius (ft)

24B. For cone roof, provide slope (ft/ft)

25. Complete the following section for **Floating Roof Tanks** ☐ Does Not Apply

25A. Year Internal Floaters Installed:

25B. Primary Seal Type: (check one)
☐ Metallic (Mechanical) Shoe Seal ☐ Liquid Mounted Resilient Seal
☐ Vapor Mounted Resilient Seal ☐ Other (describe):

25C. Is the Floating Roof equipped with a Secondary Seal? ☐ YES ☐ NO

25D. If YES, how is the secondary seal mounted? (check one) ☐ Shoe ☐ Rim ☐ Other (describe):

25E. Is the Floating Roof equipped with a weather shield? ☐ YES ☐ NO

25F. Describe deck fittings; indicate the number of each type of fitting:

ACCESS HATCH		
BOLT COVER, GASKETED:	UNBOLTED COVER, GASKETED:	UNBOLTED COVER, UNGASKETED:

AUTOMATIC GAUGE FLOAT WELL		
BOLT COVER, GASKETED:	UNBOLTED COVER, GASKETED:	UNBOLTED COVER, UNGASKETED:

COLUMN WELL		
BUILT-UP COLUMN – SLIDING COVER, GASKETED:	BUILT-UP COLUMN – SLIDING COVER, UNGASKETED:	PIPE COLUMN – FLEXIBLE FABRIC SLEEVE SEAL:

LADDER WELL	
PIP COLUMN – SLIDING COVER, GASKETED:	PIPE COLUMN – SLIDING COVER, UNGASKETED:

GAUGE-HATCH/SAMPLE PORT	
SLIDING COVER, GASKETED:	SLIDING COVER, UNGASKETED:

ROOF LEG OR HANGER WELL		
WEIGHTED MECHANICAL ACTUATION, GASKETED:	WEIGHTED MECHANICAL ACTUATION, UNGASKETED:	SAMPLE WELL-SLIT FABRIC SEAL (10% OPEN AREA)

VACUUM BREAKER	
WEIGHTED MECHANICAL ACTUATION, GASKETED:	WEIGHTED MECHANICAL ACTUATION, UNGASKETED:

RIM VENT	
WEIGHTED MECHANICAL ACTUATION GASKETED:	WEIGHTED MECHANICAL ACTUATION, UNGASKETED:

DECK DRAIN (3-INCH DIAMETER)	
OPEN:	90% CLOSED:

STUB DRAIN
1-INCH DIAMETER:

OTHER (DESCRIBE, ATTACH ADDITIONAL PAGES IF NECESSARY)

26. Complete the following section for Internal Floating Roof Tanks ☐ Does Not Apply	
26A. Deck Type: ☐ Bolted ☐ Welded	
26B. For Bolted decks, provide deck construction:	
26C. Deck seam: ☐ Continuous sheet construction 5 feet wide ☐ Continuous sheet construction 6 feet wide ☐ Continuous sheet construction 7 feet wide ☐ Continuous sheet construction 5 × 7.5 feet wide ☐ Continuous sheet construction 5 × 12 feet wide ☐ Other (describe)	
26D. Deck seam length (ft)	26E. Area of deck (ft^2)
For column supported tanks: 26F. Number of columns:	26G. Diameter of each column:

IV. SITE INFORMANTION (optional if providing TANKS Summary Sheets)

27. Provide the city and state on which the data in this section are based.
28. Daily Average Ambient Temperature (°F)
29. Annual Average Maximum Temperature (°F)
30. Annual Average Minimum Temperature (°F)
31. Average Wind Speed (miles/hr)
32. Annual Average Solar Insulation Factor (BTU/(ft^2·day))
33. Atmospheric Pressure (psia)

V. LIQUID INFORMATION (optional if providing TANKS Summary Sheets)

34. Average daily temperature range of bulk liquid: See TANKS Summary Sheets	
34A. Minimum (°F)	34B. Maximum (°F)
35. Average operating pressure range of tank:	
35A. Minimum (psig)	35B. Maximum (psig)
36A. Minimum Liquid Surface Temperature (°F)	36B. Corresponding Vapor Pressure (psia)
37A. Average Liquid Surface Temperature (°F)	37B. Corresponding Vapor Pressure (psia)
38A. Maximum Liquid Surface Temperature (°F)	38B. Corresponding Vapor Pressure (psia)

39. Provide the following for <u>each</u> liquid or gas to be stored in tank. Add additional pages if necessary.

39A. Material Name or Composition			
39B. CAS Number			
39C. Liquid Density (lb/gal)			
39D. Liquid Molecular Weight (lb/lb-mole)			
39E. Vapor Molecular Weight (lb/lb-mole)			

Maximum Vapor Pressure 39F. True (psia) 39G. Reid (psia)			
Months Storage per Year 39H. From 39I. To			

VI. EMISSIONS AND CONTROL DEVICE DATA (required)

40. Emission Control Devices (check as many as apply): ☐ Does Not Apply

- ☒ Carbon Adsorption[1]
- ☐ Condenser[1]
- ☐ Conservation Vent (psig)
  - Vacuum Setting Pressure Setting
- ☐ Emergency Relief Valve (psig)
- ☐ Inert Gas Blanket of
- ☐ Insulation of Tank with
- ☐ Liquid Absorption (scrubber)[1]
- ☐ Refrigeration of Tank
- ☐ Rupture Disc (psig)
- ☐ Vent to Incinerator[1]
- ☐ Other[1] (describe):

[1] Complete appropriate Air Pollution Control Device Sheet.

41. Expected Emission Rate (submit Test Data or Calculations here or elsewhere in the application).

Material Name & CAS No.	Breathing Loss (lb/hr)	Working Loss		Annual Loss (lb/yr)	Estimation Method[1]
		Amount	Units		
MDI (101-68-8)					

[1] EPA = EPA Emission Factor, MB = Material Balance, SS = Similar Source, ST = Similar Source Test, Throughput Data, O = Other (specify)

☐ Remember to attach emissions calculations, including TANKS Summary Sheets if applicable.

ATTACHMENT M

AIR POLLUTION CONTROL DEVICE

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

Attachment M
Air Pollution Control Device Sheet
(OTHER COLLECTORS)

Control Device ID No. (3C):

Equipment Information

1. Manufacturer: Koch Filter Corporation Model No. (MERV 8)	2. Control Device Name: Multi-Pleat Elite Type: Cartridge Filter
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. On a separate sheet(s) supply all data and calculations used in selecting or designing this collection device.	
5. Provide a scale diagram of the control device showing internal construction.	
6. Submit a schematic and diagram with dimensions and flow rates.	
7. Guaranteed minimum collection efficiency for each pollutant collected:90% PM	
8. Attached efficiency curve and/or other efficiency information. Reverse pitch fan	
9. Design inlet volume: 6,000 SCFM	10. Capacity: 6,000
11. Indicate the liquid flow rate and describe equipment provided to measure pressure drop and flow rate, if any. A magnehelic gauge will be used to measure the pressure drop across the spray booth filters	
12. Attach any additional data including auxiliary equipment and operation details to thoroughly evaluate the control equipment.	
13. Description of method of handling the collected material(s) for reuse of disposal. The dried paint booth filters will be disposed of with standard non hazardous waste.	

Gas Stream Characteristics

14. Are halogenated organics present?	☐ Yes	☒ No
Are particulates present?	☒ Yes	☐ No
Are metals present?	☐ Yes	☒ No

15. Inlet Emission stream parameters:	**Maximum**	**Typical**
Pressure (mmHg):		760
Heat Content (BTU/scf):		0
Oxygen Content (%):		21
Moisture Content (%):		Ambient
Relative Humidity (%):		Ambient

16. Type of pollutant(s) controlled: ☐ SO_x ☐ Odor
☒ Particulate (type): ☐ Other

17. Inlet gas velocity: 3.08 ft/sec

18. Pollutant specific gravity:

19. Gas flow into the collector:
6000 ACF @ 80 °F and 14.7 PSIA

20. Gas stream temperature:
Inlet: 80 °F
Outlet: 80 °F

21. Gas flow rate:
Design Maximum: 6000 ACFM
Average Expected: 5000 ACFM

22. Particulate Grain Loading in grains/scf:
Inlet: 0.544
Outlet: 0.0544

23. Emission rate of each pollutant (specify) into and out of collector:

Pollutant	IN Pollutant		Emission Capture Efficiency %	OUT Pollutant		Control Efficiency %
	lb/hr	grains/acf		lb/hr	grains/acf	
A PM10	28	0.544	100	2.8	.0544	90
B						
C						
D						
E						

24. Dimensions of stack: Height 30 ft. Diameter 1.5 ft.

25. Supply a curve showing proposed collection efficiency versus gas volume from 25 to 130 percent of design rating of collector.

Particulate Distribution

26. 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		

27. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooling, gas reheating, gas humidification):

28. Describe the collection material disposal system:

The pleated filters will be disposed of with standard non-hazardous waste.

29. Have you included ***Other Collectores Control Device*** in the Emissions Points Data Summary Sheet?

30. **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:
The pressure drop across the filter will be at regular intervals to determine filter replacement	Any malfunctions of control equipment will be documented. Additionally system maintenance will be recorded to show the control system is being maintained appropriately.
REPORTING:	TESTING:
Excess emissions shall be reported in accordance with permit conditions	At the Director's Discretion

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.

31. Manufacturer's Guaranteed Control Efficiency for each air pollutant.

90% for PM_{10}

32. Manufacturer's Guaranteed Control Efficiency for each air pollutant.

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

ATTACHMENT N

SUPPORTING EMISSIONS CALCULATIONS

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

Parallam Sealer Booth & Enclosure Tunnel

Emission Unit ID 005-09
Emission Point PLAMBOOTHSTK E09

Sealer Usage Rates	9.12	gal/hr
	79,842	gal/yr
Total Sealer Sprayed	813,330	lb/yr
Sealer Applied @70% Trans. Eff.	569,331	lb/yr
Overspray Potential to Emit (PTE)	243,999	lb/yr
Emissions with 90% Control	24,400	lb/yr
Maximum PM_{10}	**12.20**	tpy
Maximum PM_{10}	**2.79**	lb/hr
Density (sealer)	10.187	lb/gal

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	EU 005-09
City:	Buckhannon
State:	WV
Company:	Weyerhaeuser
Type of Tank:	Vertical Fixed Roof Tank
Description:	Sealer bulk tank

Tank Dimensions

Shell Height (ft):	16.00
Diameter (ft):	8.00
Liquid Height (ft) :	15.00
Avg. Liquid Height (ft):	8.00
Volume (gallons):	5,640.20
Turnovers:	14.16
Net Throughput(gal/yr):	79,842.00
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	Gray/Light
Shell Condition	Good
Roof Color/Shade:	Gray/Light
Roof Condition:	Good

Roof Characteristics

Type:	Dome
Height (ft)	0.25
Radius (ft) (Dome Roof)	8.00

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meterological Data used in Emissions Calculations: Elkins, West Virginia (Avg Atmospheric Pressure = 13.73 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

EU 005-09 - Vertical Fixed Roof Tank
Buckhannon, WV

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
PMDI / MDI	All	55.41	46.54	64.27	51.30	0.0000	0.0000	0.0000	250.2600			250.26	Option 1: VP50 = .000000103 VP60 = .000000104

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

EU 005-09 - Vertical Fixed Roof Tank
Buckhannon, WV

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
PMDI / MDI	0.00	0.00	0.00

ATTACHMENT O

MONITORING/RECORDKEEPING/REPORTING/ TESTING PLANS

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

MONITORING, RECORD KEEPING, REPORTING, TESTING PLANS

Monitoring

The company plans to monitor hours of operation, sealer usage, and control device delta P across the spray booth filter.

Recordkeeping

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.

The company will keep records of the items monitored, such as sealer throughput, hours of operation, planned maintenance activities, unplanned maintenance activities, and spray booth filter pressure drop as well as any complaints regarding the facility.

Reporting

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

Testing

Visual Emission (VE) testing will be conducted periodically.

ATTACHMENT P

PUBLIC NOTICE

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

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 Rule 13/Title V Permit to Modify the Buckhannon Engineered Wood Products Facility in Buckhannon, Upshur County, West Virginia. From Route 20 in Buckhannon, go east on US 33 and take 2nd turn on left onto Industrial Park Road (Rte 15/33) for ~ 1 mile to stop sign, Plant will be straight ahead. The latitude and longitude coordinates are: 39.00830 and -80.20307.

The applicant estimates the modification will increase the facility's potential to discharge of the following Regulated Air Pollutants:

Pollutant	Tons/yr
PM_{10}	12.2
MDI – HAP	12.2

Application will take place upon issuance of permit. 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.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.

Dated this the 14th day of August, 2015.

By: Weyerhaeuser NR Company
Matthew Rutherford
Environmental Manager
100 TJM Drive
Buckhannon, WV 26201

ATTACHMENT S

TITLE V PERMIT REVISION

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

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:

CAM is not applicable to the spraybooth operations because it is considered part of the affected sourc regulated under 40CFR63, subpart DDDD, which is a 112 standard promulgated after 1990.

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.

40 CFR 63, Subpart QQQQ, NESHAP for surface coating of wood building products

☒ **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.

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
R30-097900029-2011	03/25/2011	
R13-1843B	02/27/2009	
	/ /	

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
PM (MDI – HAP)	+12.2 tpy

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

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

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

i. Proposed changes do not violate any applicable requirement;

ii. Proposed changes do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

iii. Proposed changes do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient air quality impacts, or a visibility increment analysis;

iv. Proposed changes do not seek to establish or change a permit term or condition for which there is no underlying applicable requirement and which permit or condition has been used to avoid an applicable requirement to which the source would otherwise be subject (synthetic minor). Such terms and conditions include, but are not limited to a federally enforceable emissions cap used to avoid classification as a modification under any provision of Title I or any alternative emissions limit approved pursuant to regulations promulgated under § 112(j)(5) of the Clean Air Act;

v. Proposed changes do not involve preconstruction review under Title I of the Clean Air Act or 45CSR14 and 45CSR19;

vi. Proposed changes are not required under any rule of the Director to be processed as a significant modification;

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

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

(Signed):	_____ *(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 T

PERMIT APPLICATION FEE

Rule 13 Construction/Title V Modification Application

Buckhannon Facility, 097-00029
Buckhannon, West Virginia

Weyerhaeuser NR Company
41 TJM Drive
Buckhannon, West Virginia

August 2015

Weyerhaeuser
Weyerhaeuser NR Company

Control
P.O. Box 9769
Federal Way, WA 98063-9769

AUGUST 4, 2015

0000022D0010000016 -005400000001-0075630804
WEYERHAEUSER NR COMPANY
BUCKHANNON-PARALLAM
ATTN MATTHEW RUTHERFORD
100 TJM DR
BUCKHANNON, WV 26201

SUPPLIER#/PMT DOC#: 0003038264/1500145945
CHECK DATE: 08/04/15
CHECK NUMBER: 0055642276
CHECK AMOUNT: $3,500.00

PAGE: 1 OF 1

LOCATION	INVOICE NO.	REFERENCE NO.	AMOUNT	DEDUCTIONS	NET AMOUNT
ETCAP	2015BUCKPSLSEAL		$3500.00	$0.00	$3500.00
2 DAY / PRIORITY MAIL TO PC LOCATION WV050 ATTN: MATTHEW RUTHERFORD					
ETCAP FEDERAL WAY, WA 1-888-387-2267					
TOTAL			$3500.00	$0.00	$3500.00

WERFM1-FRM 11/2008

† PLEASE FOLD ON PERFORATION AND DETACH HERE. † THIS CHECK IS PRINTED ON A BLUE BACKGROUND

Weyerhaeuser
Weyerhaeuser NR Company

Control
P.O. Box 9769
Federal Way, WA 98063-9769

0055642276
AUGUST 4, 2015

Pay To The Order Of: WEST VIRGINIA DEPT OF ENVIRONMENTAL
PROTECTION DIV OF AIR QUALITY
601 - 57TH ST SE
CHARLESTON, WV 25304

66-156/531
NOT NEGOTIABLE AFTER 6 MONTHS
*********$3,500.00***

Amount: THREE THOUSAND FIVE HUNDRED DOLLARS AND 00/100

WELLS FARGO BANK, N.A.

WEYERHAEUSER NR COMPANY
Unique Character Facsimile Signature

⑈0055642276⑈ ⑆053101561⑆ 2079900400218⑈