ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL ABRACZINSKAS
Director

NORTH CAROLINA
Environmental Quality

XXXXX, 2020

Mr. Kevin Davis
Mill Manager
Weyerhaeuser NR Company
P. O. Box 280
Ayden, North Carolina 28513

SUBJECT: Air Quality Permit No. 06270T25
Facility ID: 7400252
Weyerhaeuser NR Company – Grifton
Grifton, North Carolina
Pitt County
Fee Class: Title V
PSD Status: Major

Dear Mr. Davis:

In accordance with your completed Air Quality Permit Application for a PSD modification of a Title V permit received November 22, 2019, we are forwarding herewith Air Quality Permit No. 06270T25 to Weyerhaeuser NR Company – Grifton, 371 East Hanrahan Road, Grifton, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official, it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon

receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Pitt County has triggered increment tracking under Prevention of Significant Deterioration (PSD) for Nitrogen Oxides (NOx). However, this permit modification does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from XXXX, 2020 until September 30, 2020, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Betty Gatano, P.E., at (919) 707-8736 or betty.gatano@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Kelly Fortin, EPA Region 4
Washington Regional Office
Central Files
Connie Horne (cover letter only)

ATTACHMENT I to Air Quality Permit No. 06270T25

Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description
IAST-2	500 gallon gasoline storage tank
IES-SSF-0901	dry trim end hog (goes to IF-4)
IF-1	green chip truck loading
IF-2	bark bin and green bark loadout
IF-3	planer shavings truck loadout (secondary)
IF-4	dry trim ends truck loading
IF-5	bark truck loading (at the hog at the old round-wood area near the feed to the Wellons bins)
IF-7	primary conveyor (enclosed except for first 2 to 3 feet and feeds out of the main #1 Wellons bin)
IF-8	bark conveying to bark hog (covered conveyor with an open bottom)
IF-10	filing and grinding shop
IF-11	logo painting
IF-12	spray painting
IF-13	knife shop
IF-14	green chip bin
IF-15	cross-country conveyor (from the chippers to the old conveyor to the Wellons bins)
IF-16	dry shavings bin
IF-17	dry trim chip bin
IF-18	three bark and green sawdust wood residue silos (feed to Wellons Units)
IF-19	Planer shavings truck loadout (primary – three sided enclosed)
IF-20	three sided enclosed ash system loadout at energy system
IF-21 through IF-25	five green mill conveyors
IF-GN-5	gasoline emergency generator
ITOST-1	hot thermal oil storage tank (12,800 gallon capacity)
IF-Silo1, IF-Silo2, IF-Silo3	three wet fuel silos
IF-Silo4	one dry fuel silo
IF-26	Babbitt pot air flow unit

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit.”
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled “Specific Permit Conditions Regulatory Guide.” The link to this site is as follows: http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide.

ATTACHMENT II to Air Quality Permit No. 06270T25

The following changes were made to the Weyerhaeuser – Grifton Mill, Air Permit No. 06270T24:

Pages	Section	Description of Changes
Cover letter and throughout permit	--	Updated all dates and permit revision numbers.
Insignificant Activities	--	• Modified description of planer shavings truck loadout (ID No. IF-3). • Modified description of the planer shavings truck loadout (ID No. IF-19). • Added three wet fuel silos (ID Nos. IF-Silo1, IF-Silo2, and IF-Silo3). • Added one dry fuel silo (ID No. IF-Silo4). • Added Babbitt pot air flow unit (ID No. IF-26).
3	Section 1.0 – Equipment Table	• Added three direct wood-fired/ natural gas-fired continuous dry kilns (ID Nos. CDK1, CDK2, and CDK3). • Removed label for Case-by-Case MACT for the thermal oil heaters (ID Nos. ES-SEH-1901, ES-SEH-2901, and ES-SHE-3901), as this regulation is no longer applicable. • Added footnote stating three direct wood-fired/ natural gas-fired continuous dry kilns (ID Nos. CDK1, CDK2, and CDK3) are listed as a 15A NCAC 02Q .0501(b)(2) modification. • Added footnote specifying the seven indirectly-heated lumber drying kilns (ID Nos. ES-DK1 through ES-DK7), the thermal oil heaters (ID Nos. ES-SEH-1901, ES-SEH-2901, and ES-SEH-3901), and emergency generators (ID Nos. ES-GN-1 and ES-GN-3) shall be permanently shutdown no later than 18 months after startup of the first direct wood-fired/ natural gas-fired continuous dry kiln (ID Nos. CDK1, CDK2, or CDK3).
4	2.1 A – Regulations Table	Removed reference to Case-by-Case MACT for thermal oil heater (ID No. ES-SEH-3901), as this regulation is no longer applicable.
6	2.1 B – Regulations Table	Removed reference to Case-by-Case MACT for thermal oil heaters (ID Nos. ES-SEH-1901 and ES-SEH-2901), as this regulation is no longer applicable.
9	2.1 D.1.c	Added noncompliance statement.
13 – 15	2.1 I	Added permit condition for the three direct wood-fired/ natural gas-fired continuous dry kilns (ID Nos. `CDK1, CDK2, and CDK3`). These emission sources are subject to the following regulations: • 15A NCAC 02D.0515 • 15A NCAC 02D .0516 • 15A NCAC 02D .0521 • 15A NCAC 02D .0530 • 15A NCAC 02D .1100 • 15A NCAC 02Q .0504
16	2.2 A – Regulations Table	Removed reference to Case-by-Case MACT for thermal oil heaters (ID Nos. ES-SEH-1901, ES-SEH-2901, and ES-SEH-3901), as this regulation is no longer applicable.
17	2.2 A.3	• Removed permit condition to Case-by-Case MACT for thermal oil heaters (ID Nos. ES-SEH-1901, ES-SEH-2901, and ES-SEH-3901), as this regulation is no longer applicable. • Replaced condition with a "RESERVED" place holder.
18	2.2 A.4.a.i	Removed reference to "sunset" date for Case-by-Case MACT for thermal oil heaters (ID Nos. ES-SEH-1901, ES-SEH-2901, and ES-SEH-3901), as this regulation is no longer applicable.
27 – 35	Section 3	Updated the General Conditions to the most recent revision (V5.3 08/21/2018).
36	Attachment	Updated the list of acronyms.

State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
06702T25	06270T24	XXXX, 2020	September 30, 2020

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee:	**Weyerhaeuser NR Company – Grifton**
Facility ID:	**7400252**
Facility Site Location:	**371 East Hanrahan Road**
City, County, State, Zip:	**Grifton, Pitt County, North Carolina 28530**
Mailing Address:	**P.O. Box 280**
City, State, Zip:	**Ayden, North Carolina 28513**
Application Number:	**7400252.19A**
Complete Application Date:	**November 22, 2019**
Primary SIC Code:	**2421**
Division of Air Quality, Regional Office Address:	**Washington Regional Office 943 Washington Square Mall Washington, NC 27889**

Permit issued this the XXth day of XXXX 2020

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William D. Willets, P.E., Chief, Air Permitting Section
By Authority of the Environmental Management Commission

Table of Contents

SECTION 1 - PERMITTED EMISSION SOURCE (S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
5, 17, 23	ES-SEH-3901[1] **CAM,** **PSD,** **NSPS Dc,** **MACT DDDDD**	one biomass-fired thermal oil heater Wellons No. 3 (98 million Btu per hour heat input) without flyash reinjection	CD-SEF-3901 and CD-SEF-4901	one multicyclone (112 eight-inch diameter tubes) discharging to one dry electrostatic precipitator
7, 17, 23	ES-SEH-1901 and ES-SEH-2901[1] **CAM,** **MACT DDDDD**	two biomass-fired thermal oil heaters Wellons Nos. 1 and 2 (57.16 million Btu per hour heat input each) without flyash reinjection which together may burn thermal and hydraulic used oil, associated sawdust used as an absorbent for on-site spills of thermal and hydraulic virgin and on-specification used oil, and No. 2 fuel oils	CD-SEF-1901, CD-SEF-2901, and CD-SEF-4901	two multicyclones (66 eight-inch diameter tubes each), one each per heater, both discharging to one dry electrostatic precipitator
9, 23, 24	ES-DK1 through ES-DK7[1] **PSD,** **MACT DDDD**	seven indirectly-heated lumber drying kilns	n/a	none
14	CDK1, CDK2, and CDK3[2] **PSD,** **MACT DDDD**	three direct wood-fired/ natural gas-fired continuous dry kilns (40.0 million Btu per hour maximum heat input rate per kiln; total operating rate of 340 million board feet per year (mmbf/yr))	n/a	none
10, 23	ES-SFF-1902 **PSD**	planer/trimmer mill planer and trimmer	CD-F-0903 CD-F-0904	cyclone (156 inches in diameter) in series with bagfilter (7,165 square feet of filter area)
11, 24	ES-GN-1[1] **MACT ZZZZ**	energy system diesel fuel-fired engine No. 1 (295 HP, 2.1 million Btu per hour maximum heat input)	n/a	none
11, 24	ES-GN-2 **MACT ZZZZ**	fire pump diesel fuel-fired engine No. 1 (176 HP, 1.24 million Btu per hour maximum heat input)	n/a	none
12, 23, 24	ES-GN-3[1] **PSD,** **MACT ZZZZ**	energy system diesel fuel-fired engine No. 2 (295 HP, 2.1 million Btu per hour maximum heat input)	n/a	None
11, 23, 24	ES-GN-4 **PSD,** **MACT ZZZZ**	fire pump diesel fuel-fired engine No. 2 (176 HP, 1.24 million Btu per hour maximum heat input)	n/a	None

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
11	F-7	two debarkers	n/a	None
12	ES-MIAS	mold inhibitor application system	n/a	None

1. Existing thermal oil heaters **(ID Nos. ES-SEH-1901, ES-SEH-2901, and ES-SEH-3901),** existing indirectly-heated lumber drying kilns **(ID Nos. ES-DK1 through ES-DK7),** and existing diesel fuel-fired engines **(ID Nos. ES-GN-1 and ES-GN-3)** shall be permanently shutdown no later than 18 months after startup of the first direct wood-fired/ natural gas-fired continuous dry kiln **(ID Nos. CDK1, CDK2, or CDK3)**.
2. These emission sources **(ID Nos. CDK1, CDK2, and CDK3)** are listed as a 15A NCAC 02Q .0501(b)(2) modification. The Permittee shall file a Title V Air Quality Permit Application on or before 12 months after commencing operation in accordance with General Condition NN.1. The permit shield described in General Condition R does not apply and compliance certification as described in General Condition P is not required.

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 - Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, record keeping, and reporting requirements as specified herein:

A. One biomass-fired thermal oil heater (ID No. ES-SEH-3901) and associated multicyclone (ID No. CD-SEF-3901) and electrostatic precipitator (ID No. CD-SEF-4901)

The following table provides a summary of limits and standards for the emission source described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu	15A NCAC 02D .0516
Particulate Matter	0.10 pounds per million Btu heat input	15A NCAC 02D .0524 (40 CFR Part 60 Subpart Dc)
	See Multiple Emission Sources Section 2.2 B.	15A NCAC 02D .0530
	See Multiple Emission Sources Section 2.2 A.1	15A NCAC 02D .0614 (40 CFR 64 CAM)
Visible Emissions	20 percent opacity	15A NCAC 02D .0524 (40 CFR Part 60 Subpart Dc)
	Continuous opacity monitor	
Odors	See Multiple Emission Sources Section 2.2 A.2 **State-enforceable Only**	15A NCAC 02D .1806
Hazardous Air Pollutants	See Multiple Emission Sources Section 2.2 A.4	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDDD)
Carbon Monoxide	See Multiple Emission Sources Section 2.2 B.	15A NCAC 02D .0530
Nitrogen Oxides	See Multiple Emission Sources Section 2.2 B.	15A NCAC 02D .0530
Volatile Organic Compounds	See Multiple Emission Sources Section 2.2 B.	15A NCAC 02D .0530

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this thermal heater **(ID No. ES-SEH-3901)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of biomass in the thermal heater.

2. 15A NCAC 02D .0524: NSPS 40 CFR PART 60 SUBPART Dc

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard

15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions." [15A NCAC 02D .0524]

Emission Limitations [15A NCAC 02D .0524]

b. Particulate matter emissions from this thermal heater shall not be more than **0.10 pounds per million Btu heat** input.
c. Visible emissions from this source shall not be more than **20 percent opacity** when averaged over a six-minute period, except for one six-minute period per hour of not more than 27 percent opacity.
d. If additional emissions testing is required, the testing shall be performed in accordance with and General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.b or 2.1 A.2.c above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring [15A NCAC 02Q .0508(f)]

e. The Permittee shall use a continuous opacity monitor system (COMS) to monitor and record opacity. The COMS shall be installed, calibrated, maintained, tested, and operated in accordance with 40 CFR Part 60 Appendix B "Performance Specifications" and Appendix F "Quality Assurance Procedures." The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the COMS is not calibrated, maintained, and tested.
f. Particulate matter emissions from the thermal oil heater shall be controlled by one multicyclone and one dry electrostatic precipitator (ESP) operating with at least one of its two electrical fields energized. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
    i. a monthly external visual inspection of the system ductwork and multicyclone collection unit for leaks and of the critical components of the electrostatic precipitator such as rappers, ash removal equipment; and field voltage; and
    ii. an annual internal inspection of the multicyclone's structural integrity
    iii. an annual internal inspection of the electrostatic precipitator's structural integrity to include for the ESP checks for signs of plugging of gas distribution plates and hopper, signs of excessive buildup on inlet and outlet plenum floor surfaces, and for broken rapper rod insulators, cracked support bushing insulators, and broken or loose stabilizer bar insulators (if installed) and replacement as required.

    The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the monitoring requirements are not monitored as described above.

Recordkeeping [15A NCAC 02Q .0508(f)]

g. The results of inspections and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
    i. the date and time of each recorded action;
    ii. the results of each inspection;
    iii. a report of any maintenance performed on the multicyclone and electrostatic precipitator;
    iv. the transformer-rectifier electrical data for the electrostatic precipitator including field voltage; and
    v. any variance from manufacturer's recommendations, if any, and corrections made.

    The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

h. In addition to any other reporting required by 40 CFR § 60.48c or notification requirements to the EPA, the Permittee is required to NOTIFY the DAQ in **writing** of the following:
    i. any excess opacity emission reports as measured by the continuous opacity monitoring system (COMS), postmarked on or before January 30, April 30, July 30, and October 30 of each calendar year for the preceding three-month period. If there are no excess emissions during the calendar quarter, the Permittee shall submit a report quarterly stating that no excess emissions occurred during the reporting period;
    ii. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on the multicyclones and electrostatic precipitator; and
    iii. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

B. Two biomass-fired thermal oil heaters (ID Nos. ES-SEH-1901 and ES-SEH-2901) and associated multicyclones (ID Nos. CD-SEF-1901 and CD-SEF-2901) and electrostatic precipitator (ID No. CD-SEF-4901)

The following table provides a summary of limits and standards for the emission source described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Emissions	*when firing biomass*: 0.41 pounds per million Btu *when firing biomass with thermal and hydraulic virgin or used oil* E = [(0.41)(Qw) + (0.32)(Qo)] / (Qw + Qo) pounds per million Btu where: Qw = actual wood heat input rate in Btu/hr Qo = actual oil heat input rate in Btu/hr	15A NCAC 02D .0504
	See Multiple Emission Sources Section 2.2 A.1	15A NCAC 02D .0614 (40 CFR 64 CAM)
Sulfur Dioxide	2.3 pounds per million Btu	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Odors	See Multiple Emission Sources Section 2.2 A.2 **State-enforceable Only**	15A NCAC 02D .1806
Hazardous Air Pollutants	See Multiple Emission Sources Section 2.2 A.4	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDDD)
PSD Pollutants	Reporting Requirement (See Permit Condition 2.1 B.5)	15A NCAC 02D .0530(u) (Use of projected actual emissions)

1. 15A NCAC 02D .0504: PARTICULATES FROM WOODBURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of wood that are discharged from each of these thermal heaters (ID Nos. ES-SEH-1901 and ES-SEH-2901) into the atmosphere shall not exceed **0.41 pounds per million Btu heat input**.

b. Emissions of particulate matter from the combustion of wood with thermal and hydraulic virgin and used oil from these thermal heaters shall not exceed an allowable emission rate as calculated by the following equation:

$$E = \frac{[(0.41)(Qw) + (0.32)(Qo)]}{(Qw + Qo)} \text{ pounds per million Btu}$$

where: Qw = actual wood heat input rate in Btu/hr
Qo = actual thermal and hydraulic oil heat input rate in Btu/hr

Testing [15A NCAC 02Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with and General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504.

Monitoring [15A NCAC 02Q .0508(f)]

d. Particulate matter emissions from the thermal oil heaters shall be controlled by two multicyclones and one dry electrostatic precipitator operating with at least one of its two electrical fields energized. To ensure compliance, the Permittee shall perform inspections and maintenance as required for the electrostatic precipitator in Section 2.1-A.2.f. and as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement for the multicyclones and ductwork must include the following:

i. a monthly external visual inspection of the system ductwork and material collection unit for leaks; and

ii. an annual (for each 12 month period from initial inspection) internal inspection of the multicyclone's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if the multicyclone and ductwork are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

e. The results of the inspections and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. a report of any maintenance performed on the multicyclone; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0504 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

f. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on the multicyclones and electrostatic precipitator.

g. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this source shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

b. The sulfur content of the thermal and hydraulic virgin or used oils fired in the heaters shall not exceed 1.0 percent by weight.

Testing [15A NCAC 02Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

d. The Permittee shall maintain accurate records of the actual amount and type of the oil burned in the heaters. These records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these thermal oil heaters **(ID Nos. ES-SEH-1901 and ES-SEH-2901)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not 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.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.3.a **(ID Nos. ES-SEH-1901 and ES-SEH-2901)** above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. The continuous opacity monitoring system required under Section 2.1 A.2.f. also monitors the visible emissions from the firing of wood and used oil in these heaters. If the COMS results exceed the limit given in Section 2.1 B.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521. No additional monitoring, recordkeeping, or reporting is required.

4. 15A NCAC 02D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS

a. Pursuant to 15A NCAC 02D .0530(u) because the Permittee relied on projected actual emissions for the purposes of demonstrating that the modifications to the two biomass-fired thermal oil heaters (**ID Nos. ES-SEH-1901 and ES-SEH-2901**, Application 7400252.14A, Permit No. 06270T22) did not result in a significant emissions increase, the Permittee shall maintain records of annual emissions, in tons per year on a calendar year basis, related to these modifications. These records (written or electronic format) shall be maintained on-site for 5 years following resumption of regular operations of the boiler after these modifications. The Permittee shall submit a report to the Regional Office within 60 days after the end of each calendar year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).

C. Seven indirectly-heated lumber drying kilns (ID Nos. ES-DK1, ES-DK2, ES-DK3, ES-DK4, ES-DK5, ES-DK6, and ES-DK7)

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E=4.10\ P^{0.67}$ where E = allowable emissions rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
	See Multiple Emissions Section 2.2 B	15A NCAC 02D .0530
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Odors	See Multiple Emissions Section 2.2 A.2 **State-enforceable Only**	15A NCAC 02D .1806
Volatile Organic Compounds	See Multiple Emissions Section 2.2 B	15A NCAC 02D .0530
Hazardous Air Pollutants	See Multiple Emission Sources Section 2.2 C (No applicable requirements beyond initial notification.)	15A NCAC 02D .1111 (40 CFR 63, Subpart DDDD)

1. 15A NCAC 02D .0515: PARTICULATE FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from the lumber drying kilns **(ID Nos. ES-DK-1 through ES-DK-7)** shall not exceed an allowable emission rate as calculated by the following equation:

$E = 4.10 \times P^{0.67}$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the drying of lumber in the kilns.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the lumber drying kilns **(ID Nos. ES-DK-1 through ES-DK-7)** shall not be more than **20 percent opacity** when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not 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. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the drying of lumber in the kilns.

D. Planer/trimmer mill-planer and trimmer (ID No. ES-SFF-1902), and associated cyclone (ID No. CD-F-0903) and bagfilter (ID No. CD-F-0904)

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	Adequate duct work and properly designed collectors	15A NCAC 02D .0512
	See Multiple Emission Sources Section 2.2 B.	15A NCAC 02D .0530
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Odors	See Multiple Emission Sources Section 2.2 A.2 **State-enforceable Only**	15A NCAC 02D .1806

1. 15A NCAC 02D .0512: PARTICULATES FROM MISCELLANEOUS WOOD PRODUCTS FINISHING PLANTS

a. The Permittee shall not cause, allow, or permit particulate matter 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.

Monitoring [15A NCAC 02Q .0508(f)]

b. Particulate matter emissions from the woodworking operation **(ID No. ES-SFF-1902)** shall be controlled by a cyclone **(ID No. CD-F-0903)** and a bagfilter **(ID No. CD-F-0904)**. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:
   i. monthly external inspection of the ductwork, cyclone, and bagfilter noting the structural integrity; and
   ii. annual (for each 12 month period following the initial inspection) internal inspection of the bagfilters (eliminate if there are not any bagfilters) noting the structural integrity and the condition of the filters.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if the ductwork, cyclone and bagfilter are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

c. The results of inspections and maintenance for the ductwork, cyclone and the bagfilter shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection; and
   iii. the results of maintenance performed on any control device.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if the ductwork, cyclone and bagfilter are not inspected and maintained.

Reporting [15A NCAC 02Q .0508 (f)]

d. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.

e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and by July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the woodworking operations **(ID No. ES-SFF-1902)** shall not be more than **20 percent opacity** when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not 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.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the planer/trimmer mill.

E. Energy system diesel fuel-fired engine No. 1 (ID No. ES-GN-1) and fire pump diesel fuel-fired engine No. 1 (ID No. ES-GN-2)

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Hazardous Air Pollutants	See Multiple Emission Sources Section 2.2 D	15A NCAC 02D .1111 (40 CFR 63, Subpart ZZZZ)

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these engines **(ID Nos. ES-GN-1 and ES-GN-2)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of diesel fuel in these engines.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these engines **(ID Nos. ES-GN-1 and ES-GN-2)** shall not be more than **20 percent opacity** when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not 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.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of diesel fuel in these engines.

F. Energy system diesel fuel-fired engine No. 2 (ID No. ES-GN-3) and fire pump system diesel fuel-fired engine No. 2 (ID No. ES-GN-4)

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Particulate Matter	See Multiple Emission Sources Section 2.2 B	15A NCAC 02D .0530
Volatile Organic Compounds	See Multiple Emission Sources Section 2.2 B.	15A NCAC 02D .0530
Nitrogen Oxide	See Multiple Emission Sources Section 2.2 B	15A NCAC 02D .0530
Carbon Monoxide	See Multiple Emission Sources Section 2.2 B	15A NCAC 02D .0530
Hazardous air pollutants	See Multiple Emission Sources Section 2.2 D	15A NCAC 02D .1111 (40 CFR 63, Subpart ZZZZ)

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these engines **(ID Nos. ES-GN-3 and ES-GN-4)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing diesel fuel in these engines.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these engines **(ID Nos. ES-GN-3 and ES-GN-4)** shall not be more than **20 percent opacity** when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not 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.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of diesel fuel in these engines.

G. Two debarkers (ID No. F-7)

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	less than 75 micrograms per cubic meter (annual mean) and 150 micrograms per cubic meter (24-hour maximum) in the ambient air beyond the property line	15A NCAC 02D .0512
Visible Emissions	20 percent opacity	15A NCAC 02D .0521

1. 15A NCAC 02D .0512: PARTICULATES FROM MISCELLANEOUS WOOD PRODUCTS FINISHING PLANTS

a. The Permittee shall not cause, allow, or permit particulate matter 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. Emissions from the debarkers are fugitive.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

b. No monitoring, recordkeeping, or reporting is required for particulate emissions from the debarkers.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the debarkers **(ID No. F-7)** shall not be more than **20 percent opacity** when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not 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.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the debarkers.

H. Mold Inhibitor Application System (ID No. ES-MIAS)

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Volatile Organic Compounds	VOC emissions shall not exceed 39.9 tons per consecutive 12-month period, rolling monthly total	15A NCAC 02Q .0317 Avoidance of 15A NCAC 02D .0530
Odors	See Multiple Emissions Subsection 2.2 A.2 **State-enforceable Only**	15A NCAC 02D .1806

1. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the mold inhibitor application system **(ID No. ES-MIAS)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not 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.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H.1.a above for the mold inhibitor application system **(ID No. ES-MIAS)**, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the emission source **(ID No. ES-MIAS)**.

2. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of this regulation, the mold inhibitor application system **(ID No. ES-MIAS)** shall discharge into the atmosphere no more than 39.9 tons of VOCs per consecutive 12-month period.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

b. Calculations of VOC emissions per month shall be made at the end of each month. VOC emissions shall be determined by multiplying the total amount of each type of VOC-containing material consumed during the month by the VOC content of the material. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amounts of VOC containing materials or the VOC emissions are not monitored and recorded.

c. Calculations and the total amount of VOC emissions shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the VOC emissions exceed the limit in Section 2.1 H.3.a above.

Reporting [15A NCAC 02Q .0508(f)]

d. The Permittee shall submit a summary report of monitoring and recordkeeping activities given postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly VOC emissions for the previous 17 months. The emissions shall be calculated for each of the 12-month periods over the previous 17 months.

I. Three direct wood-fired/ natural gas-fired continuous dry kilns (ID Nos. CDK1, CDK2, and CDK3)

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times P^{0.67}$ for P < or = 30 tons per hour or $E=55.0(P)^{0.11}- 40$ for P > 30 tons per hour where E = allowable emissions rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Volatile Organic Compounds	4.34 pounds of VOC (as pinene) per thousand board feet Work practice standards	15A NCAC 02D .0530
Hazardous Air Pollutants	Plywood and Composite Wood Products Manufacturing MACT (No applicable requirements beyond initial notification.)	15A NCAC 02D .1111 40 CFR 63, Subpart DDDD
N/A	Submit a Title V permit application within one year of beginning operation	15A NCAC 02Q .0504
Odors	See Multiple Emissions Section 2.2 A.2 **State-enforceable Only**	15A NCAC 02D .1806

1. 15A NCAC 02D .0515: PARTICULATE FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from the direct-fired continuous dry kilns **(ID Nos. CDK1, CDK2, and CDK3)** shall not exceed an allowable emission rate as calculated by the following equation:

$E = 4.10 \times P^{0.67}$ for units with process weight rate less than or equal to 30 tons per hour
or
$E=55.0(P)^{0.11}- 40$ for units with process weight rates greater than 30 tons per hour

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0308(a)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0308(a)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the drying of lumber in the kilns.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the direct-fired continuous dry kilns **(ID Nos. CDK1, CDK2, and CDK3)** shall not be more than **20 percent opacity** when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not 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.

Testing [15A NCAC 02Q .0308(a)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0308(a)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the drying of lumber in the kilns.

3. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements in accordance with 15A NCAC 02D .0530, "Prevention of Significant Deterioration of Air Quality" as promulgated in 40 CFR 51.166.

b. The following emission limits shall not be exceeded:

Emission Source	Pollutant	BACT Limit	Units	Averaging Period	Technology
three direct-fired continuous dry kilns **(ID Nos. CDK1, CDK2, and CDK3)**	VOC (as pinene)	4.34 737.8	lb/MBF ton/yr	n/a	Good design and operating practices

c. To ensure compliance with the emission limits given in 2.1 I.3.b above, the Permittee shall not exceed 340 million board feet per year of lumber dried in three direct-fired continuous dry kilns **(ID Nos. CDK1, CDK2, and CDK3).**

d. The existing thermal oil heaters **(ID Nos. ES-SEH-1901, ES-SEH-2901, and ES-SEH-3901),** the existing indirectly-heated lumber drying kilns **(ID Nos. ES-DK1 through ES-DK7**), and the existing diesel fuel-fired engines **(ID Nos. ES-GN-1 and ES-GN-3)** shall be permanently shutdown no later than 18 months after startup of the first direct wood-fired/ natural gas-fired continuous dry kiln **(ID Nos. CDK1, CDK2, or CDK3)**.

Testing [15A NCAC 02Q .0308(a)]

e. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Monitoring/Recordkeeping [15A NCAC 02Q .0308(a)]

f. The Permittee shall operate and maintain the three direct-fired continuous dry kilns **(ID Nos. CDK1, CDK2, and CDK3)** in accordance with the manufacturer's specifications or a site-specific plan approved by the NC DAQ Regional Administrator. The Permittee shall record any maintenance performed on the kilns each month in a logbook (written or electronic format).

g. To ensure compliance with the limits in Section 2.1 I.3.b above, the Permittee shall calculate the following:
   i. the monthly production rate and the 12-month production rate of the three direct-fired continuous dry kilns **(ID Nos. CDK1, CDK2, and CDK3)**.
   ii. the monthly VOC emissions and the 12-month VOC emissions from the three direct-fired continuous dry kilns **(ID Nos. CDK1, CDK2, and CDK3`)**. VOC emissions shall be determined by multiplying the total amount of lumber dried in the kilns by an emission factor of 4.34 pounds of VOC emissions per thousand board feet (MBF) of lumber dried.

h. The Permittee shall record the production rates and VOC emissions specified in Sections 2.1 I.3.f.i and ii above each month in a logbook (written or electronic format).

Reporting [15A NCAC 02Q .0308(a)]

i The Permittee shall submit a semiannual summary report of monitoring and recordkeeping activities given in Sections 2.1 I.3. e and f above postmarked on or before January 30 of each calendar year for the preceding six-

month period and on or before July 30 of each calendar year for the preceding six-month period. The report shall contain the following:

i. The monthly volatile organic compound emissions from the three direct-fired continuous dry kilns **(ID Nos. CDK1, CDK2, and CDK3)** the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and

ii. The monthly quantities of lumber dried in the three direct-fired continuous dry kilns **(ID Nos. CDK1, CDK2, and CDK3)** each kiln for the previous 17 months. The amount of lumber dried must be calculated for each of the 12-month periods over the previous 17 months.

4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY for National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products Manufacture (40 CFR Part 63 Subpart DDDD)

a. For three direct-fired continuous dry kilns **(ID Nos. CDK1, CDK2, and CDK3)**, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart DDDD. "National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products Manufacture" and Subpart A "General Provisions."

Initial Notification

b. The Permittee shall submit an Initial Notification to DAQ, no later than 120 calendar days after the initial startup of each of the three direct-fired continuous dry kilns **(ID Nos. CDK1, CDK2, and CDK3)**, in accordance with 40 CFR 63.2280(b).

5. 15A NCAC 02Q .0504: OPTION FOR OBTAINING CONSTRUCTION AND OPERATION PERMIT

Permitting [15A NCAC 02Q .0504(d)]

a. Pursuant to 15A NCAC 02Q .0501(b)(2), for completion of the two-step significant modification process initiated by Application No. 7400252.19A, the Permittee shall file an amended application following the procedures of Section 15A NCAC 02Q .0500 within one year from the date of beginning operation of any of these sources **(ID Nos. CDK1, CDK2, and CDK3)**.

Reporting [15A NCAC 02Q .0308(a)]

b. The Permittee shall notify the Regional Office in writing of the date of beginning operation of any of these sources **(ID Nos. CDK1, CDK2, and CDK3)**, postmarked no later than 30 days after such date.

2.2 - Multiple Emission Sources Specific Limitations and Conditions

A. Three biomass-fired thermal oil heaters (ID Nos. ES-SEH-1901, ES-SEH-2901, and ES-SEH-3901) and associated multicyclones (ID Nos. CD-SEF-1901, CD-SEF-2901, CD-SEF-3901) and electrostatic precipitator (ID No. CD-SEF-4901) and seven lumber drying kilns (ID Nos. ES-DK1 through ES-DK7)

The following table provides a summary of limits and standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulates	***ID Nos. ES-SEH-1901, ES-SEH-2901, and ES-SEH-3901 only*** Continuous opacity monitor	15A NCAC 02D .0614 (40 CFR 64 - CAM)
Odors	Odorous emissions must be controlled **State-enforceable Only**	15A NCAC 02D .1806
Hazardous Air Pollutants	Hydrochloric Acid(HCl): 2.2E-02 lb per MMBtu of heat input Mercury (Hg): 5.7E-06 lb per MMBtu of heat input Carbon monoxide (CO): 1,100 ppm by volume on a dry basis corrected to 3 percent oxygen Filterable Particulate Matter(PM) or Total Suspended Metals (TSM): 2.0E-02 lb per MMBtu of heat input or 5.8E-03 lb per MMBtu of heat input	15A NCAC 02D .1111 (40 CFR 63, Subpart DDDDD)

1. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING

a. Per 40 CFR 64 and 15A NCAC 02D .0614, the Permittee shall comply with the following compliance assurance monitoring (CAM) requirements.

b. **Background**

i. Emission Unit(s).

(A) Description: three biomass-fired thermal oil heaters

(B) Identification: **ID Nos. ES-SEH-1901, ES-SEH-2901, and ES-SEH-3901**

ii. Applicable Regulation, Emission Limit, and Monitoring Requirements

(A) Regulations:

(1) 15A NCAC 02D .0504 (**ID Nos. ES-SEH-1901 and ES-SEH-2901)**

(2) 15A NCAC 02D .0524 - NSPS Subpart Dc **(ID No. ES-SEH-3901)**

(B) Emission limits:

(1) 0.41 pounds per million Btu heat input (**ID Nos. ES-SEH-1901 and ES-SEH-2901)**

(2) 0.10 pounds per million Btu heat input **(ID No. ES-SEH-3901)**

(C) Control Technology: individual multicyclones **(ID Nos. CD-SEF-1901, CD-SEF-2901, and CD-SEF-3901)** followed by common dry electrostatic precipitator **(CD-SEF-4901)**

c. **Monitoring Approach**. The key elements of the monitoring approach for particulate matter, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table:

I. Indicator	Visible emissions
Measurement Approach	Visible emissions from the dry electrostatic precipitator (ESP) will be monitored continuously using a continuous opacity monitoring (COM) system on the common stack.
II. Indicator Range QIP Threshold	An excursion is defined as visible emissions in amounts greater than 15% (six-minute average) excluding periods of start-up or shutdown. Excursions trigger an inspection and corrective action requirement as outlined in the SSM Plan. Note that an excursion does not indicate a permit deviation.

III. Performance Criteria	
A. Data Representativeness	Measurements are being made at the emission point (ESP outlet) of the common stack
B. Verification of Operational Status	NA
C. QA/QC Practices	The COM systems shall be calibrated, maintained and operated according to 40 CFR 60, Appendix B, PS1.
D. Monitoring Frequency	Data is collected continuously with the COM system.
E. Data Collection Procedures	Data from the COM system is collected electronically and maintained on the data acquisition and handling system computer along with information on the operating status of the thermal oil heaters.
F. Averaging Periods	6 minutes

Reporting [15A NCAC 02Q .0508(f)]

d. The Permittee shall submit a summary report of all monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations for the requirements of this permit must be clearly identified. The report shall also include the following information, as applicable:
   i. summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
   ii. summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
   iii. a description of the actions taken to implement the QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

State-enforceable Only

2. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.
b. If the Director determines that a source or facility is emitting an objectionable odor, by the procedures described below, the Permittee shall:
   i. within 180 days of receipt of written notification from the Director of the requirement to implement maximum feasible controls, complete the determination process outlined in 15A NCAC 02D .1807 and submit to the Director a completed maximum feasible control determination process, a permit application for maximum feasible controls and a compliance schedule;
   ii. within 18 months of receipt of written notification from the Director of the requirement to implement maximum feasible controls, have installed and begun operating maximum feasible controls.

3. RESERVED

4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, §63.7490(d), §63.7499(g), (p)]

a. For the existing sources (fuel cell designed to burn biomass), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD. "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."
   i. The Permittee shall be subject to the requirements of this standard starting May 20, 2019. Note that the requirements of this standard may require action on behalf of the Permittee prior to May 20, 2019.

Definitions and Nomenclature [§63.7575]

b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63 Subpart A General Provisions [§63.7565]

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

Compliance Date [§63.7510(e), §63.56(b)]

d. The Permittee shall:
   i. Complete the initial tune up (Section 2.2 A.4.w.) and the one-time energy assessment (Section 2.2 A.4.z) no later than May 20, 2019.
   ii.. Complete the initial compliance requirements in Section 2.2 A.4.k, l, m, p. q, r, and s no later than 180 days after May 20, 2019 and according to the applicable provisions in 40 CFR 63.7(a)(2).

Notifications [§63.7545]

e. The Permittee shall submit the following notifications:
   i. Notification of intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.
   ii. Notification of intent to conduct a performance evaluation of the CMS(s) simultaneously with the notification of the performance test date required, or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required. [§63.8(e)]

f. The Permittee shall submit, for the initial compliance demonstration for each affected unit, a Notification of Compliance Status report, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in §63.7545 (e)(1) through (8), as applicable.

General Compliance Requirements [§63.7505(a), §63.7500]

g. At all times the affected unit(s) is operating, the Permittee shall be in compliance with the emission standards in Section 2.2 A.4.i, except during periods of startup and shutdown. . During startup and shutdown, the Permittee must only follow the work practice standards according to item 5 of Table 3 of Subpart DDDDD.

h. At all times, the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

Emission Limits [15A NCAC 02Q .0508(f), §63.7500(a)(1), Table 2]

i. The affected units shall meet the following emission limits:

Pollutant	Emission Limit
Hydrochloric Acid(HCl)	2.2E-02 lb per MMBtu of heat input
Mercury (Hg)	5.7E-06 lb per MMBtu of heat input
Carbon monoxide (CO)	1,100 ppm by volume on a dry basis corrected to 3 percent oxygen

Pollutant	Emission Limit
Filterable Particulate Matter(PM) or Total Selected Metals (TSM)	2.0E-02 lb per MMBtu of heat input or 5.8E-03 lb per MMBtu of heat input

Testing [15A NCAC 02Q .0508(f)]

j. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test(s) are above any of the limits given in Section 2.2 A.4.i above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Initial compliance requirements [§63.7510]

k. For filterable PM (if chosen rather than TSM) and CO, the Permittee shall demonstrate compliance with the limits in Section 2.2 A.4.i by developing a site-specific stack test plan and conducting an initial stack test(s) according to §63.7520 and Table 5 of Subpart DDDDD.

l. For HCl, Hg and/or TSM (if chosen rather than filterable PM), the Permittee shall demonstrate compliance with the emission limits in Section 2.2 A.4.i by:
   i. Stack testing: Developing a site-specific stack test plan and conducting an initial stack test(s) according to §63.7520 and Table 5 of Subpart DDDDD and developing a site-specific fuel monitoring plan and conducting fuel analyses according to §63.7521 and Table 6; or
   ii. Fuel analysis: Developing a site-specific fuel monitoring plan and conducting fuel analyses according to §63.7521 and Table 6.

m. The Permittee shall establish operating limits (and maximum fuel pollutant input levels, as applicable) according to §63.7530 and Tables 7 and 8 of Subpart DDDDD.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.2 A.4.c through m are not met.

Subsequent compliance test and fuel analysis requirements [§63.7515]

n. For each pollutant for which initial compliance was demonstrated with a stack test, the Permittee shall conduct all subsequent stack tests on an annual basis, except as specified in §63.7515.

o. For each pollutant for which initial compliance was demonstrated with a fuel analysis, the Permittee shall conduct all subsequent fuel analyses and determine the applicable pollutant emission rates on a monthly basis, except as specified in §63.7515.

Monitoring Requirements [15A NCAC 02Q .0508(f)]

p. The Permittee shall operate an oxygen trim system with the oxygen level set no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test as the operating limit for oxygen according to Table 7 of Subpart DDDDD. [§63.7525(a)]

q. The Permittee shall record operating load data every 15 minutes according to §63.7540.

r. The Permittee shall install, operate, and maintain a continuous opacity monitoring system according to §63.7525(c) if compliance with the PM or TSM limit is demonstrated via stack testing.

s. The Permittee shall develop site-specific monitoring plan(s) according to the requirements in §§63.7505(d)(1) through (4).

t. The Permittee shall maintain the 30-day rolling average operating load of each unit such that it does not exceed 110 percent of the highest hourly average operating load recorded during the most recent performance test. [§63.7500(a)(2)]

u. If the Permittee demonstrates compliance with emission limits using fuel analysis, the Permittee shall maintain the 12-month rolling average emission rate for HCl, Hg, and/or TSM at or below the applicable emission limit.

v. The Permittee shall maintain opacity to less than or equal to 10 percent opacity (daily block average). [§63.7500(a)(2)]

Work Practice Standards [15A NCAC 02Q .0508(f)]

w. The Permittee shall conduct a tune-up of the affected source every five years as specified below.
   i. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown);
   ii. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject; and
   iii. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a

dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
[§63.7500(a)(1), §63.7540(a)(10)]

x. Each subsequent tune-up shall be conducted no more than 61 months after the previous tune-up. [40CFR 63.7515(d)]

y. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of restart. [§63.7540(a)(13), §63.7515(g)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.2 A.4.n through y are not met.

Energy Assessment Requirements [15A NCAC 02Q .0508(f)]

z. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR 63 Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) appropriate for the on-site technical hours listed in §63.7575. [§63.7500(a)(1), Table 3] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.2 A.4.z are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7555]

aa. The Permittee shall keep the following:
  i. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
  ii. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in §63.10(b)(2)(viii).

bb. For each continuous monitoring system the Permittee shall keep the following records:
  i. Records described in § 63.10(b)(2)(vii) through (xi).
  ii. Monitoring data for continuous opacity monitoring system during a performance evaluation as required in § 63.6(h)(7)(i) and (ii).
  iii. Previous (i.e., superseded) versions of the performance evaluation plan as required in § 63.8(d)(3).
  iv. Records of the date and time that each deviation started and stopped.

cc. The Permittee shall keep all records required by Table 8 of Subpart DDDDD, including all monitoring data and calculated averages for applicable operating limits to show continuous compliance with each emission limit and operating limit that applies.

dd. For each boiler or process heater the Permittee shall keep the following:
  i. records of monthly fuel use by each affected unit, including the type(s) of fuel and amount(s) used.
  ii. for Hg, HCl and TSM, copies of all calculations and supporting documentation of maximum pollutant fuel input or pollutant emission rates as described in§63.7555.
  iii. records to support stack testing less frequently than annually (if applicable) as described in§63.7555(6).
  iv. records of the occurrence and duration of each malfunction of the affected unit, or of the associated air pollution control and monitoring equipment.
  v. records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.7500(a)(3), including corrective actions to restore the malfunctioning affected unit or monitoring equipment to its normal or usual manner of operation.
  vi. records associated with each startup and shutdown period as required by §63.7555.
  vii. records associated with emissions averaging as described in §63.7555(e).

ee. Maintain on-site and submit, if requested by the Administrator, an annual report associated with each boiler tune up, containing the following information:
  i. The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the source;
  ii. A description of any corrective actions taken as a part of the combustion adjustment; and
  iii. The type and amount of fuel used over the 12 months prior to the tune up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
  [40 CFR 63.7540(a)(10)(vi)]

ff. The Permittee shall:
  i. maintain records in a form suitable and readily available for expeditious review;
  ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and

iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.

[40 CFR 63.7560, 63.10(b)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in Section 2.2 A.4.aa through ff.

Reporting Requirements [15A NCAC 02Q .0508(f), §63.7550]

gg. The Permittee shall submit a compliance report semiannually postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June.
   i. The first compliance report shall be postmarked on or before January 30, 2020 and cover the period from May 20, 2019 through December 31, 2019.
   ii. The compliance reports shall also be submitted electronically to the EPA via the procedures in §63.7550(h).

hh. The compliance report shall contain the information in §63.7550(c) depending on how the facility chooses to comply with the limits.

ii. For each deviation from an emission limit or operating limit, the report shall contain the information in§§63.7550(d) and (e).

jj. Within 60 days after the date of completing each performance test (defined in §63.2) as required by this subpart the Permittee shall submit the results of the performance tests, including any associated fuel analyses, to the DAQ pursuant to 63.10(d)(2) and to the EPA via the procedures in §63.7550(h).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in Section 2.2 A.4.gg through jj are not met.

B. One biomass-fired thermal oil heater (ID No. ES-SEH-3901) and associated multicyclone (ID No. CD-SEF-3901) and electrostatic precipitator (ID No. CD-SEF-4901); seven indirectly-heated lumber drying kilns (ID Nos. ES-DK1, ES-DK2, ES-DK3, ES-DK4, ES-DK5, ES-DK6, and ES-DK7); one planer/trimmer mill-planer and trimmer (ID No. ES-SFF-1902) and associated cyclone (ID No. CD-F-0903) and bagfilter (ID No. CD-F-0904); fire pump diesel fuel-fired engine No. 2 (ID No. ES-GN-3); and energy system diesel fuel-fired engine No. 2 (ID No. ES-GN-4)

1. 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The Permittee shall comply with all the requirements in accordance with the PSD, Final Determination by the Division of Air Quality dated September 26, 1997. The Permittee shall not exceed the following Best Available Control Technology (BACT) emission limitations:

Emission Source	Pollutant	Emission Limit
thermal oil heater No. 3 (ID No. ES-SEH-3901)	Particulate Matter (PM)	0.10 pounds (lbs) per million Btu heat input; 42.9 tons per year (tpy)
	Carbon Monoxide (CO)	0.50 lbs per million Btu heat input; 214.62 tpy
	Nitrogen Oxides (NOx)	0.25 lbs per million Btu heat input; 107.0 tpy
	Volatile Organic Compounds (VOC)	0.007 lbs per million Btu heat input; 3.15 tpy
lumber drying kilns (ID Nos. ES-DK1 through ES-DK-7)	PM	0.235 lbs per thousand board feet (MBF) of lumber dried (nominal basis); 35.25 tpy
	VOC	5.0 lbs per MBF of lumber dried (nominal basis); 750.0 tpy
planer/trimmer mill-planer and trimmer (ID No. ES-SFF-1902)	PM	0.43 pound per hour (lbs/hr); 1.89 tpy
	VOC	2.13 lbs/hr; 9.31 tpy
energy system diesel fuel-fired engine No. 2 (ID No. ES-GN-3)	PM	0.64 lbs/hr; 0.032 tpy
	CO	2.00 lbs/hr; 0.098 tpy
	NOx	9.10 lbs/hr; 0.46 tpy
	VOC	0.74 lbs/hr; 0.037 tpy
fire pump diesel fuel-fired engine No. 2 (ID No. ES-GN-4)	PM	0.38 lbs/hr; 0.019 tpy
	CO	1.20 lbs/hr; 0.06 tpy
	NOx	5.5 lbs/hr; 0.28 tpy
	VOC	0.45 lbs/hr; 0.023 tpy

b. To ensure compliance with the emission limits given in 2.2 B.1.a above, the Permittee shall not exceed the following operational limits:
   i. 300 million board feet per year of lumber dried in the seven lumber drying kilns **(ID Nos. ES-DK1 through ES-DK7)** combined; and
   ii. 100 hours of operation per year each for the energy system and fire pump diesel fuel-fired engines **(ID Nos. ES-GN-3 and ES-GN-4)**.

Testing [15A NCAC 02Q .0508(f)]

c. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the average of the results of this test are above the limits given in Section 2.2 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring [15A NCAC 02Q .0508(f)]

d. Calculations of VOC emissions per month from the lumber drying kilns **(ID Nos. ES-DK1 through ES-DK7)** shall be made at the end of each month. VOC emissions shall be determined by multiplying the total amount of lumber dried in the kilns by an emission factor of **5.0 pounds of VOC emissions per thousand board feet (MBF) of lumber** dried (nominal basis). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the VOC emissions exceed the limit given in Section 2.2 B.1.a above.

Recordkeeping [15A NCAC 02Q .0508(f)]

e. The calculations and the total amount of VOC emissions from the lumber drying kilns **(ID Nos. ES-DK1 through ES-DK7)** and the number of hours of operation of the two engines **(ID Nos. ES-GN-3 and ES-GN-4)** shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amounts of lumber dried and VOCs emitted from the kilns and the hours of operation of the engines **(ID Nos. ES-GN-3 and ES-GN-4)** are not monitored and recorded.

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly VOC emissions from the lumber drying kilns **(ID Nos. ES-DK1 through ES-DK7)** for the previous 17 months. The emissions shall be calculated for each of the three 12-month periods over the previous 17 months.
   ii. The monthly quantities of lumber dried in kilns **(ID Nos. ES-DK1 through ES-DK7)** for the previous 17 months; and
   iii. The monthly hours of operation of the engines **(ID Nos. ES-GN-3 and ES-GN-4)**.
   iv. All instances of deviations from the requirements of this permit must be clearly identified.

C. Seven indirectly-heated lumber drying kilns (ID Nos. ES-DK1 through ES-DK7)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAP	Plywood and Composite Wood Products Manufacturing MACT (No applicable requirements beyond initial notification.)	15A NCAC 02D .1111 (40 CFR 63, Subpart DDDD)

1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY for National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products Manufacture (40 CFR Part 63 Subpart DDDD)

The Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 02D .1111, "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart DDDD by October 1, 2008 or as amended by Rule for the seven indirectly-heated lumber drying kilns (ID Nos. ES-DK1 through ES-DK7). [40 CFR 63.2233]

D. Fire pump diesel fuel-fired engine No. 1 (ID No. ES-GN-1), energy system diesel fuel-fired engine No. 1 (ID No. ES-GN-2), fire pump diesel fuel-fired engine No. 2 (ID No. ES-GN-3); and energy system diesel fuel-fired engine No. 2 (ID No. ES-GN-4)

1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.6585, 63.6590(a)(1)(ii)]

a. For these emission source(s) (existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart ZZZZ "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

Definitions and Nomenclature

b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.6675 shall apply.

Applicability Date [40 CFR 63.6595(a)(1)]

c. The Permittee shall comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013.

Notifications [40 CFR 63.6645(a)(5)]

d. The Permittee has no notification requirements.

General Provisions [40 CFR 63.6665]

e. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart ZZZZ The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the general provisions are not met.

Operating and Maintenance Requirements [15A NCAC 02Q .0508(b)]

f. During periods of startup of the IC engine, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[40 CFR 63.6602 and 63.6625(h)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the operating and maintenance requirements are not met.

g. Except during periods of startup of the IC engine, the Permittee shall:
   i. Change oil and filter every 500 hours of operation or annually, whichever comes first;
   ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
   iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

   [40 CFR 63.6602, Table 2C]
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the operating and maintenance requirements are not met.

h. The Permittee shall have the option to utilize the oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in condition g. [40 CFR 63.6602, Table 2C, 63.6625(i)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the operating and maintenance requirements are not met.

i. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Section 2.2 D.1.g, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63.6602, Table 2C] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the operating and maintenance requirements are not met.

j. The permittee shall be in compliance with the emission limitations, operating limitations and other requirements in this subpart that apply at all times. [40 CFR 63.6605(a)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the operating and maintenance requirements are not met.

k. The Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the operating and maintenance requirements are not met.

l. The Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e) and 63.6640(a), Table 6] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the operating and maintenance requirements are not met.

m. In order for the engine to be considered an emergency stationary RICE under this condition, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs i. through iii. below, is prohibited.
   i. There is no time limit on the use of emergency stationary RICE in emergency situations.
   ii. The Permittee may operate the emergency stationary RICE for any combination of the purposes specified in paragraphs (A) through (C) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph iii. below counts as part of the 100 hours per calendar year allowed by this paragraph ii.
      (A) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
      (B) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP– 002–3.
      (C) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
   iii. Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph m. ii. of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)]

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the operating and maintenance requirements are not met.

   Monitoring [15A NCAC 02Q .0508(f)]

n. The Permittee shall install a non-resettable hour meter on the IC engine if one is not already installed. [40 CFR 63.6625(f)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the monitor requirements are not met.

   Recordkeeping [15A NCAC 02Q .0508(f)]

o. The Permittee shall keep the following:
   i. A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).[40 CFR 63.6655(a)(1)]
   ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]
   iii. Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(4)]
   iv. Records of actions taken during periods of malfunction to minimize emissions in accordance with Section 2.2 D.1.k, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
   v. Records of the maintenance conducted on the RICE pursuant to Section 2.2 D.1.l. [40 CFR 63.6655(d) and (e)]
   vi. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in Section 2.2 D.1.m.ii(B) or (C) above, the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

   [40 CFR 63.6655(f)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the recordkeeping requirements are not met.

p. The Permittee shall keep each record in a form suitable and readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a), (b), (c)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the recordkeeping requirements are not met.

Reporting [15A NCAC 02Q .0508(f)]

q. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance must be clearly identified. [40 CFR 63.6640(b), (e), and 63.6650(f)] The summary report shall also include any reporting required in Section 2.2 D.1.i., as necessary. [40 CFR 63.6602, Table 2C]

r. If the Permittee owns or operates an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Section 2.2 D.1.m.ii(B) and (C) above, the Permittee shall submit an annual report according to the requirements at 40 CFR 63.6650(h). This report must be submitted to the Regional Supervisor and the EPA. [40 CFR 63.6650(h)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements are not met.

SECTION 3 - GENERAL CONDITIONS (version 5.3, 08/21/2018)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY
The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**
1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**
1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.

   If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
   a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
   b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
      i. the changes are not a modification under Title I of the Federal Clean Air Act;
      ii. the changes do not cause the allowable emissions under the permit to be exceeded;
      iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
      iv. the Permittee shall attach the notice to the relevant permit.
   c. The written notification shall include:
      i. a description of the change;
      ii. the date on which the change will occur;
      iii. any change in emissions; and
      iv. any permit term or condition that is no longer applicable as a result of the change.
   d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
   a. the change affects only insignificant activities and the activities remain insignificant after the change; or
   b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A **Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
    a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
        i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
            - name and location of the facility;
            - nature and cause of the malfunction or breakdown;
            - time when the malfunction or breakdown is first observed;
            - expected duration; and
            - estimated rate of emissions;
        ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
        iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
    a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B **Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **Emergency Provisions** [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include

noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
   a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
   b. the permitted facility was at the time being properly operated;
   c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
   d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]
This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]
It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]
1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a

compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
   c. the applicable requirements under Title IV; or
   d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]
A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History [**15A NCAC 02Q .0507(d)(3)]
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(d)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) –** FEDERALLY-ENFORCEABLE ONLY
Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]
Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
    a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
        i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
        ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.

iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.

b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
   a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
   b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
   c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
   d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. **Fugitive Dust Control Requirement** [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:

a. a description of the change at the facility;
b. the date on which the change will occur;
c. any change in emissions; and
d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]
For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound