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Mr. Ricardo Hillmann
General Manager
ATC Panels, Inc.
985 Corinth Rd.
Moncure, North Carolina 27559

Dear Mr. Hillmann:

SUBJECT: Air Quality Permit No. 03449T31
Facility ID: 1900015
ATC Panels, Inc.
Moncure, North Carolina
Chatham County
Fee Class: Title V

In accordance with your completed Air Quality Permit Application for a 2Q .0501(d)(1) modification of the Title V permit received on October 20, 2006, we are forwarding herewith Air Quality Permit No. **03449T31** to ATC Panels, Inc., 985 Corinth Road, Moncure, North Carolina, authorizing the construction and operation of the emission sources and associated air pollution control devices 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 of Part I. **The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.**

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

Mr. Ricardo Hillmann

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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.

For PSD increment tracking purposes, PM-10, SO₂, and NO_x emissions have increased by 13.2 lbs/hr, 8.3 lbs/hr, and 20.0 lbs/hr, respectively.

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 until July 31, 2009 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 Rahul P. Thaker, P.E., QEP, at (919) 715-6238.

Mr. Ricardo Hillmann

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Sincerely yours,

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

Enclosure

cc: Gregg Worley, EPA Region 4
Ernie Fuller, Raleigh Regional Office
Connie Horne (cover letter only)
Central Files

ATTACHMENT

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

1. Diesel-fired fire pump (267 horsepower, 1.87 million Btu per hour heat input) (**ID No. I-DFP-1**)
2. Diesel-fired emergency generator (465 horsepower, 3,026 million Btu per hour heat input) (**ID No. I-ODG**)
3. Roof ventilators (**ID No. I-VENTS**)
4. One 500 gallons above ground gasoline storage tank (**ID No. I-GAS**)
5. Four 1000 gallons each above ground propane storage tanks (**ID Nos. I-TANK1, I-TANK2, I-TANK3, I-TANK4**)

ATTACHMENT

The following table summarizes changes made to the previous permit (No. 03449T30):

Old Page No.	New Page No.	Condition No.	Changes
Cover letter attachment for insignificant activities	Cover letter attachment for insignificant activities	-	Modify the descriptors for gasoline storage tanks (ID No. I-GAS) and propane storage tanks (ID No. I-TANKS) as the following: One 500 gallons above ground gasoline storage tank (ID No. I-GAS) and Four 1000 gallons each above ground propane storage tanks (ID Nos. I-TANK1, I-TANK2, I-TANK3, I-TANK4).
3 through 6	3 through 7	Section 1 Table	<p>Modify the descriptor for fiberboard press (ID no. WIW-4000) to state "fiberboard press and cooler."</p> <p>Modify the descriptors for three particleboard dryers (ID Nos. 1430, 1420, and 1410) to clarify that (i) the burner size for surface layer is 60 million Btu/hr, each core layer is 50 million Btu/hr, and the "Wellons burner" is 40 million Btu/hr. Also clarify that the "Wellons" burner can discharge to any of the three particleboard dryers.</p> <p>Modify the label "BACT" for all particleboard mill sources to state "PSD."</p> <p>Remove all footnotes to the Table for previous revisions to the permit which were approved using 2Q .0515, .0501(c)(2), and 502(b)(10) procedures. This permit revision includes repermitting of these sources using the significant modification procedures in Part 70. Also, all applicable forms for the previous approvals have been received from the company.</p>
8 through 10	8 through 10	Section 2.1 B. and Regulatory Summary Table	<p>Modify the descriptor for fiberboard press (ID no. WIW-4000) to state "fiberboard press and cooler."</p> <p>Include applicability for 2D .1100 and 2Q .0705.</p>
10	10	Section 2.1 B.1.b.	Correct "C." to "B." in "Section 2.1 C.1.a."
10	10	Section 2.1 B.2.c.	Change the stack testing and results submittal due date to "90 days of start-up" as this source has not yet been constructed.
12	12	Section 2.1 B.3.b.	Remove source WIW-4000 from this stipulation as it is an uncontrolled source.
13	13	Section 2.1 B.4.c.	Change the stack testing and results submittal due date to "90 days of start-up" as these sources have not yet been constructed.
14	15	Section 2.1 B.6.c.	Update visible emissions monitoring using the latest language. Also state a requirement to reestablish "normal" within 30 days of start-up.

Old Page No.	New Page No.	Condition No.	Changes
15 and 16	15 through 17	Section 2.1 C. and Regulatory Summary Table	Include "Wellons" burner in the descriptor and in the regulatory applicability for 2D .0516. Clarify the particulate matter as PM10 for PSD. Include applicability for 2D .0504, 2D .1100 and 2Q .0705.
-	17	Section 2.1 C.1.	Insert the applicability for 2D .0504 for "Wellons" burner.
16	17	Section 2.1 C.1.	Label it as Section 2.1 C.2.
17	18	Section 2.1 C.2.	Label it as Section 2.1 C.3.
18	18	Section 2.1 C.3.	Label it as Section 2.1 C.4. Clarify that 2D .0516 only applies to three particleboard dryers and one "Wellons" burner.
18	19	Section 2.1 C.4.	Label it as Section 2.1 C.5. Modify the condition to include "Wellons" burner. Update visible emissions monitoring using latest language. Include "normal" establishment requirement for three particleboard dryers and a "Wellons" burner.
19	20 and 21	Section 2.1 C.5. Table	Label it as Section 2.1 C.6. Include new BACT for particleboard dryers. Include separate footnotes for emissions during start-up, shutdown and malfunctions, and emissions of particleboard dryers.
20	-	Section 2.1 C.5.b.	Delete it.
21	22	Section 2.1 C.5.c.	Label it as Section 2.1 C.6.b.
21	22	Section 2.1 C.5.d.	Label it as Section 2.1 C.6.c. Modify the condition to require stack testing for PM10 within 180 days of issuance of air permit 03449T31.
21	22	Section 2.1 C.5.e.	Label it as Section 2.1 C.6.d.
21	23	Section 2.1 C.5.f.	Label it as Section 2.1 C.6.e.
22	23	Section 2.1 C.5.g.	Label it as Section 2.1 C.6.f.
22	23	Section 2.1 C.5.h.	Label it as Section 2.1 C.6.g.
22	23	Section 2.1 C.5.i.	Label it as Section 2.1 C.6.h.
22	23	Section 2.1 C.5.j.	Label it as Section 2.1 C.6.i.
23	24	Section 2.1 C.5.k.	Label it as Section 2.1 C.6.j.
23	24	Section 2.1 C.5.l.	Label it as Section 2.1 C.6.k.
23	24	Section 2.1 C.5.m.	Label it as Section 2.1 C.6.l.
23	24	Section 2.1 C.5.n.	Label it as Section 2.1 C.6.m.
23	24	Section 2.1 C.5.o.	Label it as Section 2.1 C.6.n.
23	24	Section 2.1 C.5.p.	Label it as Section 2.1 C.6.o.
23	24	Section 2.1 C.5.q.	Label it as Section 2.1 C.6.p. Modify the condition to require stack testing for CO within 180 days of issuance of air permit 03449T31.
24	25	Section 2.1 C.5.r.	Label it as Section 2.1 C.6.q. Include monitoring consisting of I/M requirements for particleboard dryers.
24	25	Section 2.1 C.5.r.	Label it as Section 2.1 C.6.r. Include recordkeeping for I/M performed on particleboard dryers.
24	25	Section 2.1 C.5.s.	Label it as Section 2.1 C.6.u.

Old Page No.	New Page No.	Condition No.	Changes
24	25	Section 2.1 C.5.t.	Label it as Section 2.1 C.6.v. Modify the condition to require stack testing for VOC within 180 days of issuance of air permit 03449T31.
-	25	Section 2.1C.6.s. and t.	Insert semiannual reporting and maintenance on particleboard dryers upon request for CO emissions.
24 and 25	25	Section 2.1 C.5.u. through z.	Remove monitoring and record keeping requirements for RTO.
-	26	Section 2.1 C.6.w. and x.	Include monitoring for wet ESP and a requirement to establish water injection rate through the performance of stack test for VOC.
-	26	Section 2.1 C.6.y.	Include reporting requirements for VOC.
25	26	Section 2.1 C.5.aa.	Label it as Section 2.1 C.6.dd.
25	-	Section 2.1 C.5.bb.	Remove this requirement.
25	26	Section 2.1 C.5.cc. and dd.	Modify the monitoring and record keeping requirements and label it as Section 2.1 C.6.ee.
-	26	Section 2.1 C.6.ff.	Insert reporting requirements for VE.
25	26	Section 2.1 C.5.ee.	Label it as Section 2.1 C.6.z.
25	27	Section 2.1 C.5.ff.	Label it as Section 2.1 C.6.aa. Modify the condition to require stack testing for NOx within 180 days of issuance of air permit 03449T31.
26	26	Section 2.1 C.5.gg.	Label it as Section 2.1 C.6.bb. Include monitoring / record keeping for NOx.
-	26	Section 2.1 C.6.cc.	Insert reporting requirements for NOx.
26	-	Section 2.1 C.5.hh.	Remove this requirement as it is redundant (same requirement as Section 2.1 C.5.ii. in air permit 03449T30).
26	27	Section 2.1 C.5.ii.	Label it as Section 2.1 C.6.gg.
26	-	Section 2.1 C.5.jj.	Remove this requirement as it has already been covered in other sections of the permit.
26	-	Section 2.1 C.5.kk.	Remove this semiannual reporting requirement as it has already been covered in other sections of the permit.
26	27	Section 2.1 C.5.ll.	Label it as Section 2.1 C.6.hh.
-	27	Section 2.1 C.7.	Insert this new applicable requirement for CAM for multiclones and wet ESP.
27	28	Section 2.1 D. Table	Include regulatory applicability for 2D .1111 (boiler MACT) for "new" source - "Pr-Heat1".
28	30	Section 2.1 D.4.c.	Update visible emissions monitoring using the latest language.
29	30	Section 2.2 A. Table	Modify Table to include applicability for 2D .1100 and 2Q .0700.
30	33	Section 2.2 A.2.	Label it as Section 2.2 A.3.
-	31	Section 2.2 A.2.	Insert 2D .1100 requirement: Include emission limits for formaldehyde, acrolein, methylene chloride, benzene, phenol, arsenic, beryllium, cadmium, soluble chromate compounds, chromium (as Cr ⁺⁶), manganese, nickel, acetaldehyde and di(2-ethylhexyl) phthalate as per approved modeling analysis.

Old Page No.	New Page No.	Condition No.	Changes
-	33	Section 2.2 A.4.	Include 2Q .0711 TPERs for Carbon disulfide (75-15-0), Carbon Tetrachloride (56-23-5), n-hexane (110-54-3), hexane isomers except n-hexane, Methyl Ethyl Ketone (78-93-3), Methyl Isobutyl Ketone (108-10-1), Methylene Chloride (75-09-2), Styrene (100-42-5), Toluene (108-88-3), and Xylene (1330-20-7).
30 through 38	34 through 41	Section 3	Include the latest language for General Conditions.
41	-	Part II	Remove entire Part II. All requirements have been satisfied. Previous revisions to the permit using 2Q .0515, .0501(c)(2), and 502(b)(10) procedures are now re-permitted using the significant modification procedures in Part 70. Also, all applicable forms for the previous approvals have been received from the company.



AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
03449T31	03449T30	xx	July 31, 2009

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:

ATC Panels, Inc.

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, State, Zip: Moncure, North Carolina 27559

Application Number: 1900015.06D
Complete Application Date: October 20, 2006
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 xx.

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

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(Including specific requirements)

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

SECTION 3: GENERAL PERMIT CONDITIONS

PART II

This permit does not include a Part II.

ATTACHMENT

List of Acronyms

PART I

The Division of Air Quality (DAQ), the United States Environmental Protection Agency (EPA), and citizens as defined under the Federal Clean Air Act have the authority to enforce the terms, conditions, and limitations contained in Part I of this permit unless otherwise specified.

Under Title 15A NCAC 2Q, the operation of emission source(s) and associated air pollution control device(s) and appurtenances listed in Part I of this permit is based on plans, specifications, operating parameters, and other information as submitted in the Air Quality Permit Application.

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	Truck/Rail Chip Handling System, Enclosed	N/A	None
7004 or SP-2	Truck/Rail Sawdust Handling System, Enclosed	N/A	None
7010	Particle Board Mill Truck Dump	N/A	None
7012, 7014, 7015, 7029	Dump bunkers and CL dryer dump	N/A	None
7052, 7054, 7055, 7056	Wood residue bunkers	N/A	None
6001, 7002-A, 7002-B, 7002-C, 7002-D	Wood chip piles - Medium Density Fiberboard Mill	N/A	None
6003, 7006, 7007, 7022	Wood Fuel Pad and Boiler Transfers	N/A	None
7005-D, 7005-E, 7005-F, 7005-G	Sawdust transport to A-frame	N/A	None
7008	Boiler fuel house	N/A	None
7025	Scale transfer conveyors	N/A	None
7019, 7026	Fiber dump and reject filter bins	N/A	None
7027	Hog fuel hopper	N/A	None
7003	Medium Density Fiberboard Mill feed bins	N/A	None
7040, 7044, 7046, 7048, 7050	Particleboard Mill chip transfer	N/A	None
SP	Fuel Sawdust and Chip Storage Piles	N/A	None
7024	Particleboard Mill feed bins	N/A	None
Medium Density Fiberboard Facilities			
HCB	Green chip and board trim transport system	CD-CCB, CD-CCC, CD-CCD, CD-CCE CD-4001	Four (4) High efficiency simple cyclones - each 72 inches in diameter Reverse flow bag filter with 2410 square feet of filter surface area

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
RDS	Refiners startup dump system	CD-5002	High efficiency cyclone - 96 inches in diameter
DA	System A fiber dryer	CD-CA	High efficiency cyclone - 204 inches in diameter
DB	System B fiber dryer	CD-CB	High efficiency cyclone - 204 inches in diameter
RCB-2	Fiber conveying system	CD-RCA, CD-RCB	Two (2) High efficiency cyclones - each 98.5 inches in diameter
		CD-3003	Air pulse bag filter with 3,475 square feet of filter surface area
FB-1	Fiber Forming System	CD-1003	Reverse flow bag filter with 6,924 square feet of filter surface area
RJB-1	Mat reject system	CD-RJC	Simple Cyclone - 168 inches in diameter
		CD-1004	Reverse flow bag filter with 4,680 square feet of filter surface area
RCB-1	Fiber reclaim system	CD-FRC	High efficiency cyclone - 170 inches in diameter
		CD-1002	Reverse flow bag filter with 5,767 square feet of filter surface area
WIW-4000	Fiberboard press and cooler	N/A	None
SDB-1	Steinemann Calibrating Sander	CD-1005	Reverse flow bag filter with 6,924 square feet of filter surface area
SDB-2	Steinemann Finishing Sander	CD-5003	Reverse flow bag filter with 6,924 square feet of filter surface area
1009A.1, 1009A.2, 1009A.3, BHB.1, BHB.2, BHB.3, SB-1, 5407-G, 5407-A, 5407-F	Edge Trim System Globe Saw Hogging Heads Globe Saw Blow Hog QC lab equipment, Radial arm saw, Globe sawdust collection system, Globe and Radial Arm Saws, Rip and Porter saws and sander dust, Porter saw dust collection system, Saws and sander from mill works line	CD-CBC-1009A CD-TTC-1009B CD-SC-1 CD-4002	Standard efficiency cyclone - 108 inches in diameter; Simple cyclone - 96 inches in diameter; Simple cyclone - 99 inches in diameter; Reverse flow bag filter with 6,720 square feet of filter surface area
ES-FS1 through ES-FS5, ES-RS, TLS	Five (5) Fines Saws	CD-MW-C1	Simple cyclone - 99 inches in diameter
	Rip Saw Truck Loading Station	CD-MW-B1	Reverse flow bag filter with 2,680 square feet of filter surface area
D-1	Keeler Boiler: Wood/equivalent No. 2 waste oil/No. 2 fuel oil-fired boiler (145 million BTU per hour maximum heat input)	CD-ZMC	Multi-cyclone with 88 tubes, each 9 inches in diameter
		CD-DESP	Dry electrostatic precipitator with 31,238 square feet of plate area
ST-1	Saw and sander dust transfer system	CD-SC CD-FC	Two (2) simple cyclones - each 72 inches in diameter
		CD-1008	Reverse flow bag filter with 1,144 square feet of surface area

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
HTC	Hogged board trim/hogged fuel recovery system	CD-SC-1 -or- CD-1010	Simple cyclone - 99 inches in diameter; -or- High efficiency cyclone - 48 inches in diameter
Particleboard Mill			
3501 PSD	Sawdust Rock and Metal Separator	CD-SC CD-3501	High efficiency cyclone - 72 inches in diameter Reverse flow bag filter with 2,410 square feet of surface area
1430 PSD	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 CD-PB-WESP	High efficiency multi-cyclone with 2 tubes, each 132 inches in diameter Wet electrostatic precipitator
1420 PSD	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 CD-PB-WESP	High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter Wet electrostatic precipitator
1410 PSD	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 CD-PB-WESP	High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter Wet electrostatic precipitator
3201 PSD	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 AND/OR CD-1421 AND/OR CD-1411, AND CD-PB-WESP	High efficiency multi-cyclone with 2 tubes, each 132 inches in diameter High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter High efficiency multi-cyclone with 4 tubes, each 80 inches in diameter Wet electrostatic precipitator
3515 PSD	Surface Material Transport (SL fines from screening operation)	CD-3500, CD-3512B CD-3515	Two (2) simple cyclones - each 72 inches in diameter Reverse flow fabric filter with 6,918 square feet of surface area
3525 PSD	Surface Formers and Mat Dumps	CD-3520A, CD-3520B, CD-3521 CD-3525	Three (3) simple cyclones - each 96 inches in diameter Reverse flow fabric filter with 6,918 square feet of surface area

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
3535 PSD	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	Particleboard Press	N/A	None
PB-BC PSD	Particleboard Cooler	N/A	None
3565 PSD	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	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	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	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
3585 PSD	PZKR Green Chip Flakers	CD-3585	Reverse flow bag filter with 4,880 square feet of surface area
3595	Oversize Material Pallmann Mill	CD-3595	Reverse flow bagfilter (Maximum air-to-cloth ratio of 3.0 ACFM/total filter surface area).
3577 PSD	Dry waste transport system	CD-3532	Simple cyclone - 60 inches in diameter
		CD-3577	Reverse flow bag filter with 4,068 square feet of surface area
Laminator Mill			
3593 and 3594	Two (2) Short Cycle Laminating Presses	CD-3593	Reverse flow bagfilter (Maximum air-to-cloth ratio of 4.1 ACFM/total filter surface area).

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Pr-Heat1 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

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);**
- Boiler Fuel House (ID No. 7008);**
- Scale Transfer Conveyors (ID No. 7025);**
- Fiber dump and reject filter bins (ID Nos. 7019 and 7026);**
- Hog Fuel Hopper (ID No. 7027);**
- Medium Density Fiberboard Mill Feed Bins (ID No. 7003);**
- 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

Regulatory Requirements

- 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 .0501(c)(8)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) 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); boiler fuel house (ID No. 7008); scale transfer conveyors (ID No. 7025); fiber dump and reject filter bins (ID Nos. 7019 and 7026); hog fuel hopper (ID No. 7027); medium density fiberboard mill feed bins (ID No. 7003); particleboard mill chip transfer (ID Nos. 7040, 7044, 7046, 7048, and 7050); and particleboard mill feed lines (ID No. 7024).

B. Medium Density Fiberboard Mill (ID No. MDF):

Green Chip and Board Trim Transport System (ID No. HCB);
Refiners Startup Dump System (ID No. RDS);
System A Fiber Dryer (ID No. DA);
System B Fiber Dryer (ID No. DB);
Fiber Conveying System (ID No. RCB-2);
Fiber Forming System (ID No. FB-1);
Mat Reject System (ID No. RJB-1);
Fiber Reclaim System (ID No. RCB-1);
Fiberboard Press and Cooler (ID No. WIW-4000);
Steinemann Calibrating Sander (ID No. SDB-1);
Steinemann Finishing Sander (ID No. SDB-2);
Edge Trim System (ID No. 1009A.1);
Globe Saw Hogging Heads (ID No. 1009A.2);
Globe Saw Blow Hog (ID No. 1009A.3);
Blow Hog Transfer System, and QC Systems (ID Nos. BHB.1, BHB.2, and BHB.3);
Globe and Radial Arm Saws (ID No. SB-1);
Rip and Porter Saws (ID Nos. 5407-G and 5407-A);
Saws and Sander Dust Collection (ID No. 5407-F);
Five (5) Fines Saws (ID Nos. ES-FS1 through ES-FS5);
Rip Saw (ID No. ES-RS);
Truck Loading System (ID No. TLS);
Keeler Boiler (ID No. D-1);
Saw and Sander Dust Transfer System (ID No. ST-1); and
Hogged Board Trim/Hogged Fuel Recovery System (ID No. HTC)

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	See Section 2.2 A.2; State-enforceable only	15A NCAC 2D .1100
Odors	Odorous emissions must be controlled - See Section 2.2 A.3; State-enforceable only	15A NCAC 2D .1806
Toxic air pollutants	See Section 2.2 A.4; State-enforceable only	15A NCAC 2Q .0705

ALTERNATIVE OPERATING SCENARIOS [15A NCAC 2Q .0508(p)]

- a. The Permittee, contemporaneously with making a change from one alternate operating scenario to another, shall record in a logbook (written or electronic format) the scenario under which it is operating. [15A NCAC 2Q .0508(p)]

AOS -firing No. 2 fuel oil, natural gas, or used oil

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

Regulatory Requirements

- a. Emissions of particulate matter from the combustion of No. 2 oil, natural gas, and used oil that are discharged from this source into the atmosphere shall not exceed 0.300 pounds per million Btu heat input. [15A NCAC 2D .0503(c)]

Testing [15A NCAC 2D .0501(c)(3)]

- 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 B.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, natural gas, and used oil in the Keeler Boiler (**ID No. D-1**).

POS -firing wood and wood residues in combination with used oil or No. 2 fuel oil

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

Regulatory Requirements

- a. Emissions of particulate matter from this source shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0504(f)]

$$E = \frac{(0.386 * Q_x) + (0.300 * Q_o)}{Q_x + Q_o}$$

where:

- E = Emissions of particulate matter (in pounds per million Btu)
- Q_w = Actual wood heat input rate in Btu/hr
- Q_o = Actual other fuel heat input rate in Btu/hr

Testing [15A NCAC 2D .0501(c)(3)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(3) 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 .0504.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit above by testing the wood fuel-fired Keeler Boiler (**ID No. D-1**) for particulate matter and establish the lower limits of the daily average primary voltage and current drop, 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 and the results submitted within 90 days of start-up of the Keeler Boiler (**ID No. D-1**) unless an alternate date is approved by the DAQ. 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 .0504.

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

Particulate matter emissions from the Keeler Boiler (**ID No. D-1**) shall be controlled by a multi-cyclone (**ID No. CD-ZMC**) in series with a dry electrostatic precipitator (**ID No. CD-DESP**).

For the Keeler Boiler (ID No. D-1):

- d. To comply with the provisions of the permit and ensure compliance with the limitations prescribed in 15A NCAC 2D .0504(c), the Permittee shall establish an inspection and maintenance schedule/checklist and perform such inspections and maintenance on the indirect heat exchangers on the Keeler Boiler (**ID No. D-1**). As a minimum, the inspection and maintenance program will include a monthly inspection of the indirect heat exchangers, boilers, fans, and ductwork for leaks and to ensure structural integrity. In addition, Permittee shall perform maintenance and cleaning at least once per year. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504 if the indirect heat exchangers are not inspected, cleaned, and maintained.

For the multi-cyclone (ID No. CD-ZMC):

- e. To ensure compliance and effective operation, the Permittee shall perform inspections and maintenance, which shall include the following:
- i. a once per month external visual inspection of the multi-cyclone, the system duct work, and the material collection unit for leaks and
 - ii. a once per year internal inspection of the multi-cyclone's structural integrity.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504 if the multi-cyclones and ductwork are not inspected and maintained.

For the dry electrostatic precipitator (ID No. CD-DESP):

- f. To ensure compliance and the effective operation of the dry electrostatic precipitator (**ID No. CD-DESP**), the Permittee shall
- i. 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;
 - ii. within 30 operational days following the startup of the MDF Line, monitor and record the daily primary voltage and current to establish a lower and an upper limit (excluding periods of start-up, shut-down, and malfunctions);
 - iii. within 60 operational days following the startup of the MDF Line, the Permittee shall request that the lower and an upper limit for the primary voltage and current be specified administratively in this Permit according to 2.1 B.2.f.i and ii.; and
 - iv. within 60 days of receiving approval from the DAQ of the test results pursuant to 2.1B.2.c. above the Permittee shall request that the lower and an upper limit for the primary voltage and current be changed administratively.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504 if:
- v. the voltage or current readings are not monitored, recorded, excluding periods of start-up, shut-down, malfunction, and monitor downtime and as provided in i. above; or
 - vi. the voltage or current fall below the lower or exceed the upper limit as established above.

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

For the Keller Boiler (ID No. D-1)

- g. The results inspection and maintenance schedule/checklist of the multi-cyclones 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 boiler; and
 - iv. any corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504 if these records are not maintained.

For the multi-cyclone (ID No. CD-ZMC):

- h. The results of inspection and maintenance of the multi-cyclones 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 duct work; and
- iv. any corrections made.

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

For the dry electrostatic precipitator (ID No. CD-DESP):

- i. The results of inspection and maintenance of the dry 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;
 - iii. corrective actions taken.

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

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

- j. The Permittee shall submit the results of any maintenance performed on the multi-cyclone (ID No. CD-ZMC), the dry electrostatic precipitator (ID No. CD-DESP), and Keeler Boiler (ID No. D-1) within 30 days of a written request by the DAQ.
- k. 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.

3. 15A NCAC 2D .0512: Particulates from Wood Products Finishing Plants

Regulatory Requirements

- 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/Record keeping [15A NCAC 2Q .0508(f)]

- b. Particulate matter emissions from the units in the medium-density fiberboard mill [ID No. MDF] (including the green chip and board trim transport system [ID No. HCB], refiners [ID No. RDS], fiber conveying system [ID No. RCB-2], fiber forming system [ID No. FB-1], mat reject system [ID No. RJB-1], fiber reclaim system [ID No. RCB-1], sanders [ID Nos. SDB-1 and SDB-2], edge trim system [ID No. 1009A.1], globe saw hogging heads and blow hog [ID Nos. 1009A.2 and 1009A.3], blow hog transfer system with QC lab equipment, radial arm saw, and globe saw dust collection systems [ID Nos. BHB.1, BHB.2, and BHB.3], globe saw sawdust system [ID No. SB-1], rip and porter saw dust collection system [ID Nos. 5407-G and 5407-A], sander dust collection system [ID No. 5407-F], fines saws [ID Nos. ES-FS1 through ES-FS5], rip saw [ID No. ES-RS], truck loading system [ID No. TLS], (saw and sander dust collection system [ID No. ST-1], and hog trim transport system [ID No. HTC] shall be controlled by 16 cyclones (ID Nos. CD-CCB, CD-CCC, CD-CCD, CD-CCE, CD-5002, CD-RCA, CD-RCB, CD-RJC, CD-FRC, CD-CBC-1009A, CD-TTC-1009B, CD-SC-1, CD-MW-C1, CD-SC, CD-FC, and CD-1010), and 10 fabric filters (ID Nos. CD-4001, CD-3003, CD-1004, CD-1003, CD-1002, CD-1005, CD-5003, CD-4002, CD-MW-B1 and CD-1008). To ensure compliance, the Permittee shall perform inspections and maintenance as following:
 - i. monthly external inspection of the duct work and cyclones, noting the structural integrity; and
 - ii. internal inspection of the fabric 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 fabric filters are not inspected and maintained.

- c. The results of inspection and maintenance for the cyclones and bag filters shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection; and

iii. the results of maintenance performed on any control device.
The Permittee shall be deemed in noncompliance with 15A NCAC 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 16 cyclones (**ID Nos. CD-CCB, CD-CCC, CD-CCD, CD-CCE, CD-5002, CD-RCA, CD-RCB, CD-RJC, CD-FRC, CD-CBC-1009A, CD-TTC-1009B, CD-SC-1, CD-MW-C1, CD-SC, CD-FC, and CD-1010**), and 10 fabric filters (**ID Nos. CD-4001, CD-3003, CD-1004, CD-1003, CD-1002, CD-1005, CD-5003, CD-4002, CD-MW-B1 and CD-1008**) within 30 days of a written request by the DAQ.
- e. The Permittee shall submit a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 2D .0515: PARTICULATE EMISSIONS FROM MISCELLANEOUS INDUSTRIAL PROCESSES

Regulatory Requirements

- a. Emissions of particulate matter from the units in the medium-density fiberboard mill that are discharged into the atmosphere shall not exceed an allowable emission rate as calculated by the following equations: [15A NCAC 2D .0515(a)].

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

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 .0501(c)(3)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(3) and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1 B.4.a. (above) for particulate matter, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limits above by testing the fiber dryers (**ID Nos. CD-DA and CD-DB**) for particulate matter 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 90 days of start-up of fiber dryers (**ID Nos. CD-DA and CD-DB**) unless an alternate date is approved by the DAQ. If the results of this test for particulate matter are above the limit identified in Section 2.1 B.4.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- d. Particulate matter emissions from the units in the medium-density fiberboard mill [**ID No. MDF**] shall be controlled as follows:
 - i. Emissions from the system A fiber dryer (**ID No. DA**) shall be controlled by a 204-inch diameter high efficiency cyclone (**ID No. CD-CA**) and the system B fiber dryer (**ID No. DB**) shall be controlled by a 204 inches in diameter high efficiency cyclone (**ID No. CD-CB**)

For the cyclones (ID Nos. CD-CA and CD-CB):

- e. To ensure compliance and effective operation, the Permittee shall perform inspections and maintenance which shall include the following:
 - i. a once per month external visual inspection of the cyclones, the system duct work, and the material collection unit for leaks and
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the cyclones and ductwork are not inspected and maintained.
- f. 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)]

- g. The Permittee shall submit the results of any maintenance performed on the cyclones (**ID Nos. CD-CA and CD-CB**) within 30 days of a written request by the DAQ.
- h. 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.

5. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

Regulatory Requirements

- a. Sulfur dioxide from the Keeler Boiler (**ID No. D-1**) 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(a)].

Testing [15A NCAC 2D .0501(c)(4)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 B.5.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 wood, natural gas, or No. 2 fuel oil in the Keeler Boiler (**ID No. D-1**).

6. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

Regulatory Requirements

- a. As required by 15A NCAC 2D .0521(d) "Control of Visible Emissions," visible emissions from the units in the medium-density fiberboard mill (**ID No. MDF**) 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 .0501(c)(8)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1 B.6.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 medium-density fiberboard mill as follows for any visible emissions above normal:

Emission Source Description and ID No.	Emission Point ID No.
Green chip and board trim transport system (ID No. HCB)	CD-4001
Refiners (ID No. RDS)	CD-5002
System A fiber dryer (ID No. DA)	3001
System B fiber dryer (ID No. DB)	3001
Fiber conveying system (ID No. RCB-2)	CD-3003
Fiber forming system (ID No. FB-1)	CD-1003
Fiber reclaim system (ID No. RCB-1)	CD-1002

Emission Source Description and ID No.	Emission Point ID No.
Fiberboard press and cooler (ID No. WIW-4000)	4000
Sander (ID No. SDB-1)	CD-1005
Sander (ID No. SDB-2)	CD-5003
edge trim system (ID No. 1009A.1)	CD-4002, 1008
globe saw hogging heads and blow hog (ID Nos. 1009A.2 and 1009A.3)	CD-4002, 1008
Blow hog transfer system, QC lab equipment, radial arm saw, and globe sawdust collection systems (ID Nos. BHB.1, BHB.2, and BHB.3)	CD-4002, 1008
Globe saw sawdust system (ID No. SB-1)	CD-4002, 1008
Rip and porter saw dust collection system (ID Nos. 5407-G and 5407-A)	CD-4002, 1008
Sander dust collection system (ID No. 5407-F)	CD-4002, 1008
Five fines saws (ID Nos. ES-FS1 through ES-FS5)	CD-MW-B1
Rip saw (ID No. ES-RS)	CD-MW-B1
Truck Loading System (ID No. TLS)	CD-MW-B1
Keeler Boiler (ID No. D-1)	1001
Saw and sander dust transfer system (ID No. ST-1)	CD-4002, 1008
Hog trim transport system (ID No. HTC)	CD-1010

The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. The Permittee shall reestablish [normal] in the first 30 days of start-up of the emission sources in Section 2.1 B. 6.c. above. If visible emissions from the emission points in the medium-density fiberboard mill 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 .0501(c)(8) is below the limit given in Section 2.1 B.6. 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. 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.

C. 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
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 C.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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	Odorous emissions must be controlled - See Section 2.2 A.3; State-enforceable only	15A NCAC 2D .1806
Toxic air pollutants	See Section 2.2 A.4; State-enforceable only	15A NCAC 2Q .0705

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. [15A NCAC 2D .0504]

Testing [15A NCAC 2D .0501(c)(3)]

- 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.

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 C.6.d. through l. shall be sufficient to assure compliance with 15A NCAC 2D .0504. If the requirements of Section 2.1 C.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 C.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

Regulatory Requirements

- 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:
 - i. monthly external inspection of the duct work and cyclones, noting the structural integrity; and
 - ii. internal inspection of the bag filters, every 12 months, noting the structural integrity and the condition of the filters.

The Permittee shall be deemed in noncompliance with 15A NCAC 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:

- 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)]

- 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

Regulatory Requirements

- 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: [15A NCAC 2D .0515(a)].

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

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 .0501(c)(3)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(3) and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1 C.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 Section 2.1.C.6. f. through 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

Regulatory Requirements

- 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. [15A NCAC 2D .0516(a)].

Testing [15A NCAC 2D .0501(c)(4)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1. C.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

Regulatory Requirements

- 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 .0501(c)(8)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1 C.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 .0501(c)(8) is below the limit given in Section 2.1 C.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

Regulatory Requirement

- 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	202 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

Emission Source	Pollutants	Emission Limits*	Control Technology
Flying Cut Off Saw, Pretrim Saws, and Production Collection (ID No. 3535)	PM ₁₀	0.005 lbs/hr	baghouse 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
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 C.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 .0501(c)(3)]

- b. If testing is required for emissions of PM₁₀, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(3) and General Condition JJ. If the results of this test exceed the limits given in Section 2.1 C.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 C.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 C.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.**

- x. **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 C.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 .0501(c)]

- 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 C.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 C.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 C.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 .0501(c)(17)]

- u. If testing is required for emissions of volatile organic compounds, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(17) and General Condition JJ. If the results of this test exceed the limit given in Section 2.1 C.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 C.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 C.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 C.6.q. and r. above shall be sufficient to assure compliance with 15A NCAC 2D .0530. If the requirements of Section 2.1 C.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 C.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 C.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 C.6.x. through an "administrative permit amendments" procedure within 90 days from the submittal of stack test results in Section 2.1 C.6.v. above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the requirements of the Section 2.1 C.6.x. are not complied with.

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

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

Testing (Nitrogen Oxides) Testing [15A NCAC 2D .0501(c)(7)]

- z. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(7) and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1 C.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 C.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 C.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 C.6.q. and r. above shall be sufficient to assure compliance with 15A NCAC 2D .0530. If the requirements of Section 2.1 C.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 C.6. s. and t. shall be sufficient to assure compliance with 15A NCAC 2D .0530.

Testing (Visible Emissions) [15A NCAC 2D .0501(c)(8)]

- dd. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1 C.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 C.5.c. and d. above shall be sufficient to assure

compliance with 15A NCAC 2D .0530 for all PSD affected sources except particleboard dryers.¹ If the requirements of Section 2.1 C.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 C.5.e. shall be sufficient to assure compliance with 15A NCAC 2D .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.

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

- hh. 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. 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 C.6.d.ii., f., h., j., and l. above shall be sufficient to assure compliance with 15A NCAC 2D .0614.
- d. During the tack test for PM₁₀ as required in Section 2.1 C.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 C.6.c. above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0614 if the requirements of the Section 2.1 C.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 C.6.m. and n. shall be sufficient to assure compliance with 15A NCAC 2D .0614.

D. 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)

¹ Particleboard dryers are not subject any VE BACT.

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 <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 .0503 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)
Toxic air pollutants	See Section 2.2 A.2; State-enforceable only	15A NCAC 2D .1100
Hazardous Air Pollutants	<u>Affected source: Hot Oil Heater (ID No. Pr-Heat1)</u> initial notification only See §63.7506(b) and §63.7545(c)	15A NCAC 2D .1111 40 CFR 63 Subpart DDDDD
Odors	State-enforceable only Odorous emissions must be controlled - Section 2.2. A.3. Facility-Wide Affected Emission Sources.	15A NCAC 2D .1806
Toxic air pollutants	See Section 2.2 A.4; State-enforceable only	15A NCAC 2Q .0705

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

Regulatory Requirements

- 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. [15A NCAC 2D .0503(c)]

Testing [15A NCAC 2D .0501 (c)(3)]

- 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. D.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

Regulatory Requirements

- 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: [15A NCAC 2D .0515(a)].

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

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 .0501(c)(3)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(3) and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in Section 2.1 D.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

Regulatory Requirements

- 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. [15A NCAC 2D .0516(a)].

Testing [15A NCAC 2D .0501(c)(4)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 D.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

Regulatory Requirements

- 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 .0501(c)(8)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ found in Section 3. If the results of the test performed exceed the limits given in

Section 2.1 D.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 .0501(c)(8) is below the limit given in Section 2.1 D.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.

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 - See Section 2.2 A.1.	15A NCAC 2D .0958
toxic air pollutants	See Section 2.2 A.2. and Section 2.2 A.4. <i>State enforceable only</i>	15A NCAC 2D .1100 and 15A NCAC 2Q .0705
odors	Odorous emissions must be controlled - Section 2.2 A.3. <i>State enforceable only</i>	15A NCAC 2D .1806

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.

2. 15A NCAC 2D .1100: CONTROL OF TOXIC AIR POLLUTANTS [STATE ONLY REQUIREMENT]

- a. In accordance with 15A NCAC 2Q .0705, the Permittee has evaluated all toxic air pollutants covered in 15A NCAC 2D .1104 for all sources at the facility, including the sources exempt from evaluation under 15A NCAC 2Q .0702(a)(1) through (a)(24)². Pursuant to 15A NCAC 2D .1100 and in accordance with the completed application (1900015.06D) received October 20, 2006 for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

² Although the Permittee has modeled air toxic emissions from the exempt sources, the air permit will not include the modeled emission rates for the exempt sources.

Emission Source	Toxic Air Pollutant	Emission Limit(s)
"Wellons" Burner (ID No. 3201)	Acetaldehyde Acrolein Arsenic Benzene Beryllium di(2-ethylhexyl)phthalate Cadmium Non-specific Chromium (VI) compounds as Chromium (VI) Formaldehyde Manganese Nickel Phenol	0.033 lbs/hr 0.16 lb/hr 7.71 lbs/yr 1471.7 lbs/yr 0.385 lb/yr 0.000045 lb/day 1.43 lbs/yr 0.42 lb/yr 0.176 lb/hr 1.54 lb/day 0.032 lb/day 0.002 lb/hr
Particleboard Dryers (ID Nos. 1410, 1420, and 1430)	Acetaldehyde Acrolein Benzene di(2-ethylhexyl)phthalate Formaldehyde Phenol	1.45 lbs/hr 23.7 lbs/hr 514.2 lbs/yr 0.456 lb/day 65.8 lb/hr 0.238 lbs/hr
Particleboard Press (ID No. DEF-2010)	Acetaldehyde Acrolein Benzene Formaldehyde Phenol	0.168 lb/hr 0.0186 lb/hr 553.1 lbs/yr 6.47 lbs/hr 0.198 lb/hr
Particleboard Cooler (ID No. PB-BC)	Acetaldehyde Acrolein Benzene Formaldehyde Phenol	0.076 lbs/hr 0.00369 lb/hr 83.9 lbs/yr 0.75 lb/hr 0.116 lb/hr
MDF System A dryer and System B Dryer (ID Nos. DA and DB)	Acetaldehyde Acrolein Benzene Formaldehyde Phenol	0.397 lb/hr 0.0181 lb/hr 812.0 lbs/yr 23.8 lbs/hr 0.497 lb/hr
MDF Fiberboard Press (ID No. WIW-4000)	Acetaldehyde Acrolein Benzene Formaldehyde Phenol	0.157 lb/hr 0.0056 lb/hr 441.5 lbs/yr 8.06 lbs/hr 0.302 lb/hr
MDF Cooler (ID No. WIW-4000)	Acetaldehyde Acrolein Benzene Formaldehyde Phenol	0.0112 lb/hr 0.00246 lb/hr 382.9 lbs/yr 0.047 lb/hr 0.12 lb/hr
Particleboard Miscellaneous Sources (ID Nos. 3525, 3535, 3565, 4110, 3555, 3575, 3585, 3595, and 3577)	Acetaldehyde Formaldehyde Phenol	0.138 lb/hr 0.143 lb/hr 0.271 lb/hr
MDF Miscellaneous Sources (ID Nos. HCB, RDS, RCB-2, FB-1, RJB-1, RCB-1, SDB-1, SDB-2, BHB, ST-1, HTC, and TLS)	Acetaldehyde Acrolein Formaldehyde Phenol	0.188 lb/hr 0.073 lb/hr 1.49 lbs/hr 0.051 lb/hr
Laminators (ID Nos. 3593, 3594, and Pr-Heat1)	Formaldehyde	0.031 lb/hr

b. No testing is required.

Monitoring/Recordkeeping/Reporting 15A NCAC 2D .1105]

c. No monitoring / recordkeeping / reporting is required.

3. 15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS [STATE ONLY REQUIREMENT]

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 2Q .0705: EXISTING FACILITIES AND SIC CALLS for TOXIC AIR POLLUTANT EMISSIONS LIMITATION REQUIREMENT [STATE-ENFORCEABLE ONLY]

- a. As of October 20, 2006, emissions of toxic air pollutants have been demonstrated on a facility-wide basis (excluding those sources exempt under 15A NCAC 2Q .0702 "Exemptions") that each of the toxic air pollutants (TAPs) emitted from all sources at the facility are either below its respective toxic permit emission rates (TPER) listed in 15A NCAC 2Q .0711 - "Emission Rates Requiring a Permit" or the TAPs are in compliance with 15A NCAC 2D .1100 "Control of Toxic Air Pollutants" as described elsewhere in this permit.
- b. The facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions of any TAP listed in 15A NCAC 2Q .0711 or in this permit from all sources at the facility (excluding those sources exempt under 15A NCAC 2Q .0702 "Exemptions"), including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TPER listed in 15A NCAC 2Q .0711 without first obtaining an air permit to construct or operate.
- c. PRIOR to exceeding any of the TPERs listed in 15A NCAC 2Q .0711, the Permittee shall be responsible for obtaining an air permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D .1100 "Control of Toxic Air Pollutants".
- d. The Permittee shall maintain at the facility records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A NCAC 2Q .0711.
- e. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required pursuant to 15A NCAC 2Q .0711 and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

Pollutant (CAS No.)	lbs/hr	lbs/day	lbs/yr
Carbon disulfide (75-15-0)		3.9	
Carbon Tetrachloride (56-23-5)			460
n-hexane (110-54-3)		23	
hexane isomers except n-hexane	92		
Methyl Ethyl Ketone (78-93-3)		78	
Methyl Isobutyl Ketone (108-10-1)		52	
Methylene Chloride (75-09-2)			1600
Styrene (100-42-5)	2.7		
Toluene (108-88-3)		98	
Xylene (1330-20-7)		57	

SECTION 3 - GENERAL CONDITIONS

This section describes terms and conditions applicable to this Title V facility. All references to the “permit” in this section apply only to Part I of the permit.

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 NO_x 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

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. 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.
2. 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.
3. 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)(3)]

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

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

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)]

If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ in support of a permit application, the Permittee shall perform such testing in accordance with the appropriate EPA reference method(s) as approved by the DAQ and follow the procedures outlined below. The Permittee must request **in writing** and receive approval from the DAQ for an alternate test method or procedure.

1. The Permittee shall submit a completed Protocol Submittal Form to the DAQ Regional Supervisor at least 45 days prior to the scheduled test date. A copy of the Protocol Submittal Form may be obtained from the Regional Supervisor.
2. The Permittee shall notify the Regional Supervisor of the specific test dates at least 15 days prior to testing in order to afford the DAQ the opportunity to have an observer on-site during the sampling program.
3. During all sampling periods, the Permittee shall operate the emission source(s) under maximum normal operating conditions or alternative operating conditions as deemed appropriate by the Regional Supervisor or his delegate.
4. The Permittee shall submit **two** copies of the test report to the DAQ. The test report shall contain at a minimum the following information:
 - a. a certification of the test results by sampling team leader and facility representative;
 - b. a summary of emissions results and text detailing the objectives of the testing program, the applicable state and federal regulations, and conclusions about the testing and compliance status of the emission source(s);
 - c. a detailed description of the tested emission source(s) and sampling location(s) process flow diagrams, engineering drawings, and sampling location schematics should be included as necessary;
 - d. all field, analytical, and calibration data necessary to verify that the testing was performed as specified in the applicable test methods;
 - e. example calculations for at least one test run using equations in the applicable test methods and all test results including intermediate parameter calculations; and
 - f. documentation of facility operating conditions during all testing periods and an explanation relating these operating conditions to maximum normal operation. If necessary, provide historical process data to verify maximum normal operation.
5. The testing requirement(s) shall be considered satisfied only upon written approval of the test results by the DAQ.
6. The DAQ will review emission test results with respect exclusively to the specified testing objectives as proposed by the Permittee and approved by the DAQ. The use of the test results beyond the stated objectives remains subject to the approval of the DAQ.

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.

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
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
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
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound