NORTH CAROLINA DIVISION OF AIR QUALITY

Application Review

Issue Date: Draft – December 18, 2017

Region: Washington Regional Office
County: Pitt
NC Facility ID: 7400252
Inspector's Name: Robert Bright
Date of Last Inspection: 06/28/2017
Compliance Code: 3 / Compliance - inspection

Facility Data

Applicant (Facility's Name): Weyerhaeuser NR Company

Facility Address:
Weyerhaeuser NR Company – Grifton
371 Hanrahan Road
Grifton, NC 28530

SIC: 2421 / Sawmills & Planing Mills General
NAICS: 321113 / Sawmills

Facility Classification: Before: Title V **After:** Title V
Fee Classification: Before: Title V **After:** Title V

Permit Applicability (this application only)

SIP: 15A NCAC 02D .1109 & 02D .1111
NSPS: N/A
NESHAP: MACT Case-by-Case [112(j)] & DDDDD
PSD: N/A
PSD Avoidance: N/A
NC Toxics: N/A
112(r): N/A
Other: Removal of 15A NCAC 02D .0958

Contact Data

Facility Contact	Authorized Contact	Technical Contact
Jack Godwin Environmental Manager (252) 746-7217 PO Box 280 Ayden, NC 28530	Kevin Davis Plant Manager (252) 746-7214 PO Box 280 Ayden, NC 28513	Jack Godwin Environmental Manager (252) 746-7217 PO Box 280 Ayden, NC 28530

Application Data

Application Number: 7400252.17A
Date Received: 10/04/2017
Application Type: Modification
Application Schedule: TV-Significant

Existing Permit Data
Existing Permit Number: 06270/T23
Existing Permit Issue Date: 10/14/2015
Existing Permit Expiration Date: 09/30/2020

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2016	0.7500	51.51	385.14	88.26	7.08	31.86	22.41 [Methanol (methyl alcohol)]
2015	0.8400	58.31	391.31	98.63	7.59	32.48	22.73 [Methanol (methyl alcohol)]
2014	0.8700	58.61	395.53	117.99	7.65	32.86	22.98 [Methanol (methyl alcohol)]
2013	0.9000	59.41	417.78	73.95	7.94	34.20	23.93 [Methanol (methyl alcohol)]
2012	0.8100	55.37	400.00	81.99	7.62	32.41	22.92 [Methanol (methyl alcohol)]

Review Engineer: Judy Lee

Review Engineer's Signature: **Date:**

Comments / Recommendations:
Issue: 06270/T24
Permit Issue Date:
Permit Expiration Date: September 30, 2020

I. Purpose of Application

The Weyerhaeuser NR Company, Grifton Lumber Mill (Weyerhaeuser – Grifton) located in Pitt County, North Carolina submitted air permit application No. 7400252.17A, dated October 2, 2017, which was received by the Division of Air Quality (DAQ) Raleigh Central Office (RCO) on October 4, 2017. Weyerhaeuser – Grifton currently operates under permit No. 06270T23 and are requesting incorporation of stack testing as an option to demonstrate compliance with the total selected metals (TSM) limit currently in their permit under 112(j) Case-by-Case MACT for three biomass-fired thermal oil heaters (TOH): Wellons Nos. 1 and 2 (ID Nos. ES-SEH-1901 and ES-SEH-2901) and Wellons No. 3 (ID No. ES-SEH-3901), in addition to changes requested with Applicability Determination No. 3109. The requested changes to the existing Title V permit for Weyerhaeuser – Grifton require a significant modification processed pursuant to 15A NCAC 02Q .0501(d)(1).

Applicability Determination (AD) No. 3109: NHSM Determination response letter dated September 22, 2017, from Jefferson Twisdale, RCO to Mr. Davis, Weyerhaeuser – Grifton regarding the combustion of used oil as an on-specification used oil and sawdust when an oil leak or spill occurs. Sawdust is used as an absorbent for both virgin oils and on-specification used oil. These fuels would not be considered solid waste as defined in 40 CFR 241.2. Per Weyerhaeuser – Grifton's AD request letter, the wash down water and kiln condensate will be removed as fuels during the next permit revision because the facility no longer burns these materials. In addition, sawdust that has absorbed spilled virgin and on-specification used oil maybe used as a fuel for the TOHs.

II. Facility Description

Tree-length and precut logs of various sizes and grades are debarked, cut to size, and processed through the sawmill where logs are cut into lumber, primarily 2x4's, 2x6's, 2x8's, 2x10's, and 2x12's, and molding. The rough cut lumber from the sawmill is stacked and dried in lumber kilns. The kilns are heated by a hot oil system that recirculates oil between the wood residue burners and finned heat exchangers within the kilns. Sawdust and bark are the primary fuels for the hot oil heaters. Used oils recovered from the hot oil system, wash water from vehicle washdowns, and kiln condensate are sprayed onto the sawdust and bark before use as fuel in the kiln hot oil system. The dried lumber is finished by planing and trimming in the planer mill. Finished lumber is packaged and then shipped off-site. Bark, chips, sawdust, and planer shavings are also shipped off-site as byproducts.

The facility produces southern pine lumber. Logs are received, debarked, sorted, ripped into boards (2x4, 2x6, 2x8, 2x10 and 2x12), dried in kilns and finally planed/trimmed. The debarking area, lumber plant and finishing plant typically operate 20 hours per day (hrs/day) - two 10 hour shifts/day, Monday through Thursday. The energy plant and kilns operates 24 hrs/day. The facility requires the dumping of 150 log trucks per day to keep the mill running and has a target of 600,000 board feet per shift.

- **Facility name/address/legal name/responsible official check:**

- ✓ **IBEAM** compared with application submittal
- ✓ NC Department of the Secretary of State Corporation search: **https://www.sosnc.gov/** compared with **IBEAM** (See Attachment 1)

III. History/Background/Application Chronology

October 4, 2017 – Significant Modification received in RCO.

September 22, 2017 – Applicability Determination No. 3109: NHSM Determination response letter from Jefferson Twisdale, RCO to Mr. Davis, Weyerhaeuser – Grifton regarding the combustion of used oil as an on-specification used oil and sawdust when used as an absorbent on oil leaks and spills. Sawdust is used as an absorbent for both virgin oils and on-specification used oil. These fuels would not be considered solid waste as defined in 40 CFR 241.2.

August 25, 2017 – Meeting between DAQ staff (Mr. Mark Cuilla, Mr. Booker Pullen and Mr. William Willets of RCO; Mr. Robert Bright of the Washington Regional Office (WARO)) and Weyerhaeuser – Grifton staff (Mr. Jack Godwin and Mr. Mike Wood) and AECOM (Ms. Amy Marshall) to discuss the possibility of changing the Case-By-Case MACT compliance method from fuel analysis to stack testing. During the meeting it was determined that Weyerhaeuser – Grifton could either determine compliance through stack testing or fuel analysis as they currently do for TSM other than CO, but not both.

October 14, 2015 – TV Renewal, Permit No. 06270T23 issued by Ms. Jenny Sheppard.

July 30, 2014 – 501(c) Part I Modification to modify two biomass-fired thermal oil heaters Nos. 1 and 2 Wellons, Permit No. 06270T22 issued by Mr. Brian Bland

May 25, 2010 – TV Significant to add Case By Case MACT language for Industrial Boilers, Permit No. 06270T21 issued by Mr. Ed Martin

August 27, 2009 – 501(c)(2) Part I modification to add mold inhibitor application process, Permit No. 06270T20 issued by Mr. Jay Evans

January 5, 2009 – Ownership Change, Permit No. 06270T19 issued by Mr. Mike Benson

July 17, 2008 – TV Minor modification to adjust CAM monitoring and Last MACT Toxics condition, Permit No. 06270T18 issued by Mr. Mike Benson

September 17, 2007 – TV Administrative Amendment to remove vacated boiler MACT language, Permit No. 06270T17 issued by Mr. Mike Smithwick

February 19, 2007 – TV Renewal, Permit No. 06270T16 issued by Mr. Steve Hall

IV. Permit Table of Changes/Modifications

The following changes were made to the Weyerhaeuser – Grifton Mill, Air Permit No. 06270T23:

Page No.(s)	Section	Description of Change(s)
Cover letter and throughout permit	Globally	Updated permit revision numbers, effective date, and expiration date. Updated permit application number, completeness date. Updated permit issuance date. Updated signature line to reflect current Air Permits Section Chief.
3	Section 1 – Equipment Table	Updated description of ES-SEH-1901 and ES-SEH-2901 per Applicability (AD) Determination No. 3109
4	Section 2.1-A	Corrected ~~*[CAA § 112(j)]*~~ (Case-by-case MACT) reference under HAP
6	Section 2.1-B	Corrected ~~*[CAA § 112(j)]*~~ (Case-by-case MACT) reference under HAP
6&7	Section 2.1-B.1-4	Updated hydraulic virgin or used oil description per AD No. 3109
12&13	Section 2.1-H.2	Removed requirements for 02D .0958 per current guidance
14	2.2-A.	Corrected ~~*[CAA § 112(j)]*~~ (Case-by-case MACT) reference under HAP
16-22	Section 2.2-A.3.	Updated Case-by-Case MACT per this permit modification request
31-41	General Conditions	Updated general conditions with latest version (Version 5.1, 08/03/2017)
42	List of Acronyms	Updated with latest version

✓ TVEE was updated accordingly (see pink sheet for approval).

V. New Equipment/Change in Emissions and Regulatory Review

As part of this modification Weyerhaeuser – Grifton request the following:

- Incorporation of stack testing as an option to demonstrate compliance with the TSM limit under Case-by-Case MACT
- Removal of washdown water and kiln condensate as materials permitted to be combusted in TOHs (ID No. ES-SHE-1901 and ES-SHE-2901)
- Clarification that the on-specification used oil can be either thermal oil, hydraulic oil or No. 2 oil and any spilled material that is burned may be absorbed onto clean biomass (sawdust)
- Request that specific condition 2.2-A.3 be modified to allow compliance with the TSM limit to be based on either stack testing or fuel analysis. [Per Mr. Mark Cuilla, RCO conversation with Mr. William Willets, RCO on October 18, 2017 during DAQ's meeting with Weyerhaeuser – Grifton staff and AECOM on August 25, 2017 it was explained that they could either determine compliance through stack testing or fuel analysis, not both; thus, the permit will be modified to include stack testing only.]

Per the application submittal, "Because the proposed project does not constitute a new facility or a facility expansion, notification under 02Q .0113, Notification in Areas Without Zoning, is not required. The facility's production capacity is not being increased, no physical modifications are being made, and the facility's footprint is not changing."

Proposed Equipment Changes

Per application submittal for this permit modification, the following changes were requested (see Form A2 and Attachments for more details):

Equipment to be ADDED – n/a

Equipment to be MODIFIED

Emission Source ID NO.	Emission Source Description	Control Device ID NO.	Control Device Description
ES-SEH-1901	Biomass-fired thermal oil heaters Wellons No. 1 (57.16 million Btu per hour heat input each)	CD-SEF-1901 and CD-SEF-4901	Multicyclone (66 eight-inch diameter tubes) discharging to a dry electrostatic precipitator
ES-SEH-2901	Biomass-fired thermal oil heaters Wellons No. 2 (57.16 million Btu per hour heat input each)	CD-SEF-2901 and CD-SEF-4901	Multicyclone (66 eight-inch diameter tubes) discharging to a dry electrostatic precipitator
ES-SEH-3901	Biomass-fired thermal oil heater Wellons No. 3 (98 million Btu per hour heat input)	CD-SEF-3901 and CD-SEF-4901	Multicyclone (112 eight-inch diameter tubes) discharging to a dry electrostatic precipitator

Equipment to be REMOVED — n/a

Total Facility-wide emissions based on Emission Inventory (please see table at beginning of document).

In addition to requirements provided in Section 3 – General Conditions, this source is currently subject to the following regulations:

15A NCAC 2D .0504, Particulates from Wood Burning Indirect Heat Exchangers
15A NCAC 2D .0512, Particulates from Miscellaneous Wood Products Finishing Plants
15A NCAC 2D .0515, Particulates from Miscellaneous Industrial Processes
15A NCAC 2D .0516, Sulfur Dioxide Emissions from Combustion Sources
15A NCAC 2D .0521, Control of Visible Emissions
15A NCAC 2D .0524, New Source Performance Standards (40 CFR Part 60, Subparts Dc)
15A NCAC 2D .0530, Prevention of Significant Deterioration (40 CFR Part 51), 15A NCAC 2D .0530(u)
15A NCAC 2D .0614, Compliance Assurance Monitoring (40 CFR Part 64)
15A NCAC 2D .0958, Work Practices for Sources of Volatile Organic Compounds (Removal)
15A NCAC 2D .1109, CAA § 112(j); Case-By-Case MACT for Boilers and Process Heaters
15A NCAC 2D .1806, Control and Prohibition of Odorous Emissions

Maximum Achievable Control Technology (MACT) standard under CAA §112(j)
The sources subject to the §112(j) MACT for which the permit is being revised are the three biomass-fired thermal oil heaters: Wellons Nos. 1 and 2 (ID Nos. ES-SEH-1901 and ES-SEH-2901) per Form B – Specific Emission Source Information (Required for All Sources) – start operation/manufacture date was 1989 and Wellons No. 3 (ID No. ES-SEH-3901) per Form B start operation/manufacture date was 1998.

Per Form B1 – Emission Source (Wood, Coal, Oil, Gas, Other Fuel-Fired Burner) – TOH Nos. 1 & 2 (ID Nos. ES-SEH-1901 and ES-SEH-2901) and No. 3 (ID No. ES-SEH-3901) burn wood/bark at 50% moisture controlled without reinjection transferred from fuel silo with a Btu content of 4,500 Btu/pound (wet) and negligible sulfur content; as well as used oil with a Btu content of 19,892 Btu/pound and 1% sulfur content by weight.

Per previous review: These heaters fire wet wood with heat inputs of at least 30 million Btu/hr but less than 100 million Btu/hr. Each heater has a multicyclone venting to a common electrostatic precipitator (ESP).

NC DAQ developed 112(j) application guidance that discussed the options and procedures for writing a 112(j) permit for the industrial, commercial and institutional boilers, and process heaters, which is available at https://deq.nc.gov/about/divisions/air-quality/air-quality-permits/112j-permitting-program.

At the time Weyerhaeuser – Grifton's permit was processed, the facility proposed a total selected metals (TSM) limit instead of a PM limit as allowed by the guidance document. The facility had also chosen to comply with a Health-Based Compliance Alternative (HBCA) for HCl and Mn (see Section 15 of the guidance), and used fuel sampling to demonstrate compliance with the TSM (minus Mn), HCl and Hg emission limits. TSM includes arsenic, beryllium, cadmium, chromium, lead, manganese, nickel, and selenium. The HBCA eligibility demonstration was consistent with the procedures provided by the EPA in the vacated §112(d) Subpart DDDDD standard for boilers and process heaters. Since the facility used fuel sampling for

compliance, no performance testing was required for TSM, HCl and Hg. The facility was required to perform initial and annual periodic stack testing to demonstrate compliance with the CO limit and used a continuous opacity monitor system (COMS) to demonstrate compliance with the opacity limit.

The following emission standards apply to the TOHs as taken from Table 2-1 of the guidance document for TSM, Hg, and CO. The HCl limit was determined as discussed under the **HBCA for HCl and Mn** and as discussed in detail as part of the review for Permit No. 06270T21 issued on May 25, 2010. In addition, the facility must meet the opacity limit of 20 percent under the Boiler MACT, Subpart DDDDD.

Total Selected Metals: 0.0003 lbs/MMBtu (TSM defined as total for As, Be, Cd, Cr, Ni, Pb and Se)
Mercury (Hg): 5.0e-06 lbs/MMBtu
Hydrogen Chloride-Equivalent (HCl): 386.1 lbs/hr (total for sources ES-SEH-1901, ES-SHE-2901 and ES-SEH-3901)
CO: 508 ppmvd, corrected to 7% O_2
Opacity: 20 percent

- Per Form B1, this permit application requests a change to the 112j compliance demonstration methodology. Neither the thermal oil heaters nor the ESP is being modified; therefore, no revised C form is being submitted.
- Per Form E4 – Emission Source Compliance Schedule – Stack testing instead of fuel sampling will be used as the compliance demonstration method for the 112(j) Boiler MACT TSM limit. The Permittee submitted a detailed schedule of compliance as follows:
  - Submit permit application to revise compliance method [September 29, 2017 – Received October 4, 2017]
  - Conduct stack testing to demonstrate compliance with 112(j) TSM limit [October 27, 2017 – Conducted on October 26, 2017]
  - Submit stack testing results to DAQ within 60 days of testing [December 22, 2017]
  - Compliance information will be included on semi-annual compliance report [January 30, 2018]
- Per Form E5 – Title V Compliance Certification (Required) – The facility is NOT currently in compliance with all applicable requirements. Signed by Mr. Kevin Davis, Plant Manager on October 2, 2017.

The Permittee submitted suggested language with the application that would allow compliance with the Total Selected Metals (TSM) limit to be based on either fuel analysis or stack testing. However, as indicated above during the August 25, 2017 meeting between DAQ and Weyerhaeuser, DAQ indicated that only one compliance method could be used. Therefore, the current permit is being amended to allow for stack testing as the compliance method for the TSM limit.

- ✓ Appropriate monitoring, recordkeeping and reporting requirements (MRRR) will be added during this significant modification consistent with other Title V facilities subject to Case-by-Case MACT.

A testing protocol was received by Stationary Source Compliance Branch (SSCB) on September 18, 2017 and testing was approved by Mr. Brent W. Hall, SSCB, per memorandum dated October 19, 2017. Testing was proposed for October 26, 2017. A summary of the proposed test methods and emission limits is shown in the following table:

Pollutant	EPA Method	Emission Limit	Regulation
TSM	29	0.0003 lb/mmBtu	112(j) Case-By Case MACT
Filterable PM	5	0.020 lb/mmBtu	63 Subpart DDDDD

Per Stack Test Observation Report (STOR) dated October 27, 2017 written by Mr. Bright, WARO, the TSM and filterable particulate emissions stack test for the three Wellons Units (ID Nos. ES-SEH-1901, ES-SEH-2901 and ES-SEH-3901) was observed on October 26, 2017. The testing is required to demonstrate compliance with NCAC 2D .1109 (CAA 112(j)) Case-by-Case MACT per permit specific condition 2.2A.3. Mr. Bright was assisted by Mr. Godwin, Weyerhaeuser. AECOM performed the test. CO was being monitored for engineering purposes.

Stack Test Observations

All three Wellons Units were solely firing woodwaste and no VE was observed. Total energy output was 115 mmBtu per hour throughout the test. The COMS was measuring an instantaneous and six-minute average opacity of 0.4 and 0.7%, respectively. All seven lumber kilns were in operation as well, requiring max production from all three Wellons Units.

Three, two-hour sampling runs (Methods 5 and 29) were performed. I was onsite for run 1 (1028-1233). The post-run leak check rate was 0.003 CFM at 7" Hg (5" Hg was the highest vacuum during the run). Visual observation of the filter suggests that the emission rate will be very low, but laboratory analysis will ultimately determine the actual emission rate and compliance with the emissions limitation.

Comments, Conclusions and Recommendations
The stack test appeared to be conducted in accordance with the EPA methods/procedures. WaRO is waiting on the Stationary Source Compliance Branch acceptance before pursuing any compliance action that may result from any stack tests performed.

No visible emissions were observed from any air emission source (permitted/insignificant). The CO emissions were well below the 112(j) limit of 508 ppmvd (corrected to 7% O_2).

15A NCAC 2D .0958 "Work Practices for Sources of Volatile Organic Compounds"
On November 1, 2016, amendments to 15A NCAC 02D .0902 were finalized to narrow applicability of work practice standards in 15A NCAC 02D .0958 from statewide to the maintenance area for the 1997 8-hour ozone standard. This change is being made primarily because the abundance of biogenic VOC emissions in North Carolina results in ozone formation being limited by the amount of available nitrogen oxides (NOx) emissions. Provisions of the Clean Air Act (CAA) require that VOC requirements previously implemented in an ozone nonattainment area prior to re-designation remain in place. However, facilities outside the maintenance area counties for the 1997 8-hour ozone standard would no longer be required to comply with the work practice standards in 02D .0958. As discussed in Section VI below, Pitt County was not in nonattainment for the 1997 8-hr ozone standard and 02D .0958 is no longer applicable to facilities within Pitt County.

✓ The permit condition for 02D .0958 will be removed during this significant permit modification per current guidance.

VI. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

NSPS – The facility is currently subject to New Source Performance Standards (NSPS); however, this permit modification does not affect this status.

One of the three TOHs is subject to ***40 CFR 60 (NSPS), Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units***. The current Title V permit includes the necessary MRRR to ensure compliance with Subpart Dc, including the requirements to operate and maintain a COMS on the oil heater stack.

NESHAPS/MACT – The facility is currently subject to the Maximum Achievable Control Technology (MACT) Standards; however, this permit modification does not affect this status.

15A NCAC 2D .1111 [40 CFR Part 63 Subpart DDDD]: National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products Manufacture: The Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 2D .1111, "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart DDDD by October 1, 2008 for the seven indirectly-heated lumber drying kilns (ID Nos. ES-DK1 through ES-DK7). The kilns are subject to initial notification only.

15A NCAC 2D .1111 [40 CFR Part 63 Subpart DDDDD]: National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, Institutional Boilers and Process Heaters: The Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 2D .1111, "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart DDDDD by May 20, 2019 for the three woodwaste-fired thermal oil heaters (ID Nos. ES-SEH-1901, ES-SEH-2901, and ES-SEH-3901).

15A NCAC 2D .1100 – CAA 112(j) Case-by-Case MACT for Boilers and Process Heaters: On July 20, 2007, the DC Circuit Court vacated the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, which had been promulgated under 40 CFR 63, Subpart DDDDD. The North Carolina Attorney General's Office has determined that the NESHAP vacatur equates to the failure of the US EPA to promulgate a standard as required under Section 112(d) of the Clean Air Act (CAA). As a result, the site-specific Maximum Achievable Control Technology (MACT) Standards required under CAA 112(j), commonly referred to as the MACT 'hammer" provisions were triggered. North Carolina regulations implementing the MACT hammer are found at 15A NCAC 2D .1109.

However, per the Federal Register Notice:

> "*Any emissions from a combustion unit that are not routinely through the direct-fired dryers would be subject to the Industrial/Commercial/Institutional Boilers and Process Heaters NESHAP."*

The TOH's were previously addressed during processing of the 112(j) application as part of issued Permit No. 06270T21.

- ✓ As discussed under Section V above, the appropriate monitoring, recordkeeping and reporting requirements (MRRR) will be added during this significant modification per the applicants request to change the compliance method for the TSM limit from fuel analysis to stack testing.

PSD/NAAQS – This facility is a major source under the Federal Prevention of Significant Deterioration (PSD) program. This facility is considered a major source for PSD due to the VOC emissions from the lumber drying kilns. The facility has a PSD permit which establishes Best Available Control Technology (BACT) emission limitations for several emission sources.

This modification does not affect this status.

Attainment Status

Pitt County is currently classified as "attainment" for Particulate and Ozone based on the Electronic Code of Federal Regulations (e-CFR) data obtained from Title 40: Protection of Environment.

PART 81—DESIGNATION OF AREAS FOR AIR QUALITY PLANNING PURPOSES
Subpart C—Section 107 Attainment Status Designations §81.334 – North Carolina.

The minor source baseline dates for Pitt County have been triggered for NO_x as of September 26, 1997 by Weyerhaeuser. No changes in emissions to these pollutants will occur as part of this modification. Thus, no increment tracking is required for NO_x associated with this proposed modification.

112(r)

Per Form A3 – 112(r) Applicability Information, this facility is not subject to 40 CFR Part 68 "Prevention of Accidental Releases" Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the Risk Management Plan (RMP) thresholds in the Rule

CAM

15A NCAC 02D .0614 "Compliance Assurance Monitoring" (40 CFR 64)

This facility is a Title V facility with potential emissions that exceed the Title V major source levels without considering controls. In order to be subject to the 40 CFR Part 64 - Compliance Assurance Monitoring (CAM) requirements, all three of the following criteria must be satisfied:

(i) pollutant specific emission unit (e.g. thermal oil heaters, planer/trimmer mill, etc.) shall be subject to an emission limitation or a standard other than the exempt limitations or standards (e.g. post-1990 federal standards such as MACT, NSPS etc.),

(ii) the pollutant specific emission unit uses an active control device to achieve compliance with the applicable requirement, and

(iii) potential pre-control device emission rate for the pollutant specific emission unit for any regulated pollutant shall be greater than the major source threshold.

The following table provides a summary of the facility's CAM applicability determination for all emissions sources at Weyerhaeuser - Grifton, NC plant with a control devise:

Emission Source Description (ID Number)	Pollutant	Applicable Requirement	Control Device(s) (ID Number)	Pre-controlled Emission Rate	Major Source Threshold	Subject to CAM?
woodwaste-fired TOH No. 1 (ES-SEH-1901)	PM	15A NCAC 2D .0524 15A NCAC 2D .0530	multicyclone (CD-SEF-1901) & dry ESP (CD-SEF-4901)	144.5 tpy	100	Yes
woodwaste-fired TOH No. 2 (ES-SEH-2901)	PM	15A NCAC 2D .0504	multicyclone (CD-SEF-2901) & dry ESP (CD-SEF-4901)	144.5 tpy	100	Yes
woodwaste-fired TOH No. 3 (ES-SEH-3901)	PM	15A NCAC 2D .0504	multicyclone (CD-SEF-3901) & dry ESP (CD-SEF-4901)	247.7 tpy	100	Yes
planer/trimmer mill (ES-SFF-1902)	PM	15A NCAC 2D .0512	cyclone (CD-F-0903) & bagfilter (CD-F-0904)	47.3 tpy	100	No

It should be noted here the cyclone (CD-F-0903) installed on the planer/trimmer mill can be considered as "inherent process equipment" as defined in Part 64. The company provided a rationale for considering this cyclone as inherent process

equipment in the renewal application for the Grifton, NC facility. They claim that the cyclone is necessary for the proper operation of the pneumatic conveying system in the planer/trimmer mill and the cyclone is not necessary to meet the applicable emission standard. NC DAQ agrees that this cyclone meets the definition of inherent process equipment, therefore the potential uncontrolled emissions for the planer/trimmer mill were calculated post-cyclone and show that the planer/trimmer mill is not subject to the CAM rules.

The CAM rules apply to the three woodwaste-fired TOHs until the compliance date of the Boiler MACT, after which the facility must comply with the emission standards, monitoring, recordkeeping, and reporting requirements of the Boiler MACT in lieu of the CAM requirements outlined in the permit.

- ✓ A CAM determination plan is not required for this significant modification because it only involves modifying existing Case-by-Case MACT compliance methods. No change to the control devices or limits have been requested as part of this significant modification.

VII. Facility Wide Air Toxics

During renewal of their previous permit (Permit No. 06720T23), the facility requested that the toxics requirements be removed from their permit per the Session law 2012-91 allowing the state requirements for toxic air pollutants to be removed provided there is a NESHAP applicable to the equipment emitting the toxic air pollutants and the removal of the related requirements from the permit does not pose an unacceptable health risk. DAQ has reviewed the request and has removed the requirements from the current permit. The review found that all of the sources emitting toxic air pollutants were also subject to a NESHAP/MACT and all of the emission rates reported over the last several years were well below the emission limits found in the permit. The AQAB preformed a modeling analysis and compliance is indicated.

- ✓ A toxics evaluation is not required for this significant modification because it only involves modifying existing Case-by-Case MACT compliance methods.

VIII. Stipulation Review

Based on the latest Inspection Report dated June 29, 2017 and performed on June 28, 2017 by Mr. Robert Bright, WARO, Weyerhauser – Grifton appeared to be in compliance.

Weyerhaeuser has performed stack tests for CO on the following dates:
July 19, 2013 (DAQ Tracking Number 2013-083ST)
June 26, 2014 (DAQ Tracking Number 2014-110ST)
May 8, 2015 (DAQ Tracking Number 2015-061ST)

Fuel analyses were used for the TSM, Hg and Cl compliance determinations. The Site-Specific Monitoring Plan was submitted as part of the July 19, 2013 stack test. SSCB review of the stack test reports and fuel analysis indicates compliance. Via specific permit condition 2.2.A.3.d.i, the due date for the next test is May 2018. The next fuel analysis is due by July 2018, but the facility will be performing the analysis in July 2017.

<u>From the CY2012 inspection report</u>:
Another issue that needs to be clarified is the combustion of kiln condensate in the Wellons units. Proposed changes to the non-secondary hazardous waste determination, CISWI and NC incinerator rules may have an impact. This will need to be addressed before the 112(j) MACT "hammer" compliance date.

<u>Answered in the CY2013 inspection report</u>:
Amy Marshall of URS commented that no CISWI determination is required for the combustion of kiln condensate as DDDDD references existing state rules that exempt boilers from the regulation. In addition, there has been no change to the operation that triggers NSPS Dc. Jack commented that kiln condensate will be combusted as part of the July 19, 2013 stack test.

Kiln condensate is no longer combusted in the Wellons units. In addition, the absorbent pads used in oil spills will no longer be combusted in the Wellons units to avoid CISWI applicability. The required semi-annual reports outlining fuel type and amounts combusted are received on time. WaRO's review of the reports indicates no deviations from the fuels tested. Compliance is indicated.

- ✓ Weyerhaeuser – Grifton currently uses sawdust to absorb spills; thus, CISWI does not apply as indicated under Section I above.

Compliance History (5-year):
A Notice of Deficiency was issued on December 12, 2013 for the late submittal of the 112(j) Notice of Compliance Status.

Conclusions, Comments and Recommendations
The various facility reports are submitted by the required date.
The freon turbine mentioned in previous inspection reports has been removed.
The facility appeared to operate in compliance with all applicable air quality regulations and permit conditions at the time of inspection.

The permit modification changes (where needed) were incorporated into the permit (see table of changes in Section IV. and Regulatory Review in Section V of this document.

IX. 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 .0525, the EPA will have a concurrent 45-day review period. 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 pursuant 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 state/local programs within 50 miles of the facility.

X. Conclusions, Comments, and Recommendations

1. A professional engineer's seal was not required for this significant modification.

2. A consistency determination was not required for this significant modification.

3. WARO recommends issuance of the permit and does request a DRAFT permit prior to issuance.

A draft copy of the permit and review were sent to WARO on November 21, 2017 for comments. Comments received via email on December 18, 2017. All appropriate comments were incorporated into the draft permit.

RCO concurs with WARO's recommendation to issue air permit.

4. A draft copy of the permit was sent to Weyerhaeuser – Grifton on November 21, 2017 for comments.

Comments received on DRAFT/PROPOSED permit:

Please see the attached comments (letter dated December 11, 2017 addressed to Mr. William Willets from Mr. Kevin Davis – Attachment 2) received via email from Mr. Jack Godwin through Mr. Kevin Davis on December 11, 2017.

The Division had the following responses sent via email to Mr. Godwin via email on December 12, 2017 through Mr. Davis:

1. The zip code was incorrect in our database, with the exception of the address for Mr. Kevin Davis. This will be corrected.
2. The draft permit was revised per Applicability Determination #3109 as requested. Per your comment and upon further review dating back to your facility's Title V Permit No. 06270T22 prior to renewal and your request to remove toxics, your permit allowed your facility to burn up to 500 gallons per year used hydraulic, thermal oil, lubricating and No. 2 fuel oil in the thermal oil heaters under 15A NCAC 02Q .0700 providing the used oil was generated on-site and equivalent to unadulterated No. 2 fuel; thus, thermal oil will be added to the emission source description based on historical usage.
3. The TSM limit was based on stack testing ONLY per Mr. William Willets on October 18th, 2017. This decision was based on the August 25th, 2017 meeting between Weyerhaeuser – Grifton staff (Mr. Jack Godwin and Mr. Mike Wood), AECOM (Ms. Amy Marshall) and DAQ staff (Mr. William Willets, Mr. Mark Cuilla, Mr. Booker Pullen and Mr. Robert Bright-WARO) to discuss the possibility of changing the Case-By-Case MACT compliance method from fuel analysis to stack testing. Per DAQ compliance maybe determined using fuel analysis OR stack testing, not both.

No additional comments were received during the comment period.

Attachment 1
NC Secretary of State's Corporation Page as of October 26, 2017:
https://www.sosnc.gov/Search/profcorp/8991188

BUSINESS CORPORATION ANNUAL REPORT

NAME OF BUSINESS CORPORATION: Weyerhaeuser NR Company

SECRETARY OF STATE ID NUMBER: 1067707 STATE OF FORMATION: WA

REPORT FOR THE FISCAL YEAR END: 12/31/2016

Filing Office Use Only
E-Filed Annual Report
1067707
CA201710302667
4/13/2017 12:07
☐ Changes

SECTION A: REGISTERED AGENT'S INFORMATION

1. NAME OF REGISTERED AGENT: Corporation Service Company

2. SIGNATURE OF THE NEW REGISTERED AGENT: _____
SIGNATURE CONSTITUTES CONSENT TO THE APPOINTMENT

3. REGISTERED OFFICE STREET ADDRESS **& COUNTY**
327 Hillsborough Street
Raleigh, NC 27603-1725 Wake County

4. REGISTERED OFFICE MAILING ADDRESS
327 Hillsborough Street
Raleigh, NC 27603-1725

SECTION B: PRINCIPAL OFFICE INFORMATION

1. DESCRIPTION OF NATURE OF BUSINESS: Manufacture and sale of forest products.

2. PRINCIPAL OFFICE PHONE NUMBER: 206-539-4061 **3. PRINCIPAL OFFICE EMAIL:** Privacy Redaction

4. PRINCIPAL OFFICE STREET ADDRESS **& COUNTY**
220 Occidental Ave S.
Seattle, WA 98104-3120

5. PRINCIPAL OFFICE MAILING ADDRESS
220 Occidental Ave S.
Seattle, WA 98104-3120

SECTION C: OFFICERS (Enter additional officers in Section E.)

NAME: Jim Balumas
TITLE: Assistant Secretary
ADDRESS:
220 Occidental Ave S.
Seattle, WA 98104

NAME: Pamela Berry
TITLE: Assistant Secretary
ADDRESS:
220 Occidental Ave S.
Seattle, WA 98104

NAME: Corrin M. Crawford
TITLE: Assistant Secretary
ADDRESS:
220 Occidental Ave S.
Seattle, WA 98104

SECTION D: CERTIFICATION OF ANNUAL REPORT. Section D must be completed in its entirety by a person/business entity.

Kristy T. Harlan
SIGNATURE
Form must be signed by an officer listed under Section C of this form.

4/13/2017
DATE

Kristy T. Harlan
Print or Type Name of Officer

Executive Director
Print or Type Title of Officer

MAIL TO: Secretary of State, Corporations Division, Post Office Box 29525, Raleigh, NC 27626-0525

Attachment 2 – Letter dated December 11, 2017 from Weyerhaeuser – Grifton

Weyerhaeuser

Weyerhaeuser NR Company – Greenville Lumber Facility
371 Hanrahan Road
Grifton, North Carolina 28530

December 11, 2017

Mr. William Willets, PE
Division of Air Quality, NCDEQ
1641 Mail Service Center
Raleigh, NC 27699-1641

Subject: Comments on Draft Permit for Revision of 112j Case-by-Case Boiler MACT Provisions
Weyerhaeuser NR Company – Grifton Mill
Permit No. 06270T23/Facility ID 7400252
Application 7400252.17A

Dear Mr. Willets,

The Weyerhaeuser NR Company Grifton Lumber Mill submitted a permit application in October 2017 (Application Number 7400252.17A) to update the case-by-case MACT requirements under Clean Air Act Section 112j in permit condition 2.2.A.3 for the three Wellons Thermal Oil Heaters (ES-SEH-1901, ES-SEH-2901, and ES-SEH-3901). With this application, Weyerhaeuser requested incorporation of stack testing as an option to demonstrate compliance with the TSM limit. The following are our comments on the draft permit received by email on November 21, 2017, from the permit writer, Ms. Judy Lee.

1. The Zip Code for the mailing address is not correct; please update to 28513. Here is the full correct mailing address:
   P.O. Box 280, Ayden, North Carolina, 28513

2. Thermal oil heaters ES-SEH-1901 and ES-SEH-2901combust only biomass, on-specification used oil, and clean biomass absorbent (sawdust) used to clean up on-site spills of on-specification used oils. The on-specification used oils on site are hydraulic oil, thermal oil, and No. 2 oil. The draft permit references combustion of biomass, used hydraulic oil, and sawdust absorbent from spills of virgin hydraulic and on-specification used oil; and No. 2 fuel oil.

   To clarify, the thermal oil heaters do not have oil burners, and thus can only burn used oil if it is mixed with biomass/sawdust. In accordance with our current permit and with our letter dated August 15, 2017, which was the basis for DAQ's Non-Hazardous Secondary Material Determination No. 3109, we would like to clarify that the on-specification used oil can be either used thermal oil, used hydraulic oil, or used No. 2 oil. Weyerhaeuser requests that NCDAQ update the Emission Source Description for these thermal oil heaters to clarify the following used oils: thermal, hydraulic, and No. 2 fuel oil.

3. The units are subject to numeric limits for total selected metals (TSM, not including manganese), mercury, hydrogen chloride (HCl), and carbon monoxide (CO). The compliance demonstration method provided in the permit for the TSM limit is currently based on fuel analysis. This application requested incorporation of stack testing as an option to demonstrate compliance with the TSM limit. The draft permit removed the option of fuel analysis and substituted stack testing only. Weyerhaueser requests that permit condition 2.2.A.3 be modified to allow compliance with the TSM limit to be based on either stack testing or fuel analysis.

If you have questions or comments regarding this information, please call Jack Godwin of my staff at (252) 746-7217 or Amy Marshall of AECOM at (919) 461-1251.

Sincerely,

Kevin Davis
Mill Manager

Attachments

cc: Robert Bright, NC DEQ Washington Regional Office
Jack Godwin, Weyerhaeuser
Mike Wood, Weyerhaeuser
Amy Marshall, AECOM
Libby Robinson, AECOM