Air Quality
ENVIRONMENTAL QUALITY

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL A. ABRACZINSKAS
Director

DRAFT

Michael W. Golden
Complex Responsible Official
Georgia-Pacific Wood Products LLC
Dudley Plywood/CNS Plant
139 Brewington Road
Dudley, North Carolina 28333

Dear Mr. Golden:

SUBJECT: Air Quality Permit No. 09268T24
Facility ID: 9600058
Georgia-Pacific Wood Products LLC – Dudley Plywood/CNS Plant
Dudley, North Carolina
Wayne County
Fee Class: Title V
PSD Class: Major

In accordance with your completed Air Quality Permit Application for Part II of a Significant modification of a Title V Permit under 15A NCAC 02Q .0501(c)(2) received on May 31, 2017, we are forwarding herewith Air Quality Permit No. 09268T24 to Georgia-Pacific Wood Products LLC, 139 Brewington Road, Dudley, 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 2Q .0503(8) have been listed for informational purposes as "ATTACHMENT 1". 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 shall 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 shall be submitted in writing to the Director and shall 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 shall 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 GS 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 GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

The PSD minor source baseline date has been triggered in Wayne County for PM-10, SO_2, and NOx. Any increment changes associated with this modification were addressed in the Part 1 permit application (No. 9600058.16A).

This Air Quality Permit shall be effective from DRAFT until September 30, 2019, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Please note the attached summary table, which outlines the changes made to the permit. Should you have any questions concerning this matter, please contact Kevin Godwin at 919-707-8480 or kevin.godwin@ncdenr.gov.

Sincerely,

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

Enclosure

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

ATTACHMENT 1 to cover letter of Permit No. 09268T24

Insignificant Activities under 15A NCAC 2Q .0503(8)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Sources at Plywood Plant			
IF-SWS1	Swing Saw No. 1	NA	NA
IF-BP	Bark pile	NA	NA
IF-LA	Lathes	NA	NA
IF-LPC	Lily pad chipper	NA	NA
IF-VC1	Veneer Chipper 66	NA	NA
IF-VC2	Veneer Chipper 67	NA	NA
IF-SHS1	Shaker Screen 1	NA	NA
IF-SHS2	Shaker Screen 2	NA	NA
IF-TR	Chip truck bin/ Rail loading	NA	NA
IF-TB1	Chip truck bin	NA	NA
IF-TB2	Plytrim truck bin	NA	NA
IF-TK1	Resin Tank No. 1 (10,000 gallon capacity)	NA	NA
IF-TK2	Resin Tank No. 2 (10,000 gallon capacity)	NA	NA
IF-SS	Slasher saws	NA	NA
IF-BFH	Boiler fuel house	NA	NA
IF-BH	Bark hog	NA	NA
IF-DSPW	Plywood deck saws	NA	NA
IF-VCC	Veneer conditioning chamber	NA	NA
Sources at Chip-N-Saw Plant			
IF-CB	Chip bin	NA	NA
IF-CS1	Cutoff Saw No. 1	NA	NA
IF-CS2	Cutoff Saw No. 2	NA	NA
IF-BB	Bark bin	NA	NA
IF-SWB	Sawdust bin	NA	NA
IF-PSB	Planer shavings bin	NA	NA
IF-BS	Bark shredder	NA	NA
IF-SC	Small chipper	NA	NA
I-silo1	fuel storage silo (sawdust from pneumatic sawdust conveying system)	CD-C44S - or - CD-C42 - or - *CD-47	One simple cyclone (72 inches in diameter) - or - One simple cyclone (80 inches in diameter) - or - One simple cyclone (80 inches in diameter or less)

*This control device is in the design stage, the description of the control device will be changed later, administratively.

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source 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 2D .1100 "Control of Toxic Air Pollutants" or 2Q .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 2 to cover letter of Permit No. 09268T24

The following table provides a summary of changes made to the existing permit.

Page No.	Condition/ Item	Description of Change(s)
Throughout	N/A	Change the application number and complete date; Change permit revision number to T24; Change the permit issuance/effective dates.
Cover letter	N/A	Updated PSD increment tracking paragraph.
52	2.2 E.2.	Removed 15A NCAC 02Q .0504: OPTION FOR OBTAINING CONSTRUCTION AND OPERATION PERMIT
52	3	Included most recent shell version (v5.1, 08/03/2017) General Conditions.

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
09268T24	09268T23	DRAFT	September 30, 2019

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 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, 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: **Georgia-Pacific Wood Products LLC Dudley Plywood/CNS Facility**

Facility ID: **9600058**
Facility Site Location: **139 Brewington Road**
City, County, State, Zip: **Dudley, Wayne County, North Carolina, 28333**
Mailing Address: **139 Brewington Road**
City, State, Zip: **Dudley, North Carolina 28333**

Application Numbers: **9600058.17B**
Complete Application Date: **May 31, 2017**
Primary SIC Code: **2436**

Division of Air Quality, Regional Office Address: **Washington Regional Office**
943 Washington Square Mall
Washington, North Carolina 27889

Permit issued this the XX of XX, XXXX.

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

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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:

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Sources at Plywood Plant				
51	F-DBPW [β]	Plywood debarker	N/A	N/A
6	ES-CS1 **(BACT)**	Shaker screen 1 chip conveying system transporting green wood residuals to a chip truck bin	CD-C17	One simple cyclone (60 inches in diameter)
6	ES-CS2 **(BACT)**	Shaker screen 2 chip conveying system transporting green wood residuals to either a chip rail loading operation or a chip truck bin	CD-C5A - or - CD-C5	One simple cyclone (96 inches in diameter) -or- One simple cyclone (72 inches in diameter)
6	ES-CS3 **(BACT)**	Plywood pressing, sawing, and trimming conveying system transporting dry wood residuals to either a plywood trim truck bin or dry wood residual transfer system ES-CS4	CD-C8A - or - CD-C1 CD-BH1	Simple cyclone (56 inches in diameter; CD-C8A) -or- simple cyclone (156 inches in diameter; CD-C1) One bagfilter (4,007 square feet of filter area
6	ES-CS4 **(BACT)**	Plywood pressing, sawing, trimming, and conveying transfer system transporting dry wood residuals to the boiler fuel house	CD-C8 CD-BH8	One simple cyclone (60 inches in diameter) One bagfilter (407 square feet of filter area)
42, 43	F-GL **(MACT, DDDD)**	Glue line	N/A	N/A
9, 42, 43, 51	ES-VD1 **(BACT; MACT, DDDD)**	Four steam-heated veneer dryers (50,000 square feet per hour drying capacity [3/8 inch basis] maximum capacity, combined)	CD-VD	One four chamber natural-gas fired regenerative thermal oxidizer (11.0 million Btu per hour maximum heat input rate)
9, 42, 43, 51	ES-VD2 **(BACT; MACT, DDDD)**			
9, 42, 43, 51	ES-VD3 **(BACT; MACT, DDDD)**			
9, 42, 43, 51	ES-VD4 **(BACT; MACT, DDDD)**			
12, 42, 43, 51	F-VP1 **(BACT; MACT, DDDD)**	One steam-heated plywood press	N/A	N/A
12, 42, 43, 51	F-VP2 **(BACT;**	One steam-heated plywood press	N/A	N/A

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
	MACT, DDDD)			
14	ES-BS **(BACT)**	Plywood sanding operations (big sander)	CD-BH5[1]	One bagfilter (9,679 square feet of filter area)
14	ES-TGS **(BACT)**	Tongue and groove sander	CD-BH5[1]	One bagfilter (9,679 square feet of filter area)
42, 43	F-ES **(MACT, DDDD)**	Edge seal	N/A	N/A
42, 43	F-PO **(MACT, DDDD)**	Plywood painting operations	NA	N/A
42. 43, 51	F-PP** **(MACT, DDDD)**	Plywood patching operations	NA	N/A
16, 42	ES-B1 **(BACT; CAM; Case-by-Case MACT)**	Wood residual/bark-fired boiler (254 million Btu per hour total maximum heat input rate) equipped with a propane/natural gas-fired sander dust burner and an overfire air (OFA) system	CD-MC CD-SC	One multicyclone (200 nine-inch diameter tubes) One venturi scrubber
30	ES-P3*** **(MACT, ZZZZ; NSPS, IIII)**	One diesel-fired emergency fire water pump (174 horsepower maximum rated power output)	N/A	N/A
42, 51	F-LSV	Log soaking vats	N/A	N/A
Sources at CNS Plant				
34, 42, 43	ES-LK4 **(BACT; MACT, DDDD**)**	One wood residuals direct-fired double track continuous lumber kiln (35.0 million Btu per hour maximum heat input rate, potential operating rate of 80 million board feet per year)	N/A	N/A
34, 42, 43	ES-LK5 **(BACT; MACT, DDDD**)**	One wood residuals direct-fired double track continuous lumber kiln (35.0 million Btu per hour maximum heat input rate, potential operating rate of 73 million board feet per year)	N/A	N/A
34, 42, 43	ES-LK6 **(BACT; MACT, DDDD**)**	One wood residuals direct-fired double track continuous lumber kiln (35.0 million Btu per hour maximum heat input rate, potential operating rate of 110 million board feet per year)	N/A	N/A
N/A	F-DBCNS [β]	CNS debarker	N/A - or - CD-BH48 *	N/A - or - One bagfilter (with less than

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
				10,000 acfm)
36	ES-BC	Big chipper	CD-C46	One simple cyclone (72 inches in diameter)
36	ES-TC***	Trim conveyance to Big chipper	N/A	N/A
36	ES-SCS	One pneumatic sawdust conveying system transporting dry wood residuals to either of the two lumber kiln fuel storage silos or a sawdust bin	CD-C42 -or - CD-C44S -or - CD-47*	One simple cyclone (80 inches in diameter) -or - One simple cyclone (72 inches in diameter) -or - One simple cyclone (80 inches in diameter or less)
36	ES-PMCS	One planer mill conveying system	CD-BH43 -or- CD-50* CD-BH50*	One bagfilter (36,600 acfm) -or - One simple cyclone (70,000 acfm) One bagfilter (70,000 acfm)
36	ES-PSCS	One planer shavings conveying system	CD-C44A -or - CD-C44B*	One simple cyclone (3,870 acfm) - or - One simple cyclone (8,000 acfm)
36	ES-CNS	Chip-N-Saw line (maximum design capacity 263, 000 MBF/yr)	NA -or- CD-BH49*	NA -or- One bagfilter (with less than 10,000 acfm)
38	ES-P2 **(MACT, ZZZZ; NSPS, IIII)**	One diesel-fired emergency water pump (200 horsepower maximum rated power output)	N/A	N/A
36	F-FS	One Flat Screen	N/A	N/A

β This emission source has potential particulate matter emissions in excess of 5 tons per year and is, therefore, ineligible for classification as an "insignificant activity because of size or production rate" as defined at 15A NCAC 2Q .0503(8). Therefore, although no emission standards apply, this source shall be included in the permit.

* These control devices are in the design stage, the description of the control device will be changed later, administratively.

** These sources have no requirements as part of MACT Subpart DDDD.

*** These emission sources (ID Nos. ES-TC and ES-P3) are listed as a minor modification per 15A NCAC 02Q .0515. The compliance certification as described in General Condition P is required. Unless otherwise notified by NC DAQ, the affected terms of this permit (excluding the permit shield as described General Condition R) for this source shall become final on March 8, 2017. Until this date, the affected permit terms herein reflect the proposed operating

language that the Permittee shall operate this source under pursuant to 15A NCAC 02Q .0515(f).
1 Existing cyclones and bagfilters (ID Nos. CD-C3, CD-BH3, CD-C4, and CD-BH4) are permitted to operate in compliance until the new bagfilter is operational.

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 - Emission Source(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) listed below are subject to the following specific terms, conditions, and limitations, including the monitoring, recordkeeping, and reporting requirements to which those requirements apply:

A. Plywood plant conveying, sawing, and trimming operations, including:

- **One shaker screen 1 chip conveying system (ID No. ES-CS1) transporting green wood residuals to a chip truck bin (ID No. IF-TB1) via one associated simple cyclone (ID No. CD-C17);**
- **One shaker screen 2 chip conveying system (ID No. ES-CS2) transporting green wood residuals to either:**
  - **One chip truck bin (ID No. IF-TR) via one associated simple cyclone (ID No. CD-C5); or**
  - **Chip rail loading (ID No. IF-TR) via one associated simple cyclone (ID No. CD-C5A);**
- **Plywood pressing, sawing, and trimming conveying system (ID No. ES-CS3) transporting dry wood residuals to either:**
  - **One plywood trim truck bin (ID No. IF-TB2) via two associated simple cyclones (ID Nos. CD-C1 and CD-C8A, respectively) in series with one bagfilter (ID No. CD-BH1); or**
  - **Dry wood residuals transfer system ES-CS4**
- **Plywood pressing, sawing, trimming, and conveying transfer system (ID No. ES-CS4) transporting dry wood residuals to the boiler fuel house (ID No. IF-BFH) via one associated simple cyclone (ID No. CD-C8) in series with one bagfilter (ID No. CD-BH8)**

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	Provide adequate duct work and properly designed collectors	15A NCAC 2D .0512
	Best Available Control Technology See Section 2.1.A.3.a	15A NCAC 2D .0530
Visible emissions	20 percent opacity	15A NCAC 2D .0521

1. 15A NCAC 2D .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 2Q .0508(f)]

b. Particulate matter emissions from these sources **(ID Nos. ES-CS1, ES-CS2, ES-CS3, and ES-CS4)** shall be controlled by the associated simple cyclones **(ID Nos. CD-C1, CD-C5, CD-C5A, CD-C8, CD-C8A, and CD-C17)** and bagfilters **(ID Nos. CD-BH1 and CD-BH8)** as described in Section 2.1 A, above. To

assure 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, cyclones, and bagfilters noting the structural integrity; and
ii. Annual (for each 12 month period following the initial inspection) internal inspection of the bagfilters noting the structural integrity and the condition of the filters.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0512 if the ductwork, cyclones, and bagfilters are not inspected and maintained.

Recordkeeping [15A NCAC 2Q .0508(f)]

c. The results of inspection and maintenance for the ductwork, cyclones, and bagfilters 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 2D .0512 if these records are not maintained.

Reporting [15A NCAC 2Q .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 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 shall be clearly identified.

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

a. Visible emissions from these sources **(ID Nos. ES-CS1, ES-CS2, ES-CS3, and ES-CS4)** 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 2Q .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.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 2Q .0508(f)]

c. To assure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The monthly observation shall be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from a source are observed to be above normal, the Permittee shall either:
   i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.2.a, above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring 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 observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
iii. The results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the 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 shall be clearly identified.

3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The following Best Available Control Technology (BACT) limits are applied:
   i. The shaker screen 1 chip conveying system **(ID No. ES-CS1)** shall not discharge into the atmosphere more than 0.60 pounds per hour of particulate matter;
   ii. The shaker screen 2 chip conveying system **(ID No. ES-CS2)** shall not discharge into the atmosphere more than 1.52 pounds per hour of particulate matter;
   iii. The plywood pressing, sawing, and trimming conveying system **(ID No. ES-CS3)** shall not discharge into the atmosphere more than 0.90 pounds per hour of particulate matter;
   iv. The plywood pressing, sawing, trimming, and conveying transfer system **(ID No. ES-CS4)** shall not discharge into the atmosphere more than 0.17 pounds per hour of particulate matter; and
   v. These sources **(ID Nos. ES-CS1, ES-CS2, ES-CS3, and ES-CS4)** shall not operate for more than 8,260 hours, each, per consecutive 12-month period.

Testing [15A NCAC 2Q .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 limits given in Section 2.1 A.3.a.i through iv, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. The Permittee shall comply with the monitoring and recordkeeping requirements in Sections 2.1 A.1.b and c, above, to assure compliance with the emission limits of Sections 2.1 A.3.a.i through iv, above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the monitoring is not conducted or if the records are not maintained.

d. The Permittee shall conduct monthly monitoring of the hours of operation of these sources **(ID Nos. ES-CS1, ES-CS2, ES-CS3, and ES-CS4)** to assure compliance with the limit in Section 2.1 A.3.a.v, above. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The records shall include:
   i. The actual hours of operation of each source for each calendar month; and
   ii. The actual hours of operation of each source for the consecutive 12-month period ending with the calendar month.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the monitoring is not conducted or if the records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the 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 shall be clearly identified.

B. Four steam-heated veneer dryers arranged in parallel (ID Nos. ES-VD1, ES-VD2, ES-VD3, and ES-VD4) and one associated four-chamber natural gas-fired regenerative thermal oxidizer (ID No. CD-VD)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	Adequate ductwork and properly designed collectors	15A NCAC 2D .0512
	Best Available Control Technology See Section 2.1.B.3.a	15A NCAC 2D .0530
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Volatile Organic Compounds	Continuously monitor, and control emissions via, the regenerative thermal oxidizer (ID No. CD-VD)	15A NCAC 2Q .0317 (PSD Avoidance)
Odorous emissions	**State-Enforceable Only** See Section 2.2 A.2	15A NCAC 2D .1806
Toxic Air Pollutants	**State-Enforceable Only** See Section 2.2 B.1	15A NCAC 2Q .0711
Hazardous Air Pollutants	**Maximum Achievable Control Technology** See Section 2.2 C.1	15A NCAC 2D .1111 [40 CFR 63, Subpart DDDD]
VOCs, PM, NOx, SO_2, CO, and CO_2e	**PSD Tracking Condition** See Section 2.2 D "Multiple Emission Sources"	15A NCAC 2D .0530(u)

1. 15A NCAC 2D .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 2Q .0508(f)]

b. Particulate matter emissions from the four steam-heated veneer dryers **(ID Nos. ES-VD1, ES-VD2, ES-VD3, and ES-VD4)** shall be controlled by the regenerative thermal oxidizer (RTO) **(ID No. CD-VD)**, except as allowed in Sections 2.1 B.4.a.i(A) through (C), below. To assure compliance, the Permittee shall perform inspections and maintenance (I&M) as recommended by the manufacturer, if any. As a minimum, the I&M program shall include:
   i. Monthly external inspection of the ductwork and regenerative thermal oxidizer **(ID No. CD-VD)** noting the structural integrity; and
   ii. Annual internal inspection (for each 12 month period following the initial inspection) of the regenerative thermal oxidizer **(ID No. CD-VD)** noting the structural integrity and the condition of the filters.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0512 if the ductwork and regenerative thermal oxidizer **(ID No. CD-VD)** are not inspected and maintained.

Recordkeeping [15A NCAC 2Q .0508(f)]

c. The results of inspection and maintenance for the ductwork and RTO **(ID No. CD-VD)** 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 the RTO **(ID No. CD-VD)**.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0512 if these records are not

maintained.

Reporting [15A NCAC 2Q .0508(f)]

d. The Permittee shall submit the results of any maintenance performed on the RTO **(ID No. CD-VD)** 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 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 shall be clearly identified.

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

a. Visible emissions from these sources **(ID Nos. ES-VD1 through ES-VD4)** 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 2Q .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.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 2Q .0508(f)]

c. To assure compliance, once a month the Permittee shall observe the emission points of these sources **(ID Nos. ES-VD1 through ES-VD4)** for any visible emissions above normal. The monthly observation shall be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from a source are observed to be above normal, the Permittee shall either:
   i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.2.a, above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring of the veneer dryers 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 observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities for the plywood veneer dryers 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 shall be clearly identified.

3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The veneer dryers **(ID Nos. ES-VD1, ES-VD2, ES-VD3, and ES-VD4)** shall not exceed the applicable Best Available Control Technology (BACT) limits. Specifically, these sources shall not:
   i. Exceed a throughput of 438 million square feet of veneer (3/8 inch basis) per consecutive 12-month period, combined; or
   ii. Discharge into the atmosphere more than 2.0 pounds of particulate matter per hour.

Testing [15A NCAC 2Q .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, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. To ensure compliance with the emission limit of Section 2.1 B.3.a.ii, above, the Permittee shall conduct the monitoring and recordkeeping requirements included in Sections 2.1 B.1.b and c, above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the monitoring of Section 2.1 B.1.b, above, is not conducted or if the records of Section 2.1 B.1.c, above, are not maintained.
d. To ensure compliance with the throughput limit of Section 2.1 B.3.a.i, above, the Permittee shall monitor the throughput of the four veneer dryers in units of million square feet (3/8 inch basis). The Permittee shall conduct this veneer throughput monitoring for each calendar month and for the consecutive 12-month period ending with each calendar month.
e. The Permittee shall maintain the results of monitoring conducted pursuant to Section 2.1 B.3.d, above, in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.
f. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the monitoring of Section 2.1 B.3.d, above, is not conducted or if the records of Section 2.1 B.3.e, above, are not maintained.
g. The Permittee shall submit a summary report of the 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 shall be clearly identified.
h. Pursuant to 15A NCAC 2D .0530(u), because the Permittee relied on projected actual emissions for the purposes of demonstrating the installation of sheet lappers and new dryer controls on the veneer dryers (Application No. 9600058.12C, Air Permit No. 09268T13) 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 veneer dryers 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).

4. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS
(Avoidance of 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION)

a. In order to avoid additional applicability of 15A NCAC 2D .0530(g), the Permittee shall perform all of the requirements of Sections 2.1 B.4.a.i and ii, below:
   i. The Permittee shall control emissions of volatile organic compounds (VOC) from the "hot zone" exhausts of the veneer dryers (**ID Nos. ES-VD1, ES-VD2, ES-VD3, and ES-VD4**) with the regenerative thermal oxidizer (RTO) **(ID No. CD-VD)** at all times except during:
      (A) Periods when the veneer dryers are not operating;
      (B) Previously scheduled startup or shutdown periods (including bakeouts and washouts). These startup and shutdown periods shall not exceed the minimum amount of time necessary for these events. Further, during these events the Permittee shall minimize VOC emissions to the greatest extent practicable; and
      (C) Force Majeure events (including malfunctions which qualify as Force Majeure events).

ii. To assure compliance, the Permittee shall, at all times except during periods described in Sections 2.1 B.4.a.i(A) through (C), above:
(A) Maintain a minimum 3-hour average RTO VOC destruction efficiency of at least 90 percent for the captured VOC emissions and follow the control requirements found in Section 2.2 C.1.e. below.

Testing [15A NCAC 2Q .0508(f)]

b. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the control efficiency requirement in Section 2.1 B.4.a.ii(A), above, once per permit term by testing the RTO (ID Nos. CD-VD) inlet and outlet for VOC emissions in accordance with General Condition JJ of this permit, and a testing protocol approved by the DAQ. This testing shall be completed, and the associated results submitted to DAQ, at least 9 months prior to the expiration date of this permit unless an alternate date is approved by the DAQ. In addition, the following conditions shall apply during testing:
i. The veneer dryers (**ID Nos. ES-VD1, ES-VD2, ES-VD3, and ES-VD4**) shall operate at a minimum of 90 percent of maximum operating conditions or at a level representative of average load over the previous twelve months during the testing to determine compliance.
ii. If testing is conducted at average load, supporting documentation shall be available to the DAQ at the time of testing and provided as part of the final test report.
If the results of the test indicate a VOC destruction efficiency less than that required in Section 2.1 B.4.a.ii(A), above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring, Recordkeeping, and Reporting [15A NCAC 2Q .0508(f)]

c. To assure compliance with the requirements of Section 2.1 B.4.a, above, the Permittee shall comply with the monitoring, recordkeeping, and reporting requirements found in Section 2.2 C.1.h., i., j., and k. below.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the monitoring, recordkeeping, and reporting requirements of Section 2.2 C.1.h., i., j., and k., below, are not performed.

C. Two steam-heated plywood presses (ID Nos. F-VP1 and F-VP2)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	Adequate ductwork and properly designed collectors	15A NCAC 2D .0512
	Best Available Control Technology See Section 2.1.C.3.a	15A NCAC 2D .0530
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Odorous emissions	**State-Enforceable Only** See Section 2.2 A.2	15A NCAC 2D .1806
Hazardous Air Pollutants	**Maximum Achievable Control Technology** See Section 2.2 C.1	15A NCAC 2D .1111 [40 CFR 63, Subpart DDDD]
VOC and PM	**PSD Tracking Condition** See Section 2.2 D "Multiple Emission Sources"	15A NCAC 2D .0530(u)

1. 15A NCAC 2D .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/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

b. No monitoring, recordkeeping, or reporting is required for particulate emissions from these sources **(ID Nos. F-VP1 and F-VP2)**.

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

a. Visible emissions from these sources **(ID Nos. F-VP1 and F-VP2)** 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 2Q .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 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from these sources **(ID Nos. F-VP1 and F-VP2)**.

3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The plywood presses **(ID Nos. F-VP1 and F-VP2)** shall not exceed the applicable Best Available Control Technology (BACT) limits. Specifically, these sources shall not:
   i. Exceed a throughput of 425 million square feet of plywood (3/8 inch basis) per consecutive 12-month period, combined; or
   ii. Discharge into the atmosphere more than 0.03 pounds of particulate matter per 1,000 square feet of plywood produced (3/8 inch basis).

Testing [15A NCAC 2Q .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.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for particulate emissions from the two plywood presses **(ID Nos. F-VP1 and F-VP2)** to ensure compliance with the emission limit of Section 2.1 C.3.a.ii, above. Compliance with the control requirements of Section 2.1 C.1.a, above, shall be sufficient to ensure compliance with the emission limit of Section 2.1 C.3.a.ii, above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the Permittee does not comply with the control requirements of Section 2.1 C.1.a, above.
d. To ensure compliance with the throughput limit of Section 2.1 C.3.a.i, above, the Permittee shall monitor the throughput of the two plywood presses in units of million square feet (3/8 inch basis). The Permittee shall conduct this plywood throughput monitoring for each calendar month and for the consecutive 12-month period ending with each calendar month.
e. The Permittee shall maintain the results of monitoring conducted pursuant to Section 2.1 C.3.d, above, in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.
f. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the monitoring of Section 2.1 C.3.d, above, is not conducted or if the records of Section 2.1 C.3.e, above, are not maintained.
g. The Permittee shall submit a summary report of the 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 shall be clearly identified.

D. Sanding operations, including:

- **One tongue and groove sander (ID No. ES-TGS) with one bagfilter (ID No. CD-BH5); and**
- **One plywood sanding operation (a.k.a. Big Sander) (ID No. ES-BS) with one bagfilter (ID No. CD-BH5)**

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	Adequate duct work and properly designed collectors	15A NCAC 2D .0512
	Best Available Control Technology See Section 2.1.D.3.a	15A NCAC 2D .0530
Visible emissions	20 percent opacity	15A NCAC 2D .0521

1. 15A NCAC 2D .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 2Q .0508(f)]

b. Particulate matter emissions from these emission sources **(ID No. ES-TGS and ES-BS)** shall be controlled by one bagfilter **(ID No. CD-BH5).** To assure 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 and bagfilter noting the structural integrity; and
   ii. Annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter noting the structural integrity and the condition of the filters.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0512 if the ductwork and bagfilter are not inspected and maintained.

Recordkeeping [15A NCAC 2Q .0508(f)]

c. The results of inspection and maintenance for the ductwork and 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 2D .0512 if these records are not maintained.

Reporting [15A NCAC 2Q .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 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 shall be clearly identified.

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

a. Visible emissions from these emission sources (**ID No. ES-BS and ID No. ES-TGS**) 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 2Q .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 2D .0521.

Monitoring [15A NCAC 2Q .0508(f)]

c. To assure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The monthly observation shall be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from a source are observed to be above normal, the Permittee shall either:
   i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 D.2.a, above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring 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 observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the 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 shall be clearly identified.

3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The following Best Available Control Technology (BACT) limits are applied:
   i. The tongue and groove sander **(ID No. ES-TGS)** shall not:
      (A) Discharge into the atmosphere more than 1.42 pounds of particulate matter per hour; or
      (B) Operate for more than 8,260 hours per consecutive 12-month period.
   ii. The plywood sanding operation **(ID No. ES-BS)** shall not:
      (A) Discharge into the atmosphere more than 1.36 pounds of particulate matter per hour; or
      (B) Operate for more than 7,200 hours per consecutive 12-month period.

Testing [15A NCAC 2Q .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 emission limits given in Sections 2.1 D.3.a.i(A) or D.3.a.ii.(A), above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. To assure compliance with the limits of Sections 2.1 D.3.a.i(A) and ii(A), above, the Permittee shall conduct the monitoring and recordkeeping requirements included in Sections 2.1 D.1.b and c, above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the monitoring of Section 2.1 D.1.b, above, is not conducted or if the records of Section 2.1 D.1.c, above, are not maintained.

d. To assure compliance with the limits in Sections 2.1 D.3.a.i(B) and ii(B), above, the Permittee shall conduct monthly monitoring of the hours of operation of the plywood sanding operation **(ID No. ES-BS)** and the tongue and groove sander **(ID No. ES-TGS)**. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The records shall include:
   i. The hours of operation of each source for each calendar month; and
   ii. The hours of operation of each source for the consecutive 12-month period ending with the calendar month.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the monitoring is not conducted or if the records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the 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 shall be clearly identified.

E. Wood residual/bark-fired boiler (ID No. ES-B1) equipped with a propane/natural gas-fired sander dust burner, an overfire air (OFA) system, and one associated multicyclone (ID No. CD-MC) in series with one venturi scrubber (ID No. CD-SC).

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	*Firing natural gas and/or propane* 0.33 pounds per million Btu heat input	15A NCAC 2D .0503
	POS – firing Wood residual/bark only or in combination with natural gas/ propane See Section 2.1.E.2.a	15A NCAC 2D .0504
	Best Available Control Technology 31.00 pounds per hour	15A NCAC 2D .0530
	Compliance Assurance Monitoring	15A NCAC 2D .0614
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Odorous emissions	**State-Enforceable Only** See Section 2.2 A.2	15A NCAC 2D .1806
Hazardous Air Pollutants	See Section 2.1.E.7.a	15A NCAC 2D .1109 (Case-by-Case MACT)
VOCs, PM, NOx, SO_2, CO, and CO_2e	**PSD Tracking Condition** See Section 2.2 D "Multiple Emission Sources"	15A NCAC 2D .0530(u)

1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas/propane that are discharged from this emission source **(ID No. ES-B1)** into the atmosphere shall not exceed 0.33 pounds per million Btu heat input.

Testing [15A NCAC 2Q .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 limits given in Section 2.1 E.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for particulate emissions from the firing of natural gas/propane in this source **(ID No. ES-B1)**.

d. When firing any amount of wood or bark in this source **(ID No. ES-B1)**, the Permittee shall comply with the monitoring, recordkeeping, and reporting requirements in Sections 2.1 E. 2. c, d, e and f, below.

2. 15A NCAC 2D .0504: PARTICULATES FROM WOODBURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from this emission source **(ID No. ES-B1)** shall not exceed an allowable emission rate as calculated by the following equation:

$$E_c = \frac{(0.34 \times Q_W) + (0.33 \times Q_O)}{Q_t}$$

Where:
Ec = Emission limit (pounds per million Btu)
Qw = Actual wood heat input rate (million Btu per hour)
Qo = Actual other fuel heat input rate (million Btu per hour)
Qt = Qw + Qo

Testing [15A NCAC 2Q .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 limits given in Section 2.1 E.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504.

Monitoring [15A NCAC 2Q .0508(f)]

c. Particulate matter emissions from this emission source **(ID No. ES-B1)** shall be controlled by one multicyclone **(ID No. CD-MC)** in series with one venturi scrubber **(ID No. CD-SC)**. To assure compliance, the Permittee shall perform calibration of all associated monitoring equipment, 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 shall include the following:
   i. A monthly external visual inspection of the system ductwork and multicyclone for leaks; and
   ii. An annual internal inspection (for each 12 month period from the initial inspection) of the venturi scrubber and multicyclone for structural integrity. In addition, as a minimum, the annual internal inspection of the venturi scrubber shall include the following:
      (A) An inspection of the spray nozzles for clogging and corrosion damage; and
      (B) Cleaning of all associated monitoring equipment (e.g. flow and pressure drop meters).

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504 if the venturi scrubber, multicyclone, and ductwork are not inspected and maintained.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of inspection 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. The results of any maintenance performed on the scrubber and multicyclone; and
iv. Any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on the venturi scrubber and/or multicyclone.
f. 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 shall be clearly identified.

3. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this emission source **(ID No. ES-B1)** 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 2Q .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 limits given in Section 2.1 E.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the combustion of wood in this emission source **(ID No. ES-B1)**.

4. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from this boiler **(ID No. ES-B1)** 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 2Q .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 limits given in Section 2.1 E.4.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 2Q .0508(f)]

c. To assure compliance, once a day the Permittee shall observe the emission points of this source for any visible emissions above normal. The daily observation shall be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semiannual period. If visible emissions from this source are observed to be above normal, the Permittee shall either:
   i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 E.4.a, above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring 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 observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the 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 shall be clearly identified.

5. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The boiler **(ID No. ES-B1)** shall not discharge particulate matter emissions into the atmosphere in excess of the Best Available Control Technology (BACT) limit of 31.00 pounds per hour.

Testing [15A NCAC 2Q .0508(f)]

b. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit in Section 2.1 E.5.a, above, once per permit term by testing the boiler (**ID No. ES-B1**) for particulate matter emissions in accordance with General Condition JJ, and a testing protocol approved by the DAQ. This testing shall be completed, and the associated results submitted to DAQ, at least 9 months prior to the expiration date of this permit unless an alternate date is approved by the DAQ. The following conditions shall apply during testing:
   i. The boiler shall operate at a minimum of 90 percent of maximum operating conditions or at a level representative of average load over the previous twelve months during stack testing to determine compliance with the maximum allowable emission rate.
   ii. If testing is conducted at average boiler load, supporting documentation shall be available to the DAQ at the time of testing and provided as part of the final test report.

   If the results of this test indicate emissions above the limit given in Section 2.1 E.5.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. To ensure compliance with the emission limit of Section 2.1 E.5.a, above, the Permittee shall conduct the monitoring and recordkeeping requirements in Sections 2.1 E.2.c and d, above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the monitoring requirements in Section 2.1 E.2.c, above, are not performed or if the records required pursuant to Section 2.1 E.2.d, above, are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

d. The Permittee shall submit a summary report of the 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 shall be clearly identified.

e. Pursuant to 15A NCAC 2D .0530(u), because the Permittee relied on projected actual emissions for the purposes of demonstrating that the modifications to boiler (**ID No. ES-B1**) and associates systems (Application No. 9600058.12E, Air Permit No. 09268T14) 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).

6. 15A NCAC 2D .0614: COMPLIANCE ASSURANCE MONITORING

Applicability [15A NCAC 2D .0614 and 40 CFR § 64.2]

a. For boiler **(ID No. ES-B1)**, the Permittee shall comply with 40 CFR Part 64 and 15A NCAC 2D .0614 and shall ensure that this source complies with the particulate emission limits of 15A NCAC 2D .0504 and 15A NCAC 2D .0530 by complying with Section 2.1 E.6 of this permit.

Control Requirements/Parameter ranges [15A NCAC 2Q .0508(f)]

b. Particulate emissions from the boiler shall be controlled by the associated multicyclone **(ID No. CD-MC)** and venturi scrubber **(ID No. CD-SC)**. In addition, the Permittee shall maintain a *3-hour average water injection rate* into the venturi scrubber equal to or greater than the value established during the most recent compliance testing of boiler **(ID No. ES-B1)** conducted to demonstrate compliance with 15A NCAC 2D .0530 pursuant to Section 2.1 E.5.b, above, that has been approved by the SSCB of DAQ.

Monitoring [15A NCAC 2Q .0508(f)]

c. **For visible emissions:** The Permittee shall perform the monitoring requirements of Section 2.1 E.4.c, above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0614 if the monitoring requirements of Section 2.1 E.4.c, above, are not performed.

d. **For particulate emissions:** The Permittee shall perform the monitoring requirements of Sections 2.1 E.6.d.i through iii, below. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0614 if the monitoring and recordkeeping requirements of Sections 2.1 E.6.d.i through iii, below, are not performed.
   i. The Permittee shall perform the monitoring requirements of Section 2.1 E.2.c, above;
   ii. The Permittee shall monitor the water injection rate into the venturi scrubber at least once every 15 minutes and calculate an average value of each parameter for each 3-hour boiler operating period via an electronic continuous parametric monitoring system (CPMS) that notifies the operator of any out-of-range values; and
   iii. The Permittee shall install, maintain, operate and calibrate the CPMS as recommended by the monitoring equipment manufacturer.

e. **For excursions:** In the event of an excursion the Permittee shall take appropriate action to correct the excursion as soon as practicable. Further, if the venturi scrubber operates under conditions qualifying as an excursion for more than 5 percent of the operational time of boiler (**ID No. ES-B1**) during a consecutive 6-month period, then the Permittee shall develop a Quality Improvement Plan (QIP) in accordance with 40 CFR §64.8. For the purposes of this permit condition excursions are defined as follows:
   i. If visible emissions are observed to be above normal as cited in 2.1 E.4.c then an excursion has occurred.
   ii. If a 3-hour average water injection rate into the venturi scrubber is less than the value established as per Section 2.1 E.6.b above then an excursion has occurred.

Recordkeeping [15A NCAC 2Q .0508(f)]

f. The results of monitoring, inspections, maintenance and calibrations conducted pursuant to Sections 2.1 E.6.c and d, above, 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 the differential pressure drop and water injection rate monitoring, noting any excursions along with any actions taken to correct the differential pressure drop or water injection rate;
   iii. The results of any inspections or maintenance performed on the venturi scrubber or CPMS; and
   iv. Any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0614 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f), 40 CFR 60.9]

g. The Permittee shall submit a summary report of the 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 shall 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 a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

7. 15A NCAC 2D .1109: 112(j) CASE-BY-CASE MACT for BOILERS and PROCESS HEATERS

a. Emissions of the following regulated pollutants shall not exceed the emissions limits listed below for the affected wood residual/bark-fired boiler **(ID No. ES-B1)**:

Regulated Pollutant(s)	Emission Limit(s)
Total Selected Metals (TSM) *TSM is defined as the following: arsenic, beryllium, cadmium, chromium, lead, nickel, and selenium. [Manganese shall not be included in the determination of TSM since the facility submitted a health-based compliance demonstration for manganese as part of the 112(j) permit application.]*	3.00 E-04 lb/MMBtu for green wood* *5.00 E-04 lb/MMBtu for dry wood**
Mercury (Hg)	5.00 E-06 lb/MMBtu
Hydrogen Chloride (HCl)	0.02 lb/MMBtu
Carbon Monoxide (CO)	2174 ppmvd, corrected to 7% O_2 [3 - (1 hour) run average] or 699 ppmvd, corrected to 7% O_2 (30-day average)

* To determine the applicable TSM emission limit for various mixtures of green and dry wood, use the following equation: *TSM Limit (lb/MMBtu) = 3.00E-04 lb/MMBtu * (wt% of green wood in fuel mix) + 5.00E-04 lb/MMBtu*(wt% of Dry Wood in fuel mix)*

b. **Compliance Dates**

i. The initial compliance date for these emission limitations and associated monitoring, recordkeeping, and reporting requirements is **May 17, 2013** (extended one year to **May 17, 2014**). These conditions need not be included on the annual compliance certification until after the initial compliance date. These limits apply except for periods of startup, shutdown, and malfunction. The Permittee shall follow the procedures in 15A NCAC 2D .0535 for any excess emissions that occur during periods of startup, shutdown, or malfunction. The Permittee shall comply with the TSM, Hg, and HCl limits in this Section by conducting performance testing and establishing maximum fuel input levels or by conducting fuel analysis to demonstrate that the emission rates of these pollutants are below the applicable limits. Compliance with the CO limitation shall be demonstrated through periodic stack testing or continuous emissions monitoring.
ii. The Permittee shall comply with this CAA §112(j) standard until **May 19, 2019**. The initial

compliance date for the applicable CAA §112(d) standard for ‘‘National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters” is **May 20, 2019**.

Operating Standards

c. If the Permittee demonstrates compliance with the Total Selected Metals (TSM) and/or Mercury (Hg) limitations using performance testing, the Permittee shall maintain the venturi scrubber’s minimum pressure drop or liquid flow-rate at or above the operating levels, adjusted for variability, established during the most recent performance test that demonstrated compliance with the applicable emission limit in Section 2.1 E.7.a above.

d. If the Permittee demonstrates compliance with the Hydrogen Chloride (HCl) limitation using performance testing, the Permittee shall maintain the venturi scrubber’s effluent pH and pressure drop or liquid flow-rate at or above the operating levels, adjusted for variability, established during the most recent performance test that demonstrated compliance with the applicable emission limit in Section 2.1 E.7.a above.

e. If the Permittee demonstrates compliance with the TSM, Hg and/or HCl limitation using fuel analysis, the Permittee shall maintain the fuel type or fuel mixture such that the emission rates calculated according to the procedures in Section 2.1 E.7.l. are less than the applicable emission limits.

f. During the periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain the boiler, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the Permittee reduce emissions from the above emission source to the greatest extent which is consistent with safety and good air pollution control practices.

Testing [15A NCAC 2Q .0508(f)]

g. Initial Testing Requirement: TSM, Hg, HCl and CO: If the Permittee demonstrates compliance with the emission limits in Section 2.1.E.7.a. using performance testing, the Permittee shall conduct an initial compliance test, as applicable, within 180 days of the initial compliance date, in accordance with a testing protocol approved by the NC DAQ unless the NC DAQ – Stationary Source Compliance Branch (SSCB) approves a previously conducted performance test as an equivalent compliance demonstration. Testing shall be performed in accordance with General Condition JJ. Performance tests may not be conducted during periods of startup, shutdown, or malfunction. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if the required tests are not conducted, or if the results of the emissions tests exceed the limits in Section 2.1 E.7.a. above.

h. The Permittee shall use performance test results to establish operating parameters, as applicable, in accordance with Table 6-1:

Table 6-1. Operating Parameters Established by Performance Testing

Control Device	Pollutant(s)	Requirements for Performance Test
Venturi Scrubber	Hg and/or TSM	1. Collect pressure drop or liquid flow rate data every 15 minutes during the entire period of the performance test; and 2. Determine the average pressure drop or liquid flow rate for each individual test run in the 3-run performance test by computing the average of all the 15-minute readings taken during each test run.
Venturi Scrubber	HCl	1. Collect pH and pressure drop or liquid flow rate data every 15 minutes during the entire period of the performance test; and, 2. Determine the average pH and pressure drop or liquid flow rate for each individual test run in the 3-run performance test by computing the average of all the 15-minute readings taken during each test run.

i. Periodic Testing: TSM, Hg, HCl and CO - The Permittee shall conduct all applicable performance tests on an annual basis, unless it meets the requirements listed in i. through iii. below. Annual performance tests, if required, shall be completed between 10 and 12 months after the previous performance test.
   i. The Permittee may conduct performance tests less often for a given pollutant if the performance tests for at least 3 consecutive years show compliance with the emission limit. In this case, the Permittee need not conduct a performance test for that pollutant for the next 2 years, but shall conduct a performance test during the third year and no more than 36 months after the previous performance test.
   ii. If the affected boiler or process heater continues to meet the emission limit, the Permittee may conduct performance tests every third year, but each such performance test shall be conducted no more than 36 months after the previous performance test.
   iii. If a performance test shows noncompliance with an emission limit, the Permittee shall conduct annual performance tests for that pollutant until all performance tests over consecutive 3-year period show compliance.

   The Permittee shall report the results of performance test within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for the affected sources have not changed or provide documentation of revised operating parameters.

j. <u>Initial Fuel Analysis Requirement:</u> TSM, Hg and HCl – If the Permittee demonstrates compliance with the emission limits in Section 2.1.E.7.a using performance testing, the Permittee shall conduct an initial fuel analysis to determine emission rates and establishing required operating limits within 180 days of the initial compliance date. The fuel analyses shall be conducted according to the following procedures:
   i. Develop and submit a site-specific fuel analysis plan to the NC DAQ – SSCB for review and approval no later than 60 days before the date that the Permittee plans to demonstrate compliance. The plan shall include the following information:
      A. The identification of all fuel types anticipated to be burned in each affected boiler or process heater.
      B. For each fuel type, identification of whether the fuel analysis will be conducted by the Permittee or a fuel supplier.
      C. For each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if the procedures are different from paragraph c. or d. below. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types.
      D. For each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of TSM, Hg and/or HCl, as applicable.
   ii. Obtain, at a minimum, three composite fuel samples for each fuel type according to the following procedures, or according to the procedures in Table 8-1 below:
      A. If sampling from a belt (or screw) feeder, collect fuel samples as follows:
         1. Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum two pounds of sample. Collect all the material (fines and coarse) in the full cross-section. Transfer the sample to a clean plastic bag.
         2. Each composite sample will consist of a minimum of three samples collected at approximately equal intervals during the testing period.
      B. If sampling from a fuel pile or truck, collect fuel samples according as follows:
         1. For each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile.
         2. At each sampling site, dig into the pile to a depth of 18 inches. Insert a clean flat square shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling.
      C. Transfer all samples to a clean plastic bag for further processing.
   iii. Prepare each composite sample according to the procedures in paragraphs A. through G. below:
      A. Thoroughly mix and pour the entire composite sample over a clean plastic sheet.
      B. Break sample pieces larger than 3 inches into smaller sizes.
      C. Make a pie shape with the entire composite sample and subdivide it into four equal parts.

D. Separate one of the quarter samples as the first subset.
E. If this subset is too large for grinding, repeat the procedure in paragraph iii. above with the quarter sample and obtain a one-quarter subset from this sample.
F. Grind the sample in a mill.
G. Use the procedure in paragraph C. above to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

k. Determine the concentration of pollutants in the fuel (i.e. - TSM, Hg or HCl, as applicable) in units of lbs/MMBtu of each composite sample for each fuel type according to the procedures in Table 8-1:

Table 8-1 Fuel Analysis Requirement

Pollutant(s)	Task	Method
Hg, TSM and/or HCl	Collect Fuel Samples	• Procedure in paragraph c. above; or, • ASTM D2234-00, D2234M-03 (for coal) (IBR, see 40 CFR 63.14(b)); or, • ASTM D6323-98 (2003) (for biomass) (IBR, see 40 CFR 63.14(b)).
	Prepare Composited Fuel Samples	• SW-846-3050B (for solid samples); or, • SW-846-3020A (for liquid samples); or, • ASTM D2013-04 (for coal) (IBR, see 40 CFR 63.14(b)); or, • ASTM D5198-92 (2003) (for biomass) (IBR, see 40 CFR 63.14(b)).
	Determine Heat Content	• ASTM D5865-04 (for coal) (IBR, see 40 CFR 63.14(b)); or, • ASTM E711-87 (for biomass) (IBR, see 40 CFR 63.14(b)).
	Determine Moisture Content	• ASTM D3137-03 (IBR, see 40 CFR 63.14(b)); or, • ASTM E871-82 (1998) (IBR, see 40 CFR 63.14(b)).
Hg	Measure Hg Concentration in Sample	• ASTM D6722-01 (for coal) (IBR, see 40 CFR 63.14(b)); or, • SW-846-7471A (for solid samples); or, • SW-846-7470A (for liquid samples).
	Convert Concentration into lbs/MMBtu	Method 19 F-factor methodology in 40 CFR 60, Appendix A
TSM	Measure TSM Concentration in Sample	• SW-846-6010B or ASTM D6357-04 (for arsenic, beryllium, cadmium, chromium, lead, manganese, and nickel for all solid fuels); and, • ASTM D4606-03 (for selenium in coal) (IBR, see 40 CFR 63.14(b)); or, • ASTM E885-88 (1996) (for biomass) (IBR, see 40 CFR 63.14(b)).
	Convert Concentration into lbs/MMBtu	Method 19 F-factor methodology in 40 CFR 60, Appendix A
HCl	Measure Cl Concentration in Sample	• SW-846-9250 or ASTM D6721-01 (for coal); or, • ASTM E776-87 (1996) (for biomass) (IBR, see 40 CFR 63.14(b)).
	Convert Concentration into lbs/MMBtu HCl	Method 19 F-factor methodology in 40 CFR 60, Appendix A

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if the required initial fuel analyses are not performed, or if the emission rate according to Section 2.1 E.7.l determined exceeds the applicable limit in Section 2.1 E.7.a.

l. Periodic Fuel Analysis Requirements: TSM, Hg and HCl - If the Permittee demonstrates compliance using fuel analysis, the Permittee shall conduct a fuel analysis for each type of fuel burned no later than 5 years after the previous fuel analysis. The Permittee shall report the results of fuel analyses within 60 days after the completion of the fuel analyses. This report should also verify that the operating limits for

your affected source have not changed or provide documentation of revised operating parameters. The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if the required periodic fuel analyses are not performed, or if the emission rate determined according to Section 2.1.E.7.n exceeds the limit in Section 2.1 E.7.a.

m. Initial Compliance Requirements: TSM, HCL and Hg - If the Permittee demonstrates compliance through performance testing, the Permittee shall establish each site-specific operating limit that applies according to the requirements in Section 2.1 E.7.d and Section 2.1.E.7.j.ii, as applicable. The Permittee shall also conduct fuel analyses according to Section 2.1 E.7.i and establish maximum fuel pollutant input levels according to Section 2.1.E.7.k., as applicable.

i. Establish the maximum Hg fuel input level ($Mercury_{input}$), maximum chlorine (Cl) fuel input level (Cl_{input}), and maximum TSM fuel input level (TSM_{input}) during the initial performance testing, as applicable, using the procedures provided below.

A. Determine the fuel type or fuel mixture that can be burned in the boiler or process heater with the highest content of TSM, Hg or Cl.

B. During the compliance demonstration, determine the fraction of total heat input for each fuel burned (Q_i) based on the fuel mixture that has the highest content of TSM, Hg or Cl, and the average TSM, Hg or Cl concentration of each fuel type burned.

C. Establish maximum fuel input levels using equations 7 through 9.

$$Mercury_{input} = \sum_{i=1}^{n} \left[(Hg_i)(Q_i) \right] \quad \text{(Eq. 7)}$$

$$TSM_{input} = \sum_{i=1}^{n} \left[(TSM_i)(Q_i) \right] \quad \text{(Eq. 8)}$$

$$Cl_{input} = \sum_{i=1}^{n} \left[(Cl_i)(Q_i) \right] \quad \text{(Eq. 9)}$$

Where:

$Mercury_{input}$	=	Maximum amount of mercury entering the boiler or process heater through fuels burned in lbs/MMBtu.
TSM_{input}	=	Maximum amount of TSM entering the boiler or process heater through fuels burned in lbs/MMBtu.
Cl_{input}	=	Maximum amount of chlorine entering the boiler or process heater through fuels burned in lbs/MMBtu.
Hg_i	=	Arithmetic average concentration of mercury in fuel type, i, determined by fuel analysis, in lbs/MMBtu.
TSM_i	=	Arithmetic average concentration of TSM in fuel type, i, determined by fuel analysis, in lbs/MMBtu.
Cl_i	=	Arithmetic average concentration of chlorine in fuel type, i, determined by fuel analysis, in lbs/MMBtu.
Qi	=	Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If multiple fuel types are not fired during the performance testing, insert a value of "1" for Q_i.
n	=	Number of different fuel types burned in the boiler or process heater for the mixture that has the highest content of the applicable pollutant.

ii. Establish parameter operating limits according to the following procedures:

A. For a wet scrubber, establish the minimum scrubber effluent pH and liquid flowrate or pressure drop during the three-run performance test. If the Permittee conducts separate performance tests

for TSM, HCl, and Hg emissions, the Permittee shall establish one set of minimum scrubber effluent pH and liquid flowrate or pressure drop operating limits, as follows:

1. The minimum scrubber effluent pH operating limit shall be established during the HCl performance test.
2. The minimum liquid flowrate or pressure drop operating limits shall be the highest minimum values established during any of the performance tests.

n. Ongoing Compliance Requirements: TSM, Hg and HCl - If the Permittee demonstrates compliance using fuel analysis, the emission rate calculated for the affected boiler or process heater using Equations 11 through 13 shall be less than the applicable emission limit.

$$Mercury = \sum_{i=1}^{n}\left[\left(Hg_{i90}\right)\left(Q_i\right)\right] \quad \text{(Eq. 11)}$$

$$TSM = \sum_{i=1}^{n}\left[\left(TSM_{i90}\right)\left(Q_i\right)\right] \quad \text{(Eq. 12)}$$

$$HCl = \sum_{i=1}^{n}\left[\left(Cl_{i90}\right)\left(Q_i\right)(1.028)\right] \quad \text{(Eq. 13)}$$

Where:

Mercury	=	Mercury emission rate from the boiler or process heater in lbs/MMBtu.
TSM	=	TSM emission rate from the boiler or process heater in lbs/MMBtu.
HCl	=	HCl emission rate from the boiler or process heater in lbs/MMBtu.
Hg_{i90}	=	90th percentile confidence level concentration of mercury in fuel, i, in lbs/MMBtu as calculated according to Eq. 14.
TSM_{i90}	=	90th percentile confidence level concentration of TSM in fuel, i, in lbs/MMBtu as calculated according to Eq. 14.
Cl_{i90}	=	90th percentile confidence level concentration of chlorine in fuel, i, in lbs/MMBtu as calculated according to Eq. 14.
Q_i	=	Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If the affected source does not burn multiple fuel types, insert a value of "1" for Q_i.
n	=	Number of different fuel types burned in the affected source for the mixture that has the highest content of the applicable pollutant.
1.028	=	Molecular weight ratio of HCl to chlorine.

The Permittee must determine the 90th percentile concentration of the composite samples analyzed for each fuel type using the one-sided z-statistic test described in Equation 14.

$$P_{90} = \text{mean} + (\text{SD} \times t) \quad \text{(Eq. 14)}$$

Where:

P_{90}	=	90th percentile confidence level pollutant concentration, in units of lbs/MMBtu.
mean	=	Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed, in units of lbs/MMBtu

SD	=	Standard deviation of the pollutant concentration in the fuel samples analyzed, in units of lbs/MMBtu
t	=	t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if an emission rate determined above exceeds the applicable limit in Section 2.1 E.7.a.

Monitoring [15A NCAC 2Q .0508(f)]

o. The Permittee shall install, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide (CO) and oxygen according to the procedures listed in i. through viii. below only if the Permittee elects to demonstrate compliance with the CO limit using the 30-day rolling average CO limit above in Section 2.1.E.7.a. The CO and oxygen shall be monitored at the same location at the outlet of the boiler (**ID No. ES-B1**).
   i. Each CEMS shall be installed, operated, and maintained according to the applicable procedures under Performance Specification (PS) 3 or 4A of 40 CFR 60, Appendix B.
   ii. Conduct a performance evaluation of each CEMS according to the requirements in 40 CFR 63.8 and according to PS 4A of 40 CFR 60, Appendix B.
   iii. Each CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
   iv. The CEMS data shall be reduced as specified in 40 CFR 63.8(g)(2).
   v. The Permittee shall calculate and record a 30-day rolling average emission rate on a daily basis. A new 30-day rolling average emission rate is calculated as the average of all of the hourly CO emission data for the preceding 30 operating days.
   vi. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), monitor continuously (or collect data at all required intervals) at all times that the affected source is operating.
   vii. For purposes of calculating data averages, the Permittee may not use data recorded during periods of monitoring malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities, or when the boiler or process heater is operating at less than 50 percent of its rated capacity. The Permittee shall use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.
   viii. A 30-day rolling average emission rate above the applicable emission limitation shall constitute a violation of the standard.

   The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if the requirements of this Section 2.1 E.7.m. are not complied with or any 30-day rolling average emission rate of CO is above the applicable CO emission standards in Section 2.1 E.7.a above.

p. For **each operating limit that requires the use of a CMS**, the Permittee shall install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures listed below.
   i. The CPMS shall complete a minimum of one cycle of operation for each successive 15-minute period. A valid hour of data shall have a minimum of four successive cycles of operation.
   ii. Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), conduct all monitoring in continuous operation at all times that the affected unit is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
   iii. For purposes of calculating data averages, the Permittee may not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control

activities. The Permittee shall use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

iv. Determine the 3-hour block average of all recorded readings, except as provided in paragraph iii. above.

v. Record the results of each inspection, calibration, and validation check.

vi. Operation above the established maximum or below the established minimum operating limits shall constitute a violation of established operating limits.

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if the Permittee does not install, operate, and maintain each CPMS as detailed in the requirements above.

q. For **each operating limit that requires the use of a flow measurement device**, the Permittee shall meet the requirements listed below:

i. Locate the flow sensor and other necessary equipment in a position that provides a representative flow.

ii. Use a flow sensor with a measurement sensitivity of 2 percent of the flow rate.

iii. Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

iv. Conduct a flow sensor calibration check at least semiannually.

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if the Permittee does not install, operate, and maintain the flow measurement device as detailed in the requirements above.

r. For **each operating limit that requires the use of a pressure measurement device**, the Permittee shall meet the requirements in paragraph n. above, in addition to the following requirements:

i. Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure.

ii. Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

iii. Use a gauge with a minimum tolerance of 1.27 centimeters of water or a transducer with a minimum tolerance of 1 percent of the pressure range.

iv. Check pressure tap pluggage daily.

v. Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

vi. Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if the Permittee does not install, operate, and maintain the pressure measurement device as detailed in the requirements above.

s. For **each operating limit that requires the use of a pH measurement device**, the Permittee shall meet the requirements in paragraph n. above, in addition to the following requirements:

i. Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.

ii. Ensure the sample is properly mixed and representative of the fluid to be measured.

iii. Check the pH meter's calibration on at least two points every 8 hours of process operation.

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if the Permittee does not install, operate, and maintain the pH measurement device as detailed in the requirements above.

t. The Permittee shall maintain records of the type and amount of all fuels burned in each affected source during the reporting period to demonstrate that:

i. All fuel types and mixtures of fuels burned would result in TSM, HCl and Hg emissions that are lower than the applicable emission limit for each pollutant (if the facility demonstrates compliance using fuel analysis); or

ii. All fuel types and mixtures of fuels burned would result in lower fuel input of TSM, Cl and Hg than the maximum values calculated during the last performance tests (if the facility demonstrates compliance through performance testing).

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if the fuel types burned result in emission rates that exceed the applicable emission limits in Section 2.1 E.7.a.

<u>Recordkeeping</u> [15A NCAC 2Q .0508(f)]

u. The Permittee shall maintain copy of each notification and report required by this standard, including all

documentation supporting any Notification of Compliance Status.

v. The Permittee shall maintain records of performance tests, fuel analyses, or other compliance demonstrations and CMS performance evaluations.

w. **For each required CEMS and CPMS**, the Permittee shall maintain the following records:
   i. All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
   ii. A record of each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);
   iii. All CMS calibration checks; and,
   iv. All adjustments and maintenance performed on CMS;

x. The Permittee shall maintain records of all monitoring data and calculated averages for applicable operating limits such as pressure drop, carbon monoxide, and pH used to demonstrate compliance with the limits above in Section 2.1 E.7.a.

y. The Permittee shall maintain the following records:
   i. Records of monthly fuel use by each affected source, including the type(s) of fuel and amount(s) used. The Permittee may use steam production data to estimate monthly fuel consumption.
   ii. A copy of all calculations and supporting documentation of maximum Hg, Cl and TSM fuel input that were conducted to demonstrate compliance with and associated limit <u>through performance testing</u>. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum Hg, Cl and TSM fuel input.
   iii. A copy of all calculations and supporting documentation of TSM, HCl and Hg emission rates that were conducted to demonstrate compliance with and associated limit <u>through fuel analysis</u>. Supporting documentation should include results of any fuel analyses and basis for the estimates of emission rates.

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1109 if the Permittee does not maintain records as detailed in the Section 2.1 E.7.r-v requirements above.

<u>Reporting</u> [15A NCAC 2Q .0508(f)]

z. <u>Notification of Compliance Status</u> - The Permittee shall submit a Notification of Compliance Status that meets the requirements of 40 CFR 63.9(h)(2)(ii) before the close of business on the 60th day following the completion of the final required performance test and/or other initial compliance demonstration. The Notification of Compliance Status report shall contain the following information, as applicable:
   i. A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.
   ii. Summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits.
   iii. Identification of whether the facility is complying with the PM emission limit or the alternative TSM emission limit.
   iv. Identification of whether the facility demonstrated compliance with each applicable emission limit through performance testing or fuel analysis.
   v. Identification of whether the facility plans to demonstrate compliance by emissions averaging.
   vi. A certification signed by the Responsible Official that the facility has met all applicable emission limits and work practice standards.
   vii. A summary of the CO emissions monitoring data, as applicable, and the maximum CO emission levels recorded during the performance test.

aa. <u>Semiannual Summary Report</u> - The Permittee shall submit a summary report by 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 first summary report shall be required on **July 30, 2013**. The report shall include the following:
   i. Company name, address and facility ID number;
   ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth,

accuracy, and completeness of the content of the report;

iii. Date of report and beginning and ending dates of the reporting period;

iv. The total fuel use by each affected source for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure;

v. A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable;

vi. A signed statement indicating that no new types of fuel were fired in the affected sources.

F. One diesel-fired emergency fire water pump (ID No. ES-P3)

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 heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
NMHC + NOX, CO, and PM	See Section 2.1.F.3	15A NCAC 2D .0524 [40 CFR Part 60, Subpart IIII]
Hazardous Air Pollutants	Comply with NSPS Subpart IIII	15A NCAC 2D .1111 [40 CFR Part 63, Subpart ZZZZ]
Odorous emissions	**State-Enforceable Only** See Section 2.2 A.2	15A NCAC 2D .1806

1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this emission source (**ID No. ES-P3**) 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 2Q .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 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from this emission source (**ID No. ES-P3**) while burning diesel fuel.

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

a. Visible emissions from this emission source (**ID No. ES-P3**) 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 2Q .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 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from this emission source (**ID No. ES-P3**) while burning diesel fuel.

3. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart IIII)

A) Emergency fire pump with diesel fired engine with ratings of 174 hp (ID No. ES-P3)

Applicability [15A NCAC 2Q .0508(f), 40 CFR § 60.4200(a)(2)(ii)]

a. For this engine, the Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," including Subpart A "General Provisions."

General Provisions [15A NCAC 2Q .0508(f)]

b. Pursuant to 40 CFR § 60 .4218, The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 8 of 40 CFR 60 Subpart IIII.

Emission Standards [15A NCAC 2Q .0508(f)]

c. The Permittee shall comply with the emission standards in the Table below:

Pollutants	NMHC + NOX	CO	PM
*Emissions measured in: g/KW-hr (g/HP-hr)	4.0 (3.0)	5.0 (3.7)	0.30 (0.22)

[40 CFR § 60.4205(c) and Table 4 of NSPS subpart IIII (*The above emissions limits are for a stationary fire pump engine with a HP range of 100 to 175 and 2010 and later model years)]

Fuel Requirements [15A NCAC 2Q .0508(f)]

d. The Permittee shall use diesel fuel with the following content:
   i. Sulfur Content (for NR diesel fuel) = 15 ppm = 0.0015% weight,
   ii. Cetane index = 40 (minimum); OR Aromatic content = 35% volume (maximum)
   [40 CFR § 60.4207(b) and 40 CFR § 40 80.510(b)]

Testing [15A NCAC 2Q .0508(f)]

e. 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 limits given in Section 2.1.F. 3. A) c., and d., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

Monitoring [15A NCAC 2Q .0508(f)]

f. The engine has the following monitoring requirements:
   i. The engines shall be equipped with a non-resettable hour meter prior to startup.
   [40 CFR § 60.4209(a)]

Compliance Requirements [15A NCAC 2Q .0508(b)]

g. The Permittee shall:
   i. operate and maintain the engines and control devices according to the manufacturer's emission related-written instructions over the entire life of the engine;
   ii. change only those emission-related settings that are permitted by the manufacturer; and
   iii. meet the requirements of 40 CFR 89 and/or 1068 as applicable.
   [40 CFR § 60.4206 and 40 CFR § 60.4211(a)]

h. The Permittee shall comply with the emission standards in Section 2.1 F. 3. A) c., of this permit, by purchasing an engine certified to meet the emission standards in Section 2.1 F. 3. A) c., of this permit.

The engine shall be installed and configured according to the manufacturer's emission-related specifications.
[40 CFR § 60.4211(c)]

i. In order for the engine to be considered an emergency stationary ICE 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 below, is prohibited.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) The Permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraphs i(2)(i) through (iii) of this condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (i)(3) of this condition counts as part of the 100 hours per calendar year allowed by this paragraph (i)(2).

(i) Emergency stationary ICE 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 ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE 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 60.17), 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.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE 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 (i)(2) of this condition. Except as provided in paragraph (i)(3)(i) of this condition, the 50 hours per calendar year for non- emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40CFR 60.4211(f)]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, if the requirements in Section 2.1.F.3.A) f., through i., above, are not met.

Recordkeeping [15A NCAC 2Q .0508(f)]

j. To assure compliance, the Permittee shall perform inspections and maintenance on the engine as recommended by the manufacturer per 40 CFR 60.4206 and 40 CFR 60.4211(a). The results of inspection 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. the results of any maintenance performed on the engine;
   iv. any variance from manufacturer's recommendations, if any, and corrections made;
   v. the hours of operation of the engine in emergency and non-emergency service. [40 CFR § 60.4214(b)]
   vi. the Permittee must provide documentation from the manufacturer that the engine is certified to meet the emission standards in Section 2.1.F.3.A) c., above. [40 CFR § 4214(a)(2)(iii)]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

k. 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 with the requirements of this permit shall be clearly identified.

4. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR Part 63, Subpart ZZZZ)

Applicability [40 CFR § 63. 63.6585, 6590(a)(2)(ii)]

a. For this emission source **(ID No. ES-P3)** (stationary RICE with a site rating of equal to or less than 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 Emission Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

Stationary RICE subject to Regulations under 40 CFR Part 60 [15 A NCAC 2Q. 0508(f)]

b. Pursuant to 40 CFR 63.6590(c)(6), this source must meet the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A by meeting the requirements of 40 CFR part 60 subpart IIII. No further requirements apply for these engines under 40 CFR 63 Subpart ZZZZ and Subpart A.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111., If the requirements in Section 2.1 F. 4. A) a. and b., are not met.

G. Three wood residuals direct-fired double track lumber kilns (ID Nos. ES-LK4, ES-LK5, and ES-LK6)

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 emission rate in pounds per hour P = Process weight rate in tons per hour	15A NCAC 2D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
VOC (Volatile Organic Compounds)	**Best Available Control Technology** • -3.8 lb VOC/MBF (as carbon) • Good Work Practices	15A NCAC 2D .0530
Odorous emissions	**State-Enforceable Only** See Section 2.2 A.2	15A NCAC 2D .1806
Hazardous Air Pollutants	**Maximum Achievable Control Technology*** See Section 2.2 C.1	15A NCAC 2D .1111 [40 CFR 63, Subpart DDDD]

* The lumber kilns are subject to MACT Subpart DDDD, but have no requirements.

1. 15A NCAC 2D .0515: PARTICULATE FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these emission sources **(ID Nos. ES-LK4, ES-LK5, and ES-LK6)** shall not exceed an allowable emission rate as calculated by the following equations:

For $P \leq 30$, $E = 4.10 \times (P)^{0.67}$
For $P > 30$, $E = 55.0 \times (P)^{0.11} - 40$

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 2Q .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 limits given in Section 2.1 G.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for particulate emissions from the firing of wood residuals in these emission sources (**ID Nos. ES-LK4, ES-LK5, and ES-LK6).**

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

a. Emissions of sulfur dioxide from these emission sources **(ID Nos. ES-LK4, ES-LK5, and ES-LK6)** 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 2Q .0508(f)]

a. 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 limits given in Section 2.1 G.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

b. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of wood residual in these emission sources (**ID Nos. ES-LK4, ES-LK5, and ES-LK6).**

3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these emission sources (**ID Nos. ES-LK4, ES-LK5, and ES-LK6)** 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 2Q .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 limits given in Section 2.1 G.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of wood residual in these emission sources (**ID Nos. ES-LK4, ES-LK5, and ES-LK6).**

4. 15A NCAC 2D .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 20, 2013. These requirements include:
   i. The Permittee shall not emit to atmosphere more than 3.8 pounds of volatile organic compound (VOC) (as carbon) per thousand board feet of lumber dried from the three lumber kilns (**ID Nos. ES-LK4, 5 and 6**).
   ii. The three lumber kilns (**ID Nos. ES-LK4, 5, and 6)** shall properly be operated and maintained consistent with good work practices as defined in iii., and iv. below.
   iii. The Permittee shall maintain a 12-month rolling average moisture content at or above 12 percent to be measured at the planer mill;
   iv. The Permittee shall within 180 days of start-up of the continuous kilns (**ID Nos. ES-LK4 or ES-LK6**), whichever is later, submit for approval to DAQ site specific maintenance plans for proper kiln maintenance.

Testing [15A NCAC 2Q .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 limits given in Sections 2.1 G.4.a.i, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. To assure compliance with the work practices described above, the Permittee shall calculate the 12-month rolling average moisture content for each calendar month and report the 12 month rolling average to the NCDAQ as part of the semi-annual Title V reporting requirement.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the monitoring is not conducted or if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

d. The Permittee shall submit a summary report of the 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 shall be clearly identified.

H. Chip-N-Saw plant woodworking operations including:

- **Big chipper (ID No. ES-BC) and one associated simple cyclone (ID No. CD-C46);**
- **Trim conveyance (ID No. ES-TC) to Big chipper;**
- **One pneumatic sawdust conveying system (ID No. ES-SCS) transporting dry wood residuals to either:**
  - **One of two lumber kiln fuel storage silo via one associated simple cyclone (ID No. CD-C44S) or one simple cyclone (ID No. CD-47); or**
  - **One sawdust bin (ID No. F-SWB) via one associated simple cyclone (ID No. CD-C42)**
- **One planer mill conveying system (ID No. ES-PMCS) and associated bagfilter (ID No. CD-BH43) (existing) OR associated simple cyclone (ID No. CD-43A) in series with a bagfilter (ID No. CD-BH43A) (new);**
- **One planer shavings conveying system (ID No. ES-PSCS) and one associated simple cyclone (ID No. CD-C44A) (existing) OR one associated simple cyclone (ID No. CD-C44A) (new); and**
- **One Chip-N-Saw line (ID No. ES-CNS) (replacement Chip-N-Saw will include associated bagfilter (ID No. CD-BH49)); and**
- **One flat screen (ID No. F-FS) screening chips from sawdust**

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 2D .0512
Visible emissions	20 percent opacity	15A NCAC 2D .0521

1. 15A NCAC 2D .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 2Q .0508(f)]

b. Particulate matter emissions from these sources (**ID Nos. ES-BC, ES-SCS, ES-PSCS ES-PMCS, and ES-CNS)** shall be controlled by simple cyclones **(ID Nos. CD-C42, CD-C44A, CD-C44S, CD-C46, and CD-47)** and bagfilters **(ID Nos. CD-BH43, CD-BH48, and CD-BH49)** as described in Section 2.1 H, above. To assure 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, cyclones, and bagfilters noting the structural integrity; and
   ii. Annual (for each 12 month period following the initial inspection) internal inspection of the bagfilters noting the structural integrity and the condition of the filters.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0512 if the ductwork, cyclones, and bagfilters are not inspected and maintained.

Recordkeeping [15A NCAC 2Q .0508(f)]

c. The results of inspection and maintenance for the ductwork, cyclones, and bagfilters 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 2D .0512 if these records are not maintained.

Reporting [15A NCAC 2Q .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 shall be clearly identified.

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

a. Visible emissions from these emission sources (**ID Nos. ES-46, ES-SCS, ES-PMCS, ES-PSCS, and ES-CNS**) 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 2Q .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 limits given in Section 2.1 H.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 2Q .0508(f)]

c. To assure compliance, once per semiannual period the Permittee shall observe the emission points of these sources for any visible emissions above normal. The semiannual observation shall be made for each semiannual period of the calendar year period to ensure compliance with this requirement. If visible emissions from a source are observed to be above normal, the Permittee shall either:

i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or

ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 H.2.a, above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring 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 observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and

iii. The results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the 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 shall be clearly identified.

I. One diesel-fired emergency water pump (ID No. ES-P2).

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 heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
NMHC + NOX, CO, and PM	See Section 2.1.I.3.	15A NCAC 2D .0524 [40 CFR Part 60, Subpart IIII]
Hazardous Air Pollutants	Comply with NSPS Subpart IIII	15A NCAC 2D .1111 [40 CFR Part 63, Subpart ZZZZ]
Odorous emissions	**State-Enforceable Only** See Section 2.2 A.2	15A NCAC 2D .1806

1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this emission source (**ID No. ES-P2**) 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 2Q .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 I.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from this emission source (**ID No. ES-P2**) while burning diesel fuel.

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

a. Visible emissions from this emission source (**ID No. ES-P2**) 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 2Q .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 I.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from this emission source (**ID No. ES-P2**) while burning diesel fuel.

3. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR Part 60, Subpart IIII)

A) Emergency fire pump with diesel fired engine with ratings of 200 hp (ID No. ES-P2)

Applicability [15A NCAC 2Q .0508(f), 40 CFR § 60.4200(a)(2)(ii)]

a. For the this engine, the Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart IIII, Standards of

Performance for Stationary Compression Ignition Internal Combustion Engines," including Subpart A "General Provisions."

General Provisions [15A NCAC 2Q .0508(f)]

b. Pursuant to 40 CFR § 60 .4218, The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 8 of 40 CFR 60 Subpart IIII.

Emission Standards [15A NCAC 2Q .0508(f)]

c. The Permittee shall comply with the emission standards in the Table below:

Pollutants	NMHC + NOX	CO	PM
*Emissions measured in: g/KW-hr (g/HP-hr)	4.0 (3.0)		0.20 (0.15)

[40 CFR § 60.4205(c) and Table 4 of NSPS subpart IIII (*The above emissions limits are for a stationary fire pump engine with a HP range of 175 to 300 and 2009 and later model years)]

Fuel Requirements [15A NCAC 2Q .0508(f)]

d. The Permittee shall use diesel fuel with the following content:
   i. Sulfur Content (for NR diesel fuel) = 15 ppm = 0.0015% weight,
   ii. Sulfur Content (for LM diesel fuel) = 500 ppm = 0.05% weight, and
   iii. Cetane index or aromatic content:
   iv. Cetane index = 40 (minimum); OR Aromatic content = 35% volume (maximum)
   [40 CFR § 60.4207(b) and 40 CFR § 40 80.510(b)]

Testing [15A NCAC 2Q .0508(f)]

e. 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 limits given in Section 2.1.I. 3. A) c., and d., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

Monitoring [15A NCAC 2Q .0508(f)]

f. The engine has the following monitoring requirements:
   i. The engines shall be equipped with a non-resettable hour meter prior to startup.
   [40 CFR § 60.4209(a)]

Compliance Requirements [15A NCAC 2Q .0508(b)]

g. The Permittee shall:
   i. operate and maintain the engines and control devices according to the manufacturer's emission related-written instructions over the entire life of the engine;
   ii. change only those emission-related settings that are permitted by the manufacturer; and
   iii. meet the requirements of 40 CFR 89 and/or 1068 as applicable.
   [40 CFR § 60.4206 and 40 CFR § 60.4211(a)]

h. The Permittee shall comply with the emission standards in Section 2.1 I. 3. A) c., of this permit, by purchasing an engine certified to meet the emission standards in Section 2.1 I. 3. A) c., of this permit. The engine shall be installed and configured according to the manufacturer's emission-related specifications.
   [40 CFR § 60.4211(c)]

i. In order for the engine to be considered an emergency stationary ICE 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 below, is prohibited.
   (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
   (2) The Permittee may operate the emergency stationary ICE for any combination of the purposes

specified in paragraphs i(2)(i) through (iii) of this condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (i)(3) of this condition counts as part of the 100 hours per calendar year allowed by this paragraph (i)(2).

(i) Emergency stationary ICE 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 ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE 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 60.17), 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.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE 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 (i)(2) of this condition. Except as provided in paragraph (i)(3)(i) of this condition, the 50 hours per calendar year for non- emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40CFR 60.4211(f)]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, if the requirements in Section 2.1.I.3.A) f., through i., above, are not met.

<u>Recordkeeping</u> [15A NCAC 2Q .0508(f)]

j. To assure compliance, the Permittee shall perform inspections and maintenance on the engine as recommended by the manufacturer per 40 CFR 60.4206 and 40 CFR 60.4211(a). The results of inspection 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. the results of any maintenance performed on the engine;
iv. any variance from manufacturer's recommendations, if any, and corrections made;
v. the hours of operation of the engine in emergency and non-emergency service.
[40 CFR § 60.4214(b)]
vi. the Permittee must provide documentation from the manufacturer that the engine is certified to meet the emission standards in Section 2.1.I.3.A) c., above.
[40 CFR § 4214(a)(2)(iii)]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

k. 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 with the requirements of this permit shall be clearly identified.

4. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (40 CFR Part 63, Subpart ZZZZ)

Applicability [40 CFR § 63. 63.6585, 6590(a)(2)(ii)]

a. For this emission source **(ID No. ES-P2)** (stationary RICE with a site rating of equal to or less than 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 Emission Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

Stationary RICE subject to Regulations under 40 CFR Part 60 [15 A NCAC 2Q. 0508(f)]

b. Pursuant to 40 CFR 63.6590(c)(6), this source must meet the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A by meeting the requirements of 40 CFR part 60 subpart IIII. No further requirements apply for these engines under 40 CFR 63 Subpart ZZZZ and Subpart A.
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111., If the requirements in Section 2.1 I. 4. A) a. and b., are not met.

2.2 - Multiple Emission Source(s) Specific Limitations and Conditions

A. Facility-wide sources emitting volatile organic compounds and/or odorous emissions, including:

- **One glue line (ID No. F-GL);**
- **Two plywood presses (ID Nos. F-VP1 and F-VP2);**
- **Four plywood veneer dryers (ID Nos. ES-VD1, ES-VD2, ES-VD3, and ES-VD4);**
- **One edge seal application operation (ID No. F-ES);**
- **Plywood painting operations (ID No. F-PO);**
- **Plywood patching operations (ID No. F-PP);**
- **One boiler (ID No. ES-B1); and**
- **Three lumber kilns (ID Nos. ES-LK4, ES-LK5, and ES-LK6)**
- **Log soaking vats (ID No. F-LSV)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odorous emissions	**State-Enforceable Only** Odorous emissions shall be controlled	15A NCAC 2D .1806

STATE-ENFORCEABLE ONLY

1. 15A NCAC 2D .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. Facility-wide sources emitting toxic air pollutants

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic Air Pollutants (TAP)	**State-Enforceable Only** Toxic Permit Emission Rates	15A NCAC 2Q .0711

STATE-ENFORCEABLE ONLY

1. 15A NCAC 2Q .0711: EMISSION RATES REQUIRING A PERMIT

a. For each TAP listed in 15A NCAC 2Q .0711 that does not have a permitted emission rate pursuant to 15A NCAC 2D .1100, the facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions from all sources at the facility (excluding those sources exempt under 15A NCAC 2Q .0702, those sources subject to 15A NCAC 2D .1109 (Case-by-Case MACT) and those sources subject to 15A NCAC 2D .1111 (40 CFR 63)) including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TPER listed in 15A NCAC 2Q .0711 without first obtaining an air permit to construct or operate.

C. Facility-wide affected source subject to 40 CFR Part 63, Subpart DDDD

The affected source is defined in Section 2.2 C.1.b, below. Those emission sources with notification requirements, applicable emission limits, control options, and/or work practice standards include:

- **Two plywood presses (ID Nos. F-VP1 and F-VP2);**
- **Four plywood veneer dryers (ID Nos. ES-VD1, ES-VD2, ES-VD3, and ES-VD4);**
- **Plywood glue line (ID No. F-GL);**
- **Group 1 miscellaneous coating operations, including:**
  - **One edge seal application operation (ID No. F-ES);**
  - **Plywood painting operations (ID No. F-PO);**
- **Plywood patching operations (ID No. F-PP); and**
- **Three lumber kilns (ID Nos. ES-LK4, ES-LK5, and ES-LK6)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Hazardous Air Pollutants	Maximum Achievable Control Technology	15A NCAC 2D .1111 [40 CFR 63, Subpart DDDD]

1. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY [40 CFR Part 63, Subpart DDDD - NESHAP for Plywood and Composite Wood Products (PCWP)]

Applicability [40 CFR §§63.2231, .2233(b) and .2252]

a. The affected source (see definition below) is subject to Environmental Management Commission Standard 15A NCAC 2D .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." The Permittee shall comply with the applicable requirements therein on and after October 1, 2007.
The process units that are not subject to the compliance options or work practice requirements of 40 CFR Part 63, Subpart DDDD (e.g. the lumber kilns) are not subject to any requirements under 40 CFR Part 63, Subpart Subparts A or DDDD other than the initial notification requirements of §63.9(b).

Definitions [40 CFR §§63.2232(b) and .2292]

b. For the purpose of this permit condition, the definitions and nomenclature cited in 40 CFR §63.2292 shall apply. Some of the definitions and nomenclature cited in 40 CFR §63.2292 are reproduced below for ease of reference:
   i. ***Affected Source*** means the collection of dryers, refiners, blenders, formers, presses, board coolers, and other process units associated with the manufacturing of PCWP. The affected source includes, but is not limited to, green end operations, refining, drying operations (including any combustion unit exhaust stream routinely used to direct fire process units), resin preparation, blending and forming operations, pressing and board cooling operations, and miscellaneous finishing operations (such as sanding, sawing, patching, edge sealing, and other finishing operations not subject to other NESHAP). The affected source also includes onsite storage and preparation of raw materials used in the manufacture of plywood and/or composite wood products, such as resins; onsite wastewater treatment operations specifically associated with plywood and composite wood products manufacturing; and miscellaneous coating operations. The affected source includes lumber kilns at PCWP manufacturing facilities.
   ii. ***Deviation*** means any instance in which an affected source, or an owner or operator of such a source:
      1. Fails to meet any requirement or obligation established by this subpart including, but not limited to, any compliance option, operating requirement, or work practice requirement;

2. Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart, and that is included in the operating permit for any affected source required to obtain such a permit; or
3. Fails to meet any compliance option, operating requirement, or work practice requirement in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart. A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

iii. ***Green rotary dryer*** means a rotary dryer that dries wood particles or fibers with an inlet moisture content of greater than 30 percent (by weight, dry basis) at any dryer inlet temperature or operates with an inlet temperature of greater than 600 °F with any inlet moisture content. A *green rotary dryer* is a process unit.

iv. ***Group 1 miscellaneous coating operations*** means application of edge seals, nail lines, logo (or other information) paint, shelving edge fillers, trademark/gradestamp inks, and wood putty patches to plywood and composite wood products (except kiln-dried lumber) on the same site where the plywood and composite wood products are manufactured. Group 1 miscellaneous coating operations also include application of synthetic patches to plywood at new affected sources.

v. ***Miscellaneous coating operations*** means application of any of the following to plywood or composite wood products: edge seals, moisture sealants, anti-skid coatings, company logos, trademark or grade stamps, nail lines, synthetic patches, wood patches, wood putty, concrete forming oils, glues for veneer composing, and shelving edge fillers. Miscellaneous coating operations also include the application of primer to oriented strandboard siding that occurs at the same site as oriented strandboard manufacture and application of asphalt, clay slurry, or titanium dioxide coatings to fiberboard at the same site of fiberboard manufacture.

vi. ***Non-HAP coating*** means a coating with HAP contents below 0.1 percent by mass for Occupational Safety and Health Administration-defined carcinogens as specified in 29 CFR 1910.1200(d)(4), and below 1.0 percent by mass for other HAP compounds.

vii. ***Oriented strandboard (OSB)*** means a composite panel produced from thin wood strands cut from whole logs, formed into resinated layers (with the grain of strands in one layer oriented perpendicular to the strands in adjacent layers), and pressed.

viii. ***Plywood*** means a panel product consisting of layers of wood veneers hot pressed together with resin. Plywood includes panel products made by hot pressing (with resin) veneers to a substrate such as particleboard, medium density fiberboard, or lumber. Plywood products may be flat or curved.

ix. ***Plywood and composite wood products (PCWP) manufacturing facility*** means a facility that manufactures plywood and/or composite wood products by bonding wood material (fibers, particles, strands, veneers, etc.) or agricultural fiber, generally with resin under heat and pressure, to form a panel, engineered wood product, or other product defined in §63.2292. Plywood and composite wood products manufacturing facilities also include facilities that manufacture dry veneer and lumber kilns located at any facility. Plywood and composite wood products include, but are not limited to, plywood, veneer, particleboard, molded particleboard, OSB, hardboard, fiberboard, medium density fiberboard, laminated strand lumber, laminated veneer lumber, wood I-joists, kiln-dried lumber, and glue-laminated beams.

x. ***Reconstituted wood product press*** means a press, including (if applicable) the press unloader, that presses a resinated mat of wood fibers, particles, or strands between hot platens or hot rollers to compact and set the mat into a panel by simultaneous application of heat and pressure. Reconstituted wood product presses are used in the manufacture of hardboard, medium density fiberboard, particleboard, and OSB. Extruders are not considered to be reconstituted wood product presses. A *reconstituted wood product press* is a process unit.

xi. ***Rotary strand dryer*** means a rotary dryer operated by applying heat and used to reduce the moisture of wood strands used in the manufacture of oriented strandboard, laminated strand lumber, or other wood strand-based products. A *rotary strand dryer* is a process unit.

xii. ***Softwood veneer dryer*** means a dryer that removes excess moisture from veneer by conveying the veneer through a heated medium, generally on rollers, belts, cables, or wire mesh. Softwood veneer

dryers are used to dry veneer with greater than or equal to 30 percent softwood species on an annual volume basis. Veneer kilns that operate as batch units, veneer dryers heated by radio frequency or microwaves that are used to redry veneer, and veneer redryers (defined elsewhere in this section) that are heated by conventional means are not considered to be softwood veneer dryers. A *softwood veneer dryer* is a process unit.

xiii. ***Total hazardous air pollutant emissions*** means, for purposes of this subpart, the sum of the emissions of the following six compounds: acetaldehyde, acrolein, formaldehyde, methanol, phenol, and propionaldehyde.

Testing [15A NCAC 2Q .0508(f) and 40 CFR §63.2262]

c. If emissions testing is required, the testing shall be performed in accordance with 40 CFR §63.2262 and General Condition JJ. If the results of this test are above the limit(s) given in Section 2.2 C.1.e.i(B), below, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 and 40 CFR Part 63, Subpart DDDD.

General Requirements [40 CFR §63.2250]

d. The Permittee shall:
   i. Develop and maintain a written startup, shutdown, and malfunction (SSM) plan according to the provisions in 40 CFR §63.6(e)(3). These provisions include:
      (A) The SSM Plan shall describe, in detail, procedures for operating and maintaining the source during SSM periods and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with 40 CFR Part 63, Subpart DDDD.
      (B) The SSM Plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation.
      (C) Operating in accordance with the SSM Plan should ensure that, at all times, the Permittee operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions.
      (D) The Permittee shall promptly submit a copy of any SSM Plan (or a portion thereof) which is maintained at the affected source or in the possession of the Permittee to DAQ within 30 calendar days of a written request.
      (E) The Permittee may periodically revise the SSM Plan for the affected source as necessary to comply with 40 CFR Part 63, Subpart DDDD or reflect changes in equipment or procedures at the affected source without prior approval by the EPA or DAQ. However, each such revision to a SSM Plan shall be reported in the next semiannual compliance report.
      (F) The Permittee shall revise the SSM Plan to address or more adequately addresses an event that meets the characteristics of a malfunction but is not included in the current SSM Plan within 45 days after occurrence of an event that the SSM Plan does not address or does not adequately address.
      (G) If the Permittee makes any revision to the SSM Plan which alters the scope of the activities at the source which are deemed to be a SSM event, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in 40 CFR Part 63, Subpart DDDD, the revised SSM Plan shall not take effect until after the Permittee has provided a written notice describing the revision to DAQ.
   ii. Operate the affected source in compliance with the applicable compliance options, operating requirements, and work practice standards as listed in Sections 2.2 C.1.e and f, below, except during SSM periods, periods falling under the routine control device maintenance exemption (RCDME) as described in Section 2.2 C.1.g, below, and/or periods of source non-operation;
   iii. Operate and maintain the affected source, including control and monitoring equipment, according to the provisions of 40 CFR §63.6(e)(1)(i). Specifically:
      (A) 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 at all times (including SSM periods).
      (B) The Permittee shall correct any malfunctions as soon as practicable after occurrence.

(C) During an SSM period the general duty to minimize emissions requires that the Permittee reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. However, the Permittee is not required to achieve the otherwise applicable limit(s) of 40 CFR Part 63, Subpart DDDD or to make any further efforts to reduce emissions if the otherwise applicable limit(s) of 40 CFR Part 63, Subpart DDDD is (are) achieved.

Control Requirements [40 CFR §§63.2240, .2269, .2270 and .2271 and Tables 1B and 2 of Subpart DDDD]

e. The plywood veneer dryers **(ID Nos. ES-VD1, ES-VD2, ES-VD3, and ES-VD4)** are subject to specific emissions control requirements under 40 CFR Part 63, Subpart DDDD. Specifically:

i. **For the plywood veneer dryers (ID Nos. ES-VD1, ES-VD2, ES-VD3, and ES-VD4):** The plywood veneer dryers qualify as softwood veneer dryers, as defined in Section 2.2 C.1.b, above. The Permittee has opted to comply with the control requirements of 40 CFR Part 63, Subpart DDDD via the add-on control system compliance option allowed under 40 CFR §63.2240(b). Therefore, the Permittee shall comply with option (1) of Tables 1B and 2 of 40 CFR Part 63, Subpart DDDD. Specifically:

(A) Total hazardous air pollutant (HAP) emissions, as defined in Section 2.2 C.1.b, above, from the plywood veneer dryers shall be controlled via the regenerative thermal oxidizer (RTO) **(ID No. CD-VD)**, except as allowed under Section 2.2 C.1.d.ii, above.

(B) The Permittee shall reduce emissions of total HAP [measured as total hydrocarbon – THC (as carbon)] from the heated zones of the plywood veneer dryers by at least 90 percent.

(C) To ensure compliance with Section 2.2 C.1.e.i(B), above, the Permittee shall maintain the firebox combustion temperatures (3-hour block average) in the RTO **(ID No. CD-VD)** at or above the minimum combustion temperatures established during the most recent associated compliance test. The Permittee most recently conducted PCWP MACT compliance testing on CD-VD on January 7, 2010. That testing indicated reductions in total HAP emissions of 95 percent while the average chamber combustion temperature of the three minimum 15-minute firebox temperatures monitored during the test runs was 1,579 degrees Fahrenheit (ºF).

The Permittee may administratively amend the 3-hour block average firebox temperature requirements of Section 2.2 C.1.e.i(C) upon final approval by the Stationary Source Compliance Branch (SSCB) of DAQ of any future testing conducted on the plywood veneer dryers and the associated RTO.

Work Practice Requirements [40 CFR §§63.2241, and .2271 and Table 3 of Subpart DDDD]

f. The plywood veneer dryers **(ID Nos. ES-VD1, ES-VD2, ES-VD3, and ES-VD4)** and the group 1 miscellaneous coating operations **(ID Nos. F-ES, F-PO, and F-PP)** are subject to specific work practice requirements under 40 CFR Part 63, Subpart DDDD. Specifically:

i. **Plywood veneer dryers (ID No. ES-VD1 through ES-VD4):** The Permittee shall minimize any fugitive emissions from the veneer dryer doors (via proper maintenance procedures) and minimize any fugitive emissions from the green end of the veneer dryers (via proper balancing of the heated zone exhausts) in accordance with a written inspection and maintenance (I&M) plan that has been approved by DAQ.

ii. **Group 1 miscellaneous coating operations (ID Nos. F-ES, F-PO, and F-PP):** The edge seal application operation, paint spray booth, dry ply line, and plywood painting/patching operations qualify as group 1 miscellaneous coating operations, as defined in Section 2.2 C.1.b, above. The Permittee shall use only non-HAP coatings, as defined in Section 2.2 C.1.b, above, in these sources.

Routine Control Device Maintenance Exemption [40 CFR §63.2251]

g. The Permittee submitted a request for a routine control device maintenance exemption (RCDME) to DAQ for the RTO **(ID No. CD-VD)** controlling emissions from the plywood veneer dryers **(ID Nos. ES-VD1 through ES-VD4)**. The RCDME is incorporated by reference into, and attached to, this permit in accordance with 40 CFR §63.2251(c) (see Attachment 2 to this permit). The applicable compliance option and operating requirements of 40 CFR Part 63, Subpart DDDD for the plywood veneer dryers do not apply during periods covered under the RCDME except that:

i. The Permittee shall minimize emissions to the greatest extent possible during the RCDME periods;
ii. The Permittee shall schedule startup and shutdown of emission control systems during periods of non-operation of process equipment to the extent practical; and
iii. Those time periods covered under the RCDME shall not exceed 0.5 percent of the annual operating uptime for the plywood veneer dryers.

Monitoring [40 CFR §§63.2269, .2270, and .2271 and Tables 7 and 8 of Subpart DDDD]

h. The Permittee shall comply with the monitoring requirements of Sections 2.2 C.1.h.i through iv, below. If the Permittee does not conduct this monitoring then the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 and 40 CFR Part 63, Subpart DDDD.

i. **Plywood veneer dryers (ID No. ES-VD1 through ES-VD4):**

(A) The Permittee shall install, operate, and maintain at all times a continuous parameter monitoring system (CPMS) to monitor the combustion temperature in the associated RTO **(ID No. CD-VD)** that:

(1) Is capable of completing a minimum of one cycle of operation (i.e. sampling, analyzing, and recording) for each successive 15-minute period;
(2) If a chart recorder is used, it shall have a sensitivity with minor divisions not more than 20 ºF;
(3) Utilizes a temperature sensor with a minimum accuracy of 4 ºF or 0.75 percent of the temperature value, whichever is larger; and
(4) Has that temperature sensor located in a position that provides a representative temperature.

(B) The Permittee shall inspect all CPMS components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion at least quarterly.

(C) The Permittee shall perform a CPMS electronic calibration in accordance with the equipment manufacturer's instructions and follow-up with a sensor validation check in which a separate temperature sensor placed nearby the CPMS sensor yields a reading within 30 ºF of the CPMS sensor reading at least semiannually. As an alternative to this CPMS electronic calibration and sensor validation check, the Permittee may install a new temperature sensor.

(D) The Permittee shall conduct a CPMS electronic calibration and sensor validation check within 24 hours of restarting any of the plywood veneer dryers after any period during which the temperature sensor exceeds the manufacturer's specified maximum operating temperature range. As an alternative to this CPMS electronic calibration and sensor validation check, the Permittee may install a new temperature sensor.

(E) The Permittee shall monitor, collect, and handle CPMS data as follows:

(1) The Permittee shall continuously monitor the combustion temperatures of the RTO **(ID No. CD-VD)** except when the plywood veneer dryers are:

(a) Not operating;
(b) Experiencing an SSM event;
(c) Operating under the RCDME; or
(d) Operating during a CPMS malfunction and associated repairs, during required CPMS quality assurance or control activities (e.g. calibration checks and zero and span adjustments), or during a CPMS "out-of-control" period. "Out-of-control" periods are described in 40 CFR §63.8(c)(7) as periods when the zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the applicable CD specification in the performance specification; or periods when the CPMS fails a performance test audit (e.g., electronic calibration or temperature sensor validation check), relative accuracy audit, relative accuracy test audit, or linearity test audit.

Any period for which the CPMS is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(2) The Permittee shall determine the 3-hour block average of all valid recorded combustion temperature data after every 3 hour period of operation for which the Permittee has recorded at least 75 percent of the required combustion temperature readings as valid data. The data recorded in accordance with Section 2.2 C.1.h.i(E), above, is considered valid data.

(F) The Permittee shall follow the I&M plan for the proper maintenance procedures and heated zone exhaust balancing procedures to minimize fugitive emissions from the veneer dryers' doors and the green end.

ii. **Group 1 miscellaneous coating operations (ID Nos. F-ES, F-PO, and F-PP):** The Permittee shall conduct monthly monitoring of the coating materials utilized in the group 1 miscellaneous coating operations (i.e. the edge seal application operation, paint spray booth, dry ply line, and plywood painting/patching operations) to ensure that only non-HAP coatings, as defined in Section 2.2 C.1.b, above, are utilized in those sources.

Recordkeeping [40 CFR §§63.2282 and .2283]

i. The Permittee shall comply with the recordkeeping requirements of Sections 2.2 C.1.i.i and ii, below. If the Permittee does not conduct this recordkeeping then the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 and 40 CFR Part 63, Subpart DDDD.

i. The Permittee shall maintain:

(A) A copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart DDDD, including any documentation supporting the Initial Notification or Notification of Compliance Status, as required by 40 CFR §63.10(b)(2)(xiv);

(B) A copy of the current SSM Plan and, if applicable, each previous (i.e., superseded) version of the SSM Plan, as required by 40 CFR §63.6(e)(3)(iii) through (v);

(C) Documentation of any approved RCDME;

(D) The records of performance tests and performance evaluations, as required by 40 CFR §63.10(b)(2)(viii); and

(E) Records of monitoring required to show continuous compliance with each applicable compliance option, operating requirement, and work practice requirement, as described in Sections 2.2 C.1.h.i through iv, above.

ii. The Permittee shall maintain the records described in Section 2.2 C.1.i.i(A) through (E), above:

(A) In a form suitable and readily available for expeditious review as specified in 40 CFR §63.10(b)(1) (i.e. in written or electronic format)

(B) For at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records shall be maintained on site for at least the first 2 years of this 5 year period but may be maintained offsite for the remainder of the 5 year period.

Notifications [40 CFR §§63.2280]

j. The Permittee shall comply with the notification requirements of Sections 2.2 C.1.j.i through v, below. If the Permittee does not submit the required notifications then the Permittee shall be deemed in noncompliance with 40 CFR Part 63, Subpart DDDD and 15A NCAC 2D .1111. The Permittee shall submit:

i. Notification of intent to conduct a required performance test at least 60 days prior to the scheduled performance test and of any change in performance test date as required in 40 CFR §§63.7(b) and 63.9(e). The Permittee shall submit a copy of the performance test report to DAQ within 30 days of completion of the performance test.

ii. Notification of intent to conduct a performance evaluation of the continuous parameter monitoring system (CPMS) during a required performance test at least 60 days prior to the scheduled performance test as required in 40 CFR §§63.8(e) and 63.9(g). The Permittee shall submit a performance evaluation test plan to DAQ within 30 days of a written request by DAQ.

iii. Notification of Compliance Status [i.e. for new sources or for those sources in the OSB plant with applicable requirements (e.g. the rotary flake dryers and the OSB press)] as required in 40 CFR §63.9(h)(2)(ii).

iv. Notification of a request for a RCDME pursuant to 40 CFR §63.2251.

v. Notification at least 30 days prior to modifying or replacing the CPMS installed on the RTO **(ID No. CD-VD)** or changing the monitored parameter or the value of the monitored parameter that indicates compliance.

Reporting [40 CFR §§63.2281]

k. The Permittee shall submit the following reports:

i. **Immediate SSM Reports**: The Permittee shall submit an immediate SSM report if a SSM event that causes an exceedance of an applicable emission standard is not handled in accordance with the SSM Plan. The Permittee shall report (by fax or telephone) the actions taken for the SSM event within 2 working days after commencing actions not consistent with the SSM Plan. In addition, the Permittee shall submit the information in 40 CFR §63.10(d)(5)(ii) by letter within 7 working days after the end of the event unless alternative arrangements have been made with DAQ. This information includes:

(A) The name, title, and signature of the owner or operator or other responsible official who is certifying the accuracy of the immediate SSM report;

(B) A description of the SSM event;

(C) The reasons for not following the SSM Plan;

(D) A description of all excess emissions and/or parameter monitoring exceedances which are believed to have occurred; and

(E) A summary of actions taken to minimize emissions during the SSM event.

ii. **Compliance Reports**: The Permittee shall submit semiannual compliance reports 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 semiannual compliance reports shall include the following information:

(A) General information including the company name and address, the date of the report, and the dates defining the period covered by the report.

(B) A statement by a responsible official (with their name, title, and signature) certifying the truth, accuracy, and completeness of the content of the report.

(C) The information in 40 CFR §63.10(d)(5)(i) if the facility experienced a SSM event during the reporting period that resulted in emissions that exceed an emission standard and the Permittee took actions consistent with their SSM Plan. This information includes the number, duration, and brief description of the SSM event(s) and a summary of actions taken to minimize emissions during the SSM event.

(D) Any revision(s) made to the SSM Plan during the reporting period.

(E) The information of 40 CFR §63.2281(c)(5) if the Permittee performs any maintenance on the RTO **(ID No. RTO-VD)** while the RTO is offline and one or more of the veneer dryers **(ID Nos. ES-VD1 through ES-VD3)** is operating. This information includes the date and time that the RTO was shut down, the date and time that the RTO was restarted, identification of which veneer dryers were operating and the number of hours that each veneer dryer operated while the RTO was offline, and a statement of whether or not the RTO maintenance was included in the RCDME. If the maintenance was included in the RCDME then also include the total amount of time that each veneer dryer operated during the semiannual compliance period (SACP) and during the previous SACP, the total amount of time that each veneer dryer operated while the RTO was down for maintenance under the RCDME during the SACP and during the previous SACP, and a computation of the annual percent of veneer dryer operating uptime during which the RTO was offline for routine maintenance, for each veneer dryer, using the following equation:

$$RM_i = \frac{\left[DT_p + DT_c\right]}{\left[PU_{p,i} + PU_{c,i}\right]}$$

Where:

RM_i = Annual percentage of veneer dryer "i" uptime during which the RTO was down for routine maintenance;

$PU_{p,i}$ = Process unit uptime of veneer dryer "i" for the previous SACP;

$PU_{c,i}$ = Process unit uptime of veneer dryer "i" for the current SACP;

DT_p = Control device downtime claimed under the RCDME for the previous SACP; and

DT_c = Control device downtime claimed under the RCDME for the current SACP.

(F) The results of any performance testing conducted on affected sources during the reporting period.

(G) A statement that there were no deviations from the applicable compliance options, operating requirements, or work practice requirements for the affected sources during the reporting period, if applicable.

(H) A statement that there were no periods during which the RTO combustion temperature CPMS was out-of-control, as described in Section 2.2 D.1.h.i(E)(1)(d), above, during the reporting period, if applicable.

(I) The total operating time during the reporting period of each affected source for which the Permittee deviates from the applicable work practice requirements during the reporting period, if applicable, and information on the number, duration, and cause of the deviations (including unknown cause, if applicable) and the corrective actions taken.

(J) The information of 40 CFR §63.2281(e)(1) through (11) for each deviation from the applicable compliance options or operating requirements (including SSM events and periods covered under the RCDME), if applicable. This information includes both general and specific information, as described below:

(1) **General information includes:** the date of the latest continuous parameter monitoring system (CPMS) certification or audit and a brief description of the process units, the CPMS, and any changes in the CPMS or processes since the last semiannual reporting period.

(2) **Specific information includes**, as applicable:

(a) The time, date, and duration of each deviation [including periods during which the CPMS was inoperative (except for low-level and high-level checks) or out-of-control (as described in Section 2.2 D.1.h.i(E)(1)(d), above)];

(b) Descriptions of corrective actions taken;

(c) A statement of whether each deviation occurred during a SSM event, a period covered under the RCDME, or during another period;

(d) A summary of the total duration of the deviation (expressed in units of time and as a percent of the total source operating time) during that reporting period;

(e) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, CPMS problems, control device maintenance, process problems, other known causes, and other unknown causes; and

(f) A summary of the total duration of CPMS downtime (in units of time and as a percent of the total source operating time) during that reporting period.

D. Modified Sources included in Application 9600058.13B:

- **Plywood Debarker (ID No. F-DBPW);**
- **Two plywood presses (ID Nos. F-VP1 and F-VP2);**
- **Four plywood veneer dryers (ID Nos. ES-VD1, ES-VD2, ES-VD3, and ES-VD4); and**
- **Plywood patching operations (ID No. F-PP)**

1. 15A NCAC 2D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS

Recordkeeping [15A NCAC 2Q .0503(f)]

a. Pursuant to 15A NCAC 2D .0530(u), because the Permittee relied on projected actual emissions for the purposes of demonstrating that the replacement of the debarker, modification to the plywood dryers, plywood presses, and plywood patching operations (Application No. 9600058.13B, Air Permit No. 09268T16) would 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 veneer dryers after these modifications.
   i. Based on information received with Application No. 96.00058.14A, normal operation of the veneer dryers resumed in January, 2013. Therefore, these records must be maintained until January 31, 2018.

Reporting [15A NCAC 2Q .0508(f)]

b. 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).

E. Modified Sources included in Application 9600058.16A:

- **Veneer Dryers (ID Nos. ES-VD1 through VD4)**
- **Log vats (ID No. ES-LSV);**
- **Lathes (ID No. IF-LA)**
- **Debarker (ID No. F-DBPW); and**
- **Veneer conditioning chamber (ID No. IS-VCC)**

1. 15A NCAC 2D .0530(u): USE OF PROJECTED ACTUAL EMISSIONS TO AVOID APPLICABILITY OF REQUIREMENTS OF PSD

a. The Permittee has used projected actual emissions to avoid applicability of prevention of significant deterioration requirements pursuant to application 9600058.16A for the Dryer Rebuild project consisting of the modified sources: (ID Nos. ES-VD1 through VD4, ES-LSV, IF-LA, F-DBPW and IS-VCC).

Monitoring/Recordkeeping/Reporting [15A NCAC 2D .0530(u) and 2Q .0308]

b. The Permittee shall perform the following:
   i. The Permittee shall maintain records of annual emissions in tons per year, on a calendar year basis related to the Dryer Rebuild project, for five years following resumption of regular operations after the change is made.
   ii. The Permittee shall submit a report to the director 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-c).
   iii. The Permittee shall make the information documented and maintained under this condition available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).
   iv. The reported actual emissions (post-construction emissions) for each of the five calendar years

will be compared to the projected actual emissions (pre-construction projection) as included below:

Pollutant	Projected Actual Emissions* (tons per year)
PM	49.8
PM_{10}	41.08
$PM_{2.5}$	34.5
VOC	292.0

* These projections are not enforceable limitations. If projected emissions are exceeded, consistent with 15A NCAC 2D .0530, the permit shall include in its annual report an explanation as to why the actual rates exceeded the projection.

SECTION 3 - GENERAL CONDITIONS (version 5.1, 08/03/2017)

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 nine 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)(4)]
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(e)]
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(c)(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(d)(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 1 to Permit No. 09268T24
Georgia-Pacific Wood Products, LLC – Dudley

List of Acronyms

AOS	Alternate 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

ATTACHMENT 2 to Permit No. 09268T24
Georgia-Pacific Wood Products, LLC – Dudley

Routine Control Device Maintenance Exemption for the regenerative thermal oxidizer **(ID No. CD-VD)** associated with the four veneer dryers **(ID Nos. ES-VD1, ES-VD2, ES-VD3 and ES-VD4).**