ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
MICHAEL ABRACZINSKAS
Director

NORTH CAROLINA
Environmental Quality

MM DD 2023

Jeff McMillian
Plant Manager
Arauco North America, Inc.
985 Corinth Rd.
Moncure, North Carolina 27559

SUBJECT: Air Quality Permit No. 03449T58
Facility ID: 1900015
Arauco North America, Inc.
Moncure
Chatham County
Fee Class: Title V
PSD Class: Major

Dear Mr. McMillian:

In accordance with your completed Air Quality Permit Application for a Modification of your Title V permit, we are forwarding herewith Air Quality Permit No. 03449T58 authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been identified as such in the permit. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 4. 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 file a petition for contested case hearing in the North Carolina Office of Administrative Hearings. Information regarding the right, procedure, and time limit for permittees and other persons aggrieved to file such a petition is contained in the attached "Notice Regarding the Right to Contest A Division of Air Quality Permit Decision."

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

143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Chatham County has triggered increment tracking under PSD for PM_{10}, NOx, and SO_2. This modification will result in an increase of 0.08 pounds per hour of PM_{10}.

This Air Quality Permit shall be effective from MM DD, 2023 and shall expire on the earlier of February 28, 2027 or the renewal of Permit No. 03449T53 has been issued or denied. This Air Quality Permit is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Joseph Voelker, at (919) 707-8730 or joseph.voelker@ncdenr.gov.

Sincerely yours,

Mark J. Cuilla, EIT, CPM, Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Brad Akers, EPA Region 4 (permit and review)
Laserfiche (1900015)

NOTICE REGARDING THE RIGHT TO CONTEST A DIVISION OF AIR QUALITY PERMIT DECISION

Right of the Permit Applicant or Permittee to File a Contested Case: Pursuant to NCGS 143-215.108(e), a permit applicant or permittee who is dissatisfied with the Division of Air Quality's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 in the Office of Administrative Hearings within 30 days after the Division notifies the applicant or permittee of its decision. If the applicant or permittee does not file a petition within the required time, the Division's decision on the application is final and is not subject to review. The filing of a petition will stay the Division's decision until resolution of the contested case.

Right of Other Persons Aggrieved to File a Contested Case: Pursuant to NCGS 143-215.108(e1), a person other than an applicant or permittee who is a person aggrieved by the Division's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 within 30 days after the Division provides notice of its decision on a permit application, as provided in NCGS 150B-23(f), or by posting the decision on a publicly available Web site. The filing of a petition under this subsection does not stay the Division's decision except as ordered by the administrative law judge under NCGS 150B-33(b).

General Filing Instructions: A petition for contested case hearing must be in the form of a written petition, conforming to NCGS 150B-23, and filed with the Office of Administrative Hearings, 1711 New Hope Church Road, Raleigh NC, 27609, along with a fee in an amount provided in NCGS 150B-23.2. A petition for contested case hearing form may be obtained upon request from the Office of Administrative Hearings or on its website at https://www.oah.nc.gov/hearings-division/filing/hearing-forms. Additional specific instructions for filing a petition are set forth at 26 NCAC Chapter 03.

Service Instructions: A party filing a contested case is required to serve a copy of the petition, by any means authorized under 26 NCAC 03 .0102, on the process agent for the Department of Environmental Quality:

William F. Lane, General Counsel
North Carolina Department of Environmental Quality
1601 Mail Service Center
Raleigh, North Carolina 27699-1601

If the party filing the petition is a person aggrieved other than the permittee or permit applicant, the party **must also** serve the permittee in accordance with NCGS 150B-23(a).

* * *

Additional information is available at https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case. Please contact the OAH at 984-236-1850 or oah.postmaster@oah.nc.gov with all questions regarding the filing fee and/or the details of the filing process.

Summary of Changes to Permit

The following changes were made to Air Permit No. 03449T57:*

Page No.	Section	Description of Changes
NA	Cover Letter	• Updated permit revision numbers, issue and effective dates, etc.
4	1	• The equipment list was revised to reflect the removal the control devices (CD02, CD04 and CD18) from the MDF board cooler
11	2.1 C	• Table 2.1 C was revised to reflect the removal the control devices (CD02, CD04 and CD18) from the MDF board cooler
12	2.1 C.1	• 02D .0515 condition • Added production rate recordkeeping requirement consistent with current DAQ permitting shell standards for uncontrolled sources. No reporting is required.
13	2.1 C.2	• 02D .0521 condition • Paragraph c was revised as follows: ▪ removed the following language as it has been satisfied: The Permittee shall re-establish "normal" within 30 days after the initial operation of the biofilter **(ID No. CD18)** after the modifications undertaken in application no. 1900015.18A are completed. ▪ Revised language to reflect that there are now multiple emission points associated with the sources identified in Table 2.1 C. ▪ Added the following language; The Permittee shall re-establish "normal" for the sources in Table 2.1 C above within 30 days after the initial operation of the sources in Table 2.1 C above after the modifications undertaken in application no. 1900015.22B are completed.
36	2.2 A.1	• MACT DDDD condition • Removed testing and permit revision requirement at existing Section 2.2 A.1.m.i(A) as it was satisfied by the issuance of permit revision no. T56 issued March 28, 2022. • Substantial revisions to the condition were made in response to the August 13, 2020 amendments to MACT DDDD that were published as a final rule in the Federal Register at 89 FR 49434. Thes include, but are not limited to: ▪ Revising the requirements including the work practices, monitoring recordkeeping and reporting required during startups, shutdowns, and malfunctions ▪ Adding substantial electronic reporting requirements ▪ Expanding temperature sensor validation requirements • Added reference to the Press Hall in Section 2.2 A.1.i. as it is subject to enclosure requirements under MACT DDDD

43	2.2 B.1	• PSD avoidance condition for PM10 and PM2.5 • Removed existing testing condition at Section 2.2 B.1 c.ii as it has already been satisfied. The most recent testing showed an emission rate from the biofilter of 0.29 lb/ODMT. See Table 2 of permit review. The Permittee for conservatism requested the emission factor of 0.51 lb/ODMT in Table 2.2 B.1 to remain unchanged. • Added a footnote (**) to the dryer emission factors in Table 2.2 B.1 to reflect that the factors also now cover the emissions from the uncontrolled board cooler which are expected to have negligible PM emissions. • Added board cooler process rate recordkeeping.
45	2.2 B.2	• 02D .0530 PSD condition • Removed the biofilter as a control technology for the MDF board cooler • No specific testing required for the uncontrolled board cooler given the expected margin of compliance. Future testing may be required if margin of compliance substantially changes.

* This list is not intended to be a detailed record of every change made to the permit but a summary of those changes.

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
03449T58	03449T57	MM DD, 2023*	February 28, 2027**

*The effective date listed above applies only to changes made as a result of this modification. All other terms and conditions of this permit are applicable as of the issuance date.
**This permit shall expire on the earlier of February 28, 2027 or the renewal of Permit No. 03449T53 has been issued or denied.

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

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

Permittee:	**Arauco North America, Inc.**
Facility ID:	**1900015**
Primary SIC Code:	**2493**
NAICS Code:	**321219**
Facility Site Location:	**985 Corinth Road**
City, County, State, Zip:	**Moncure, Chatham County, North Carolina 27559**
Mailing Address:	**985 Corinth Road**
City, State, Zip:	**Moncure, North Carolina 27559**
Application Number:	**1900015.22B**
Complete Application Date:	**July 27, 2022**
Division of Air Quality, Regional Office Address:	**Raleigh Regional Office** **3800 Barrett Drive, Suite 101** **Raleigh, North Carolina 27609**

Permit issued this the DDth day of MM, 2023

Mark J. Cuilla, EIT, CPM, Chief, Air Permitting Section
By Authority of the Environmental Management Commission

Table of Contents

List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
BAE	Baseline Actual Emissions
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CEDRI	Compliance and Emissions Data Reporting Interface
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
CSAPR	Cross-State Air Pollution Rule
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
GHGs	Greenhouse Gases
HAP	Hazardous Air Pollutant
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
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
NSR	New Source Review
OAH	Office of Administrative Hearings
PAE	Projected Actual Emissions
PAL	Plantwide Applicability Limitation
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
tpy	Tons Per Year
VOC	Volatile Organic Compound

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

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

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Material Handling Sources			
7001 or SP-1 **MACT DDDD**	Truck/Rail Chip Handling System, Enclosed	N/A	N/A
7004 or SP-2 **MACT DDDD**	Truck/Rail Sawdust Handling System, Enclosed	N/A	N/A
7010 **MACT DDDD**	Particle Board Mill Truck Dump	N/A	N/A
7012, 7014, 7015, 7029 **MACT DDDD**	Dump bunkers and CL dryer dump	N/A	N/A
7052, 7054, 7055, 7056 **MACT DDDD**	Wood residue bunkers	N/A	N/A
6001, 7002-A, 7002-B, 7002-C, 7002-D **MACT DDDD**	Wood chip piles - Medium Density Fiberboard Mill	N/A	N/A
6003, 7006, 7007, 7022 **MACT DDDD**	Wood Fuel Pad and Boiler Transfers	N/A	N/A
7005-D, 7005-E, 7005-F, 7005-G **MACT DDDD**	Sawdust transport to A-frame	N/A	N/A
7025 **MACT DDDD**	Scale transfer conveyors	N/A	N/A
7019, 7026 **MACT DDDD**	Fiber dump and reject filter bins	N/A	N/A
7027 **MACT DDDD**	Hog fuel hopper	N/A	N/A
7040, 7044, 7046, 7048, 7050 **MACT DDDD**	Particleboard Mill chip transfer	N/A	N/A
SP **MACT DDDD**	Fuel Sawdust and Chip Storage Piles	N/A	N/A
7024 **MACT DDDD**	Particleboard Mill feed bins	N/A	N/A
Medium Density Fiberboard (MDF) Facilities			
ES-01 **PSD** **MACT DDDD**	Refiner	CD01	Refiner Abort Cyclone (66 inches in diameter) [1]
		CD02 in series with CD18	Venturi scrubber Biofilter
		CD14 In series with CD18	Venturi scrubber Biofilter

[1] For operation during startup, shutdown and malfunction only.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-18, ES-19, and ES-20 **PSD BACT** **NSPS Dc** **MACT DDDDD**	Three natural gas-fired hot oil heaters (30.4 million Btu per hour maximum heat input each)	N/A	N/A
ES-02-A*** **PSD BACT** **MACT DDDD**	Energy System consisting of one dry/wet wood/ woodwaste-fired burner (205 million Btu per hour heat input)	CD02-A***	Urea/water injection system
		CD02 In series with CD18	Venturi scrubber Biofilter
		CD14 In series with CD18	Venturi scrubber Biofilter
ES-02-B *** and ES-02-C-1***, ES-02-C-2***, ES-02-D*** **PSD BACT** **MACT DDDD**	Two Stage Dryer System and Three backup natural gas-fired dryer burners (35, 35, and 17 million Btu per hour heat input respectively)	CD02 In series with CD18	Venturi scrubber Biofilter
		CD14 In series with CD18	Venturi scrubber Biofilter
ES-16 **PSD BACT** **MACT DDDD**	MDF Press and Press Hall	CD02 In series with CD18	Venturi scrubber Biofilter
		CD14 In series with CD18	Venturi scrubber Biofilter
ES-06-B **PSD BACT** **MACT DDDD**	MDF Board Cooler	NA	NA
ES-03 **PSD BACT** **MACT DDDD**	Fiber Sifter System	CD03	Fabric Filter (12,290 square feet of filter area)
ES-04 **PSD BACT** **MACT DDDD**	Forming Line Clean-Up System	CD04	Fabric Filter (9,346 square feet of filter area)
ES-05 **PSD BACT** **MACT DDDD**	Mat Reject System	CD05	Fabric Filter (9,346 square feet of filter area)
ES-07 **PSD BACT** **MACT DDDD**	Saw System	CD07	Fabric Filter (6,793 square feet of filter area)
ES-08 **PSD BACT** **MACT DDDD**	Sander System No.1	CD08	Fabric Filter (12,290 square feet of filter area)
ES-09 **PSD BACT** **MACT DDDD**	Recycled Fiber Silo No.1	CD09	Bin Vent Filter (226 square feet of filter area)
ES-10 **PSD BACT** **MACT DDDD**	Sander System No. 2	CD10	Fabric Filter (12,290 square feet of filter area)
ES-12 **PSD BACT** **MACT DDDD**	Sander Dust Silo No. 1	CD12	Bin Vent Filter (226 square feet of filter area)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-13 **PSD BACT** **MACT DDDD**	Dry Sawdust Silo	CD13	Bin Vent Filter (226 square feet of filter area)
ES-15 **PSD BACT** **MACT DDDD**	Recycled Fiber Silo No. 2	CD15	Bin Vent Filter (226 square feet of filter area)
ES-17 **PSD BACT** **MACT DDDD**	Sander Dust Silo No. 2	CD17	Bin Vent Filter (226 square feet of filter area)
ES-21 **PSD BACT** **MACT ZZZZ**	Diesel Fuel-fired Emergency Generator (1592 brake Horsepower output)	N/A	N/A
MDF Moulding Line Operations consisting of:			
ES-M1A*,** **MACT DDDD**	MDF moulding line 1 – moulding zone consisting of rip saw, moulder and sanders	CD-4005** in parallel with CD-5001**	Reverse flow bag filter with 6,918 square feet of surface area Reverse flow bag filter with 6,918 square feet of surface area
ES-M2A** **MACT DDDD**	MDF moulding line 2 – moulding zone consisting of rip saw, moulder and sanders		
ES-M3A** **MACT DDDD**	MDF moulding line 3 – moulding zone consisting of rip saw, moulder and sanders		
ES-M1B* **MACT DDDD**	MDF moulding line 1 - coating and drying zone consisting of spray coater and a natural gas-fired drying oven (two burners, 1.3 million Btu per hour each)	N/A	N/A
ES-M2B** **MACT DDDD**	MDF moulding line 2 - coating and drying zone consisting of spray coater and a natural gas-fired drying oven (two burners, 1.3 million Btu per hour each)	N/A	N/A
ES-M3B** **MACT DDDD**	MDF moulding line 3 - coating and drying zone consisting of spray coater and a natural gas-fired drying oven (two burners, 1.3 million Btu per hour each)	N/A	N/A
ES-MSS1 ** **MACT DDDD**	MDF moulding line shavings silo	CD-MSS1**	Cartridge filter (1,500 square feet of surface area)
“OLD” Particleboard Mill Operations			
3501 **PSD BACT** **MACT DDDD**	Sawdust Rock and Metal Separator	CD-SC CD-3501	High efficiency cyclone - 72 inches in diameter Reverse flow bag filter with 2,410 square feet of surface area
Laminator Mill			
3593 and 3594	Two (2) Short Cycle Laminating Presses	CD-3593	Reverse flow bagfilter (Maximum air-to-cloth ratio of 4.1 ACFM/total filter surface area).
Pr-Heat1 **MACT DDDDD**	Natural gas or No. 2 fuel oil-fired hot oil heater (4.7 million Btu per hour heat input) used with short cycle laminating presses	N/A	N/A

* These emission sources and control devices 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 August 15, 2020. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source pursuant to 15A NCAC 02Q .0515(f).
** These emission sources and control devices are listed as a minor modification per 15A NCAC 02Q .0515 (App. No. 1900015.21B). 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 August 08, 2021. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source pursuant to 15A NCAC 02Q .0515(f).
*** Pursuant to application no. 1900015.22A these emission sources (ID Nos. **ES-02A, ES-02-B, ES-02-C-1, ES-02-C-2, and ES-02-D**) and control device **(ID No. CD-02-A**) are listed as a minor modification per 15A NCAC 02Q .0515. The annual compliance certification as described in General Condition P is required. Unless otherwise notified by DAQ, the affected terms of this permit (excluding the permit shield as described General Condition R) for these emission sources and control device shall become final on August 14, 2022. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate these emission source(s) and/or control device(s) pursuant to 15A NCAC 02Q .0515(f).

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

A. The following Material Handling Sources:

Table 2.1.A.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
7001 or SP-1	Truck/Rail Chip Handling System, Enclosed	N/A	N/A
7004 or SP-2	Truck/Rail Sawdust Handling System, Enclosed	N/A	N/A
7010	Particle Board Mill Truck Dump	N/A	N/A
7012, 7014, 7015, 7029	Dump bunkers and CL dryer dump	N/A	N/A
7052, 7054, 7055, 7056	Wood residue bunkers	N/A	N/A
6001, 7002-A, 7002-B, 7002-C, 7002-D	Wood chip piles - Medium Density Fiberboard Mill	N/A	N/A
6003, 7006, 7007, 7022	Wood Fuel Pad and Boiler Transfers	N/A	N/A
7005-D, 7005-E, 7005-F, 7005-G	Sawdust transport to A-frame	N/A	N/A
7025	Scale transfer conveyors	N/A	N/A
7019, 7026	Fiber dump and reject filter bins	N/A	N/A
7027	Hog fuel hopper	N/A	N/A
7040, 7044, 7046, 7048, 7050	Particleboard Mill chip transfer	N/A	N/A
SP	Fuel Sawdust and Chip Storage Piles	N/A	N/A
7024	Particleboard Mill feed bins	N/A	N/A

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

Pollutant	Limits/Standards	Applicable Regulation
Visible emissions	20 percent opacity	15A NCAC 02D .0521
HAPs	No applicable requirements	15A NCAC 02D .1111
Odors	**State-enforceable only** Odorous emissions must be controlled - See Section 2.2. A.2	15A NCAC 02D .1806

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

a. Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of the test performed exceed the limits given in Section 2.1. A.1.a. (above) for visible emissions, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

c. No monitoring, record keeping, or reporting is required for visible emissions from these emission sources.

B. Medium Density Fiberboard Facilities woodworking operations as presented in Table 2.1.B.

Table 2.1.B.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-03	Fiber Sifter System	CD03	Fabric Filter (12,290 square feet of filter area)
ES-04	Forming Line Clean-Up System	CD04	Fabric Filter (9,346 square feet of filter area)
ES-05	Mat Reject System	CD05	Fabric Filter (9,346 square feet of filter area)
ES-07	Saw System	CD07	Fabric Filter (6,793 square feet of filter area)
ES-08	Sander System No. 1	CD08	Fabric Filter (12,290 square feet of filter area)
ES-09	Recycled Fiber Silo No. 1	CD09	Bin Vent Filter (226 square feet of filter area)
ES-10	Sander System No. 2	CD10	Fabric Filter (12,290 square feet of filter area)
ES-12	Sander Dust Silo No. 1	CD12	Bin Vent Filter (226 square feet of filter area)
ES-13	Dry Sawdust Silo	CD13	Bin Vent Filter (226 square feet of filter area)
ES-15	Recycled Fiber Silo No. 2	CD15	Bin Vent Filter (226 square feet of filter area)
ES-17	Sander Dust Silo No. 2	CD17	Bin Vent Filter (226 square feet of filter area)

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

Pollutant	Limits/Standards	Applicable Regulation
PM	adequate duct work and properly designed collectors	15A NCAC 02D .0512
Visible emissions	20 percent opacity	15A NCAC 02D .0521
HAPs	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products See Section 2.2 A.1	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDD)
Odors	**State-enforceable only** See Section 2.2 A.2	15A NCAC 02D .1806
$PM_{2.5}$, PM_{10}	See Section 2.2 B.1.	15A NCAC 02Q .0317 (PSD Avoidance)
VOCs	Best Available Control Technology See Section 2.2 B.2.	15A NCAC 02D .0530

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

a. The Permittee shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors. In no case shall the ambient air quality standards be exceeded beyond the property line.

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

b. Particulate matter emissions from the MDF wood working operations shall be controlled as presented in **Table 2.1.B.** To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:
   i. monthly external inspection of the ductwork, 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 02D .0512 if the ductwork, cyclones and/or bagfilters are not inspected and maintained.

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

c. The results of inspection and maintenance for the 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 02D .0512 if these records are not maintained.

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

d. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.
e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

a. Visible emissions from the MDF wood working operations **listed in Table 2.1.B.** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

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

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

c. To ensure compliance, once a week the Permittee shall observe the emission points of these sources for any visible emissions above normal. The weekly observations must be made for each week of the calendar year period to ensure compliance with this requirement. 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 02D .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 02D .0521.

Recordkeeping [15A NCAC 02Q .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 02D .0521 if these records are not maintained.

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

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

C. Medium Density Fiberboard Facilities Operations as presented in Table 2.1.C.

Table 2.1.C.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description	Emission Point
ES-01	Refiner	CD01	Refiner Abort Cyclone (66 inches in diameter) [2]	EP01
		CD02 in series with CD18	Venturi scrubber Biofilter	EP18
		CD14 In series with CD18	Venturi scrubber Biofilter	EP18
ES-02-A	Energy System consisting of a dry/wet wood/woodwaste-fired burner (205 million Btu per hour heat input)	CD02-A	Urea/water injection system	EP18
		CD02 In series with CD18	Venturi scrubber Biofilter	EP18
		CD14 In series with CD18	Venturi scrubber Biofilter	EP18
ES-02-B ES-02-C-1, ES-02-C-2 and ES-02-D	Two Stage Dryer System Three backup natural gas-fired dryer burners (35, 35 and 17 million Btu per hour heat input respectively)	CD02 In series with CD18	Venturi scrubber Biofilter	EP18
		CD14 In series with CD18	Venturi scrubber Biofilter	EP18
ES-06-B	MDF Board Cooler	NA	NA	EP-06-B
ES-16	MDF Press and Press Hall	CD02 In series with CD18	Venturi scrubber Biofilter	EP18
		CD14 In series with CD18	Venturi scrubber Biofilter	EP18

[2] For operation during startup, shutdown and malfunction only.

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter (PM)	$E = 4.10P^{0.67}$ or $E = 55.0(P)^{0.11} - 40$ where; E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Particulate Matter (PM), Volatile Organic Compounds	Compliance Assurance Monitoring	15A NCAC 02D .0614: [40 CFR 64]
Hazardous Air Pollutants	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products **See Section 2.2 A.1**	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDD)
Odors	**State-enforceable only** **See Section 2.2 A.2**	15A NCAC 02D .1806
Nitrogen Oxides, Particulate Matter ($PM_{2.5}$, PM_{10})	**See Section 2.2 B.1 and B.3**	15A NCAC 02Q .0317 (PSD Avoidance)
Volatile Organic Compounds	Best Available Control Technology **See Section 2.2 B.2**	15A NCAC 02D .0530

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

a. Emissions of particulate matter from the emission sources in Table 2.1.C. shall not exceed an allowable emission rate as calculated by the following equation(s):

Process Rate	Allowable Emission Rate Equation
Less than or equal to 30 tons per hour	$E = 4.10 \times P^{0.67}$
Greater than 30 tons per hour	$E = 55.0(P)^{0.11} - 40$

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 02Q .0508(f)]

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

c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit above on an annual basis by testing the emission point EP18 in accordance with General Condition JJ. If the results of this test are less than 80 percent of the emission limit above, the Permittee shall be required to stack test only once every five years following the previous stack test. If the results of this test are above the limit given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

d. Particulate matter emissions from these sources shall be controlled by the venturi scrubbers as described in Table 2.1.C.

e. The Permittee shall perform inspections and maintenance as recommended by the manufacturer.

f. The Permittee shall install, operate, and maintain instrumentation on the scrubbers identified in Table 2.1.C. to continuously monitor the parameters in Table 2.1 C.1.f and maintain the parameters in the associated operating ranges. These ranges are not required during performance testing.

Table 2.1 C.1.f

Parameter	Control Device ID No.	Minimum operating range, per control device
Pressure drop (inches of water	CD02	6.5

Parameter	Control Device ID No.	Minimum operating range, per control device
gauge, 3-hour block average)	CD14	6.5
Recirculating liquid flow rate (gallons per minute, 3-hour block average)	CD02	378
	CD14	416

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the monitoring requirements in Sections 2.1 C.1.d through f are not met.

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

g. The results of any 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 inspection;
   iii. the results of any maintenance performed on the control devices;
   iv. any variance from manufacturer's recommendations, if any, and corrections made; and
   v. pressure drop, and recirculating flow rate, (3–hour block averages) for each venturi scrubber.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these recordkeeping requirements are not met.

h. For the board cooler (**ID No. ES-06-B**), the Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above can be derived, and shall make these records available to a DAQ authorized representative upon request.

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

i. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.1 C.1.d through g above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

a. Visible emissions from the emission sources in Table 2.1.C above shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

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

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

c. To ensure compliance, once a week the Permittee shall observe the emission points of the sources in Table 2.1 C above for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. The Permittee shall re-establish "normal" for the sources in Table 2.1 C above within 30 days after the after the start-up of the board cooler **(ID No. ES-06-B)** after the modifications undertaken in application no. 1900015.22B are completed. If visible emissions from these sources 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 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.2.a above.

   The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required weekly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made; or if "normal' is not established within 30 days after the start-up of the board cooler (ID No. ES-06-B) after the modifications undertaken in application no. 1900015.22B are completed.

Recordkeeping [15A NCAC 02Q .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 02D .0521 if these records are not maintained.

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

e. The Permittee shall submit a summary report of the of the monitoring and recordkeeping activities given in Section(s) 2.1 C.2.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the Energy System (**ID No. ES-02-A**) and the two-stage dryer system **(ID No. ES-02-B)** with two backup natural gas-fired burners **(ID Nos. ES-02-C-1 and -2 and ES-02-D)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

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

c. No monitoring, recordkeeping or reporting is required for sulfur dioxide emissions from the firing of wood in these sources.

4. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING [40 CFR 64]

a. Pursuant to 40 CFR 64 and 15A NCAC 02D .0614, the Permittee shall comply with the conditions below for the Pollutant Specific Emission Unit(s) controlled by the venturi scrubbers **(ID Nos. CD02 and CD14)**.

Emission Limitations/Standards

b. The following table presents the regulated pollutants and the associated emission limitations/standards:

Pollutant	Limits/Standards	Applicable Regulation
PM	See Section 2.1 C.1	15A NCAC 02D .0515

Monitoring Approach [15A NCAC 02Q .0508(f), 40 CFR 64.6]

c. The key elements of the monitoring approach for PM, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

Monitoring Elements	Indicator No. 1	Indicator No. 2
Measurement Approach [64.6(c)(1)(i), (ii)]	Injection rate measurements are made every 15 minutes	Pressure drop measurements are made every 15 minutes
Indicator Range [64.6(c)(2)]	An excursion is defined as a one-hour block average injection rate reading lower than the respective 3-hour block average reading listed in Table 2.1 C.1.f of this permit. Excursions trigger an inspection and corrective action.	An excursion is defined as a one-hour block average pressure drop reading lower than the respective 3-hour block average reading listed in Table 2.1 C.1.f of this permit. Excursions trigger an inspection and corrective action.
QIP threshold [64.8]	The QIP threshold is six excursions in a six-month reporting period.	The QIP threshold is six excursions in a six-month reporting period.
Data Representativeness [64.6(c)(1)(iii), 64.3(b)(1)]	Measurements are made once every 15 minutes and complied into the appropriate averaging periods.	Measurements are made once every 15 minutes and complied into the appropriate averaging periods.
Verification of Operational Status [64.3(b)(2)]	Monitoring shall be required upon issuance of permit no. **03449T45**	
QA/QC Practices and Criteria [64.3(b)(3)]	Flowmeter calibration shall be performed according to manufacturer recommendations.	Pressure transducer calibration shall be performed according to manufacturer recommendations.
Monitoring frequency [64.3(b)(4)]	Measurements are made by a computerized data acquisition and handling system once every 15 minutes and complied into the appropriate averaging periods.	
Data collection procedure [64.3(b)(4)]	Non-SSM periods when flowrate or pressure drop falls below the acceptable ranges for more than one -hour will be documented. An electronic or written logbook will be kept of all control device inspections and corrective actions.	

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 64.9]

d. The owner or operator shall maintain records of the following:
   i. Date and time and results of all monitoring activities;
   ii. Information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
   iii. Maintenance records of the differential pressure gauge; and
   iv. Written QIP required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan.

Reporting Requirements [15A NCAC 02Q .0508(f), 40 CFR 64.9]

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

5. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING [40 CFR 64]

a. Pursuant to 40 CFR 64 and 15A NCAC 2D .0614, the Permittee shall comply with the conditions below for the Pollutant Specific Emission Unit(s) controlled by the biofilter **(ID No. CD-18)**.

Emission Limitations/Standards

b. The following table presents the regulated pollutants and the associated emission limitations/standards:

Regulated Pollutant	Limits/Standards	Applicable Regulation
VOCs	Best Available Control Technology See Section 2.2 B.2.	15A NCAC 02D .0530

Monitoring Approach [15A NCAC 02Q .0508(f), 40 CFR 64.6]

c. The Permittee has elected to satisfy the presumptively acceptable monitoring requirements under MACT DDDD for the biofilter as allowed at 40 CFR 64.4(b)(4). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the biofilter bed minimum and maximum temperatures are outside the indicator range found at Section 2.2 A.1.h.

Recordkeeping and Reporting Requirements [15A NCAC 02Q .0508(f), 40 CFR 64.9]

d. The Permittee shall meet the recordkeeping and reporting requirements found in Section 2.2 A.1.aa through ii, as applicable. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not met.

6. 15A NCAC 02D. 0530(u): USE OF PROJECTED ACTUAL EMISSIONS TO AVOID APPLICABILITY OF PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS

a. The Permittee has used projected actual emissions to avoid applicability of Prevention of Significant Deterioration requirements for the following projects:
   i. a project consisting of modifications to the MDF dryer involving natural gas burner replacement to achieve increases in throughput, reliability and safety when firing natural gas. This project does not result in an increase in overall design capacity of the MDF Mill. This project is fully described in application no. 1900015.17D.
   ii. a project consisting of modifications to the MDF Mill to achieve increases in throughput. This project is expected to result in an increase in overall design capacity of the MDF Mill. This project is fully described in application no. 1900015.18A.

   In order to verify the assumptions used in the projected actual emissions calculations, the Permittee shall comply with the testing, record keeping and reporting requirements in Sections 2.1 C.6.b through e below.

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

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

Recordkeeping [15A NCAC 02D .0530(u)]

c. The Permittee shall maintain records of the actual emissions of PM_{10}, $PM_{2.5}$, and CO from the sources indicated in the permitted equipment list in Section 1 as the Medium Density Fiberboard (MDF) Facilities (MDF Facilities) in tons per year. Records shall start following the resumption of regular operations after the modifications described in application no. 1900015.17D and shall continue for ten years after the resumption of regular operations after the modifications described in application no. 1900015.18A. The first year shall start on the first day of the first full calendar month after commencing regular operations after the modification described in application no. 1900015.17D. Each subsequent year shall include the same 12-month period.

d. The following recordkeeping requirements apply:
   i. The reported actual emissions (post-construction emissions) of the MDF Facilities for each of the years will be compared to the projected actual emissions (pre-construction projection) for the dryer as included below:

Pollutant	Projected Actual Emissions (tons per year)
PM_{10}	92
$PM_{2.5}$	92
CO	251

ii. These projected actual emissions are not enforceable limitations. If projected emissions are exceeded, consistent with 15A NCAC 02D .0530, the permittee shall include in its annual report an explanation as to why the actual rates exceeded the projection.
iii. The Permittee shall make the information, documented and maintained in this condition available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

Reporting [15A NCAC 02D .0530(u)]

e. The Permittee shall submit a report of the actual emissions of the pollutants identified in Section 2.1 C.6.c from the MDF Facilities to the Director within 60 days after the end of each year (as defined in Section 2.1 C.6.c) during which the records in Section 2.1 C.6.c must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).

D. The following sources for the Medium Density Fiberboard Facilities

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-18, ES-19, and ES-20 **NSPS Dc** **MACT DDDDD**	Three natural gas-fired hot oil heaters (30.4 million Btu per hour maximum heat input each)	NA	NA

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

Pollutant	Limits/Standards	Applicable Regulation
PM	0.25 pounds per million Btu heat input	15A NCAC 02D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
NA	Notification and Recordkeeping	15A NCAC 02D .0524 (NSPS Subpart Dc)
HAPs	Annual tune ups	15A NCAC 02D .1111
Odors	**State-enforceable only** See Section 2.2 A.2	15A NCAC 02D .1806
$PM_{2.5}$, PM_{10}	See Section 2.2 B.1	15A NCAC 02Q .0317 (PSD Avoidance)
VOCs	Best Available Control Technology See Section 2.2 B.2.	15A NCAC 02D .0530

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas that are discharged from these sources into the atmosphere shall not exceed 0.25 pounds per million Btu heat input.

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

b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

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

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in these sources.

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

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

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

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

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

c. No monitoring/recordkeeping is required for sulfur dioxide emissions from natural gas combustion for these sources.

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

a. Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

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

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

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in these sources.

4. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. For these sources, the Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units" including Subpart A "General Provisions."

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

b. The Permittee shall record and maintain records of the amounts of each fuel fired during each month. [40 CFR 60.48c(g)(2)] These records shall be maintained by the Permittee for a period of two years following the date of such record. [40 CFR 60.48c(i)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these recordkeeping requirements are not met.

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

c. The Permittee shall submit notification of the actual startup for each source within 15 days after such date. [40 CFR 60.7(a)(3), 60.48c(a)]

5. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, §63.7490, §63.7499(l)]

a. For these sources the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."

Definitions and Nomenclature [§63.7575]

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

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

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

Compliance Date [§63.7495(a)]

d. The Permittee shall comply with the applicable requirements upon startup of these sources.

Notifications [§63.7545]

e. As specified in §63.9(b)(4) and (5), the Permittee shall submit an Initial Notification to the DAQ not later than 15 days after the actual date of startup of each affected source. [§ 63.7545(c)]

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

f. i. The Permittee shall conduct a tune-up every five years for each source while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up, as specified below:
   (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled or unscheduled shutdown, but the burner must be inspected at least once every 72 months.
   (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown).
(D) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject.
(E) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
(F) set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up.
[§63.7500(a), §63.7540(a)(10), (a)(12)]

ii. Each 5-year tune-up shall be conducted no more than 61 months after the previous tune-up. The initial tune-up shall be conducted no later than 61 months after the initial startup of the source. [40 CFR 63.7515(d)]
iii. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [§63.7540(a)(13), §63.7515(g)]
iv. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [§63.7500(a)(3)]
v. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 D.5.f are not met.

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

g. The Permittee shall:
i. keep a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or compliance report that has been submitted, according to the requirements in §63.10(b)(2)(xiv). [§63.7555(a)(1)]
ii. maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (A) through (C) below:
(A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
(B) A description of any corrective actions taken as a part of the tune-up; and
(C) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
[§63.7540(a)(10)(vi)]
iii. keep the associated records for Section 2.1 D.5.f;
iv. maintain records in a form suitable and readily available for expeditious review;
v. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
vi. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.
[§63.7560, §63.10(b)(1)]
vii. be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained pursuant to Section 2.1 D.5.g.

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

h. i. The Permittee shall submit compliance reports to the DAQ on a 5-year basis. The first report shall cover the period beginning on the compliance date specified in Section 2.1 D.5 d (i.e., start-up) and ending on the earliest December 31st less than one year from the compliance date. Subsequent 5-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 30 for the previous compliance period. [§63.7550(a), (b]
ii. The compliance report must also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/).) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML

schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [§63.7550(h)(3)]

iii. The compliance report must contain the following information:
   (A) Company name and address;
   (B) Process unit information, emissions limitations, and operating parameter limitations;
   (C) Date of report and beginning and ending dates of the reporting period;
   (D) Include the date of the most recent tune-up for each unit required according to Section 2.1 D.5.f. Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.
   (E) 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.

[§63.7550(a) and (c), Table 9]

iv. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in Section 2.1 D.5.h are not met.

E. The following Particleboard Mill operations:

Table 2.1 E.2

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
3501	Sawdust Rock and Metal Separator	CD-SC	High efficiency cyclone - 72 inches in diameter
		CD-3501	Reverse flow bag filter with 2,410 square feet of surface area

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

Pollutant	Limits/Standards	Applicable Regulation
PM	adequate duct work and properly designed collectors Affected facilities: Sources listed in Table 2.1 E.2	15A NCAC 02D .0512
Visible emissions	20 percent opacity	15A NCAC 02D .0521
PM_{10} Visible emissions	See Section 2.1 E.6.	15A NCAC 02D .0530
PM, PM10	Compliance Assurance Monitoring	15A NCAC 02D .0614 [40 CFR 64]

1. RESERVED

2. 15A NCAC 02D .0512: PARTICULATES FROM 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 [15A NCAC 02Q .0508(f)]

b. Particulate matter emissions from the sources in Table 2.1 E.2 shall be controlled as presented in Table 2.1 E.2.

c. To ensure compliance, the Permittee shall perform inspections and as follows:
   i. monthly external inspection of the duct work and cyclones, noting the structural integrity; and
   ii. internal inspection of the bag filters, every 12 months, noting the structural integrity and the condition of the filters.
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if the ductwork, cyclones, and bag filters are not inspected and maintained.

d. The results of inspection and maintenance for the cyclones, and bag filters shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection; and
   iii. the results of maintenance performed on any control device.
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if these records are not maintained.

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

e. The Permittee shall submit the results of any maintenance performed on the control devices in Table E.2 within 30 days of a written request by the DAQ.

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

3. RESERVED

4. RESERVED

5. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the emission sources in Table 2.1 E.2 shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of the test performed exceed the limits given in Section 2.1 E.5.a above for visible emissions, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

c. To ensure compliance, the Permittee shall observe, on a weekly basis, the following emission points in the Particleboard mill for any visible emissions above normal:

Emission Source Description and ID No.	Emission Point ID No.
Sawdust Rock and Metal Separator (**ID No. 3501)**	CD-3501

The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources 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 02D .2610 (Method 9) for 12 minutes is below the limit given in condition 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 02D .0521.

d. The results of the monitoring for visible emissions shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. To ensure quality, entries in the logbook should be signed by personnel responsible for the effective operation of the units in the particleboard mill and their air pollution control devices. 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 02D .0521 if these records are not maintained.

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

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

6. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. For PSD purposes, the following "Best Available Control Technology" (BACT) permit limitations shall not be exceeded for units in the particleboard mill (**ID No. PB**):

Emission Source	Pollutants	Emission Limits*, **	Control Technology
Sawdust Rock and Metal Separator (**ID No. 3501**)	PM_{10}	0.02 lbs/hr	cyclone and baghouse
	VOC	5.56 lbs/hr, as C	none
	Opacity	20 percent	cyclone and baghouse

* BACT limits shall apply at all times. However, emissions resulting from startup, shutdown or malfunction as defined under 15A NCAC 02D .0535, exceeding the limits in condition a. above are permitted, provided that the Permittee, to

the extent practicable, maintains and operates each emission source including any associated air pollution control equipment listed in this Table, in a manner consistent with good air pollution control practice for minimizing emissions.

Testing (PM_{10}, VOC, CO, NOx) [15A NCAC 02Q .0508(f)]

b. If emissions testing is required for visible emissions, PM_{10}, VOC, CO and NOx, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limits given in Section 2.1 E.6.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
c. RESERVED

Monitoring (PM_{10}) [15A NCAC 02Q .0508(f)]

d. PM_{10} emissions from the units in the particleboard mill [**ID No. PB**] shall be controlled as follows:
   i. In the sawdust rock and metal separator (**ID No. 3501**), raw materials shall be sorted to remove unusable material and transported through a high efficiency cyclone (**ID No. SC**), which is 72 inches in diameter. Emissions from the cyclone shall be exhausted to a fabric filter (**ID No. CD-3501**) with 2,410 square feet of filter surface area.
   ii. RESERVED
   iii. Emissions from the sources in in Table 2.1.E.2. shall be controlled as presented in Table 2.1.E.2

Cyclones, multi-cyclones and fabric filters in Table 2.1.E.2

e. To ensure compliance and effective operation, the Permittee shall perform inspections and maintenance, as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual external inspection of the control devices, system ductwork, and the material collection units for leaks.
   ii. for each bagfilter, an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not met.
f. RESERVED
g. RESERVED

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

h. The monitoring/recordkeeping requirements in Section 2.1 E.5.d shall be sufficient to ensure compliance with 15A NCAC 02D .0530. If the requirements of Section 2.1 E.5.d are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Recordkeeping (PM_{10}) [15A NCAC 02Q .0508(f)]

For the cyclones, multi-cyclones and fabric filters in Tables 2.1.E.2

i. The results of inspection and maintenance activities shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative of DAQ 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; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.
j. RESERVED
k. RESERVED

Reporting (PM_{10} AND VOC) [15A NCAC 02Q .0508(f)]

PM_{10}, AND VOC

m. The Permittee shall submit the results of any maintenance performed on the control devices in Table 2.1.E.2 within 30 days of a written request by the DAQ.
n. The Permittee shall submit a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

VE

o. Reporting requirements in Section 2.1 E.5.e shall be sufficient to ensure compliance with 15A NCAC 02D .0530.
p. RESERVED

7. RESERVED

8. RESERVED

F. Laminating Mill:

Table 2.1.F

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
3593 and 3594	Two (2) Short Cycle Laminating Presses	CD-3593	Reverse flow bagfilter (Maximum air-to-cloth ratio of 4.1 ACFM/total filter surface area).
Pr-Heat1	Natural gas-fired hot oil heater (4.7 million Btu per hour heat input) used with short cycle laminating presses	N/A	NA

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

Pollutant	Limits/Standards	Applicable Regulation
PM	Affected source: (ID No. Pr-Heat1) 0.60 pounds per million Btu heat input	15A NCAC 02D .0503
	Affected source: (ID Nos. 3593 and 3594) $E = 4.10P^{0.67}$ where; E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Sulfur dioxide	Affected source: (ID No. Pr-Heat1) 2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
HAPs	Affected source:(ID No. Pr-Heat1) Work Practices, 5- year tune up	15A NCAC 02D .1111 (MACT DDDDD)
Odors	**State-enforceable only** See Section 2.2 A.2	15A NCAC 02D .1806

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas from the hot oil heater (**ID No. Pr-Heat1**) into the atmosphere shall not exceed 0.60 pounds per million Btu heat input.

Testing [15A NCAC 02D .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 exceed the limit given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

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

c. No monitoring, record keeping, or reporting is required for particulate emissions from the firing of No. 2 fuel oil and natural gas in the hot oil heater (**ID No. Pr-Heat1**).

2. 15A NCAC 02D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from the units in the short cycle laminating presses **(ID Nos. 3593 and 3594)** that are discharged into the atmosphere shall not exceed an allowable emission rate as calculated by the following equations:

Process Rate	Allowable Emission Rate Equation
Less than or equal to 30 tons per hour	$E = 4.10 \times P^{0.67}$
Greater than 30 tons per hour	$E = 55.0(P)^{0.11} - 40$

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 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of the test performed exceed the limits given in condition a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

c. Particulate matter emissions from the short cycle laminating presses **(ID Nos. 3593 and 3594)** shall be controlled using the reverse flow bagfilter (**ID No. CD-3593**). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

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; and
   iii. the results of maintenance performed on any control device.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

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

e. The Permittee shall submit the results of any maintenance performed on the bagfilter (**ID No. CD-3593**) within 30 days of a written request by the DAQ.

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 must be clearly identified.

3. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Sulfur dioxide emissions from the hot oil heater (**ID No. Pr-Heat1**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

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

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

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

c. No monitoring, record keeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas in the hot oil heater (**ID No. Pr-Heat1**).

4. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the sources listed in Table 2.1.F. shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of the test performed exceed the limits given in condition a. (above) for visible emissions, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

c. To ensure compliance, the Permittee shall observe, on a weekly basis, the following emission points in the Particleboard mill for any visible emissions above normal:

Emission Source	Emission Point ID No.
short cycle laminating presses **(ID Nos. 3593 and 3594)**	CD-3593

The weekly observation must be made for each of the calendar year period to ensure compliance with this requirement. If visible emissions from the short cycle laminating presses 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 02D .2610 (Method 9) for 12 minutes is below the limit given in condition 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 02D .0521.

d. The results of the monitoring for visible emissions shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. To ensure quality, entries in the logbook should be signed by personnel responsible for the effective operation of the units in the particleboard mill and their air pollution control devices. 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 02D .0521 if these records are not maintained.

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

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

5. RESERVED

6. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, .7490(d), .7499(l)]

a. For the heater **(ID No. Pr-Heat1)** (an existing source designed to burn gas 1 fuels with a heat input capacity of less than or equal to 5 million Btu per hour), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63 Subpart DDDDD, “National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters” and Subpart A “General Provisions.”

Definitions and Nomenclature [40 CFR 63.7575]

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

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

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

Compliance Date [40 CFR 63.7510(e), 63.56(b)]

d. The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019.

Notifications [40 CFR 63.7545(e)(8), 63.7530(e),(f)]

e. The Permittee shall submit a Notification of Compliance Status. The notification must be signed by a responsible

official and sent before the close of business on the 60th day following the completion of the initial tune up and one-time energy assessment (whichever is later). The notification shall contain the following:

i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned.
ii. the following certification(s) of compliance, as applicable:
   A. "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR Part 63 Subpart DDDDD at the site according to the procedures in.40 CFR 63.7540(a)(10)(i) through (vi)' [i.e., conditions g.i. through g.v. and l. ii.]; and
   B. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)" [i.e., condition k.] and is an accurate depiction of the facility at the time of the assessment.

General Compliance Requirements [40 CFR 63.7505(a), 63.7500(f)]

f. The Permittee shall be in compliance with the work practice standards in this subpart. These standards apply at all times the affected unit is operating.

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

g. The Permittee shall conduct a tune-up of the process heater every five years as specified below.
   i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown, but the burner must be inspected at least once every 72 months
   ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
   iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown)'
   iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject.
   v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

   [40CFR 63.7500(a), (e), 63.7540(a)(10), (a)(12)]
h. Each 5-year tune-up shall be conducted no more than 61 months after the previous tune-up. [40CFR 63.7515(d)]
i. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13), 63.7515(g)]
j. At all times, the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

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

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

k. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR Part 63 Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) in Table 3 appropriate for the on-site technical hours listed in §63.7575: [§63.7500(a)(1), Table 3]

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

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

l. The Permittee shall keep the following:
   i. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).

[40 CFR 63.7555(a)(1)]

ii. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
   A. The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the source;
   B. A description of any corrective actions taken as a part of the combustion adjustment; and
   C. The type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

   [40 CFR 63.7540(a)(10)(vi)]

iii. The associated records for conditions f. through l. including:
   A. the occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment.

   [40 CFR 63.10(b)(2)(ii)]

iv. maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.
   [40 CFR 63.7555(i)]

v. maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.
   [40 CFR 63.7555(j)]

m. The Permittee shall:
   i. maintain records in a form suitable and readily available for expeditious review;
   ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
   iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.

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

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in conditions l. through m.

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

n. The Permittee shall submit compliance reports to the DAQ on a 5-year basis. The first report shall cover the period beginning on the compliance date specified in condition d. and ending on the earliest December 31st following a complete 5-year period. Subsequent 5-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 31.
   [40 CFR 63.7550(a), (b)]
   i. This report must also be submitted electronically through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due the report the Permittee submit the report to the at the appropriate address listed in 40 CFR 63.13. [40 CFR 63.7550(h)(3)]

o. The compliance report must contain the following information:
   i. Company name and address;
   ii. Process unit information, emissions limitations, and operating parameter limitations;
   iii. Date of report and beginning and ending dates of the reporting period;
   iv. The total operating time during the reporting period;
   iv. If there are no deviations from the requirements of the work practice requirements in condition g. above, a statement that there were no deviations from the work practice standards during the reporting period; and
   v. Include the date of the most recent tune-up for each unit required according to condition g. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown.

   [40 CFR 63.7550(a) and (c), Table 9]

p. If the Permittee has a deviation from a work practice standard during the reporting period, the report must contain the following information:
   i. A description of the deviation and which emission limit or operating limit from which the Permittee deviated; and
   ii. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

   [40 CFR 63.7550(a) and (d), 63.7540(b), Table 9]

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

G. The following sources for the Medium Density Fiberboard Facilities:

Table 2.1 G.1

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
MDF Moulding Line Operations consisting of:			
ES-M1A **MACT DDDD**	MDF moulding line 1 – moulding zone consisting of rip saw, moulder and sanders	CD-4005	Reverse flow bag filter with 6,918 square feet of surface area in parallel with Reverse flow bag filter with 6,918 square feet of surface area
ES-M2A **MACT DDDD**	MDF moulding line 2 – moulding zone consisting of rip saw, moulder and sanders	CD-5001	
ES-M3A **MACT DDDD**	MDF moulding line 3 – moulding zone consisting of rip saw, moulder and sanders		
ES-M1B **MACT DDDD**	MDF moulding line 1 - coating and drying zone consisting of spray coater and a natural gas-fired drying oven (two burners, 1.3 million Btu per hour each)	NA	NA
ES-M2B **MACT DDDD**	MDF moulding line 2 - coating and drying zone consisting of spray coater and a natural gas-fired drying oven (two burners, 1.3 million Btu per hour each)	N/A	N/A
ES-M3B **MACT DDDD**	MDF moulding line 3 - coating and drying zone consisting of spray coater and a natural gas-fired drying oven (two burners, 1.3 million Btu per hour each)	N/A	N/A
ES-MSS1 **MACT DDDD**	MDF moulding line shavings silo	CD-MSS1	Cartridge filter (1,500 square feet of surface area)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	adequate duct work and properly designed collectors Affected facilities: **(ID Nos. ES-M1A, -M2A, -M3A and ES-MSS1)**	15A NCAC 02D .0512
PM	$E = 4.10P^{0.67}$ when P<30 tons per hour Or $E = 55.0P^{0.11}$ when P≥30 tons per hour where E = allowable emission rate in pounds per hour P = process weight in tons per hour Affected facilities: **(ID Nos. ES-M1B, -M2B and -M3B)**	15A NCAC 02D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input Affected facilities: **(ID Nos. ES-M1B, -M2B and -M3B)**	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
HAPs	No applicable requirements See Section 2.2 A.1	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDD)
Odors	**State-enforceable only** See Section 2.2 A.2	15A NCAC 02D .1806
NA	Startup notification	NCGS 143-215.108

1. 15A NCAC 02D .0512: PARTICULATES FROM 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 [15A NCAC 02Q .0508(f)]

b. Particulate matter emissions from these sources (**ID Nos. ES-M1A, -M2A, -M3A and ES-MSS1)** shall be controlled as presented in Table 2.1 G.1.

c. To ensure compliance, the Permittee shall perform inspections and as follows:
   i. monthly external inspection of the duct work and cyclones, noting the structural integrity; and
   ii. internal inspection of the bag filters, every 12 months, noting the structural integrity and the condition of the filters.

d. The results of inspection and maintenance for the cyclones, and bag filters 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.

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

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

f. The Permittee shall submit a summary report of monitoring and record keeping activities given in Section 2.1 G.1.b through d above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources (**ID No. ES-M1B, -M2B and -M3B**) shall not exceed an allowable emission rate as calculated by the following equation:

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

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

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

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

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

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

c. The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above can be derived, and shall make these records available to a DAQ authorized representative upon request.

3. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this source (**ID Nos. ES-M1B, -M2B, and -M3B)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

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

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

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

c. No monitoring/recordkeeping or reporting is required for sulfur dioxide emissions from the firing of natural gas in these sources.

4. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

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

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

c. To ensure compliance, once a week the Permittee shall observe the emission points of these sources for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. The Permittee shall establish "normal" for these sources within 30 days of beginning operation. If visible emissions from these sources 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 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 G.4.a above.

Recordkeeping [15A NCAC 02Q .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.

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

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section(s) 2.1 A.1.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

5. STARTUP NOTIFICATION

Under the provisions of NCGS 143-215.108, the Permittee shall notify the Regional Office in writing of the date of beginning operation of the MDF moulding Line (**ID Nos. ES-M1A, -M1B, -M2A, -M2B, -M3A, -M3B and -MSS1**) postmarked no later than 30 days after such date.

H. Reserved

I. The following combustion source:

Table 2.1.I.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-21 **MACT ZZZZ**	Diesel Fuel -fired Emergency Generator (1592 Brake Horsepower output)	NA	NA

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 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
HAPs	Maximum Achievable Control Technology	15A NCAC 02D .1111 (40 CFR Part 63 Subpart ZZZZ)
Odors	**State-enforceable only** See Section 2.2 A.2.	15A NCAC 02D .1806
NOx, $PM_{2.5}$, PM_{10}	See Section 2.2 B.1.	15A NCAC 02Q .0317 (PSD Avoidance)
VOCs	Best Available Control Technology See Section 2.2 B.2.	15A NCAC 02D .0530

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

a. Visible emissions from this source shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

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

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

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

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

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

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

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

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

c. No monitoring/recordkeeping is required for sulfur dioxide emissions from the firing of diesel fuel in this source.

3. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

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

a. For this emission source (existing stationary RICE with a site rating of more 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 Part 63 Subpart ZZZZ "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

Stationary RICE subject to limited requirements [40 CFR 63.6590(b)]

b. Pursuant to 40 CFR 63.6590(b)(3)(iii), these sources do not have to meet the requirements of 40 CFR Part 63 Subpart ZZZZ and Subpart A, including initial notification requirements.

2.2 Multiple Emission Source(s) Specific Limitations and Conditions

A. Facility-wide affected emission sources

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

Pollutant	Limits/Standards	Applicable Regulation
Hazardous Air Pollutants	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products	15A NCAC 02D .1111 (40 CFR Part 63 Subpart DDDD)
Odors	**State-enforceable only** Odorous emissions must be controlled	15A NCAC 02D .1806

1. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.2231]

a. For the emission sources subject to "**MACT Subpart DDDD**" as indicated in the permitted equipment list, 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" as promulgated in 40 CFR 63, Subpart DDDD **"**National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products" and Subpart A "General Provisions."

Definitions and Nomenclature

b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.2292 shall apply. [40 CFR 63.2292]

40 CFR Part 63 Subpart A General Provisions

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources, as identified in Table 10 to 40 CFR Part 63, Subpart DDDD. [40 CFR 63.2290]

Affected Sources Not Subject to Operating Requirements

d. For process units not subject to the operating requirements in Section 2.2 A.1, the Permittee is not required to comply with the compliance options, work practice requirements, performance testing, monitoring, SSM plans, and recordkeeping or reporting requirements of this 40 CFR 63 Subpart DDDD, or any other requirements in 40 CFR 63 Subpart A except for the initial notification requirements in 40 CFR 63.9(b). [40 CFR 63.2252]

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

Group 1 Coating Operations

e. The Permittee shall use non-HAP coatings (as defined 40 CFR 63.2292) in its Group 1 miscellaneous coating operations (including **ID No. I-Spray paints**). [40 CFR 63.2241(a), Table 3 to 40 CFR 63 Subpart DDDD]

MDF Plant

f. The emissions from the MDF process units in Table 2.2 A.1 shall be controlled by the biofilter (ID No. CD18):

Table 2.2 A.1

Emission Source ID No.	Emission Source Description
ES-01	Refiner
ES-02-A	Energy System consisting of a dry/wet wood/woodwaste-fired burner (205 million Btu per hour heat input)
ES-02-B	Two Stage Dryer System
ES-02-C and ES-02-D	Two backup natural gas-fired dryer burners (78.5 and 17 million Btu per hour heat input respectively)
ES-16	MDF Press and Press Hall

[40 CFR 63.2240(b), Table 1B to 40 CFR 63 Subpart DDDD]

g. The HAP emissions from the sources in Table 2.2 A.1 above shall be controlled to meet one of the following compliance options: [40 CFR 63.2240(b), Table 1B]
   i. Reduce emissions of total HAP, measured as THC (as carbon) [a], by 90 percent; or
   ii. Limit emissions of total HAP, measured as THC (as carbon) [a], to 20 ppmvd; or
   iii. Reduce methanol emissions by 90 percent; or
   iv. Limit methanol emissions to less than or equal to 1 ppmvd if uncontrolled methanol emissions entering the control device are greater than or equal to 10 ppmvd; or
   v. Reduce formaldehyde emissions by 90 percent; or
   vi. Limit formaldehyde emissions to less than or equal to 1 ppmvd if uncontrolled formaldehyde emissions entering the control device are greater than or equal to 10 ppmvd.
   [40 CFR 63.2240(b), Table 1B to 40 CFR 63 Subpart DDDD]

h. The Permittee shall maintain the 24-hour block biofilter bed temperature within the following range as established according to Section 2.2 A.1.m. [40 CFR 63.2240(b), Table 2 to 40 CFR 63 Subpart DDDD]
   i. minimum biofilter bed temperature: **132 ºF**
   ii. maximum biofilter bed temperature: **152 ºF**
   iii. These parameters do not apply during periods of performance testing. Parameters shall be confirmed or reestablished during performance testing.

i. The Permittee shall operate the MDF Press and Press Hall (**ID No. ES16**) in an enclosure that meets the definition of a wood products enclosure in 40 CFR 63.2292. [40 CFR 63.2240(b)]

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

j. The following general testing requirements apply:
   i. If emissions (performance) 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 2.2 A.1.g above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.
   ii. All initial performance tests shall be conducted pursuant to 40 CFR 63.2260.
   iii. Any subsequent performance tests shall be conducted pursuant to 40 CFR 63.2262.
   If the results of this test(s) exceed the limits given in Section 2.2 A.1.g above or these testing requirements are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

MDF Plant Biofilter

k. The following specific testing requirements apply to the biofilter (ID No. CD18). The Permittee:
   i. may expand the biofilter bed temperature operating range, according to 40 CFR 63.2262(m).
   ii. shall conduct repeat performance tests using the applicable method(s) specified in Table 4 to 40 CFR 63 Subpart DDDD:
      (A) two years following the previous performance test; and
      (B) within 180 days after each replacement of any portion of the biofilter bed media with a different type of media or each replacement of more than 50 percent (by volume) of the biofilter bed media with the same type of media.
      [Table 7 to 40 CFR 63 Subpart DDDD]
   iii. Subsequent revisions to the monitoring parameters in Section 2.2 A.1 h will addressed as follows:
      (A) When a test report is submitted pusuant to i, ii(A), or ii(B) for the scenario where the replacement of more than 50 percent (by volume) of the biofilter bed media with the same type of media has occurred, the permittee shall certify that the biofilter and associated process units have not been modified subsequent to the date of the previous performance tests. Replacement of the biofilter media with the same type of material is not considered a modification of the biofilter for purposes of this section. The Permittee may also submit an application to revise one or both parameters in Section 2.2. A.1.h if necessary. The permit revision will be processed pursuant to 15A NCAC 02Q .0515.
      (B) Otherwise, if this certification in iii(A) is not provided or if a test report is submitted pursuant to ii(B) for the scenario where replacement of any portion of the biofilter bed media with a different type of media has occurred, then the Permittee shall submit an application to revise both parameters in Section 2.2. A.1.h. The permit revision will be processed pursuant to 15A NCAC 02Q .0514.
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these testing requirements are not met.

General Requirements [15A NCAC 02Q .0508(b)]

l. The following general requirements apply:

i. The Permittee shall be in compliance with the compliance options, operating requirements, and the work practice requirements in MACT DDDD when the process units subject to the compliance options, operating requirements, and work practice requirements are operating, except as specified in (A) through (F) below.
   (A) Prior to process unit initial startup.
   (B) During safety-related shutdowns conducted according to the work practice requirements in (E) below.
   (C) During pressurized refiner startup and shutdown according to the work practice requirements in (F) below.
   (D) The Permittee shall minimize the length of time when compliance options and operating requirements in Section 2.1 A.1 are not met due to the conditions in (B) and (C) above.
   (E) The applicable standard during safety-related shutdowns are the following work practice requirements: The Permittee shall follow documented site-specific procedures such as use of automated controls or other measures that have been developed to protect workers and equipment to ensure that the flow of raw materials (such as furnish or resin) and fuel or process heat (as applicable) ceases and that material is removed from the process unit(s) as expeditiously as possible given the system design to reduce air emissions.[Table 3 to 40 CFR 63 Subpart DDDD]
   (F) The applicable standard during pressurized refiner startup and shutdown are the following work practice requirements: The Permittee shall route exhaust gases from the pressurized refiner to its dryer control system no later than 15 minutes after wood is fed to the pressurized refiner during startup and stop wood flow into the pressurized refiner no more than 15 minutes after wood fiber and exhaust gases from the pressurized refiner stop being routed to the dryer during shutdown. [Table 3 to 40 CFR 63 Subpart DDDD
   [40 CFR 63.2250(f)]

ii. The Permittee shall always operate and maintain the affected source, including air pollution control and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.2250(g)]

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

Routine Control Device Maintenance Exemption (RCDME) [15A NCAC 02Q .0508(b)]

m. The following RCDME requirements apply:
   i. The emission limitations in Section 2.2 A.1.g do not apply during times when control device maintenance covered under the approved RCDME (per request letter dated September 26, 2019) is performed. The Permittee must minimize emissions to the greatest extent possible during these RCDME periods. [40 CFR 63.2251(d)]
   ii. Operation of the process units controlled as described in Section 2.2 A.1.f during periods of RCDME as requested in the letter dated September 29, 2019 must not exceed 3 percent of annual operating uptime for each process unit. [40 CFR 63.2251(b)]
   iii. The request for the RCDME must be incorporated by reference and attached to the affected source's title V permit. The RCDME is attached to the title V permit as ATTACHMENT B. [40 CFR 63.2251(c)]
   iv. To the extent practical, startup and shutdown of emission control systems must be scheduled during times when process equipment is also shut down. [40 CFR 63.2251(e)]

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

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

Temperature Monitoring

n. The following temperature monitoring requirements apply
   i. The Permittee shall monitor and record the MDF Plant Biofilter (ID No. CD18) bed temperature with a continuous parameter monitoring system (CPMS).
   ii. The Permittee shall install, operate, and maintain each temperature CPMS as follows:
      (A) The CPMS must be capable of completing a minimum of one cycle of operation (sampling, analyzing, and recording) for each successive 15-minute period.
      (B) At all times, you must maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
      (C) Record the results of each inspection, calibration, and validation check.
      (D) Locate the temperature sensor in a position that provides a representative temperature.

(E) Use a temperature sensor with a minimum accuracy of 4 °F or 0.75 percent of the temperature value, whichever is larger.
(F) If a chart recorder is used, it must have a sensitivity with minor divisions not more than 20 °F.
(G) Validate the temperature sensor's reading at least semiannually using one the requirements in paragraphs (1) through (5) below:
(1) Compare measured readings to a National Institute of Standards and Technology (NIST) traceable temperature measurement device or simulate a typical operating temperature using a NIST traceable temperature simulation device. When the temperature measurement device method is used, the sensor of the NIST traceable calibrated device must be placed as close as practicable to the process sensor, and both devices must be subjected to the same environmental conditions. The accuracy of the temperature measured must be 2.5 percent of the temperature measured by the NIST traceable device or 5 °F, whichever is greater.
(2) Follow applicable procedures in the thermocouple manufacturer owner's manual.
(3) Request thermocouple manufacturer to certify or re-certify electromotive force (electrical properties) of the thermocouple.
(4) Replace thermocouple with a new certified thermocouple in lieu of validation.
(5) Permanently install a redundant temperature sensor as close as practicable to the process temperature sensor. The sensors must yield a reading within 5 °F of each other for biofilters.
(H) Conduct validation checks using the procedures in paragraph ii(G) above any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.
(I) At least quarterly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.
[40 CFR 63.2269(a) and (b)]

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

All CPMS

o. The following CPMS requirements apply:
i. For the biofilter (ID No. CD18), the Permittee shall determine the 24-hour block average of all recorded readings, calculated after every 24 hours of operation as the average of the evenly spaced recorded readings in the previous 24 operating hours (excluding periods described in paragraphs ii and iii below. [40 CFR 63.2270(e)]
ii. Except for, as appropriate, monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments) the Permittee shall conduct all monitoring in continuous operation at all times that the process unit is operating. For purposes of calculating data averages, the Permittee must not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities. The Permittee must use all the data collected during all other periods in assessing compliance. 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. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitute an instance of noncompliance with the monitoring requirements. [40 CFR 63.2270(b)]
iii. The Permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities; data recorded during periods of startup, shutdown, and malfunction; or data recorded during periods of control device downtime covered in any approved routine control device maintenance exemption in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. The Permittee must use all the data collected during all other periods in assessing the operation of the control system. [40 CFR 63.2270(c)]
iv. To calculate the data averages for each 24-hour averaging period, the Permittee must have at least 75 percent of the required recorded readings for that period using only recorded readings that are based on valid data (i.e., not from periods described in paragraphs ii and iii above. [40 CFR 63.2270(f)]

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

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

p. The Permittee shall:
i. keep a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, according to the requirements in 40 CFR 63.10(b)(2)(xiv); [40 CFR 63.2282(a)(1)]
ii. keep the records related to startup, shutdown, failures to meet the standard, and actions taken to minimize emissions, specified in ii(A) through (D) below.

(A) Record the date, time, and duration of each startup and/or shutdown period, including the periods when the affected source was subject to the standard applicable to startup and shutdown.
(B) In the event that an affected unit fails to meet an applicable standard, record the number of failures; for each failure, record the date, time, cause and duration of each failure.
(C) For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, and the following information:
(1) For any failure to meet a compliance option in 40 CFR 63.2240, including the compliance options in Table 1B to 40 CFR 63 Subpart DDDD, record an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.
(2) For each failure to meet an operating requirement in Table 2 to 40 CFR 63 Subpart DDDD or work practice requirement in Table 3 to 40 CFR 63 Subpart DDDD, maintain sufficient information to estimate the quantity of each regulated pollutant emitted over the emission limit. This information must be sufficient to provide a reliable emissions estimate if requested by the Administrator.
(D) Record actions taken to minimize emissions in accordance with Section 2.2 A.1.l.ii (40 CFR 63.2250(g)), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
[40 CFR 63.2282(a)(2)]

iii. keep documentation of the approved routine control device maintenance exemption; [40 CFR 63.2282(a)(3)]
iv. keep records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii); [40 CFR 63.2282(a)(4)]
v. keep the associated records for Sections 2.2 A.1.e through o above; [40 CFR 63.2282(b)]
vi. keep the records showing that non-HAP coatings are being used; [40 CFR 63.2282(b)]
vii. keep the written CMS quality control procedures required by 40 CFR63.8(d)(2) on record for the life of the affected source or until the affected source is no longer subject to the provisions of this subpart, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the Permittee shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under 40 CFR 63.8(d)(2). [40 CFR 63.2282(f)]
viii. maintain and keep records:
(A) in a form suitable and readily available for expeditious review as specified in 40 CFR 63.10(b)(1);
(B) as specified in 40 CFR 63.10(b)(1), for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
(C) on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to 40 CFR 63.10(b)(1). The Permittee can keep the records offsite for the remaining 3 years.
(D) Any records required to be maintained by this part that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.
[40 CFR 63.2283]

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

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

q. The following reporting requirements apply:
i. The Permittee shall submit a compliance report semiannually to the DAQ 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 must be clearly identified. [40 CFR 63.2281(a), (b), and (g)]
ii. The compliance report must contain the following information:
(A) company name and address.
(B) 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.
(C) date of report and beginning and ending dates of the reporting period.
(D) the number of instances and total amount of time during the reporting period in which each of the startup/shutdown work practice requirements in Table 3 to MACT DDDD (rows 6 through 8) is used in place of the otherwise applicable compliance options, operating requirements, and work practice requirements (in Table 3 to MACT DDDD rows 1 through 5). If a startup/shutdown work practice in Table 3 to MACT DDDD

(rows 6 through 8) is used for more than a total of 100 hours during the semiannual reporting period, the Permittee shall report the date, time and duration of each instance when that startup/shutdown work practice was used.

(E) a description of control device maintenance performed while the control device was offline and one or more of the process units controlled by the control device was operating, including the information specified in 40 CFR 63.2281(c)(5)(i) through (iii).

(F) If there are no deviations from any applicable compliance option or operating requirement, and there are no deviations from the requirements for work practice requirements in Table 8 to MACT DDDD, a statement that there were no deviations from the compliance options, operating requirements, or work practice requirements during the reporting period.

(G) If there were no periods during which the continuous monitoring system (CMS), including CPMS, was out-of-control as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

[40 CFR 63.2281(c)]

iii. For each deviation from a compliance option or operating requirement and for each deviation from the work practice requirements in Table 8 to MACT DDDD that occurs at an affected source where the Permittee is not using a CMS to comply with the compliance options, operating requirements, or work practice requirements pursuant to MACT DDDD, the compliance report must contain the information in paragraphs ii.(A) through (C) above and in paragraphs (A) and (B) below. This includes periods of startup, shutdown, and malfunction and routine control device maintenance.

(A) The total operating time of each affected source during the reporting period.

(B) Information on the date, time, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

[40 CFR 63.2271, 63.2281(d)]

iv. For each deviation from a compliance option, operating requirement, or work practice requirement occurring at an affected source where the Permittee is using a CMS to comply with the compliance options, operating requirements, or work practice requirements in this subpart, you must include the information in paragraphs ii.(A) through (C) above and (A) through (L) below. This includes periods of startup, shutdown, and malfunction and routine control device maintenance.

(A) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(B) The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8).

(C) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction; during a period of control device maintenance covered in your approved routine control device maintenance exemption; or during another period.

(D) A summary of the total duration of the deviation during the reporting period and the total duration 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, control system problems, control device maintenance, process problems, other known causes, and other unknown causes.

(F) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(G) A brief description of the process units.

(H) A brief description of the CMS.

(I) The date of the latest CMS certification or audit.

(J) A description of any changes in CMS, processes, or controls since the last reporting period.

(K) For any failure to meet a compliance option in Section 2.2 A.3.h above provide an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.

(L) The total operating time of each affected source during the reporting period.

[40 CFR 63.2271, 63.2281(e)]

v. The semiannual report shall also be submitted to the EPA electronically following the procedures specified in 40 CFR 63.2281(h), except under the conditions specified in 40 CFR 63.2281(k) and (l), as applicable.

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

Performance test reporting requirements

r. The following performance testing reporting requirements apply:

i. Within 60 days after the date of completing each performance test required in Section 2.2 A.1.j above, the Permittee shall submit the results of the performance test to the EPA electronically following the procedures specified in 40 CFR 63.2281(i), except under the conditions specified in 40 CFR 63.2281(k) and (l), as applicable. [40 CFR 63.2281(i)]
ii. The performance test report shall contain the information required in 40 CR 63.7(g). [40 CFR 63.2281(a), Table 9 to 40 CFR 63 Subpart DDDD]
iii. These performance test reports shall continue to be submitted to the DAQ pursuant to General Condition JJ.

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

Notification Requirements [15A NCAC 02Q .0508(b)]

s. The following notification requirements apply:
i. The Permittee shall submit all of the notifications in §63.7(b) [*Notification of Performance Test*], 63.7 (c) [*Quality Assurance Program*], 63.8(e) [*Performance evaluation of CMS*], 63.8(f)(4) [*alternative monitoring method*], 63.8(f)(6) [*alternative RATA*], 63.9 (b) through (e) [*initial notifications*], 63,9(g) [*CMS notifications*] and 63.9(h) [*Notification of compliance status*] by the dates specified. [40 CFR 63.2280(a)]
ii. The Permittee shall submit a written notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as specified in 40 CFR 63.7(b)(1). [40 CFR 63.2280(c)]
iii. The Permittee shall submit a Notification of Compliance Status (NOCS) for each performance test required in Section 2.2 A.1.j, including a summary of the performance test results before the close of business on the 60th calendar day following the completion of each performance test. The NOCS shall be submitted to the EPA electronically following the procedures specified in 40 CFR 63.2281(h) and (k) and (l)) as applicable. [40 CFR 63.9(h)(2), 63.10(d)(2), 63.2260c, 63.2280(d)]

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

State-enforceable only

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

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. Medium Density Fiberboard Facilities

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter ($PM_{2.5}$, PM_{10})	See Section 2.2 B.1	15A NCAC 02Q .0317 (PSD Avoidance)
Volatile Organic Compounds	Best Available Control Technology See Section 2.2 B.2	15A NCAC 02D .0530
Nitrogen Oxides	See Section 2.2 B.3	15A NCAC 02Q .0317 (PSD Avoidance)

1. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to the avoid the applicability of 15A NCAC 02D .0530, the combined emissions from the sources indicated in Table 2.2 B.1 below shall not exceed the following limits:
   i. PM-2.5 emissions shall not exceed 111.9 tons per consecutive 12-month period.
   ii. PM-10 emissions shall not exceed 116.9 tons per consecutive 12-month period.

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

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

Monitoring15A NCAC 02Q .0508(f)]

c. The following monitoring requirements apply:
   i. The Permittee shall calculate on a monthly basis the monthly and rolling 12-month total of the PM10 and PM2.5 emissions from the MDF sources identified in Table 2.2 B.1.
   ii. For purposes of i above, the Permittee shall utilize the emission factors in Table 2.2 B.1 below. If the Permittee conducts source testing that results in any emission factors greater than those in Table 2.2 B.1 below, the Permittee shall submit a permit application to revise the permit with the test report required in Section 2.2 B.1.b above. The permit revision will be processed pursuant to 15A NCAC 02Q .0514.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not met.

Recordkeeping15A NCAC 02Q .0508(f)]

d. The Permittee shall keep the following records in a logbook (written or electronic format):
   i. the monthly and rolling 12-month total for the PM10 and PM2.5 emissions from the MDF sources in Table 2.2 B.1; and
   ii. the process rates of the dryers in ODMT/hr, the process rates of the press in MSF/hr, the heat inputs for the combustion sources in MMBtu/hr, and the process rate for the board cooler in units of lb/MSF, ¾" basis. These values may be calculated on a monthly average basis.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not met.

Table 2.2 B.1

Emission Point	Description*	PM-10		PM-2.5	
		EF	Units	EF	Units
EP-01	Refiner Abort Cyclone	3.52	lb/hr	3.52	lb/hr
EP-03	Fiber Sifter System Filter	0.58	lb/hr	0.58	lb/hr
EP-04	Forming Line Clean-Up Filter	0.55	lb/hr	0.55	lb/hr
EP-05	Mat reject system Filter	0.48	lb/hr	0.48	lb/hr
EP-07	Saw System Filter	0.84	lb/hr	0.84	lb/hr
EP-08	Sander System No. I Exhaust Filter	0.90	lb/hr	0.9	lb/hr
EP-09	Recycled Fiber Silo No. I Filter	0.02	lb/hr	0.02	lb/hr
EP-10	Sander System No.2 Exhaust Filter	0.45	lb/hr	0.45	lb/hr
EP-12	Sander Dust Silo No. I Filter	0.02	lb/hr	0.02	lb/hr
EP-13	Dry Sawdust Silo Filter	0.02	lb/hr	0.02	lb/hr
EP-15	Recycled Fiber Silo No. 2 Filter	0.02	lb/hr	0.02	lb/hr
EP-17	Sander Dust Silo No. 2 Filter	0.02	lb/hr	0.02	lb/hr
ES-18/19/20	Three natural gas-fired hot oil heaters	7.45E-03	lb/MMBtu	7.45E-03	lb/MMBtu
ES-02-A	Energy System Abort (50/50 dry/wet fuel)	0.5	lb/MMBtu	0.43	lb/MMBtu
ES-02-A	Energy System Abort (dry fuel)	0.36	lb/MMBtu	0.31	lb/MMBtu
EP-18	Press Biofilter	0.088	lb/MSF	0.088	lb/MSF
EP-18	Energy System and Dryer Biofilter (SW)**	0.51	lb/ODMT	0.51	lb/ODMT
EP-18	Energy System and Dryer Biofilter (SW/HW)**	0.51	lb/ODMT	0.51	lb/ODMT
EP-16	Press Biofilter (CDMDT)	0.088	lb/MSF	0.088	lb/MSF
EP-02/14	Energy System and Dryer Biofilter (SW)(CDMDT)**	0.51	lb/ODMT	0.51	lb/ODMT
EP-02/14	Energy System and Dryer Biofilter (SW/HW)(CDMDT)**	0.51	lb/ODMT	0.51	lb/ODMT

* "Energy System and Dryer" includes the commingled emissions of the energy system, two stage dryer system and the three backup burners (ID Nos. ES-02-A, -B, -C-1, -C-2, and -D)
SW – softwood only processing
SW/HW – softwood and hardwood processing
CDMDT – Control Device Maintenance Downtime, MACT Subpart DDDD, Biofilter, ID No. CD-18
** This includes emissions from the uncontrolled board cooler for PSD avoidance purposes (ID No. ES-06-B)

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

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly and rolling 12-month total of the PM10 and PM2.5 emissions from the MDF sources identified in Table 2.2 B.1. The 12 month rolling totals shall be calculated for each of the previous 17 months.

2. 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. For PSD purposes, the following "Best Available Control Technology" (BACT) permit limitations shall not be exceeded for units at the MDF Facilities:

Table 2.2.B.2

Equipment/ Process	ID No.	Emission Limits*	Control Technology
MDF Facilities Operations			
Energy System	ES-02-A	7.83 lb WPP1 VOC/ODMT	Biofilter (ID No. CD18)
Two Stage Dryer System with backup natural gas burners	ES-02-B ES-02-C-1, C-2 ES-02-D		
MDF Press and Press Hall	ES-16		
MDF Board Cooler	ES-06-B		None
MDF Woodworking Operations			
Fiber Sifter System	ES-03	0.082 lb WPP1 VOC/ODMT	None
Forming Line Clean-Up System	ES-04	0.082 lb WPP1 VOC/ODMT	
Mat Reject System	ES-05	0.082 lb WPP1 VOC/ODMT	
Saw System	ES-07	0.01 lb WPP1 VOC/MSF	
Sander System No. 1 (Primary sander)	ES-08	0.01 lb WPP1 VOC/MSF	
Sander System No. 2 (Finishing Sander)	ES-10	0.01 lb WPP1 VOC/MSF	
Recycled Fiber Silo No. 1	ES-09	0.082 lb WPP1 VOC/ODMT	
Recycled Fiber Silo No. 2	ES-15	0.082 lb WPP1 VOC/ODMT	
Sander Dust Silo No. 1	ES-12	0.268 lb WPP1 VOC/ODMT	
Sander Dust Silo No. 2	ES-17	0.268 lb WPP1 VOC/ODMT	
Dry Sawdust Silo Filter	ES-13	0.268 lb WPP1 VOC/ODMT	
Other Emission Sources in the MDF Plant			
Diesel Fuel-fired Emergency Generators	ES-21 I-DFP	Work practice standards and maintenance as required by 40 CFR 40 Part 63 Subpart ZZZZ and CFR 40 Part 60 Subpart IIII as applicable	None
Natural gas-fired hot oil heaters	ES-18, ES-19, ES-20	Proper design, maintenance, and operating practices	None
Gasoline storage tank Diesel storage tanks	I-Gas Not permitted	Proper design, maintenance, and operating practices	None

* BACT limits shall apply at all times. However, emissions resulting from startup, shutdown or malfunction as defined under 15A NCAC 02D .0535, exceeding the limits in condition a. above are permitted, provided that the Permittee, to the extent practicable, maintains and operates each emission source including any associated air pollution control equipment listed in this Table, in a manner consistent with good air pollution control practice for minimizing emissions.

** Wood Products Protocol 1 (WPP1) as provided in U.S. EPA, document entitled, “Interim VOC Measurement Protocol for the Wood Products Industry,” July 2007.

*** ODMT – oven dry metric tons

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

b. The following testing requirements apply
   i. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.
   ii. Under the provisions of NCGS 143-215.108, the Permittee shall test the MDF facilities controlled by the biofilter **(ID No. CD18)** to demonstrate compliance with the emission limits in Table 2.2 B.2.
   iii. Initial and subsequent testing shall be conducted consistent with the MACT DDDD test schedules at Section 2.2 A.1.k.

   If the results of this test(s) exceed the limits given in Table 2.2 B.2 above or these testing requirements are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. The following monitoring and recordkeeping requirements apply:
   i. The Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any, for the MDF woodworking operations cited in Table 2.2.B.2. The results of inspection and maintenance activities for the MDF woodworking operations 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:
      (A) the monthly throughput for each emission source in either ODMT or MSF, as appropriate.
      (B) the results of any maintenance activities performed on the emission sources, including corrective actions.
   ii. The monitoring and recordkeeping requirements in Section 2.1 D.5.f through h above, as applicable, shall be sufficient to ensure compliance with 15A NCAC 02D .0530 for the natural gas-fired hot oil heaters **(ID Nos. ES-18, ES-19, and ES-20)**.
   iii. The Permittee shall comply with the work practice standards and maintenance requirements and associated recordkeeping and reporting as required by 40 CFR 40 Part 63 Subpart ZZZZ and CFR 40 Part 60 Subpart IIII, as applicable, for the emergency diesel fuel-fired engines **(ID Nos. ES-21 and I-DFP).**
   iv. No monitoring or recordkeeping is required for VOC emissions from the MDF storage tanks cited in Table 2.2.B.2. above.
   v. For the MDF sources controlled by the Biofilter (ID No. CD-18), the Permittee shall meet the monitoring and recordkeeping requirements for the biofilter found in Section 2.1 A.1.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these monitoring and recordkeeping requirements are not met.

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

d. The following reporting requirements apply:
   i. The Permittee shall submit the results of any maintenance performed on the biofilter **(ID No. CD18)** within 30 days of a written request by the DAQ.
   ii. The Permittee shall submit a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to the avoid the applicability of 15A NCAC 02D .0530, the combined NOx emissions from the sources indicated in Table 2.2 B.3 below shall not exceed 308 tons per consecutive 12-month period.

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

b. i. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limits given in Section 2.2 B.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
   ii. Pursuant to NCGS 143-215.108, the Permittee shall test the sources controlled by the biofilter **(ID No CD18)** to confirm or re-establish emission factors and monitoring parameter(s) to be used for purposes of Section 2.2 B.3.c below. Testing shall be completed within 180 days after the start-up of the biofilter **(ID No. CD18)** after issuance of Permit No. T54. Testing shall be conducted in scenarios that represent worst-case NOx emissions. *This requirement was met on October 20 and 21, 2021.*
   iii. Pursuant to NCGS 143-215.108, the Permittee shall test the sources controlled by the biofilter **(ID No CD18)** to confirm or reestablish emission factors and monitoring parameter(s) to be used for purposes of Section 2.2 B.3.c below at least once every five years. Testing shall be completed within 61 months after the previous test. Testing shall be conducted in scenarios that represent worst-case NOx emissions.

iv. If the Permittee conducts source testing that results in emission factors or monitoring parameter(s) that:
(A) are greater than those in Table 2.2 B.3 below, the Permittee shall submit a request to revise the value(s) at the same time a test report required pursuant to General Condition JJ is submitted. The permit revision will be processed pursuant to 15A NCAC 02Q .0514.
(B) are less than those in Table 2.2 B.3 below, the Permittee may request to revise the value(s) in the permit pursuant to 15A NCAC 02Q .0515.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not met.

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

c. i. The Permittee may operate the urea/water injection system (**ID No. CD02-A**) on a voluntary basis.
(A) When the urea/water injection system is in operation, the Permittee shall maintain the minimum urea/water solution (45% urea concentration by volume) injection rate (3-hour block average) indicated in Table 2.2 B.3 below. During these operating periods, the Permittee may use the controlled emission factors in Table 2.2 B.3 below. This injection rate does not apply during performance testing. The injection rate will be confirmed or reestablished during performance testing.
(B) When the urea/water injection system is not in operation or the urea/water solution rate is below the rate indicated in Table 2.2 B.3 below, the Permittee must use the uncontrolled emission factors in Table 2.2 B.3 below.

ii. The Permittee shall calculate on a monthly basis the monthly and rolling 12-month total of NOx emissions from the MDF sources identified in Table 2.2 B.3 below. Periods of operation prior to the issuance of permit no. T54 are not included in these calculations.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements not met.

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

d. The Permittee shall keep the following records in a logbook (written or electronic format):
i. the heat input rates of all the sources in Table 2.2 B.3 below in units of million Btu per hour (MMBtu/hr);
ii. the water/urea injection rate in units of gpm (3-hour block averages);
iii. for each month, the number of hours of operation of each source in table 2.2 B.3 under the uncontrolled and controlled scenarios; and
iii. the monthly and rolling 12-month total of NOx emissions from each source in Table 2.2 B.3 below.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these requirements are not met.

Table 2.2 B.3

Emission Point	Emission Source Description*	NOx Emission Factor (lb/MMBtu)	Minimum Urea/Water Injection Rate (gpm)
MDF sources with no urea/water injection (uncontrolled)			
ES-02-A	Energy System consisting of one dry/wet wood/ woodwaste-fired burner (205 million Btu per hour heat input)	0.61	NA
ES-02-B and ES-02-C-1 and ES-02-C-2, ES-02-D	Two Stage Dryer System and Three backup natural gas-fired dryer burners (35, 35, and 17 million Btu per hour heat input respectively)		
MDF sources with urea/water injection (controlled)			
ES-02-A	Energy System consisting of one dry/wet wood/ woodwaste-fired burner (205 million Btu per hour heat input)	0.27	0.38
ES-02-B and	Two Stage Dryer System and		

Emission Point	Emission Source Description*	NOx Emission Factor (lb/MMBtu)	Minimum Urea/Water Injection Rate (gpm)
ES-02-C-1 and ES-02-C-2, ES-02-D	Three backup natural gas-fired dryer burners (35, 35, and 17 million Btu per hour heat input respectively)		

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

e. The Permittee shall submit a semi-annual summary report of monitoring and recordkeeping activities given in Section 2.2 B.3.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall contain the monthly and rolling 12-month total of the NOx emissions from each source identified in Table 2.2 B.3 above. The 12-month rolling totals shall be calculated for each of the previous 17 months.

2.3 Permit Shield for Non-Applicable Requirements

The Permittee is shielded from the following non-applicable requirements [15A NCAC 02Q .0512(a)(1)(A) and (B)].

A. New Source Performance Standard (NSPS) Subpart Db is not applicable to the biomass-fired Energy System (ID No. ES-02A) because the system is considered a process heater and the primary purpose is to produce a final product.

SECTION 3 - INSIGNIFICANT ACTIVITIES PER 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description[1,2]
I-VENTS	Roof ventilators
I-GAS	One 500 gallons above ground gasoline storage tank
I-TANK1, I-TANK2, I-TANK3, I-TANK4	Four above ground propane storage tanks, 1000 gallons each
I-LPA	Log Processing Area
I-MDFR-1, I-MDFR-2, I-MDFR-3, I-MDFR-4 **MACT DDDD**	Four MDF Resin Storage Tanks
I-DFP-1 **MACT ZZZZ, NSPS IIII**	Diesel fuel -fired Fire Pump Engine (347 Brake Horsepower output)
I-ODG **MACT ZZZZ**	Diesel-fuel Fired Emergency Generator (465 horsepower, 3,026 million Btu per hour heat input)
I-Irrigation fugitive	Spray Irrigation Field Fugitives
I-Wastewater ponds	Fugitives from wastewater lagoons
I-Spray paints **MACT DDDD**	Paints and striping for marking wood panels
I-ADS **MACT DDDD**	Material Separator System consisting of an Endtrim Bin, Shavings Bin, Discharge Conveyor (ADS feed), Air Density Separator, Cyclone, Baghouse and Reject Conveyor all operated with 100% recycled air.

[1] Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement (Federal or State) or that the Permittee is exempted from demonstrating compliance with any applicable requirement.

[2]When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit.”

SECTION 4 - GENERAL CONDITIONS (version 6.0, 01/07/2022)

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(s) 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. **Title V 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 [15A NCAC 02Q .0508(f)]
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** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

1. "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.)*
2. 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.
3. 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).

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

1. "Permit 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.
2. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) quarterly by notifying the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535. 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.C **Other Requirements under 15A NCAC 02D .0535**

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

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

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

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

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
   a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
   b. the permitted facility was at the time being properly operated;

c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.

4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

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

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

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

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

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

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all terms and conditions in the permit (including emissions limitations, standards, or work practices), except for conditions identified as being State-enforceable Only. 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;
4. the method(s) used for determining the compliance status of the source during the certification period;

5. each deviation and take it into account in the compliance certification; and
6. as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (CAM) occurred.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]
A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]
1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
   c. the applicable requirements under Title IV; or
   d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]
The Director may terminate, modify, or revoke and reissue this permit if:
1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]
Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]
This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]
1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
   d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

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

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

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

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

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

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

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

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

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

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

EE. **National Emission Standards Asbestos – 40 CFR Part 61, Subpart M** [15A NCAC 02D .1110]
The Permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

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, .1110, or .1111 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 for emission sources subject to Rules .0524, .1110, or .1111, the Permittee shall provide and submit all notifications, conduct all testing, and submit all test reports in accordance with the requirements of 15A NCAC 02D .0524, .1110, or .1111, as applicable. Otherwise, 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 15A NCAC 02D .2600 if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
    b. The Director may authorize the DAQ to conduct independent tests of any source subject to a rule in 15A NCAC 02D 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 15A NCAC 02D .2600 has precedence over all other tests.

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

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

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

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

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

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

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

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

1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (Air Permitting Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) in writing at least seven days before the change is made.
   a. The written notification shall include:
      i. a description of the change at the facility;
      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.

b. 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 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

MACT DDDD RCDME Request Letter dated September 26, 2019

arauco

985 Corinth Road
Moncure, North Carolina 27559
Tel: 919-642-6600
Toll Free: 855-427-2826
Fax: 919-545-5822

Certified Mail 7018 2290 0001 4576 3566
Return Receipt Requested

September 26, 2019

William Willets
NCDEQ – Division of Air Quality
217 West Jones Street
1641 Mail Service Center
Raleigh, NC 27699-1641

Subject: MACT DDDD Monitoring Permit Application Amendment
Facility ID No. 1900015/Permit No. 03449T51
Arauco North America, Inc.
Moncure, Chatham County, North Carolina

Dear Mr. Willets:

Arauco North America, Inc. (Arauco) is submitting this application addendum to modify the tune-up frequency for ES-18, 19, and 20, remove section 2.1.G language pertaining to the EVAP-1, satisfy the part 2 application required for a significant modification, and incorporate a routine control device maintenance exemption for CD-18. This application is a modification to the permit application submitted August 14, 2018 which included the necessary fees.

Arauco submitted permit application 1900015.18A June 2018 and received permit 03449T50 November 21, 2018. Within this permit application was the request to replace the natural gas burners ES-18, 19, and 20 at MDF from 26 to 30.4 MMBtu/hr units; the burners were replaced, and startup occurred March 1, 2019. When the burners were replaced, the new units operate with an oxygen trim system (Attachment A). Arauco is submitting this modification to have the tune-up frequency and language in Section 2.1.D.5 changed from annual to every five years according to the regulations under 63.7540(12), a unit that has a continuous oxygen trim system.

Arauco submitted a letter to DEQ stating the emission source EVAP-1 was no longer in operation on July 13, 2018 (Attachment B). As of October 2018, the evaporator was no longer located on Arauco's site. Arauco is submitting this permit application to have all recordkeeping and reporting requirements and any language associated with EVAP-1 in Section 2.1.G be removed from the Title V air quality permit.

Arauco is submitting this permit application to satisfy the requirements of submitting a permit application on or before 12 months after commencing operation of equipment listed as 15A NCAC 02Q .0501(b)(2). In application 1900015.15A (Attachment C), Arauco proposes several projects that will increase the overall throughput capacity of the facility including: replacing the natural gas burners, introducing a chip steaming system, implementing a steam wand, upgrades to the mat scalping system, improvements to the press outfeed, and upgrades to the saw system. Since the 1900015.18A application was approved, Arauco has implemented the natural gas burners, chip steaming system, steam wand,

and mat scalping system as originally described in the application. The press outfeed and finishing saw upgrades will be implemented as described in the application when time and resources allow for project completion.

The biofilter (CD-18) is now installed and commissioned and Arauco would like to request Routine Control Device Maintenance exemptions per 40 CFR 63.2251 for two activities related to maintaining the biofilter: 1) replacing, unplugging, or repairing spray nozzles over the media beds and 2) replacing or repairing media in the biofilter.

Nozzle Maintenance

Arauco has found through limited operation that the nozzles inside the device are critical to maintaining sizable aerobic bacteria colonies for the efficient destruction of formaldehyde. Arauco has also found that it takes multiple days to cool the biofilter to a safe temperature because Arauco operates the biofilter in a thermophilic temperature range (140-150°F). A typical shutdown of the Moncure fiberboard plant for regular maintenance activities is only 12 hours and the biofilter internal temperature due to the insulation of the concrete can still be as high as 105°F after shutdown for 12 hours. This high temperature makes work inside the unit extremely strenuous and dangerous for operators and maintenance personnel. Arauco expects to only conduct this activity at most twice per year based upon qualitative evaluation of spray patterns inside the biofilter appearing plugged or decreases in flow rates from the water pumps in the biofilter.

Media Replacement

Arauco has not operated the new biofilter long enough to replace media but has found through experience with other biofilters that every 5 years, the structured media begins to collapse. For similar heat exposure reasons as mentioned above and due to potentially unpredictable catastrophic failure of media, Arauco is requesting this activity be a permissible routine control device maintenance exemption.

Emissions Minimization

Arauco plans to minimize operations by limiting production to nominal capacities during periods of routine control device maintenance exemption. During construction of the biofilter, Arauco demonstrated compliance with the North Carolina Air Toxics standard NCAC 2D.1100 for formaldehyde while bypassing emissions from its original dryer stacks so Arauco expects no significant offsite impacts related to formaldehyde while conducting routine control device maintenance.

If you have any questions about the requested changes, please contact Yvonne Couts, Moncure Environmental Manager, 919-545-5848 and/or yvonne.couts@arauco-na.com.

Sincerely,

Jeff McMillian
Plant Manager