



North Carolina Department of Environment and Natural Resources
Division of Air Quality

Beverly Eaves Purdue
Governor

Sheila C. Holman
Director

Dee Freeman
Secretary

XX XX, 2011

Mr. Joe Heard
General Manager
Uniboard USA LLC
985 Corinth Rd.
Moncure, North Carolina 27559

Dear Mr. Hillmann:

SUBJECT: Air Quality Permit No. 03449T38
Facility ID: 1900015
Uniboard USA LLC
Moncure, North Carolina
Chatham County
Fee Class: Title V

In accordance with your completed Air Quality Permit Application for the significant modification of the Title V permit received on April 18, 2011, we are forwarding herewith Air Quality Permit No. 03449T37 to Uniboard USA LLC, 985 Corinth Road, Moncure, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

The Permittee shall file a Title V Air Quality Permit Application pursuant to 15A NCAC 2Q .0504 for the air emission sources included in permit application 1900015.07A, .08C and .09B on or before 12 months after commencing operation.

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.

These emission sources (**ID Nos. ES-21, ES-DFP-1, ES-ODG**) are listed as a minor modification per 15A NCAC 2Q .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

Permitting Section

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2728 Capital Blvd., Raleigh, North Carolina 27604
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One
North Carolina
Naturally

Mr. Joe Heard

XX XX, 2011

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described General Condition R) for this source shall become final on July 19, 2011. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source under pursuant to 15A NCAC 2Q .0515(f).

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

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

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of GS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

In addition, specific changes and additions as summarized in the attachment below have been made to the permit (note: this list may not include all changes and additions).

This Air Quality Permit shall be effective from XX XX, 2011 until April 30, 2016 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 Charles F. Yirka at (919) 715-6250.

Sincerely yours,

Donald R. van der Vaart, Ph.D., J.D. P.E.
Chief

Enclosure

cc: Gregg Worley, EPA Region 4
Raleigh Regional Office
Central Files

ATTACHMENT to cover letter to Permit No. 03449T38

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

Emission Source ID	Emission Source Description
I-VENTS	Roof ventilators
I-GAS	One 500 gallons above ground gasoline storage tank
I-TANK1, I-TANK2, I-TANK3, I-TANK4	Four, 1000 gallons each, above ground propane storage tanks
I-LPA	Log Processing Area

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 2D .1100 "Control of Toxic Air Pollutants" or 2Q .0711 "Emission Rates Requiring a Permit".
3. For additional information regarding the applicability of GACT see the DAQ page titled "The Regulatory Guide for Insignificant Activities/Permits Exempt Activities". The link to this site is as follows:
<http://daq.state.nc.us/permits/insig/>

ATTACHMENT to cover letter to Air Quality Permit No. 03449T38

Existing Condition No.	New Condition No.	Changes
Cover Letter	Same	<ul style="list-style-type: none"> • Updated permit revision numbers, issue, effective dates, etc.
Attachment to Permit	Same	<ul style="list-style-type: none"> • Update insignificant activities table to latest format
Page 1	Same	<ul style="list-style-type: none"> • Updated permit revision numbers, issue, effective dates, etc.
Table of Contents	Same	<ul style="list-style-type: none"> • Include Section 2 – 2.4 Permit Shield for Non-Applicable Requirements
Page 4 Section 1 Table Equipment List	Same	<ul style="list-style-type: none"> • Removed NSPS Subpart Db designation from the descriptor for ES-02-A
Page 11 2.1 C	Same	<ul style="list-style-type: none"> • Removed pollutants particulate matter limit, opacity standard and NSPS Db from table •
NA	Page 12 2.1.C.1	<ul style="list-style-type: none"> • Added condition for 2D .0504 • Added testing condition for 2D .0504 (within 180 days of start-up) • Insert pollutant particulate associated with 2D. 0504
Page 12 2.1.C.2	NA	<ul style="list-style-type: none"> • Remove entire NSPS Db standard and condition including COMS/CEMS requirements
NA	Page 12 2.1C.3	<ul style="list-style-type: none"> • Insert opacity standard and condition associated with 2D .0521 including daily monitoring and recordkeeping and reporting
Page 15 and 16 2.1.D.2.c. and D.3	Page 15 and 16 2.1.D.2	<ul style="list-style-type: none"> • The 2D .0521 condition for the MDF Facilities operation excluding the MDF press had referred to the monitoring, recordkeeping and reporting associated with NSPS Db. The conditions were combined into one condition for 2D .0521
NA	Page 45 2.4	<ul style="list-style-type: none"> • Added Permit Shield for Non-applicable Requirements
Page 48-56 General Conditions version 3.4	Page 46-54 General Conditions version 3.4	<ul style="list-style-type: none"> • Renumber pages for General Conditions (version 3.4)

State of North Carolina,
Department of Environment,
and Natural Resources
Division of Air Quality



AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date**
03449T38	03449T37	XX XX, 2011	April 30, 2016

**This permit shall expire on the earlier of September 30, 2014 or the renewal of permit 03449T34 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 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **Uniboard USA LLC**
Facility ID: **1900015**

Facility Site Location: **985 Corinth Road**
City, County, State, Zip: **Moncure, Chatham County, North Carolina 27559**

Mailing Address: **985 Corinth Road**
City, County, State, Zip: **Moncure, Chatham County, North Carolina 27559**

Application Number: **1900015.11B**
Complete Application Date: **May 20, 2011 (subject to be revised)**

Primary SIC Codes: **2493**
Division of Air Quality,
Regional Office Address: **Raleigh Regional Office**
3800 Barrett Drive, Suite 101
Raleigh, North Carolina 27609

Permit issued this the XXth of XX, 2011.

Donald R. van der Vaart, Ph.D., P.E., Chief, Air Permits Section
By Authority of the Environmental Management Commission

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ATTACHMENT

List of Acronyms

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	None
7004 or SP-2 MACT DDDD	Truck/Rail Sawdust Handling System, Enclosed	N/A	None
7010 MACT DDDD	Particle Board Mill Truck Dump	N/A	None
7012, 7014, 7015, 7029 MACT DDDD	Dump bunkers and CL dryer dump	N/A	None
7052, 7054, 7055, 7056 MACT DDDD	Wood residue bunkers	N/A	None
6001, 7002-A, 7002-B, 7002-C, 7002-D MACT DDDD	Wood chip piles - Medium Density Fiberboard Mill	N/A	None
6003, 7006, 7007, 7022 MACT DDDD	Wood Fuel Pad and Boiler Transfers	N/A	None
7005-D, 7005-E, 7005-F, 7005-G MACT DDDD	Sawdust transport to A-frame	N/A	None
7025 MACT DDDD	Scale transfer conveyors	N/A	None
7019, 7026 MACT DDDD	Fiber dump and reject filter bins	N/A	None
7027 MACT DDDD	Hog fuel hopper	N/A	None
7040, 7044, 7046, 7048, 7050 MACT DDDD	Particleboard Mill chip transfer	N/A	None
SP MACT DDDD	Fuel Sawdust and Chip Storage Piles	N/A	None
7024 MACT DDDD	Particleboard Mill feed bins	N/A	None
Medium Density Fiberboard Facilities[*]			
ES-01 MACT DDDD	Refiner	CD-01	Refiner Abort Cyclone (66 inches in diameter) ¹

¹ For operation during startup, shutdown and malfunction only.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
		CD02	Venturi and packed bed scrubber (35 gallons per minute minimum injection rate)
		CD14	in parallel with Venturi and packed bed scrubber (35 gallons per minute minimum injection rate)
ES-18, ES-19, and ES-20 NSPS Dc Case-by-Case MACT	Three natural gas-fired hot oil heaters (24 million Btu per hour maximum heat input each)	NA	NA
ES-02-A 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	Venturi and packed bed scrubber (35 gallons per minute minimum injection rate)
		CD14	in parallel with Venturi and packed bed scrubber (35 gallons per minute minimum injection rate)
ES-02-B and ES-02-C and ES-02-D MACT DDDD	Two Stage Dryer System and Two backup natural gas-fired dryer burners (78.5 and 17 million Btu per hour heat input respectively)	CD02	Venturi and packed bed scrubber (35 gallons per minute minimum injection rate)
		CD14	in parallel with Venturi and packed bed scrubber (35 gallons per minute minimum injection rate)
ES-16 MACT DDDD	MDF Press	CD16	Venturi and packed bed scrubber
ES-06-B MACT DDDD	MDF Board Cooler	CD02	Venturi and packed bed scrubber (35 gallons per minute minimum injection rate)
		CD14	in parallel with Venturi and packed bed scrubber (35 gallons per minute minimum injection rate)
ES-03 MACT DDDD	Fiber Sifter System	CD03	Fabric Filter (12,290 square feet of filter area)
ES-04 MACT DDDD	Forming Line Clean-Up System	CD04	Fabric Filter (9,346 square feet of filter area)
ES-05 MACT DDDD	Mat Reject System	CD05	Fabric Filter (9,346 square feet of filter area)
ES-07 MACT DDDD	Saw System	CD07	Fabric Filter (6793 square feet of filter area)
ES-08 MACT DDDD	Sander System No.1	CD08	Fabric Filter (12,290 square feet of filter area)
ES-09 MACT DDDD	Recycled Fiber Silo No.1	CD09	Bin Vent Filter (226 square feet of filter area)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-10 MACT DDDD	Sander System No. 2	CD10	Fabric Filter (12,290 square feet of filter area)
ES-12 MACT DDDD	Sander Dust Silo No. 1	CD12	Bin Vent Filter (226 square feet of filter area)
ES-13 MACT DDDD	Dry Sawdust Silo	CD13	Bin Vent Filter (226 square feet of filter area)
ES-15 MACT DDDD	Recycled Fiber Silo No. 2	CD15	Bin Vent Filter (226 square feet of filter area)
ES-17 MACT DDDD	Sander Dust Silo No. 2	CD17	Bin Vent Filter (226 square feet of filter area)
MDFR-1, MDFR-2, MDFR-3, MDFR-4 MACT DDDD	Four MDF resin storage tanks	NA	NA
ES-21** MACT ZZZZ	Diesel Fuel-fired Emergency Generator(1592 Brake Horsepower output)	NA	NA
Particleboard Mill			
3501 PSD MACT DDDD	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
1430 PSD MACT DDDD	Surface layer triple pass, rotary drum (#3) dryer with one wood suspension dust/natural gas-fired burner (60 million Btu per hour maximum rated heat input)	CD-1431	High efficiency multi-cyclone with 2 tubes, each 132 inches in diameter
		CD-PB-WESP	Wet electrostatic precipitator
1420 PSD MACT DDDD	Core layer single pass, rotary drum (#1) dryer with one wood suspension dust/natural gas-fired burner (50 million Btu per hour maximum rated heat input)	CD-1421	High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter
		CD-PB-WESP	Wet electrostatic precipitator
1410 PSD MACT DDDD	Core layer single pass, rotary drum (#2) dryer with one wood suspension dust/natural gas-fired burner (50 million Btu per hour maximum rated heat input)	CD-1411	High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter
		CD-PB-WESP	Wet electrostatic precipitator
3201 PSD MACT DDDD	One "Wellons" wood suspension dust - fired burner (40 million Btu per hour maximum rated heat input) exhausting to either surface layer triple pass, rotary drum (#3) dryer [ID No. 1430] and/or core layer single pass, rotary drum (#1) dryer [ID No. 1420] and/or core layer single pass, rotary drum (#2) dryer [ID No. 1410]	CD-1431	High efficiency multi-cyclone with 2 tubes, each 132 inches in diameter
		AND/OR	
		CD-1421	High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter
		AND/OR	
		CD-1411,	High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter
	AND		
		CD-PB-WESP	Wet electrostatic precipitator

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
3515 PSD MACT DDDD	Surface Material Transport (SL fines from screening operation)	CD-3500, CD-3512B	Two (2) simple cyclones - each 72 inches in diameter
		CD-3515	Reverse flow fabric filter with 6,918 square feet of surface area
3525 PSD MACT DDDD	Surface Formers and Mat Dumps	CD-3520A, CD-3520B, CD-3521	Three (3) simple cyclones - each 96 inches in diameter
		CD-3525	Reverse flow fabric filter with 6,918 square feet of surface area
3535 PSD MACT DDDD	Flying Cut Off Saw, Pretrim Saws, & Production Collection	CD-3530	Simple cyclone - 84 inches in diameter
		CD-3531	Simple cyclone - 108 inches in diameter
		CD-3533	Simple cyclone - 108 inches in diameter
		CD-3535	Reverse flow fabric filter with 6,918 square feet of filter area
DEF- 2010 PSD MACT DDDD	Particleboard Press	N/A	None
PB-BC PSD MACT DDDD	Particleboard Cooler	N/A	None
3565 PSD MACT DDDD	Particleboard Mill Steinemann Calibrating Sander	CD-5001	Reverse flow fabric filter with 6,918 square feet of surface area
		CD-3570	High efficiency cyclone - 144 inches in diameter
		CD-3575	Reverse flow bag filter with 1,159 square feet of surface area
3545 PSD MACT DDDD	Particleboard Mill Steinemann Finishing Sander	CD-2006	Reverse flow bag filter with 6,918 square feet of surface area
		CD-3570	High efficiency cyclone - 144 inches in diameter
		CD-3575	Reverse flow bag filter with 1,159 square feet of surface area
3555 PSD MACT DDDD	Schelling Saw Board Trim	CD-3522	High efficiency cyclone - 120 inches in diameter
		CD-4005	Reverse flow bag filter with 6,918 square feet of surface area
3575 PSD MACT DDDD	Sander Filter Transport for Filters 3545 & 3565	CD-3570	High efficiency cyclone - 144 inches in diameter
		CD-3575	Reverse flow bag filter with 1,159 square feet of surface area

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
3585 PSD MACT DDDD	PZKR Green Chip Flakers	CD-3585	Reverse flow bag filter with 4,880 square feet of surface area
3595 MACT DDDD	Oversize Material Pallmann Mill	CD-3595	Reverse flow bagfilter (Maximum air-to-cloth ratio of 3.0 ACFM/total filter surface area).
3577 PSD MACT DDDD	Dry waste transport system	CD-3532 CD-3577	Simple cyclone - 60 inches in diameter Reverse flow bag filter with 4,068 square feet of surface area
ES-DFP-1** MACT ZZZZ NSPS III	Diesel Fuel -fired Fire Pump Engine(347 Brake Horsepower output)	CD-DFP	Particulate Matter Filter
ES-ODG** MACT ZZZZ	Diesel-fuel Fired Emergency Generator (465 horsepower, 3,026 million Btu per hour heat input)	NA	NA
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 Case-by-Case MACT	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	None

* These emission sources and control devices indicated as the Medium Density Fiberboard Facilities are listed as a 15A NCAC 2Q .0501(c)(2) modification. The Permittee shall file a Title V Air Quality Permit Application on or before **12 months after commencing operation** in accordance with General Condition NN.1. The permit shield described in General Condition R does not apply and compliance certification as described in General Condition P is not required.

These emission sources (ID Nos. ES-21, ES-DFP-1, ES-ODG) are listed as a minor modification per 15A NCAC 2Q .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 **July 19, 2011. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source under pursuant to 15A NCAC 2Q .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. Material Handling Sources:

- Truck/Rail Chip Handling System (ID No. 7001 or SP-1);**
- Truck/Rail Sawdust Handling System (ID No. 7004 or SP-2);**
- Particleboard Mill Truck Dump (ID No. 7010);**
- Dump Bunkers and CL Dryer Dump (ID Nos. 7012, 7014, 7015, and 7029);**
- Wood Residue Bunkers (ID Nos. 7052, 7054, 7055 and 7056);**
- Wood Chip Piles - Medium Density Fiberboard Mill (ID Nos. 6001, 7002-A, 7002-B, 7002-C, and 7002-D);**
- Wood Fuel Pad and Boiler Transfers (ID Nos. 6003, 7006, 7007, 7022);**
- Sawdust Transport to A-Frame (ID Nos. 7005-D, 7005-E, 7005-F, 7005-G);**
- Fuel Sawdust and Chip Storage Piles (ID No. SP);**
- Scale Transfer Conveyors (ID No. 7025);**
- Fiber dump and reject filter bins (ID Nos. 7019 and 7026);**
- Hog Fuel Hopper (ID No. 7027);**
- Particleboard Mill Chip Transfer (ID Nos. 7040, 7044, 7046, 7048, and 7050); and**
- Particleboard Mill Feed Lines (ID No. 7024)**

The following table provides a summary of limits and/or standards for the material handling sources.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible emissions	20 percent opacity	15A NCAC 2D .0521(d)
Odors	Odorous emissions must be controlled - See Section 2.2. A.3; State-enforceable only	15A NCAC 2D .1806

1. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

- a. As required by 15A NCAC 2D .0521(d) "Control of Visible Emissions," visible emissions from the sources manufactured after July 1, 1971, shall not be more than 20 percent opacity when averaged over a six-minute period [15A NCAC 2D .0521(d)]. However, six minute averaging periods may exceed 20 percent opacity if
 - i. No six-minute period exceeds 87 percent opacity;
 - ii. No more than one six-minute period exceeds 20 percent opacity in any hour; and
 - iii. No more than four six-minute periods exceed 20 percent opacity in any 24-hour period

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. 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 2D .0521.

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

- c. No monitoring, record keeping, or reporting is required for visible emissions from the following sources: truck/rail chip handling system (**ID No. 7001 or SP-1**); truck/rail sawdust handling system (**ID No. 7004 or SP-2**); particleboard mill truck dump (**ID No. 7010**); dump bunkers and CL dryer dump (**ID Nos. 7012, 7014, 7015, 7029**); wood residue bunkers (**ID Nos. 7052, 7054, 7055, and 7056**); wood chip piles - medium density fiberboard mill (**ID Nos. 6001, 7002-A, 7002-B, 7002-C, and 7002-D**); wood fuel pad and boiler transfers (**ID Nos. 6003, 7006, 7007, 7022**); sawdust transport to A-frame (**ID Nos. 7005-D, 7005-E, 7005-F, 7005-G**); Fuel Sawdust and Chip Storage Piles (**ID No. SP**); scale transfer conveyors (**ID No. 7025**); fiber dump and reject filter bins (**ID Nos. 7019 and 7026**); hog fuel hopper (**ID No. 7027**); particleboard mill chip transfer (**ID Nos. 7040, 7044, 7046, 7048, and 7050**); and particleboard mill feed lines (**ID No. 7024**).

B. Medium Density Fiberboard Facilities woodworking operations as presented in Table 2.1.B.1.

Table 2.1.B.1

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 MACT DDDD	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 MACT DDDD	Recycled Fiber Silo No. 2	CD15	Bin Vent Filter (226 square feet of filter area)
ES-17 MACT DDDD	Sander Dust Silo No. 2	CD17	Bin Vent Filter (226 square feet of filter area)

The following table provides a summary of limits and/or standards for the woodworking operations in Table 2.1.B.1.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	adequate duct work and properly designed collectors	15A NCAC 2D .0512
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Volatile organic compounds	Work Practice Standards See Section 2.2 A.1.	15A NCAC 2D .0958
Toxic air pollutants	See Section 2.2 A.2; State-enforceable only	15A NCAC 2D .1100
Odors	See Section 2.2 A.3; State-enforceable only	15A NCAC 2D .1806
Hazardous air pollutants	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products See Section 2.2 A.4.	15A NCAC 2D .1111 (40 CFR 63, Subpart DDDD)
Volatile organic compounds, Nitrogen oxides, PM _{2.5} , PM ₁₀	See Section 2.2 B.1.	15A NCAC 2Q .0317 (PSD Avoidance)

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

- b. Particulate matter emissions from the MDF wood working operations shall be controlled as presented in **Table 2.1.B.1**. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:
- i. monthly external inspection of the ductwork, cyclones, and bagfilters noting the structural integrity; and
 - ii. annual (for each 12 month period following the initial inspection) internal inspection of the bagfilters noting the structural integrity and the condition of the filters.

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

Recordkeeping [15A NCAC 2Q .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 2D .0512 if these records are not maintained.

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

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

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

- a. Visible emissions from the MDF wood working operations **listed in Table 2.1.B.1**, 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 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1.B.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a week the Permittee shall observe the emission points of this source 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 the source within 30 days of initial startup. If visible emissions from this source are observed to be above normal, the Permittee shall either:
- i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1.B.2.a. above.
- If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

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

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

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

- e. The Permittee shall submit a summary report of the 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. One Energy System (ID No. ES-02-A) configured as follows in Table 2.1.C.1.

Table 2.1.C.1.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description	Configuration
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	in series with CD02 and CD14
		CD02	Venturi and packed bed scrubber (35 gallons per minute minimum injection rate)	CD02 in parallel with CD14 with emission points EP02 and EP14
		CD14	Venturi and packed bed scrubber (35 gallons per minute minimum injection rate)	

The following table provides a summary of limits and standards for the energy system described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.325 lb/million Btu (ID No. ES-02A)	15A NCAC 2D .0504
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Volatile organic compounds	Work Practice Standards See Section 2.2 A.1.	15A NCAC 2D .0958
Visible emissions	20 percent opacity	15A NCAC 2D .0521(d)
Toxic air pollutants	See Section 2.2 A.2; State-enforceable only	15A NCAC 2D .1100
Odors	See Section 2.2 A.3; State-enforceable only	15A NCAC 2D .1806
Hazardous air pollutants	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products See Section 2.2 A.4.	15A NCAC 2D .1111 (40 CFR 63, Subpart DDDD)
Volatile organic compounds, Nitrogen oxides, PM _{2.5} , PM ₁₀	See Section 2.2 B.1.	15A NCAC 2Q .0317 (PSD Avoidance)

1. 15A NCAC 2D .0504: PARTICULATES FROM WOODBURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of wood that are discharged from the biomass-fired Energy System (**ID No. ES-02-A**) into the atmosphere shall not exceed 0.325 pounds per million Btu heat input.

Testing [15A NCAC 2D .2601]

- 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 2D .0504.

Testing [15A NCAC 2D .2601]

- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit(s) above by testing the emission sources in Table 2.1.C.1 in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ. **Testing shall be completed not later than 180 days of the issuance date of Permit No. 03449T38 and annually thereafter.** The Permittee shall submit a written report of the test(s) results to the Regional Supervisor, DAQ within 60 days of completion of the 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 .0504.

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

- d. Particulate matter emissions from the biomass-fired Energy System (**ID No. ES-02-A**) shall be controlled by venturi and packed bed scrubbers (**ID Nos. CD02-A, CD-02 and CD-14**).
- e. Monitoring/recordkeeping requirements in Section 2.1 D.1.c. through f. shall be sufficient to assure compliance with 15A NCAC 2D .0504. If the requirements of Section 2.1 D.1.c. through f. are not complied with, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504.

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

- f. Reporting requirements in Section 2.1 D.1.g. shall be sufficient to assure compliance with 15A NCAC 2D .0504.

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

- a. Emissions of sulfur dioxide from Energy System (**ID No. ES-02-A**) 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. [15A NCAC 2D .0516]

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1.C.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- c. No monitoring, recordkeeping or reporting is required for sulfur dioxide emissions from wood combustion for the Energy System (**ID No. ES-02-A**).

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

- a. Visible emissions from this source **Energy System (ID No. ES-08-A)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a day the Permittee shall observe the emission points of this source **Energy System (ID No. ES-08-A)** for any visible emissions above normal. The daily observation must be made for each day of the calendar year period that this emission source is in operation to ensure compliance with this requirement. For days when this emission source is not operating, the client shall document “not operating” in the recordkeeping associated with this permit condition. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. **The Permittee shall establish “normal” for the source in the first 30 days following the effective date of the permit.** If visible emissions from this source are observed to be above normal, the Permittee shall either:
- i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.3.a. above.
- If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

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

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

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

- e. The Permittee shall submit a summary report of the 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.

D. Medium Density Fiberboard Facilities Operations as presented in Table 2.1.D.1.

Table 2.1.D.1.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-01	Refiner	CD01	Refiner Abort Cyclone (66 inches in diameter) ²
		CD02	Venturi and packed bed scrubber (35 gallons per minute minimum injection rate) in parallel with
		CD14	Venturi and packed bed scrubber (35 gallons per minute minimum injection rate)

² For operation during startup, shutdown and malfunction only.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-02-B and ES-02-C and ES-02-D	Two Stage Dryer System and Two backup natural gas-fired dryer burners (78.5 and 17 million Btu per hour heat input respectively)	CD02 CD14	Venturi and packed bed scrubber (35 gallons per minute minimum injection rate) in parallel with Venturi and packed bed scrubber (35 gallons per minute minimum injection rate)
ES-06-B	MDF Board Cooler		
ES-16	MDF Press	CD16	Venturi and packed bed scrubber

The following table provides a summary of limits and/or standards for the operations in Table 2.1.D.1.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10P^{0.67}$ 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 2D .0515
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Volatile organic compounds	Work Practice Standards See Section 2.2 A.1.	15A NCAC 2D .0958
Toxic air pollutants	See Section 2.2 A.2; State-enforceable only	15A NCAC 2D .1100
Odors	See Section 2.2 A.3; State-enforceable only	15A NCAC 2D .1806
Hazardous air pollutants	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products See Section 2.2 A.4.	15A NCAC 2D .1111 (40 CFR 63, Subpart DDDD)
Volatile organic compounds, Nitrogen oxides, PM _{2.5} , PM ₁₀	See Section 2.2 B.1.	15A NCAC 2Q .0317 (PSD Avoidance)

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

- a. Emissions of particulate matter from the emission sources in Table 2.1.D.1. 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 2D .2601]

- b. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit(s) above by testing the emission sources in Table 2.1.D.1 in accordance with a testing protocol approved

by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ. Testing shall be completed not later than 60 days after the effective date of this permit. The Permittee shall submit a written report of the test(s) results to the Regional Supervisor, DAQ within 60 days of completion of the test. If the results of this test are above the limit given in Section 2.1 D. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

- c. Particulate matter emissions from these sources shall be controlled as described in Table 2.1.D.1. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer.
- d. The Permittee shall submit a permit application to the Regional Supervisor, DAQ to include control device monitoring parameters. The application shall be submitted within 60 days of completion of the compliance testing required in condition b. above.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the monitoring requirements in conditions c. and d. are not met.

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

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

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

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

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

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

- a. Visible emissions from the emission sources in Table 2.1.D.1 shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1.D.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a week the Permittee shall observe the emission points of this source 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 the source within 30 days of initial startup. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1.D.2.a. above.If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

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

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.
 The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

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

- e. The Permittee shall submit a summary report of the 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.

E. Three natural gas-fired hot oil heaters (24 million Btu per hour maximum heat input, each) for the Medium Density Fiberboard Facilities (ID Nos. ES-18, ES-19 and ES-20)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.35 pounds per million Btu heat input	15A NCAC 2D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
NA	Notification and Recordkeeping	15A NCAC 2D .0524 (NSPS Subpart Dc)
HAPs	Best Combustion Practices	15A NCAC 2D .1109
Volatile organic compounds	Work Practice Standards See Section 2.2 A.1.	15A NCAC 2D .0958
Odors	See Section 2.2 A.3; State-enforceable only	15A NCAC 2D .1806
Volatile organic compounds, Nitrogen oxides, PM _{2.5} , PM ₁₀	See Section 2.2 B.1.	15A NCAC 2Q .0317 (PSD Avoidance)

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

- a. Emissions of particulate matter from the combustion of natural gas, that are discharged from this source into the atmosphere shall not exceed 0.35 pounds per million Btu heat input.

Testing [15A NCAC 02D .2601]

- 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 Section 2.1 E.1.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 this source.

2. 15A NCAC 2D .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 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 E.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f) and 15A NCAC 02D .2601]

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from natural gas for this source.

3. 15A NCAC 2D .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 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 A. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 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 this source.

4. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."

Initial Notification Requirements [40 CFR 60.7]

- b. In addition to any other notification requirements to the Environmental Protection Agency per 40 CFR 60.7, the Permittee is required to notify the Regional Supervisor, DAQ, in writing, of the following:
 - i. A notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date.
 - ii. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the initial notification requirements in condition b. are not met.

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

- c. Pursuant to 40 CFR 60.48c(g)(2), the Permittee shall record and maintain records of the amount of fuel combusted during each calendar month. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the recordkeeping requirements in condition c. are not met.

5. 15A NCAC 2D .1109: Case-by-Case MACT

- a. The Permittee shall use best combustion practices when operating the affected heaters (**ID Nos. ES-18, ES-19 and ES-20**). The initial compliance date for this work practice standard and the associated monitoring, recordkeeping, and reporting requirements is **October 18, 2013**. These conditions need not be included on the annual compliance certification until after the initial compliance date.

Monitoring/Recordkeeping

- b. To assure compliance, the Permittee shall perform an annual boiler inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
 - i. Inspect the burner, and clean or replace any components of the burner as necessary;
 - ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame

- pattern; and,
- iii. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.

The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if the affected heaters are not inspected and maintained as required above.

- c. 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 of each recorded action;
 - ii. The results of each inspection; and,
 - iii. The results of any maintenance performed on the heaters.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if these records are not maintained.

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

- d. No reporting is required.

F. Particleboard Mill (ID No. PB):

- Sawdust Rock and Metal Separator (ID No. 3501)**
- Surface Layer Dryer (ID No. 1430)**
- Core Layer Dryer No. 1 (ID No. 1420)**
- Core Layer Dryer No. 2 (ID No. 1410)**
- "Wellons" Burner (ID No. 3201)**
- Surface Material Transport (ID No. 3515)**
- Surface Formers and Mat Dumps (ID No. 3525)**
- Flying Cut Off Saw, Pretrim Saws, and Production Collection (ID No. 3535)**
- Particleboard Press (ID No. DEF-2010)**
- Particleboard Cooler (ID No. PB-BC)**
- Particleboard Steinemann Calibrating Sander (ID No. 3565)**
- Particleboard Steinemann Finishing Sander (ID No. 3545)**
- Schelling Saw Board Trim (ID No. 3555)**
- Sander Filter Transport for Filters 3545 and 3565 (ID No. 3575)**
- PZKR Green Chip Flakers (ID No. 3585)**
- Oversized Material Pallmann Mill (ID No. 3595)**
- Dry Waste Transport System (ID No. 3577)**

The following table provides a summary of limits and/or standards for the particleboard mill.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.365 lb/million Btu (ID No. 3201)	15A NCAC 2D .0504

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	adequate duct work and properly designed collectors Affected facilities: Sawdust Rock and Metal Separator (ID No. 3501) Surface Material Transport (ID No. 3515) Surface Formers and Mat Dumps (ID No. 3525) Flying Cut Saw, Pretrim Saws, & Production Collection (ID No. 3535) Particleboard Press (ID No. DEF-2010) Particleboard Cooler (ID No. PB-BC) Particleboard Mill Steinemann Calibrating Sander (ID No. 3565) Particleboard Mill Steinemann Finishing Sander (ID No. 3545) Schelling Saw Board Trim (ID No. 3555) Sander Filter Transport for Filters 3545 and 3565 (ID No. 3575) PZKR Green Chip Flakers (ID No. 3585) Dry Waste Transport System (ID No. 3577) Oversized Material Pallmann Mill (ID No. 3595)	15A NCAC 2D .0512
Particulate matter	$E = 4.10P^{0.67}$ when $P < 30$ tons per hour where E = allowable emission rate in pounds per hour P = process weight in tons per hour $E = 55.0P^{0.11}$ when $P \geq 30$ tons per hour where E = allowable emission rate in pounds per hour P = process weight in tons per hour Affected facilities: Surface Layer Dryer (ID No. 1430) Core Layer Dryer No. 1 (ID No. 1420) Core Layer Dryer No. 2 (ID No. 1410)	15A NCAC 2D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input Affected facilities: Surface Layer Dryer (ID No. 1430) Core Layer Dryer No. 1 (ID No. 1420) Core Layer Dryer No. 2 (ID No. 1410) "Wellons" Burner (ID No. 3201)	15A NCAC 2D .0516(a)
Visible emissions	20 percent opacity	15A NCAC 2D .0521(d)
PM ₁₀ Carbon monoxide Volatile organic compounds Nitrogen dioxide Visible emissions	See Section 2.1 F.6.	15A NCAC 2D .0530
Volatile organic compounds	Work Practice Standards See Section 2.2 A.1.	15A NCAC 2D .0958
Toxic air pollutants	See Section 2.2 A.2; State-enforceable only	15A NCAC 2D .1100
Odors	See Section 2.2 A.3; State-enforceable only	15A NCAC 2D .1806
Hazardous air pollutants	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products See Section 2.2 A.4.	15A NCAC 2D .1111 (40 CFR 63, Subpart DDDD)

1. **15A NCAC 2D .0504: PARTICULATES FROM WOODBURNING INDIRECT HEAT EXCHANGERS**
- a. Emissions of particulate matter from the combustion of wood that are discharged from the "Wellons" burner (**No. 3201**) into the atmosphere shall not exceed 0.365 pounds per million Btu heat input.

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504.

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

- c. Particulate matter emissions from the "Wellons" burner [**No. 3201**] shall be controlled by multiclones (**ID Nos. CD-1411, CD-1421, and CD-1431**) and wet ESP (**ID No. CD-PB-WESP**).
- d. Monitoring/recordkeeping requirements in Section 2.1 F.6.d. through l. shall be sufficient to assure compliance with 15A NCAC 2D .0504. If the requirements of Section 2.1 F.6.d.ii., f., h., j., and l. are not complied with, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504.

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

- e. Reporting requirements in Section 2.1 F.6. m. and n. shall be sufficient to assure compliance with 15A NCAC 2D .0504.

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

- b. Particulate matter emissions from the units in the particleboard mill [**ID No. PB**] including the sawdust rock and metal separator [**ID No. 3501**], surface material transport [**ID No. 3515**], surface formers and mat dumps [**ID No. 3525**], flying cut off saws, pretrim saws, and production collection [**ID No. 3535**], particleboard Steinemann calibrating sander [**ID No. 3565**], particleboard Steinemann finishing sander [**ID No. 3545**], Schelling saw board trim [**ID Nos. 3555**], sander filter transport for filters 3545 and 3565 [**ID No. 3575**], PZKR green chip flakers [**ID No. 3585**], Oversized Material Pallmann Mill [**ID No. 3595**], and dry waste transport system [**ID No. 3577**] shall be controlled by 12 (twelve) cyclones (**ID Nos. SC, CD-3500, CD-3512B, CD-3520A, CD-3520B, CD-3521, CD-3530, CD-3531, CD-3533, CD-3522, CD-3570, and CD-3532**), and 11 (eleven) fabric filters (**ID Nos. CD-3501, CD-3515, CD-3525, CD-3535, CD-5001, CD-2006, CD-4005, CD-3575, CD-3585, CD-3595, and CD-3577**).

Particulate matter emissions from the particleboard press [ID No. DEF-2010] and particleboard cooler [ID No. PB-BC] are uncontrolled therefore no monitoring, recordkeeping or reporting shall be required.

- c. To ensure compliance, the Permittee shall perform inspections and as follows:
- monthly external inspection of the duct work and cyclones, noting the structural integrity; and
 - 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 2D .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:

- the date and time of each recorded action;
- the results of each inspection; and
- the results of maintenance performed on any control device.

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

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

- e. The Permittee shall submit the results of any maintenance performed on ductwork, the 12 (twelve) cyclones (ID Nos. SC, CD-3500, CD-3512B, CD-3520A, CD-3520B, CD-3521, CD-3530, CD-3531, CD-3533, CD-3522, CD-3570, and CD-3532), and 11 (eleven) fabric filters (ID Nos. CD-3501, CD-3515, CD-3525, CD-3535, CD-5001, CD-2006, CD-4005, CD-3575, CD-3585, CD-3595, and CD-3577) 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. 15A NCAC 2D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the units in the particleboard mill (ID No. PB) Surface Layer Dryer (ID No. 1430), Core Layer Dryer No. 1 (ID No. 1420), and Core Layer Dryer No. 2 (ID No. 1410) that are discharged into the atmosphere shall not exceed an allowable emission rate as calculated by the following equations:

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

Where E = allowable emission rate in pounds per hour calculated to three significant figures
P = process weight rate in tons per hour

Or, for units with process weight rates greater than 30 tons per hour,

$$E = 55.0(P)^{0.11} - 40$$

Where E = allowable emission rate in pounds per hour calculated to three significant figures
P = process weight rate in tons per hour

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

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1 F.3.a. above for particulate matter, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- c. Particulate matter emissions from the units in the particleboard mill [ID No. PB] shall be controlled as follows:
 - i. Emissions from the following units shall be combined and controlled by a wet electrostatic precipitator (PB-WESP): the surface layer dryer (ID No. 1430) and the associated multi-cyclone (ID No. CD-1431) the core layer dryer # 1 (ID No. 1420) and the associated multi-cyclone (ID No. CD-1421), and the core layer dryer #2 (ID No. 1410) and the associated multi-cyclone (ID No. CD-1411).
- d. **The Monitoring, Recordkeeping, and Reporting requirements required in 2.1 F.6.d.ii., f., h., j., l., m., and n. shall be followed in order to demonstrate compliance with 15A NCAC 2D .0515.**

4. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Sulfur dioxide from the particleboard mill (ID No. PB) Surface Layer Dryer (ID No. 1430), Core Layer Dryer No. 1 (ID No. 1420), Core Layer Dryer No. 2 (ID No. 1410), and "Wellons" Burner (ID No. 3201) 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 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1. F.4.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- c. No monitoring, record keeping, or reporting is required for sulfur dioxide emissions from the firing of wood or natural gas in rotary drum dryers (ID Nos. 1410, 1420, and 1430) and from the firing of wood in the "Wellons"

burner (**ID No. 3201**).

5. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

- a. As required by 15A NCAC 2D .0521(d) "Control of Visible Emissions," visible emissions from the units in the particleboard mill (**ID No. PB**) manufactured after July 1, 1971, shall not be more than 20 percent opacity when averaged over a six-minute period [15A NCAC 2D .0521(d)]. However, six minute averaging periods may exceed 20 percent opacity if:
 - i. No six-minute period exceeds 87 percent opacity;
 - ii. No more than one six-minute period exceeds 20 percent opacity in any hour; and
 - iii. No more than four six-minute periods exceed 20 percent opacity in any 24-hour period.

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1 F.5.a. above for visible emissions, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping [15A NCAC 2Q .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
Surface Layer Dryer (ID No. 1430)	CD-PB-WESP
Core Layer Dryer #1 (ID No. 1420)	CD-PB-WESP
Core Layer Dryer #2 (ID No. 1410)	CD-PB-WESP
"Wellons" Burner (ID No. 3201)	CD-PB-WESP
Surface Material Transport (ID No. 3515)	CD-3515
Surface Formers and Mat Dumps (ID No. 3525)	CD-3525
Flying Cut Off Saw, Pretrim Saws, and Production Collection (ID No. 3535)	CD-3535
Particleboard Press (ID No. DEF-2010)	DEF-2010
Board Cooler (ID No. PB-BC)	PB-BC
Particleboard Mill Steinemann Calibrating Sander (ID No. 3565)	CD-3575
Particleboard Mill Steinemann Finishing Sander (ID No. 3545)	CD-3575
Schelling Saw Board Trim (ID No. 3555)	CD-4005
Sander Filter Transport for Filters 3545 and 3565(ID No. 3575)	CD-3575
PZKR Green Chip Flakers (ID No. 3585)	CD-3585
Oversized Material Pallmann Mill (ID No. 3595)	CD-3595
Dry Waste Transport System (ID No. 3577)	CD-3577

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 the emission sources **ID Nos. 1430, 1420, and 1410** in the first 30 days of following the effective date of air permit 03449T31. 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 2D .2601(Method 9) for 12 minutes is below the limit given in Section 2.1 F.5. a. above.
- If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.
- 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 2D .0521 if these records are not maintained.

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

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

6. 15A NCAC 2D .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
	Volatile Organic Compounds	5.56 lbs/hr, as C	none
	Opacity	20 percent	cyclone and baghouse
Surface Layer Dryer (ID No. 1430) Core Layer Dryer # 1 (ID No. 1420) Core Layer Dryer #2 (ID No. 1410)	PM ₁₀	28.3 lbs/hr **	good combustion control with existing multiclones and wet ESP
	Volatile Organic Compounds	163.3 lbs/hr, as C **	good combustion control with existing wet ESP
	Carbon Monoxide	329.4 lbs/hr **	good combustion control
	Nitrogen Oxides	94.7 lbs/hr **	good combustion control
Surface Material Transport (ID No. 3515)	PM ₁₀	0.02 lbs/hr	cyclones and baghouse
	Volatile Organic Compounds	46.5 lbs/hr, as C	none
	Opacity	20 percent	cyclones and baghouse
Surface Formers and Mat Dumps (ID No. 3525)	PM ₁₀	0.06 lbs/hr	cyclones and baghouse
	Volatile Organic Compounds	1.95 lbs/hr, as C	none
	Opacity	20 percent	cyclones and baghouse
Flying Cut Off Saw, Pretrim Saws, and Production Collection (ID No. 3535)	PM ₁₀	0.005 lbs/hr	cyclones and baghouse
	Volatile Organic Compounds	1.77 lbs/hr, as C	none
	Opacity	20 percent	cyclones and baghouse
Particleboard Press (ID No. DEF-2010) and Board Cooler (ID No. PB-BC)	PM ₁₀	3.29 lbs/hour	none
	Volatile Organic Compounds	32.1 lbs/hour as C	none
	Opacity	20 percent	none

Emission Source	Pollutants	Emission Limits*	Control Technology
Particleboard Steinemann Calibrating Sander (ID No. 3565)	PM ₁₀	0.02 lbs/hour	cyclone and baghouses
	Volatile Organic Compounds	1.08 lbs/hour as C	none
	Opacity	20 percent	cyclone and baghouses
Particleboard Steinemann Finishing Sander (ID No. 3545)	PM ₁₀	1.2 lbs/hour	cyclone and baghouses
	Volatile Organic Compounds	0.35 lbs/hour as C	none
	Opacity	20 percent	cyclone and baghouses
Schelling Saw Board Trim (ID No. 3522)	PM ₁₀	0.01 lbs/hour	cyclone and baghouse
	Volatile Organic Compounds	0.72 lbs/hour as C	none
	Opacity	20 percent	cyclone and baghouse
Sander Filter Transport for Filters 3545 and 3565 (ID No. 3575)	PM ₁₀	4.0 lbs/hour	cyclone and baghouse
	Volatile Organic Compounds	1.77 lbs/hour as C	none
	Opacity	20 percent	cyclone and baghouse
PZKR Green Chip Flakers (ID No. 3585)	PM ₁₀	1.0 lbs/hour	baghouse
	Volatile Organic Compounds	0.64 lbs/hour as C	none
	Opacity	20 percent	baghouse
Oversized Material Pallmann Mill (ID No. 3595)	PM ₁₀	0.005 lbs/hour	baghouse
	Volatile Organic Compounds	1.77 lbs/hour as C	none
	Opacity	20 percent	baghouse
Dry Waste Transport System (ID No. 3577)	PM ₁₀	0.005 lbs/hour	cyclone and baghouse
	Volatile Organic Compounds	1.77 lbs/hour 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 2D .0535, exceeding the limits in Section 2.1 F.6.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.

** BACT emission limits are a total for three particleboard dryers (ID Nos. 1410, 1420, and 1430).

Testing (PM₁₀) [15A NCAC 2D .2601]

- b. If testing is required for emissions of PM₁₀, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ. If the results of this test exceed the limits given in Section 2.1 F.6.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limits in Section 2.1 F.6.a. above by testing the particleboard dryers (ID Nos. 1410, 1420, and 1430) for PM₁₀ (filterable and condensible both) in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ of the permit.

Testing shall be completed and the results submitted within 180 days from the issuance date of air permit

03449T31. All three dryers or all operational dryers shall be included in this source testing.

The Permittee shall conduct another stack test and submit the results within 90 days of start-up of particleboard dryer (**ID No. 1410**), if this dryer was not operational during the stack test as required above. All three dryers shall be in operation during this source testing.

If the results of any tests for PM₁₀ are above the limits in Section 2.1 F.6.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring (PM₁₀) [15A NCAC 2Q .0508(f)]

- d. PM₁₀ 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. Emissions from the following units shall be combined and controlled by a wet electrostatic precipitator (**ID No. PB-WESP**).
 1. the surface layer dryer (**ID No. 1430**), its associated multi-cyclone (**ID No. CD-1431**) with two tubes, each 80 inches in diameter,
 2. the core layer dryer # 1 (**ID No. 1420**), its associated multi-cyclone (**ID No. CD-1421**) with 4 tubes, each 80 inches in diameter, and
 3. the core layer dryer #2 (**ID No. 1410**), its associated multi-cyclone (**ID No. CD-1411**) with 4 tubes, each 80 inches in diameter.
 - iii. In the surface material transport (**ID No. 3515**), emissions are controlled by 2 (two) simple cyclones (**ID Nos. CD-3500 and CD-3512B**). The cyclones are followed by fabric filter (**ID No. CD-3515**) with 6,918 square feet of filter surface area.
 - iv. In the surface formers and mat dumps (**ID No. 3525**), emissions shall be controlled by 3 (three) simple cyclones (**ID Nos. CD-3520A, CD-3520B, and CD-3521**), each 96 inches in diameter. Emissions from the cyclones shall be captured by a fabric filter (**ID No. CD-3525**) with 6,918 square feet of filter surface area.
 - v. In the flying cut off saw, pretrim saws, and production collection (**ID No. 3535**), emissions shall be controlled by one simple cyclone (**ID No. CD-3530**), which is 84 inches in diameter, and two simple cyclones (**ID Nos. CD-3531 and CD-3533**), each 108 inches in diameter, followed by a fabric filter (**ID No. CD-3535**) with 6,918 square feet of filter surface area.
 - vi. Emissions from the particleboard Steinemann calibrating sander (**ID No. 3565**), shall be captured by a fabric filter (**ID No. CD-5001**) with 6,918 square feet of filter surface area. Emissions from the fabric filter (**ID No. 5001**) shall be vented to a simple cyclone (**ID No. CD-3570**) and in turn to another fabric filter (**ID No. CD-3575**).
 - vii. Emissions from the particleboard Steinemann finishing sander (**ID No. 3545**), shall be filtered by a fabric filter (**ID No. CD-2006**) with 6,918 square feet of filter surface area. Emissions from the fabric filter (**ID No. CD-2006**) shall be vented to a simple cyclone (**ID No. CD-3570**) and in turn by another fabric filter (**ID No. CD-3575**).
 - viii. Emissions from the Schelling saw board trim (**ID No. 3555**) shall be captured by a simple cyclone (**ID No. CD-3522**), which is 120 inches in diameter, followed by a fabric filter (**ID No. CD-4005**) with 6,918 square feet of filter surface area.
 - ix. Emissions from the sander filter transport for filters 3545 and 3565 (**ID No. 3575**) shall be captured by a simple cyclone (**ID No. CD-3570**), which is 144 inches in diameter, followed by a fabric filter (**ID No. CD-3575**) with 1,159 square feet of filter surface area.
 - x. Emissions from the PZKR green chip flakers (**ID No. 3585**), shall be collected by a fabric filter (**ID No. CD-3585**) with 4,880 square feet of filter surface area.
 - xi. Emissions from the oversize material Pallmann mill (**ID No. 3595**), shall be captured by a reverse flow fabric filter (**ID No. CD-3595**) with a maximum air to cloth ratio (ACFM/total filter surface area) of 3.0 square feet of filter surface area.
 - xii. For the dry waste transport system (**ID No. 3577**), emissions shall be routed through a high efficiency cyclone (**ID No. CD-3532**), which is 60 inches in diameter, to a fabric filter (**ID No. CD-3577**) with 4,068 square feet of surface area.

For the cyclones (**ID Nos. CD-SC, CD-3500, CD-3512B, CD-3520A, CD-3520B, CD-3521, CD-3530, CD-**

3531, CD-3533, CD- 3522, CD-3570, and CD-3532):

- e. To ensure compliance and effective operation, the Permittee shall perform inspections and maintenance, 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 cyclones's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the ductwork, bagfilter and cyclones are not inspected and maintained.

For the multi-cyclones (ID Nos. CD-1411, CD-1421, and CD-1431):

- f. To ensure compliance and effective operation, the Permittee shall perform inspections and maintenance, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a weekly external visual inspection of the cyclones, the system ductwork, and the material collection unit for leaks, and
 - ii. an annual (for each 12 month period from initial inspection) internal inspection of the multi-cyclone's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the multi-cyclones and ductwork are not inspected and maintained.

For the fabric filters (ID Nos. CD-3501, CD-3515, CD-3525, CD-3535, CD-5001, CD-2006, CD-4005, CD-3575, CD-3585, CD-3595, and CD-3577):

- g. To ensure compliance and effective operation, the Permittee shall perform inspections and maintenance, 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 2D .0530 if the ductwork, bagfilter and cyclone are not inspected and maintained.

For the wet electrostatic precipitator (ID No. CD-PB-WESP)

- h. To ensure compliance and the effective operation of the wet electrostatic precipitator (ID No. CD-PB-WESP), the Permittee shall:
 - i. operate the wet electrostatic precipitator with a minimum of two of the possible three fields, excluding periods when one of the two fields is in a wash cycle;
 - ii. monitor and record the primary voltage and current through the precipitator daily. The daily observation must be made for each day of the calendar year period. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. The lower limits are given below:

Field No.	Minimum Primary Voltage, kilovolts	Minimum Current, milliamps
1	0.109	0.244
2	0.122	0.244
3	0.244	0.244

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if:

- i. the voltage or current readings are not monitored or recorded, excluding periods of start-up, shut-down, malfunction, and monitor downtime; and as provided in i. above; or
- ii. the voltage or current fall below the lower limits as established above in 2.1 F.6.h.ii.

Recordkeeping (PM₁₀) [15A NCAC 2Q .0508(f)]

For the cyclones (ID Nos. CD-SC, CD-3500, CD-3512B, CD-3520A, CD-3520B, CD-3521, CD-3530, CD-3531, CD-3533, CD- 3522, CD-3570, and CD-3532):

- i. 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; the results of any maintenance performed on the cyclones; and
 - iii. any corrections made.

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

For the multi-cyclones (ID Nos. CD-1411, CD-1421, and CD-1431):

- j. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the multi-cyclones and ductwork; and
 - iv. any corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained.

For the fabric filters (ID Nos. CD-3501, CD-3515, CD-3525, CD-3535, CD-5001, CD-2006, CD-4005, CD-3575, CD-3585, CD-3595, and CD-3577):

- k. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the bagfilters; and
 - iv. any corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained.

For the wet electrostatic precipitator (ID No. CD-PB-WESP)

- l. The results of inspection and maintenance activities, discussed above for the wet electrostatic precipitator, 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; and
 - iii. any corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained.

Reporting (PM₁₀) [15A NCAC 2Q .0508(f)]

- m. The Permittee shall submit the results of any maintenance performed on the cyclones (ID Nos. CD-SC, CD-3500, CD-3512B, CD-3520A, CD-3520B, CD-3521, CD-3530, CD-3531, CD-3533, CD-3522, CD-3570, and CD-3532), fabric filters (ID Nos. CD-3501, CD-3515, CD-3525, CD-3535, CD-5001, CD-2006, CD-4005, CD-3575, CD-3585, CD-3595, and CD-3577), multi-cyclones (ID Nos. CD-1411, CD-1421, and CD-1431), and wet electrostatic precipitator (ID No. CD-PB-WESP) 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.

Testing (Carbon Monoxide) [15A NCAC 2D .2601]

- o. If emissions testing is required, the testing shall be performed in accordance with 40 CFR Part 60 Appendix A, Method 10 and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1 F.6.a. above for emissions of carbon monoxide, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.
- p. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limits in Section 2.1 F.6.a. above by testing the particleboard dryers (ID Nos. 1410, 1420, and 1430) for carbon monoxide in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ of the permit.

Testing shall be completed and the results submitted within 180 days from the issuance date of air permit 03449T31. All three dryers or all operational dryers shall be included in this source testing.

The Permittee shall conduct another stack test and submit the results within 90 days of start-up of particleboard

dryer (**ID No. 1410**), if this dryer was not operational during the stack test as required above. All three dryers shall be in operation during this source testing.

If the results of any tests for carbon monoxide are above the limits in Section 2.1 F.6.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- q. To ensure compliance and effective operation, the Permittee shall perform inspections and maintenance of the particleboard dryers (**ID Nos. 1410, 1420, and 1430**). At a minimum, the inspection and maintenance requirement shall include the following:
- i. a weekly inspection of burners, fans, blowers, and associated process control equipment.
 - ii. an annual (for each 12 month period following the initial inspection) internal inspection of the particleboard dryers (**ID Nos. 1410, 1420, and 1430**) for structural integrity.
- If the required inspections are not conducted, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0530.

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

- r. The results of inspection and maintenance of the particleboard dryers (**ID Nos. 1410, 1420, and 1430**) 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 particleboard dryers (**ID Nos. 1410, 1420, and 1430**); and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained.

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

- s. The Permittee shall submit the results of any maintenance performed on the particleboard dryers (**ID Nos. 1410, 1420, and 1430**) within 30 days of a written request by the DAQ.
- t. 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.

Testing (Volatile Organic Compounds) [15A NCAC 2D .2601]

- u. If testing is required for emissions of volatile organic compounds, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ. If the results of this test exceed the limit given in Section 2.1 F.6.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.
- v. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limits in Section 2.1 F.6.a. above by testing the particleboard dryers (**ID Nos. 1410, 1420, and 1430**) for volatile organic compounds in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ of the permit.

Testing shall be completed and the results submitted within 180 days from the issuance date of air permit 03449T31. All three dryers or all operational dryers shall be included in this source testing.

The Permittee shall conduct another stack test and submit the results within 90 days of start-up of particleboard dryer (**ID No. 1410**), if this dryer was not operational during the stack test as required above. All three dryers shall be in operation during this source testing.

If the results of any tests for volatile organic compounds are above the limits in Section 2.1 F.6.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- w. Monitoring/recordkeeping requirements in Section 2.1 F.6.q. and r. above shall be sufficient to assure compliance with 15A NCAC 2D .0530. If the requirements of Section 2.1 F.6.q. and r. are not complied with,

the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

- x. During the stack test for VOC as required in Section 2.1 F.6.v. above, the Permittee shall collect data for water injection rates for wet ESP and establish minimum water injection rate to assure compliance with the VOC emission limit in Section 2.1 F.6.a. above. The Permittee shall request a permit revision to include the minimum water injection rate for wet ESP established in Section 2.1 F.6.x. through an "administrative permit amendments" procedure within 90 days from the submittal of stack test results in Section 2.1 F.6.v. above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the requirements of the Section 2.1 F.6.x. are not complied with.

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

- y. Reporting requirements in Section 2.1 F. 6. s. and t. shall be sufficient to assure compliance with 15A NCAC 2D .0530.

Testing (Nitrogen Oxides) Testing [15A NCAC 2D .2601]

- z. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1 F.6.a. above for emissions of nitrogen oxides, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.
- aa. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limits in Section 2.1 F.6.a. above by testing the particleboard dryers (**ID Nos. 1410, 1420, and 1430**) for nitrogen oxides in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ of the permit.

Testing shall be completed and the results submitted within 180 days from the issuance date of air permit 03449T31. All three dryers or all operational dryers shall be included in this source testing.

The Permittee shall conduct another stack test and submit the results within 90 days of start-up of particleboard dryer (**ID No. 1410**), if this dryer was not operational during the stack test as required above. All three dryers shall be in operation during this source testing.

If the results of any tests for nitrogen oxides are above the limits in Section 2.1 F.6.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- bb. Monitoring/recordkeeping requirements in Section 2.1 F.6.q. and r. above shall be sufficient to assure compliance with 15A NCAC 2D .0530. If the requirements of Section 2.1 F.6.q. and r. are not complied with, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- cc. Reporting requirements in Section 2.1 F.6. s. and t. shall be sufficient to assure compliance with 15A NCAC 2D .0530.

Testing (Visible Emissions) [15A NCAC 2D .2601]

- dd. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1 F.6.a. above for visible emissions, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- ee. Monitoring / recordkeeping requirements in Section 2.1 F.5.c. and d. above shall be sufficient to assure compliance with 15A NCAC 2D .0530 for all PSD affected sources except particleboard dryers.³ If the requirements of Section 2.1 F.5.c. and d. are not complied with, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- ff. Reporting requirements in Section 2.1 F.5.e. shall be sufficient to assure compliance with 15A NCAC 2D

³ Particleboard dryers are not subject any VE BACT.

.0530.

Monitoring/Recordkeeping (PM₁₀, CO, VOC, NO_x and VE) [15A NCAC 2Q .0508(f)]

- gg. The total particleboard production at the Particleboard Mill (**ID No. PB**) during any consecutive 12-month period shall not exceed **180,000,000 square feet on a ¾-inch basis**. The Permittee shall maintain monthly records of the total amount of particleboard produced in a logbook (written or in electronic format). Such records shall indicate the amount of particleboard produced during the preceding month and the total amount of particleboard produced over the preceding 12-month period. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the particleboard production records are not maintained or the production limit is exceeded.
- hh. The operating hours for particleboard dryers (**ID Nos. 1410, 1420 and 1430**) shall not exceed 8,500 hours each during any consecutive 12-month period. The Permittee shall keep monthly records of the hours of operation for each particleboard dryer. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not kept or operating hours of any particleboard dryers exceed 8,500 hours during any consecutive 12-month period.

Reporting (PM, PM₁₀, CO, VOC, NO_x, VE) [15A NCAC 2Q .0508(f)]

- ii. By January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June, the following shall be reported to the Regional Supervisor, Division of Air Quality:
 - a. the annual production rate at the Particleboard Mill (**ID No. PB**) in **square feet on a ¾-inch basis**. The annual production rate must be calculated for each of the six twelve-month periods over the previous seventeen months.
 - b. the hours of operation for each particleboard dryer (**ID Nos. 1410, 1420 and 1430**) for each of the six twelve-month periods over the previous seventeen months.

All instances of deviations from the requirements of this permit must be clearly identified.

7. 15A NCAC 2D .0614: COMPLIANCE ASSURANCE MONITORING [40 CFR 64]

- a. The particleboard dryers (**ID Nos. 1410, 1420, and 1430**) shall comply with all applicable requirements of 15A NCAC 2D .0614 "Compliance Assurance Monitoring".
- b. Three multiclones (**ID Nos. CD-1411, CD-1421, and CD-1431**) and one wet ESP (**ID No. CD-PB-WESP**) shall be properly operated and maintained to control PM₁₀ emissions from the particleboard dryers (**ID Nos. 1410, 1420, and 1430**).

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

- c. Monitoring and record keeping requirements for multiclones (**ID Nos. CD-1411, CD-1421, and CD-1431**) in Section 2.1 F.6.d.ii., f., h., j., and l. above shall be sufficient to assure compliance with 15A NCAC 2D .0614.
- d. During the stack test for PM₁₀ as required in Section 2.1 F.6. c. above, the Permittee shall collect data for primary voltage and primary current on each of the three fields of wet ESP (**ID No. CD-PB-WESP**). The Permittee shall establish correlation between emissions of PM₁₀, and primary voltage and primary current of wet ESP, and request a permit revision through an "administrative permit amendments" procedure within 90 days from the submittal of stack test results in Section 2.1 F.6.c. above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0614 if the requirements of the Section 2.1 F.7.d. are not complied with.

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

- e. Reporting requirements for multiclones (**ID Nos. CD-1411, CD-1421, and CD-1431**) in Section 2.1 F.6.m. and n. shall be sufficient to assure compliance with 15A NCAC 2D .0614.

G. Laminating Mill:

- One bagfilter (ID No. CD-3593) installed on two presses:**
 - Short Cycle Laminating Press (ID No. 3593)**
 - Short Cycle Laminating Press (ID No. 3594)**
- One Natural Gas and No. 2 oil-fired Hot Oil Heater (ID No. Pr-Heat1)**

The following table provides a summary of limits and/or standards for the material handling sources.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	<u>Affected source: Hot Oil Heater (ID No. Pr-Heat1)</u> 0.60 pounds per million Btu heat input	15A NCAC 2D .0503
	<u>Affected source: Short cycle laminating presses (ID Nos. 3593 and 3594)</u> $E = 4.10P^{0.67}$ where; E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 2D .0515
Sulfur dioxide	<u>Affected source: Hot Oil Heater (ID No. Pr-Heat1)</u> 2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521(d)
HAPs	<u>Affected source: Hot Oil Heater (ID No. Pr-Heat1)</u> Best Combustion Practices	15A NCAC 2D .1109
Volatile organic compounds	Work Practice Standards See Section 2.2 A.1.	15A NCAC 2D .0958
Toxic air pollutants	See Section 2.2 A.2; State-enforceable only	15A NCAC 2D .1100
Odors	See Section 2.2 A.3; State-enforceable only	15A NCAC 2D .1806

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

- a. Emissions of particulate matter from the combustion of No. 2 oil, natural gas, and used oil 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 2D .2601]

- 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 Section 2.1. G.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

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

- c. No monitoring, 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 2D .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:

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

Where E = allowable emission rate in pounds per hour calculated to three significant figures
P = process weight rate in tons per hour

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

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1 G.2.a. (above) for particulate matter, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .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 assure 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 is 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 2D .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 2D .0515 if these records are not maintained.

Reporting [15A NCAC 2Q .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 2D .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 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 G.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

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

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

- a. As required by 15A NCAC 2D .0521(d) "Control of Visible Emissions," visible emissions from the units in the Laminating Mill, including the short cycle laminating presses (**ID Nos. 3593 and 3594**) and hot oil heater (**ID No. Pr-Heat1**), shall not be more than 20 percent opacity when averaged over a six-minute period [15A NCAC 2D .0521(d)]. However, six minute averaging periods may exceed 20 percent opacity if:
 - i. No six-minute period exceeds 87 percent opacity;
 - ii. No more than one six-minute period exceeds 20 percent opacity in any hour; and
 - iii. No more than four six-minute periods exceed 20 percent opacity in any 24-hour period

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section

2.1 G.4.a. (above) for visible emissions, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping [15A NCAC 2Q .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
hot oil heater (ID No. Pr-Heat1)	Pr-Heat1

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 and/or hot oil heater are observed to be above normal, the Permittee shall either:

- i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 G.4. a. above.
- If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.
- 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 2D .0521 if these records are not maintained.

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

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

5. 15A NCAC 2D .1109: Case-by-Case MACT

- a. The Permittee shall use best combustion practices when operating the affected heater (**ID No. Pr-Heat1**). The initial compliance date for this work practice standard and the associated monitoring, recordkeeping, and reporting requirements is **October 18, 2013**. These conditions need not be included on the annual compliance certification until after the initial compliance date.

Monitoring/Recordkeeping

- b. To assure compliance, the Permittee shall perform an annual boiler inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
 - i. Inspect the burner, and clean or replace any components of the burner as necessary;
 - ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern; and,
 - iii. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.
The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if the affected heater is not inspected and maintained as required above.
- c. 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 of each recorded action;

- ii. The results of each inspection; and,
 - iii. The results of any maintenance performed on the heater.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if these records are not maintained.

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

- d. No reporting is required.

H. Four MDF Resin Storage Tanks (ID Nos. MDFR-1, MDFR-2, MDFR-3, MDFR-4)

The following table provides a summary of limits and/or standards for the material handling sources.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Volatile organic compounds	Work Practice Standards See Section 2.2 A.1.	15A NCAC 2D .0958
Toxic air pollutants	See Section 2.2 A.2; State-enforceable only	15A NCAC 2D .1100
Odors	Odorous emissions must be controlled Section 2.2. A.3; State-enforceable only	15A NCAC 2D .1806

I. The following combustion source:

Table I.

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
DFP-1 MACT ZZZZ NSPS III	Diesel fuel -fired Fire Pump Engine(347 Brake Horsepower output)	CD-DFP	Particulate matter filter

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Various	New Source Performance Standards	15A NCAC 2D .0524 [40 CFR Part 60, Subpart III]
Toxic Air Pollutants	State-enforceable only	15A NCAC 2D .1100
Hazardous Air Pollutants	Maximum Achievable Control Technology (No applicable requirements)	15A NCAC 2D .1111 [40 CFR Part 63, Subpart ZZZZ]
Odors	See Section 2.2 A.3; State-enforceable only	15A NCAC 2D .1806

1. 15A NCAC 2D .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. [15A NCAC 2D .0521 (d)]

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

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

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

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

2. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS

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

Emission Standards

- b. The Permittee shall comply with the emission standards in Table 4 to Subpart IIII of 40CFR 60, for all pollutants. [40CFR 60.4205(c)]
- c. The Permittee shall use diesel fuel in the engine with:
 - i. a maximum sulfur content of 15 ppm; and
 - ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.
[40CFR 60.4207(b) and 40CFR 80.510(b)]

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

- d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in conditions b. and c. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- e. The engine has the following monitoring requirements:
 - i. The engine shall be equipped with a non-resettable hour meter prior to startup.
[40CFR 60.4209(a)]
 - ii. The engine, which is equipped with a diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.
[40CFR 60.4209(b)]

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

- f. The Permittee shall operate and maintain the engine in accordance with the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer over the entire life of the engine. The Permittee may only change engine settings that are permitted by the manufacturer. The Permittee shall also meet the requirements of 40 CFR 89, 94 and/or 1068 as applicable. [40CFR 60.4206 and 60.4211(a)]
- g. The Permittee shall purchase the engine certified to the emission standards in 40 CFR 60.4205(c). The engine shall be installed and configured according to the manufacturer's specifications. [40CFR 60.4211(c)]
- h. The Permittee may operate the engine for maintenance checks and readiness testing for up to 100 hours per year provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Operation during an actual emergency shall not be subject to a limit on hours. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Because the Permittee is required to comply with emission standards under 40CFR 60.4205 for the engine and not under 40CFR 60.4204, any operation other than emergency operation, and maintenance and testing as allowed in 40 CFR 60.4211 is prohibited. [40CFR 60.4211(e)]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, if the requirements in conditions e. through h. are not met.

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

- i. To assure compliance, the Permittee shall perform inspections and maintenance on the engine as recommended by the manufacturer per 40CFR 60.4206 and 40 CFR 60.4211(a). The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the engine;
 - iv. any variance from manufacturer's recommendations, if any, and corrections made; and
 - v. the hours of operation during maintenance and readiness testing and during emergency service.
 - vi. records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached [40 CFR60.4214(c)]

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

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

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

3. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.2231]

- a. The Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart ZZZZ . "National Emission Standards for Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines."

Stationary RICE subject to Regulations under 40 CFR Part 60 [40 CFR 63.6590(c)]

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

If the requirements in condition b. are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111.

STATE ENFORCEABLE ONLY

4. 15A NCAC 2D .1100: CONTROL OF TOXIC AIR POLLUTANTS

Applicability

- a. This source is subject to 15A NCAC 2D .1100 "Control of Toxic Air Pollutants" but has not been considered in an evaluation pursuant to 15A NCAC 2Q .0706 "Modifications."
- b. The Division shall notify the Permittee 60 days prior to reopening the permit, if necessary, to establish emission limitations, monitoring, recordkeeping or reporting necessary to ensure compliance with 15A NCAC 2D .1100. [NCGS 143-215.108(c)]

J. The following combustion sources:

Table J.

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
ES-ODG MACT ZZZZ	Diesel-fuel Fired Emergency Generator (465 horsepower, 3,026 million Btu per hour heat input)	NA	NA

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Toxic Air Pollutants	<u>State-enforceable only</u> ID No. ES-21 only	15A NCAC 2D .1100
Hazardous Air Pollutants	Maximum Achievable Control Technology	15A NCAC 2D .1111 [40 CFR Part 63, Subpart <u>ZZZZ</u>]
Odors	See Section 2.2 A.3. <u>State-enforceable only</u>	15A NCAC 2D .1806

1. 15A NCAC 2D .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. [15A NCAC 2D .0521 (d)]

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

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

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

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

2. 15A NCAC 2D .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. [15A NCAC 2D .0516]

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. 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 2D .0516.

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

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

3. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.2231]

- a. The Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart ZZZZ . "National Emission Standards for Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines."

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

- b. Pursuant to 40 CFR 63.6590(b)(3), the emergency generator (**ID No. ES-21**) does not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:
- c. The permittee shall submit a permit application demonstrating compliance with this rule by May 3, 2013 for the emergency generator (**ID No. ES-ODG**), which is an existing emergency stationary RICE at a major source of HAP emissions.

STATE ENFORCEABLE ONLY

4. 15A NCAC 2D .1100: CONTROL OF TOXIC AIR POLLUTANTS

Applicability

- a. This source (**ID No. ES-21**) is subject to 15A NCAC 2D .1100 "Control of Toxic Air Pollutants" but has not been considered in an evaluation pursuant to 15A NCAC 2Q .0706 "Modifications."
- b. The Division shall notify the Permittee 60 days prior to reopening the permit, if necessary, to establish emission limitations, monitoring, recordkeeping or reporting necessary to ensure compliance with 15A NCAC 2D .1100. [NCGS 143-215.108(c)]

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 applicable facility wide:

Regulated Pollutant	Limits/Standards	Applicable Regulation
volatile organic compounds	Work Practice Standards	15A NCAC 2D .0958
toxic air pollutants	State enforceable only	15A NCAC 2D .1100
odors	Odorous emissions must be controlled State enforceable only	15A NCAC 2D .1806
Hazardous air pollutants	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products	15A NCAC 2D .1111 (40 CFR 63, Subpart DDDD)

1. 15A NCAC 2D .0958: WORK PRACTICES FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS

- a. Pursuant to 15A NCAC 2D .0958 and 2D .0902, for all sources that use volatile organic compounds (VOC) as solvents, carriers, material processing media, or industrial chemical reactants, or in similar uses that mix, blend, or manufacture volatile organic compounds, or emit volatile organic compounds as a product of chemical reactions, and whose emissions of VOC are greater than 15 pounds per day; the Permittee shall:
 - i. store all material, including waste material, containing volatile organic compounds in tanks or in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,
 - ii. clean up spills of volatile organic compounds as soon as possible following proper safety procedures,
 - iii. store wipe rags containing volatile organic compounds in closed containers,
 - iv. not clean sponges, fabric, wood, paper products, and other absorbent materials with volatile organic compounds,
 - v. transfer solvents containing volatile organic compounds used to clean supply lines and other coating equipment into close able containers and close such containers immediately after each use, or transfer such solvents to closed tanks, or to a treatment facility regulated under section 402 of the Clean Water Act, and
 - vi. clean mixing, blending, and manufacturing vats and containers containing volatile organic compounds by adding cleaning solvent and close the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be transferred into a closed container, a closed tank or a treatment facility regulated under section 402 of the Clean Water Act. [15A NCAC 2D .0958(c)]

- b. When cleaning parts with a solvent containing a volatile organic compound, the Permittee shall:
 - i. flush parts in the freeboard area,
 - ii. take precautions to reduce the pooling of solvent on and in the parts,
 - iii. tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,
 - iv. not fill cleaning machines above the fill line, and
 - v. not agitate solvent to the point of causing splashing. [15A NCAC 2D .0958(d)]

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

- c. To ensure compliance with this standard, the Permittee shall, at a minimum, perform a monthly visual inspection of all operations and processes utilizing volatile organic compounds. The inspection shall include, but not be limited to, VOC storage, cleaning, and transfer operations to determine compliance with the requirements specified in Conditions 2.2. A.1.a. and b. above. The inspections shall be conducted during normal operations. If the required monthly inspections are not conducted the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0958.

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

- d. The results of the inspections shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
 - i. the date and time of each inspection; and
 - ii. the results of each inspection noting whether or not noncompliant conditions were observed.
 If the required records are not maintained the permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0958.

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

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

STATE ENFORCEABLE ONLY

2. 15A NCAC 02Q .0705 (c): EXISTING FACILITIES AND SIC CALLS

- a. As of October 14, 2009 the Permittee demonstrated compliance with 15A NCAC 2D .1100 on a facility-wide basis.

STATE ENFORCEABLE ONLY

3. 15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

- a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

4. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

- a. For the emission sources subject to "MACT 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" (MACT) as promulgated in 40 CFR 63, Subpart DDDD, National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products.
 - i. The Permittee shall submit a permit application to the Regional Supervisor to modify the permit to include specific monitoring requirements for the emission sources NOT subject to the compliance schedule described in Section 2.3, as established in the Special Order by Consent (ORDER) no. 2008-002. The permit application shall be submitted included following completion of the initial performance testing of the add-on control devices used to comply with MACT DDDD. The permit application shall be submitted with the Notification of Compliance Status described in condition x.ii. below.

Definitions and Nomenclature [40 CFR 63.2292]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.2292 shall apply.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.2290]

- 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

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

- d. For the emission sources subject to "MACT DDDD" as indicated in the permitted equipment list the Permittee shall comply with compliance options and operating requirements described in Tables 1A, 1B, and 2 to 40 CFR 63 and in paragraph 40 CFR 63.2240 (c) by using one or more of the compliance options listed in paragraphs (a), (b), and (c) of 40 CFR 63.2240 for each process unit. [40 CFR 63.2240]
- e. The Permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i). [40 CFR 63.2250(b)]
- f. The Permittee must develop a written Startup, Shutdown, and Malfunction Plan (SSMP) according to the provisions in 40 CFR 63.6(e)(3). [40 CFR 63.2250(c)]
- g. 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 the operating requirements in d. through g. are not met.

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

- h. The Permittee shall meet each work practice requirement per 40 CFR 63.2241, as applicable. [40 CFR 63.2241]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the work practice requirements in condition h. are not met.

Affected Sources Not Subject to Operating Requirements [40 CFR 63.2252]

- i. For process units not subject to the operating requirements in paragraph (d) through (g), 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).

Testing [15A NCAC 02D .2601]

- j. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limits given in paragraph d. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1112.

Initial Compliance requirements [15A NCAC 02D .2601, 40 CFR 63.2260 through 40 CFR 63.2269]

- k. To demonstrate initial compliance with the compliance options and operating requirements, the Permittee must conduct performance tests and establish each site-specific operating requirement in Table 2 to 40 CFR 63 Subpart DDDD according to the requirements in 40CFR 63.2262 and Table 4 to 40 CFR 63 Subpart DDDD. Combustion units that accept process exhausts into the flame zone are exempt from the initial performance testing and operating requirements for thermal oxidizers.
- l. The Permittee must demonstrate initial compliance with each compliance option, operating requirement, and work practice requirement that applies to the Permittee according to Tables 5 and 6 to 40 CFR 63 Subpart DDDD and according to 40 CFR 63.2260 through 40 CFR 63.2269.
- m. The Permittee shall conduct performance tests no later than 180 calendar days after initial startup or no later than 180 calendar days after the compliance date that is specified for your source in 40 CFR63.2233 and according to according to 40 CFR 63.7(a)(2), whichever is later.
- n. The Permittee shall conduct initial compliance demonstrations that do not require performance tests upon initial startup or no later than 30 calendar days after the compliance date that is specified for your source in 40 CFR 63.2233, whichever is later. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the initial compliance requirements in conditions k. through n. are not met.

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

- o. The Permittee shall monitor and collect data according to 40 CFR 63.2270.
- p. The Permittee shall demonstrate continuous compliance with the compliance options, operating requirements, and work practice requirements in 40CFR 63.2240 and 63.2241 that apply according to the methods specified in Tables 7 and 8 to 40 CFR 63 Subpart DDDD. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in conditions o. and p. are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.2282 and .2283]

- q. The Permittee must keep the records listed in 40 CFR 63.2282(a).
- r. The Permittee must keep the records required in Tables 7 and 8 to 40 CFR 63 Subpart DDDD to show continuous compliance with each compliance option, operating requirement, and work practice requirement that applies.[40CFR 63.2282(b)]
- s. The Permittee must maintain records in a form suitable and readily available for expeditious review as specified in 40 CFR 63.10(b)(1). [40 CFR 63.2283(a)]
- t. As specified in 40 CFR 63.10(b)(1), the Permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.2283(b)]
- u. The Permittee must keep each record 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. [40 CFR 63.2283(c)]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained per conditions q. through u.

Notification Requirements [40 CFR 63.2280]

- v. The Permittee must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9 (b) through (e), and (g) and (h) by the dates specified. [40 CFR 63.2280(a)]
- w. If you are required to conduct a performance test, you must 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 §63.7(b)(1).
- x. If you are required to conduct a performance test, design evaluation, or other initial compliance demonstration as specified in Tables 4, 5, and 6 to 40 CFR 63 Subpart DDDD, you must submit a Notification of Compliance Status as specified in 40 CFR 63.9(h)(2)(ii).

- i. For each initial compliance demonstration required in Table 5 or 6 to 40 CFR 63 Subpart DDDD that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.
- ii. For each initial compliance demonstration required in Tables 5 and 6 to 40 CFR 63 Subpart DDDD that includes a performance test conducted according to the requirements in Table 4 to 40 CFR 63 Subpart DDDD, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to 40 CFR 63.10(d)(2).
- y. If you use the emissions averaging compliance option in 40 CFR 63.2240(c), you must submit an Emissions Averaging Plan to the EPA Administrator for approval no later than 1 year before the compliance date or no later than 1 year before the date you would begin using an emissions average, whichever is later. The Emissions Averaging Plan must include the information in 40 CFR 63.2280(f).
- z. The Permittee must notify the EPA Administrator within 30 days before any of the following actions are taken: [40 CFR 63.2280(g)]
 - i. The modification or replacement the control system for any process unit subject to the compliance options and operating requirements in paragraph (d).
 - ii. The shut down of any process unit included in the Emissions Averaging Plan.
 - iii. The change in a continuous monitoring parameter or the value or range of values of a continuous monitoring parameter for any process unit or control device.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the notification requirements in conditions v. through z. are not met.

Reporting Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.2281]

- aa. The permittee shall submit a compliance report semiannually postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June [40 CFR 63.2281(b)(5)]
- bb. The compliance report must contain the information in 40 CFR 63.2281(c).
- cc. For each deviation from a compliance option or operating requirement and for each deviation from the work practice requirements in Table 8 to 40 CFR 63 Subpart DDDD that occurs at an affected source where you are not using a CMS to comply with the compliance options, operating requirements, or work practice requirements in this subpart, the compliance report must contain the information in 40 CFR 63.2281(c)(1) through (6) and (d)(1) and (2). This includes periods of startup, shutdown, and malfunction and routine control device maintenance. [40 CFR 63.2281(d)]
- dd. For each deviation from a compliance option or operating requirement occurring at an affected source where you are using a CMS to comply with the compliance options and operating requirements in 40 CFR 63 Subpart DDDD, you must include the information 40 CFR 63.2281(c)(1) through (6) and paragraphs (e)(1) through (11). This includes periods of startup, shutdown, and malfunction and routine control device maintenance. [40 CFR 63.2281(e)]
- ee. If you comply with the emissions averaging compliance option in 40 CFR 63.2240(c), you must include in your semiannual compliance report calculations based on operating data from the semiannual reporting period that demonstrate that actual mass removal equals or exceeds the required mass removal. [40 CFR 63.2281(f)]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in aa. through ee. are not met

B. Medium Density Fiberboard Facilities

1. 15A NCAC 2Q .0317: AVOIDANCE OF PREVENTION OF SIGNIFICANT DETERIORATION - AVOIDANCE CONDITION

- a. In order to avoid the applicability of 15A NCAC 2D .0530, the combined emissions from the sources indicated in the permitted equipment list in Section 1 as the **Medium Density Fiberboard Facilities** shall not exceed the following limits:
 - i. PM-10 emissions shall not exceed 75.7 tons per consecutive 12-month period.
 - ii. Nitrogen oxide emissions shall not exceed 177.8 tons per consecutive 12-month.
 - iii. VOC emissions shall not exceed 406 tons per consecutive 12-month period.
 - iv. PM-2.5 emissions shall not exceed 70.7 tons per consecutive 12-month period.

Testing [15A NCAC 2D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ found in Section 3. If the results of this test are above any limit given in Section 2.2 B.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

- c. Under the provisions of NCGS 143-215.108, the Permittee shall test the following sources:

Emission Point	Pollutant	Emission Rate, lb/hr, total from both emission points
Venturi/packed bed scrubber (ID No. CD02) exhaust and Venturi/packed bed scrubber (ID No. CD14) exhaust	NO _x	33.88
	VOC	54.28
	PM ₁₀	9.5
	PM _{2.5}	9.5

If the testing demonstrates that the emission rate is greater than the corresponding emission rate in the above table, the permittee shall submit an application including a re-evaluation of PSD applicability. Testing shall be completed not later than 180 days after the start-up of the affected facility. The Permittee shall submit a written report of the test(s) results to the Regional Supervisor, DAQ within 60 days of completion of the test.

- d. The Permittee shall submit a permit application to the Regional Supervisor to modify the permit to include specific monitoring requirements for the urea/water injection system (ID No. CD-02-A). The permit application shall be submitted within 60 days of completion of the test required under condition c.

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

- e. The Permittee shall submit a report within 30 days after each calendar year quarter, due and post marked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September. The report shall contain the monthly PM_{2.5}, PM₁₀, NO_x, and VOC emissions from the **Medium Density Fiberboard Facilities** for the previous 14 months. The emissions must be calculated for each of the 12-month periods over the previous 14 months. The initial report shall be submitted for the quarter in which the **Medium Density Fiberboard Facilities** achieve initial startup.

2.3- Schedule of Compliance

The operations considered “affected units” for MACT requirements under 40 CFR Part 63 Subpart DDDD are subject to the compliance schedule described below as established in the Special Order by Consent (ORDER) no. 2008-002. This schedule **does not include** the affected units known collectively as the **Medium Density Fiberboard Facilities** as indicated in the permitted equipment list in Section 1. This compliance schedule is an enforceable sequence of actions with milestones leading to compliance with applicable requirements for which the source is in noncompliance at the time of permit issuance. Any judicial consent decree or an administrative order to which the source is subject shall be supplemental to and shall not sanction noncompliance with other applicable requirements on which it is based [15A NCAC 2Q .0508(i)(16) and (m)].

The original ORDER was agreed to on July 10, 2008. It has been subsequently modified and agreed to on March 19, 2010. This Special Order by Consent shall expire not later than January 1, 2012 or upon completion of the requirements included in this ORDER, whichever occurs first.

1. **Actions to be Taken by the Permittee** - The Permittee, desiring to operate in a safe and environmentally sound manner in accordance with the rules and regulations of the COMMISSION, does hereby agree to perform the following activities:
 - A. The COMPANY shall submit an equivalency-by-permit (EBP) demonstration to the DAQ by November 13, 2009. This date in the order has been met.
 - B. If the DAQ denies the EBP, the COMPANY shall design, purchase, and install a water-based system with chemical injection for its dryers within nine months of DAQ’s denial but by no later than August 31, 2011.
 - C. If the DAQ denies the EBP, the COMPANY shall design, purchase, and install one of the following control options within nine months of DAQ’s denial but no later than August 31, 2011:
 - i. A biofilter,
 - ii. A separate water-based system with chemical injection for the press, or
 - iii. Ductwork to take the press exhaust to the dryer water-based system with chemical injection
 - D. If the DAQ denies the EBP, the COMPANY shall complete shakedown and compliance testing of the water-based system with chemical injection for its dryers and the selected control option specified under Paragraph II.C. for its press within four months of installation but by no later than January 1, 2012. The compliance test report shall also be submitted within four months of installation but by no later than January 1, 2012. There will be no further extensions of the testing deadline.

2.4- Permit Shield for Non-applicable Requirements

The Permittee is shielded from the following non-applicable requirements [15A NCAC 2Q .0512(a)(1)(A) and (B)].

- A. New Source Performance Standard (NSPS) Subpart Db is not applicable to the bio-mass 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. The system (ID No. ES-02A) consists of:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description	Configuration
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	in series with CD02 and CD14
		CD02	Venturi and packed bed scrubber (35 gallons per minute minimum injection rate)	CD02 in parallel with CD14 with emission points EP02 and EP14
		CD14	Venturi and packed bed scrubber (35 gallons per minute minimum injection rate)	

SECTION 3 - GENERAL CONDITIONS (version 3.4)

- A. **General Provisions** [NCGS 143-215 and 15A NCAC 2Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 2D and 2Q.
 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 2Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environment and Natural Resources upon request.
- C. **Severability Clause** [15A NCAC 2Q .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 2Q .0507(e) and 2Q .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 2Q .0508(i)(2)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.
- F. **Circumvention** - STATE ENFORCEABLE ONLY

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

G. Permit Modifications

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

H. Changes Not Requiring Permit Modifications

1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section I 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 2Q .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 2Q .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 2Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 2D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 2Q .0523(c).

I.A. Reporting Requirements for Excess Emissions and Permit Deviations

[15A NCAC 2D .0535(f) and 2Q .0508(f)(2)]

“Excess Emissions” - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 2D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 2Q .0700. (*Note: Definitions of excess emissions under 2D .1110 and 2D .1111 shall apply where defined by rule.*)

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

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 2D .0535 as follows:
 - a. Pursuant to 15A NCAC 2D .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 2D .0535(f)(3).

Permit Deviations

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

I.B. Other Requirements under 15A NCAC 2D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 2D .0535, including 15A NCAC 2D .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 2D .0535(c)(1) through (7).
2. 15A NCAC 2D .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 2Q .0508(e) and 2Q .0513(b)]

This permit is issued for a fixed term of five years for facilities subject to Title IV requirements and for a term not to exceed five years in the case of all other facilities. This permit shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 2Q .0512(b)(1), this permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of this permit shall remain in effect until the renewal permit has been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 2Q .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 2Q .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 2Q .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 2Q .0508(f) and 2Q .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 2Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding

calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

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

Q. Certification by Responsible Official [15A NCAC 2Q .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 2Q .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 2Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 2Q .0515.

S. Termination, Modification, and Revocation of the Permit [15A NCAC 2Q .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 2Q .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 2Q .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 2Q .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 2Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 2Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environment and Natural Resources. 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 2Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 2Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 2Q .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 2Q .0107 and 2Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 2Q .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 2Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 2Q .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 2Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 2Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 2Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 2Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 2Q .0501(e)]

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

DD. Prevention of Accidental Releases - Section 112(r) [15A NCAC 2Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) -

FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. Title IV Allowances [15A NCAC 2Q .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 2D .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 2D .0300.

HH. Registration of Air Pollution Sources [15A NCAC 2D .0200]

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 2D .0202(b).

II. Ambient Air Quality Standards [15A NCAC 2D .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 2D .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 2Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 2D.

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 2D .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. 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:

- (1) 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.
 - (2) Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - (3) Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
- b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 2D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 2Q .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 2Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 2Q .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 2Q .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 2Q .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. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. Fugitive Dust Control Requirement [15A NCAC 2D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 2D .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 2D .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 2Q.0501 and .0523]

1. For modifications made pursuant to 15A NCAC 2Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.

2. For modifications made pursuant to 15A NCAC 2Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 2Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth St., Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

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

OO. Third Party Participation and EPA Review [15A NCAC 2Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environment Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 2Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
DAQ	Division of Air Quality
DENR	Department of Environment and Natural Resources
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound