NORTH CAROLINA DIVISION OF AIR QUALITY Application Review Issue Date:					Region: Washington Regional OfficeCounty: CravenNC Facility ID: 2500171Inspector's Name: Robert BrightDate of Last Inspection: 07/26/2023Compliance Code: 3 / Compliance - inspection			
		Facility	Data			Permi	t Applica	bility (this application only)
Applicant (Facility's Name): Weyerhaeuser NR Company - New Bern Lumber Facility Facility Address: Weyerhaeuser NR Company - New Bern Lumber Facility 1785 Weyerhaeuser Road Vanceboro, NC 28560 SIC: 2499 / Wood Products, Nec					SIP: 02D NSPS: N NESHAP PSD Avoi NC Toxic 112(r): N Other: 0	A : Subpar idance: M s: NA IA		
		er Miscellaneous	Wood Prod	uct Manufactur	ing			
		fore: Title V A : Title V After:		7				
		Contact	Data				Ap	oplication Data
Facility Contact Vernetta Rascoe Environmental Manager (252) 791-3242 PO Box 787 Plymouth, NC 27962		Authorized Contact Carl Parker Mill Manager (252) 633-7010 1785 Weyerhaeuser Road Vanceboro, NC 28586		Vernetta Rasco Environmental (252) 791-324 PO Box 787			/27/2023 Renewal ule: TV-Renewal ting Permit Data umber: 08043/T13 sue Date: 08/09/2019	
Total Actu	al emissions i	n TONS/YEAR:						
СҮ	SO2	NOX	VOC	CO	PM10	Tot	al HAP	Largest HAP
2022	0.4000	34.45	119.57	64.68	17.05	;	11.90	6.48 [Methanol (methyl alcohol)]
2021	0.4200	35.51	141.41	66.84	18.97	,	14.00	7.68 [Methanol (methyl alcohol)]
2020	0.4000	33.90	138.74	63.86	17.79	,	13.73	7.54 [Methanol (methyl alcohol)]
2019	3.43	37.18	125.51	69.77	16.87	,	12.15	6.80 [Methanol (methyl alcohol)]
2018	3.18	34.47	111.57	64.65	15.34	<u>ــــــــــــــــــــــــــــــــــــ</u>	10.79	6.03 [Methanol (methyl alcohol)]
Review Engineer's Signature: Date:			Issue 08043 Permit Issu Permit Exp	/T14 ie Date:		commendations:		

1. Purpose of Application

Weyerhaeuser NR Company - New Bern Lumber Facility (hereafter referred to as Weyerhaeuser) is a lumber mill located in Vanceboro, Craven County, North Carolina. The facility operates under Title V Permit No. 08043T13 with an expiration date of July 31, 2024. Weyerhaeuser has applied for renewal of their Title V air quality permit. The renewal application was received on July 27, 2023, or at least six months prior to the expiration date as required by General Condition 3.K of the current permit. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

Weyerhaeuser has not reported the addition, removal, or modification of any sources at the facility in permit renewal application No. 2500171.23A.

2. Facility Description

Weyerhaeuser New Bern Lumber is a typical sawmill located adjacent to the International Paper Pulp Mill in Vanceboro. Tree-length and precut logs brought to the sawmill are cut, debarked, and cut into rough lumber of various sizes, and then sorted/stacked to go to the kilns. Bark from the debarking process is sold; wood trimmings are sent to a chipper and chip screener and conveyed to the adjacent pulp mill. Sawdust from the mill drops out to a conveyor that carries it to a pile under a shed outside the building. The green sawdust is either used as fuel in the kiln burners or sold. The green sawdust is blown to a cyclone (CD-15) that drops to bin storage at the kiln.

The mill has two kilns; each can dry a maximum of 65 million board feet of lumber per year. When a kiln is not drying lumber, the burner vents to a bypass stack. During operation, the kilns exhaust to modulating roof vents

After drying in the kiln, the boards are sent to the planer to remove surface wood discolored in the drying process and to bring the lumber to its final dimension before loading onto trucks for shipment. Ash and dust emitted from three roof vents is collected by a cartridge filter (CD-1). Wood waste from the planer (ES-4) and end trim saw (ES-5) are sent through a cyclone (CD-2A) to a storage bin. The emissions are controlled by a cyclone (CD-2A) and a bagfilter (CD-2B).

3. Application Chronology

August 9, 2019	Division of Air Quality (DAQ) issues Permit No. 08043T13 to Weyerhaeuser as a Title V renewal.
July 27, 2023	DAQ receives permit renewal application No. 2500171.23A from Weyerhaeuser.
September 26, 2023	Draft permit and review sent for DAQ supervisory review.
September 29, 2023	DAQ supervisor provides comments on draft permit and review.
October 5, 2023	DAQ sends draft permit to Weyerhaeuser, Stationary Source Compliance Branch (SSCB) and Washington Regional Office (WaRO) for review and comment.
October 10, 2023	DAQ receives comments on draft permit from SSCB.
October 11, 2023	DAQ receives comments on draft permit from WaRO.

October 12, 2023	DAQ receives comments on draft permit from Weyerhaeuser.
XXX	Permit renewal notice published, 30-day public notice and comment period begins, and 45-day EPA comment period begins.
XXX	30-day public notice and comment period ends.
XXX	45-day EPA comment period ends.

4. Changes to Permit and Title V Equipment Editor (TVEE) Discussion

The following table summarizes changes made to the current Weyerhaeuser permit in this permit renewal.

Page No.	Section	Description of Changes
Cover and		Updated all dates and permit revision numbers
throughout		• Updated all limits/standards summary tables to current standard format
Insignificant	Attachment	Moved to Section 3 of permit
Activities List		
2	Table of Contents	Changed Section 3 from "General Conditions" to "Insignificant
		Activities per 15A NCAC 02Q .0503(8)"
		Added new Section 4, "General Conditions"
3	List of Acronyms	Relocated here (formerly last page of permit)
4	1	Updated table to current format
10	3	Section 3 is now "Insignificant Activities per 15A NCAC 02Q .0503(8)"
11-18	4	Updated General Conditions to version 7.0 dated August 23, 2023

No changes were required to the TVEE due to this renewal.

5. Description of Changes and Estimated Emissions

As stated earlier in this review, Weyerhaeuser has not reported the addition, removal, or modification of any sources at the facility. No changes in emissions are expected at this time.

6. Regulatory Review

Weyerhaeuser is subject to the following state regulations, in addition to the requirements in the General Conditions:

<u>15A NCAC 02D .0512</u>, Particulates from Wood Products Finishing Plants. This rule prohibits particulate matter (PM) caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors. In no case shall the ambient air quality standards be exceeded beyond the property line. The woodworking operations at Weyerhaeuser are subject to this rule, and include the following sources and required controls:

• The breakdown operations (ID No. ES-3) with their associated cartridge filter (ID No. CD-1)

- The planer (ID No. ES-4), end trim saw (ID No. ES-5), and end trim hog (ID No. ES-6) and associated cyclone (ID No. CD-2A) in series with bagfilter (ID No. CD-2B); and
- The green sawdust pneumatic conveying system (ID No. ES-15) with associated cyclone (ID No. CD-15)

Weyerhaeuser is required to inspect and maintain the control devices in accordance with the manufacturer's recommendations, if any. At minimum, the Permittee must conduct monthly external inspection of the ductwork, cyclones, cartridge filter, and bagfilters, noting the structural integrity, and an annual internal inspection of the cartridge filter and bagfilters, noting their condition and structural integrity. The results of inspection and maintenance must be maintained in a logbook. Summary reports of monitoring and recordkeeping activities must be submitted semiannually. This permit renewal does not affect this status. Continued compliance is expected.

<u>15A NCAC 02D .0515</u>, Particulates from Miscellaneous Industrial Processes. This rule addresses emissions of particulate matter (PM) from stacks, vents, or outlets for any industrial process for which no other particulate emission control standards apply. For such processes, the allowable emission rates shall not exceed the level calculated using one of the following equations, as appropriate for the process rate of the source:

$E = 4.10(P)^{-0.67}$	for process rates less than or equal to 30 tons per hour (ton/hr)
$E = 55.0(P)^{0.11} - 40$	for process rates greater than 30 ton/hr

Where:

- E = allowable emissions limit for particulate matter in pounds per hour (lb/hr), and
- P = process rate in ton/hr (i.e., the total weight per hour of all materials introduced into a specific process that may cause any emission of particulate matter. Liquid and gaseous fuels and combustion air are not included in the process weight).

The two direct-fired, green sawdust-fired lumber drying kilns (ES-13A/B and ES-14A/B) at Weyerhaeuser are subject to this rule. The facility must maintain production records sufficient for deriving the process rates using the formulas above, and must make these records available to DAQ upon request. No reporting is required for PM emissions from the kilns. This permit renewal does not affect this status. Continued compliance is expected.

<u>15A NCAC 02D .0516</u>, Sulfur Dioxide Emissions from Combustion Sources. Under this rule, emissions of sulfur dioxide (SO₂) from any source of combustion discharged from any vent, stack, or chimney shall not exceed 2.3 pounds of SO₂ per million British thermal units (MMBtu) input.

Both of the direct-fired, green sawdust-fired lumber drying kilns (ES-13A/B and ES-14A/B) at Weyerhaeuser are subject to this rule. Since the fuel firing these kilns is usually low in sulfur content, no monitoring, recordkeeping, or reporting is required for SO₂ emissions from these sources. This permit renewal does not affect this status. Continued compliance is expected.

<u>15A NCAC 02D .0521, Control of Visible Emissions</u>. This rule establishes opacity limits for visible emissions generated by fuel burning operations and industrial processes where visible emissions are expected to occur (except during startups, shutdowns, and malfunctions approved according to procedures in 15A NCAC 02D .0535, Excess Emissions Reporting and Malfunctions). The rule establishes opacity limits for visible emissions from sources based on the date the sources were manufactured.

The direct-fired, green sawdust-fired lumber drying kilns (ES-13A/B and ES-14A/B) at Weyerhaeuser are subject to this rule. Because these woodworking operations were manufactured after July 1, 1971, this rule limits them to 20 percent opacity averaged over a six-minute period. The six-minute averaging periods may not exceed 20 percent more than once in any hour, and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. Since visible emissions from these kilns are usually low, no monitoring, recordkeeping, or reporting is required for visible emissions from these sources.

In addition, these woodworking operations at the facility are subject to 02D .0521, with additional permit requirements:

- The breakdown operations (ES-3) with their associated cartridge filter (CD-1)
- The planer (ES-4), end trim saw (ES-5), and end trim hog (ES-6) and associated cyclone (CD-2A) in series with bagfilter (CD-2B); and
- The green sawdust pneumatic conveying system (ES-15) with associated cyclone (CD-15)

Since these woodworking operations were also manufactured after July 1, 1971, they have the same 20 percent opacity limitations as for the aforementioned kilns. Weyerhaeuser is required once every six months to observe the emission points of the woodworking operations for any visible emissions above normal. If emissions are observed to be above normal, Weyerhaeuser shall either correct the above-normal emissions as soon as practicable and within the monitoring period or demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes are below the 20 percent opacity limit. The monitoring results must be maintained in a logbook onsite, and include the date/time of each action, the results of each observation/test, along with any corrective actions taken, and the results of any corrective actions performed. Monitoring and recordkeeping activities must be reported semiannually.

This permit renewal does not affect the status of the facility with regard to this rule. Continued compliance is expected.

15A NCAC 02D .0530, Prevention of Significant Deterioration. See Section 9 of this review.

15A NCAC 02D .1111, Maximum Achievable Control Technology. See Section 7 of this review.

<u>15A NCAC 02D .1806, Control and Prohibition of Odorous Emissions (State Enforceable Only</u>). This rule—which applies facility-wide and is state-enforceable only—provides for the control and prohibition of objectionable odorous emissions. The rule requires Weyerhaeuser to implement management practices or install and operate odor control equipment sufficient to prevent odorous emissions from causing or contributing to objectionable odors beyond the facility's boundary. This permit renewal does not affect this status. Continued compliance is expected.

15A NCAC 02Q .0711, Emission Rates Requiring a Permit. See Section 12 of this review.

Note: The permit has been updated to reflect the most current stipulations for all applicable regulations.

7. National Emission Standards for Hazardous Air Pollutants (NESHAPS): Maximum and/or Generally Achievable Control Technology (MACT/GACT)

Weyerhaeuser is a major source as defined in 40 CFR Part 63.2 with regard to hazardous air pollutants (HAPs) because it has been determined that the facility has the potential to emit 10 tons per year or more of any single HAP or 25 tons per year or more of any combination of HAPs.

The facility is subject to 40 CFR Part 63, Subpart DDDD "National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products", which was initially promulgated in 69 FR 46011 (July 30, 2004) and most recently revised 85 FR 49455 (August 13 2020). However, per 40 CFR 63.2252, the lumber kilns (ES-13A/B and ES-14A/B) are not subject to any requirements under 40 CFR Part 63, Subparts A or DDDD other than the initial notification requirements of 40 CFR 63.9(b). No requirements are prescribed in Subpart DDDD for any of the other sources at the facility. This permit renewal does not affect this status. None of the revisions to Subpart DDDD since this permit was last renewed affect this status. Continued compliance is expected.

8. New Source Performance Standards (NSPS)

No sources at the Weyerhaeuser facility are subject to any NSPS. This permit renewal does not affect this status.

9. New Source Review (NSR)/Prevention of Significant Deterioration (PSD)

Weyerhaeuser had been considered to have the potential to emit more than 250 tons per year of volatile organic compounds (VOC). Weyerhaeuser avoided applicability of PSD by estimating that future operations of the facility would not exceed PSD limits for VOC pursuant to 15A NCAC 02D .0530(u). To demonstrate compliance, DAQ added a condition to Permit No. 08043T09 (issued 6/25/2009) requiring recordkeeping and reporting of annual VOC emissions for five years following resumption of normal operations at the facility.

According to the previous permit review for Permit No. 08043T12 (R. Braswell, January 23, 2015), and the 5/14/2015 permit inspection report (R.Bright), Weyerhaeuser submitted the required reports during the five-year period 2010-2015 demonstrating that VOC emissions were less than 250 tons per year¹. Therefore, Weyerhaeuser was determined not to be subject to PSD, and the VOC emission reporting requirement under 15A NCAC 02D .0530(u) was removed from the permit.² This permit review does not affect this status. Continued compliance is expected.

10. Risk Management Plan (RMP) Requirements

40 CFR Part 68 requires stationary sources storing more than threshold quantities of regulated substances to develop a RMP in accordance with Section 112(r) of the Clean Air Act. The RMP lists the potential effects of a chemical accident at the facility, steps the facility is taking to prevent an accident, and emergency response procedures to be followed if an accident should occur.

Weyerhaeuser does not handle, store, or use any 112(r) regulated pollutants in sufficient quantity to be subject to this regulation. This permit renewal does not affect this status.

¹ See permit review for Permit No. 08043T12 (R. Braswell, January 23, 2015), and the 5/14/2015 facility inspection report (R.Bright).

² Permit review for Permit No. 08034T13 (E. Crump, 8/09/2019).

11. Compliance Assurance Monitoring (CAM)

The CAM rule (15A NCAC 02D .0614) applies to each pollutant specific emissions unit located at a facility required to obtain a Title V, Part 70 or 71 permit if it meets all of the following criteria:

- It is subject to an emission limitation or standard, and
- It uses a control device to achieve compliance, and
- It has potential pre-control emissions that equal or exceed the major source threshold (i.e., either 100 tons per year (tpy) for criteria pollutants, 10 tpy of any individual HAP, or 25 tpy of any combination of HAP).

The following emission limitations or standards are exempted from the CAM rule:

- NSPS or NESHAP standards proposed after November 15, 1990;
- Stratospheric ozone protection requirements under Title VI of the Clean Air Act
- Acid rain program requirements;
- Emission limitations or standards or other requirements that apply solely under an approved emissions trading program approved under the rules of Subchapters 02D and 02Q of Chapter 15A and incorporated in a permit issued under 15A NCAC 02Q .0500;
- An emissions cap that is approved under the rules of Subchapters 02D and 02Q of Chapter 15A and incorporated in a permit issued under 15A NCAC 02Q .0500;
- Emission limitations or standards for which a permit issued under 15A NCAC 02Q .0500 specifies a continuous compliance determination method, as defined in 40 CFR 64.1—unless the applicable compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device (e.g., a surface coating line controlled by an incinerator for which continuous compliance is determined by calculating emissions on the basis of coating records and an assumed control device efficiency factor based on an initial performance test; in this example, this CAM rule would apply to the control device and capture system, but not to the remaining elements of the coating line, such as raw material usage).
- Certain municipally owned utility units, as defined in 40 CFR 72.2.

Please note that the emission unit is not exempted from the CAM rule if nonexempt emission limitations or standards (e.g., a state rule or an older NSPS emission limits) apply to the emissions unit.

CAM does not apply to the two lumber kilns (ES-13A/B and ES-14A/B) because they are subject to a NESHAP proposed after November 15, 1990 (40 CFR Part 63, Subpart DDDD). CAM was determined in a preceding permit review (Permit No. 08043T04, M. Cuilla, 1/03/2006) to be nonapplicable to the sources comprising woodworking operations for the following reasons.

Source	Control Device	Basis for Exclusion from CAM Requirement
Breakdown operations	Cartridge filter (CD-1)	Potential pre-controlled emissions below major
(ES-3)		source threshold for PM
Planer (ES-4), end	Cyclone (CD-2A) in	Potential pre-controlled emissions below major
trim saw (ES-5), and	series with bagfilter	source threshold for PM
end trim hog (ES-6)	(CD-2B)	

Green sawdust	Cyclone (CD-15)	Cyclone is considered inherent to the pneumatic
pneumatic conveying		conveying system and is therefore not a control
system (ES-15)		device for achieving compliance with a regulation

This permit renewal does not affect the facility's status with respect to CAM.

12. Facility-wide Air Toxics Review

The review for Air Permit No. 08043T12 (Russell Braswell, January 23, 2015) notes that emission modeling for NC air toxics was conducted for Weyerhaeuser most recently in 2011. The modeling demonstrated that this facility could comply with acceptable ambient level (AAL) requirements as long as annual kiln production did not exceed 130 million board-feet. Weyerhaeuser had stated in the modeling application—and continues to maintain in the current renewal application—that 130 million board-feet/year is the maximum production capacity of the kilns at the facility. Based on this modeling, references to 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" were removed from the permit, and the equipment list for the facility was updated to include the kiln's maximum capacity of 130 million board-feet per year. This permit renewal does not affect this status. Continued compliance is expected.

13. Facility Emissions Review

The table in the header page of this review summarizes emissions after application of required emission controls reported by Weyerhaeuser in their annual emissions inventories from 2018 through 2022. As shown, annual emissions of NO_X , VOC, CO, PM_{10} , and HAPs have remained relatively steady over this time period, while emissions of SO_2 have declined.

14. Compliance History and Status

The following chronology dates from when the Weyerhaeuser permit was last renewed on August 9, 2019.

March 24, 2020	Robert Bright, Washington Regional Office (WaRO) conducts facility compliance inspection. Facility appeared to be operating in compliance with all permit requirements.
September 15, 2021	Samantha Mellott, WaRO conducts facility compliance inspection. Facility appeared to be operating in compliance with all permit requirements.
July 26, 2023	Robert Bright, WaRO conducts facility compliance inspection. Facility appeared to be operating in compliance with all permit requirements.

In summary, Weyerhaeuser appears to have been operating in compliance with all requirements of their air permit since the last renewal, with no enforcement actions. Continued compliance is expected and will be monitored with facility inspections and review of required reports.

15. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0518(b), the U.S. EPA will have a 45-day review period. In general, as agreed by DAQ and EPA Region 4, EPA's 45-day review period will run concurrent with the 30-day comment period unless

advised otherwise. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit, and each final permit shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above.

There are no affected states or local programs within 50 miles of the facility.

Notice of the DRAFT Title V Permit to Affected States ran from XXXX, 2023, to XXXX, 2023. *Insert discussion of any comments received from Affected States or Local Programs.*

Public Notice of the DRAFT Title V Permit ran from XXXX, 2023, to XXXX, 2023. Insert discussion of any public comments received.

The U.S. EPA's 45-day review period ran concurrent with the 30-day Public Notice, from XXXX, 2023, to XXXX, 2023. *Insert discussion of any comments received from EPA and U.S. EPA Region 4 regarding the DRAFT Title V Permit.*

16. Other Regulatory Considerations

The following items were not required in Permit Application No. 2500171.23A:

- Professional Engineer's seal
- Zoning consistency determination
- Permit fee.

EPA has promulgated a rule (88 FR 47029, July 21, 2023), with an effective date of August 21, 2023, removing the emergency affirmative defense provisions in operating permits programs, codified in both 40 CFR 70.6(g) and 71.6(g). EPA has concluded that these provisions are inconsistent with the EPA's current interpretation of the enforcement structure of the CAA, in light of prior court decisions³. Moreover, per EPA, the removal of these provisions is also consistent with other recent EPA actions involving affirmative defenses⁴ and will harmonize the EPA's treatment of affirmative defenses across different CAA programs.

As a consequence of this EPA action to remove these provisions from 40 CFR 70.6(g), states and local agencies that have adopted similar affirmative defense provisions in their Part 70 operating permit programs will need to revise their Part 70 programs (regulations) to remove these provisions. In addition, individual operating permits that contain Title V affirmative defenses based on 40 CFR 70.6(g) or similar state regulations will need to be revised.

³ NRDC v. EPA, 749 F.3d 1055 (D.C. Cir. 2014).

⁴ In newly issued and revised New Source Performance Standards (NSPS), emission guidelines for existing sources, and NESHAP regulations, the EPA has either omitted new affirmative defense provisions or removed existing affirmative defense provisions. See, e.g., National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants; Final Rule, 80 FR 44771 (July 27, 2015); National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters; Final Rule, 80 FR 72789 (November 20, 2015); Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units; Final Rule, 81 FR 40956 (June 23, 2016).

NCDAQ has not adopted these discretionary affirmative defense provisions in its Title V regulations (15A NCAC 02Q .0500). Instead, DAQ has chosen to include them directly in individual Title V permits as General Condition J.

Per EPA, DAQ is required to promptly remove such impermissible provisions, as stated above, from individual Title V permits, after August 21, 2023, through normal course of permit issuance. This has been done with this permit renewal.

17. Recommendations

DAQ has reviewed the permit application for Weyerhaeuser NR Company - New Bern Lumber Facility located in Vanceboro, Craven County to determine compliance with all procedures and requirements. DAQ has determined that this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. DAQ recommends the issuance of Air Permit No. 08043T14 upon completion of the public participation and EPA review periods.