

January 4, 2008

Mr. Michael DeHart
Vice President/Plant Manager
Vaughan-Bassett Furniture Co. – Elkin Furniture
PO Box 230
Elkin, North Carolina 28621

Dear Mr. DeHart:

SUBJECT: Air Quality Permit No. 02467T26
Facility Site Number: 8600009
Vaughan-Bassett Furniture Company, Inc.
Elkin, North Carolina
Surry County
Fee Class: Title V

In accordance with your completed Air Quality Application for a renewal of your Title V permit received July 26, 2006 and for a significant modification received December 22, 2006, we are forwarding herewith Air Quality Permit No. 02467T26 to Vaughan-Bassett Furniture Company, Inc., Highway 268, Elkin, North Carolina authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3 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 condition(s) of the attached permit that are applicable to that particular emission source.

Mr. Michael DeHart

January 4, 2008

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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 143-215.108(A)(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.

This Air Quality Permit shall be effective from January 4, 2008 until December 31, 2012, 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 Mark J. Cuilla, E.I.T., at (919) 733-1499.

Sincerely yours,

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

Enclosure

c: Greg Worley – EPA Region IV (with review)
Winston-Salem Regional Office
Central Files

Attachment - Permit Modification/Changes

The following table describes the modifications to the current permit.

Page(s)	Section	Description of Change(s)
Attachment	Insignificant activities	-added ID Nos.
Cover	-	-amended all dates and permit revision numbers
All	Header	-amended permit revision number
3-5	Equipment table	-removed all references to ES-11I and ES-13 per Permittee -added boiler description clarifications -added MACT Subpart designations to applicable equipment
6	2.1 A 2.1 A.2.a	-amended equipment description -added ID Nos. and updated shell language
7	2.1 A.2.b-h 2.1 A.2.c 2.1 A.2.d 2.1 A.2.e 2.1 A.2.f 2.1 A.2.g 2.1 A.2.h	-reordered paragraph designations -updated shell language -updated testing date requirement -added ID Nos. and updated shell language -added ID Nos. and updated shell language -added ID Nos. -updated shell language
8	2.1 A.3.a 2.1 A.3.c 2.1 A.3.d 2.1 A.3.e 2.1 A.3.f	-added ID Nos. -updated testing date requirement -added ID Nos. and updated shell language -added ID Nos. and updated shell language -added ID Nos.
9	2.1 A.3.g 2.1 A.4.a 2.1 A.4.d 2.1 A.4.e.iii 2.1 A.4.f	-updated shell language -added ID Nos. -added ID Nos. -updated shell language -updated shell language
10	2.1 A.5.a 2.1 A.5.c 2.1 A.5.d 2.1 A.5.e	-updated shell language -updated shell language -updated shell language -updated shell language
11	2.1 B 2.1 B (table) 2.1 B.2.a 2.1 B.2.b 2.1 B.2.c	-amended equipment description -corrected rule citations -added ID Nos. and updated shell language -updated shell language -updated testing date requirement
12	2.1 B.2.d 2.1 B.2.e 2.1 B.2.f 2.1 B.2.g 2.1 B.3.a	-added ID Nos. and updated shell language -added ID Nos. -added ID Nos. -updated shell language -added ID Nos.
13	2.1 B.3.c 2.1 B.3.d 2.1 B.3.e 2.1 B.3.f 2.1 B.3.g 2.1 B.4.a	-updated testing date requirement -added ID Nos. and updated shell language -added ID Nos. -added ID Nos. -updated shell language -added ID Nos.
14	2.1 B.4.c 2.1 B.4.d.iii 2.1 B.4.e 2.1 B.5.a	-added ID Nos. -updated shell language -updated shell language -updated shell language

Page(s)	Section	Description of Change(s)
15	2.1 B.5.c 2.1 B.5.d 2.1 B.5.e 2.1 B.6.a	-updated shell language -added recordkeeping requirements -added reporting requirements -added ID Nos.
16	2.1 B.6.c 2.1 B.6.d	-added ID Nos. -amended PSD avoidance equation -added ID Nos.
17	2.1 C (old) 2.1 C (new) 2.1 C (table) 2.1 C.1.b	-removed Section per Permittee (renumbered subsequent sections) -amended equipment description -clarified emission limit language -updated shell language
18	2.1 C.1.c 2.1 C.1.e 2.1 C.2.b 2.1 C.2.c	-added ID Nos. -updated shell language -corrected cross reference -added ID Nos. and updated shell language
19	2.1 C.2.d 2.1 C.2.e 2.1 C.3.c 2.1 C.3.d	-added recordkeeping requirements -added reporting requirements -added monitoring requirements -corrected cross reference
19-20	2.1 C.3.e	-corrected cross reference
20	2.1 D	-renumbered Section and amended equipment descriptions
21	2.1 D.1.b 2.1 D.1.c 2.1 D.1.e 2.1 D.2.b	-updated shell language -added ID Nos. -updated shell language -corrected cross reference
22	2.1 D.2.c 2.1 D.2.e 2.1 E 2.1 E (table)	-added ID Nos. and updated shell language -updated shell language -renumbered Section and amended equipment descriptions -added MACT Subpart title and emission limit
23-26	2.2 A	-added ID Nos. where needed
26	2.2 B	-updated shell language
27-36	General Conditions	-updated shell conditions (v2.19)

Attachment to Permit No. 02467T26

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

Emission Source ID	Emission Source Description
IES-AST	One 1,000 gallon gasoline above ground storage tank

State of North Carolina,
Department of Environment,
and Natural Resources

Division of Air Quality



AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
02467T26	02467T25	January 4, 2008	December 31, 2012

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: **Vaughan-Bassett Furniture Company, Inc.**

Facility ID: **8600009**

Facility Site Location: **Highway 268**
City, County, State, Zip: **Elkin, Surry County, North Carolina 28621**
Mailing Address: **P.O. Box 230**
City, State, Zip: **Elkin, North Carolina 28621**

Application Number: **8600009.06A and 8600009.06B**
Complete Application Date: **July 26, 2006 and December 22, 2006**

Primary SIC Code: **2511**

Division of Air Quality: **Winston-Salem Regional Office**
Regional Office Address: **585 Waughtown Street Place**
Winston-Salem, North Carolina 27107

Permit issued this the 4th day of January, 2008.

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, testing, monitoring, recordkeeping, and reporting requirements)
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(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)

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ATTACHMENT

List of Acronyms

PART II -

This permit does not include a Part II.

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

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-4	One firetube design wood/coal-fired boiler (29.3 million Btu per hour maximum heat input capacity)	CD-1A CD-1B	Two multicyclones (each with 20, nine-inch diameter tubes)
ES-5	One firetube design wood/coal-fired boiler (29.1 million Btu per hour maximum heat input capacity)	CD-2A CD-2B	Two multicyclones (each with 20, nine-inch diameter tubes)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
<p>ES-1.1 through ES-1.9 (MACT, Subpart JJ)</p> <p>ES-3, ES-12, and ES-14 (MACT, Subpart JJ)</p> <p>ES-2 (MACT, Subpart JJ)</p> <p>DO-1 and DO-2 (MACT, Subpart JJ)</p> <p>ES-6 (MACT, Subpart JJ)</p> <p>ES-PR (MACT, Subpart JJ)</p> <p>ES-ST1 through ES-ST9 (MACT, Subpart JJ)</p> <p>ES-15 (MACT, Subpart JJ)</p>	<p>Wood Furniture Finishing Operations consisting of:</p> <p>-Nine dry filter-type spray booths</p> <p>-Three dry filter-type spray booths</p> <p>-One glaze stain baffle-type spray booth</p> <p>-Two steam-heated drying ovens</p> <p>-One gluing and assembly operation</p> <p>-Finish pump room</p> <p>-Nine finishing material day tanks</p> <p>-One reverse roll coater, steam heated</p>	NA	NA
ES-7	Woodworking operations (hog and sanding, storage silo, machine and lathe rooms)	<p>CD-4</p> <p>CD-5</p> <p>CD-6</p> <p>CD-8</p> <p>CD-9</p> <p>CD-10</p> <p>CD-16</p> <p>CD-18</p>	<p>Cyclone #1 (8.6 feet in diameter)</p> <p>Cyclone #2 (8.6 feet in diameter)</p> <p>One bagfilter (4,408 square feet of filter area)</p> <p>One Micropul RAF II fabric filter (6,900 square feet of filter area)</p> <p>One bagfilter (8,294 square feet of filter area)</p> <p>One bagfilter (7,136 square feet of filter area)</p> <p>One bagfilter (5,869 square feet of filter area)</p> <p>One bagfilter (7,555 square feet of filter area)</p>

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-8	Woodworking operations (cutting, shaping, and sanding)	CD-11	One bagfilter (6,032 square feet of filter area)
		CD-13	One bagfilter (5,235 square feet of filter area)
		CD-17	One bagfilter (7,555 square feet of filter area)
ES-9	Expanded sanding operation	CD-12	One cyclone (13.3 feet in diameter)
		CD-9	One bagfilter (8,294 square feet of filter area)
ES-10	Post sanding operation	CD-9	One bagfilter (8,294 square feet of filter area)
ES-11A through ES-11H (MACT, Subpart DDDD)	Eight lumber-drying kilns (93,000 board-feet per week maximum capacity, Nos. A, B, C, D, and H; 100,000 board-feet per week maximum capacity, Nos. E, F, and G)	NA	NA

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

A. One firetube design wood/coal-fired boiler (ID No. ES-4) and associated multicyclones (ID Nos. CD-1A and CD-1B)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	<p>POS - firing wood only or in combination with coal $E = [(0.55)(Q_w) + (0.45)(Q_o)] / (Q_w + Q_o)$</p> <p>Where: Q_w=actual wood heat input rate (million Btu/hour) Q_o=actual other fuel heat input rate (million Btu/hr)</p> <p>AOS - firing coal only 0.45 pounds per million Btu heat input</p>	15A NCAC 2D .0504
		15A NCAC 2D .0503
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible Emissions	40 percent opacity	15A NCAC 2D .0521

POS = Primary Operating Scenario AOS = Alternative Operating Scenario

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

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.

POS - Firing wood only or in combination with coal

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

- a. Emissions of particulate matter from this source (**ID No. ES-4**) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = [(0.55)(Q_w) + (0.45)(Q_o)] / (Q_w + Q_o) \text{ [pounds per million Btu]}$$

Where, Q_w=actual wood heat input (million Btu per hour)
 Q_o=actual other fuels heat input (million Btu per hour).

- b. The Permittee shall burn no more than 180 pounds per hour of finishing material facility wide.

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

- c. 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 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504.
- d. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit(s) above by testing this source (**ID No. ES-4**) for particulate matter while firing wood only in accordance to 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 by **January 4, 2009**, unless an alternate date is approved by the DAQ. If the results of this test are above the limit given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504.

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

- e. Particulate matter emissions from this source (**ID No. ES-4**) shall be controlled by two multicyclones (**ID Nos. CD-1A and CD-1B**). 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 are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
 - i. a monthly external visual inspection of the system ductwork and material collection unit for leaks; and
 - ii. an annual (for each 12 month period from initial inspection) internal inspection of the multicyclones' structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504 if the multicyclones (**ID Nos. CD-1A and CD-1B**) and ductwork are not inspected and maintained.

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

- 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;
 - iii. a report of any maintenance performed on the multicyclones (**ID Nos. CD-1A and CD-1B**); and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

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

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

- g. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on the multicyclones (**ID Nos. CD-1A and CD-1B**).
- 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.

AOS - Firing coal only

3. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of coal that are discharged from this source (**ID No. ES-4**) into the atmosphere shall not exceed 0.45 pounds per million Btu heat input.

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 A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit(s) above by testing this source (**ID No. ES-4**) for particulate matter while firing coal only in accordance to 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 by **January 4, 2009**, unless an alternate date is approved by the DAQ. If the results of this test are above the limit given in Section 2.1 A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

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

- d. Particulate matter emissions from this source (**ID No. ES-4**) shall be controlled by two multicyclones (**ID Nos. CD-1A and CD-1B**). 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 are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- i. a monthly external visual inspection of the system ductwork, and material collection unit for leaks; and
 - ii. an annual (for each 12 month period from initial inspection) internal inspection of the multicyclones' structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503 if the multicyclones (**ID Nos. CD-1A and CD-1B**) and ductwork are not inspected and maintained.

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

- e. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. a report of any maintenance performed on the multicyclones (**ID Nos. CD-1A and CD-1B**); and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503 if these records are not maintained.

Reporting [15A NCAC 2Q .0508]

- f. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on the multicyclones (**ID Nos. CD-1A and CD-1B**).

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

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

- a. Emissions of sulfur dioxide from this source (**ID No. ES-4**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 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. If the results of this test are above the limit given in Section 2.1 A.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from wood combustion in this source (**ID No. ES-4**).
- d. The maximum sulfur content of any coal received and burned in this source (**ID No. ES-4**) shall not exceed 1.5 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the coal exceeds this limit.
- e. To assure compliance, the Permittee shall monitor the sulfur content of the coal by using coal supplier certification per total shipment received. The coal supplier certification shall be recorded in a logbook (written or electronic format) per total shipment and include the following information:
 - i. the name of the coal supplier;
 - ii. the maximum sulfur content of the coal received per total shipment;
 - iii. a statement verifying that the methods used to determine the maximum sulfur content of the coal was in accordance with the following:
 - (A) sampling -- ASTM Method D 2234;
 - (B) preparation -- ASTM Method D 2013;
 - (C) gross calorific value (Btu) -- ASTM Method D-5865;
 - (D) moisture content --ASTM Method D 3173;
 - (E) sulfur content -- ASTM Method D 3177 or ASTM Method D 4239; and
 - iv. a certified statement signed by the responsible official that the records of coal supplier certification submitted represent all of the coal fired during the reporting period.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the coal is not monitored and recorded.

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

- f. The Permittee shall submit a summary report of the coal supplier certifications 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 .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source (**ID No. ES-4**) shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity.

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. If the results of this test are above the limit given in Section 2.1 A.5.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a day the Permittee shall observe the emission points of this source (**ID No. ES-4**) for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. If visible emissions from this source (**ID No. ES-4**) are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable 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 (**ID No. ES-4**) in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 A.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.

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

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.

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

Reporting [15A NCAC 2Q .0505(f)]

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

B. One firetube design wood/coal-fired boiler (ID No. ES-5) and associated multicyclones (ID Nos. CD-2A and CD-2B)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	<i>POS - firing wood only</i> 0.47 pounds per million Btu heat input	15A NCAC 2D .0504
	<i>AOS - firing coal only</i> 0.38 pounds per million Btu heat input	15A NCAC 2D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Sulfur dioxide	Less than 40 tons per year emission limitation 1.2 percent by weight sulfur content limit on coal Less than 1,750 tons per year of coal burned limitation	15A NCAC 2Q .0317 (PSD Avoidance)
Nitrogen oxides	Less than 40 tons per year emission limitation Less than 10,179 tons per year of wood burned limitation	15A NCAC 2Q .0317 (PSD Avoidance)
Particulate matter	Cannot burn wood and coal at the same time	15A NCAC 2Q .0317 (PSD Avoidance)

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

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.

POS - Firing wood fuel only

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

- a. Emissions of particulate matter from the combustion of wood that are discharged from this source (**ID No. ES-5**) into the atmosphere shall not exceed 0.47 pounds per million Btu heat input.

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(s) above by testing this source (**ID No. ES-5**) for particulate matter when firing wood in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ. Testing shall be completed by **January 4, 2009**, 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)]

- d. Particulate matter emissions from this source (**ID No. ES-5**) shall be controlled by two multicyclones (**ID Nos. CD-2A and CD-2B**). 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 are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
- i. a monthly external visual inspection of the system ductwork and material collection unit for leaks; and
 - ii. an annual (for each 12 month period from initial inspection) internal inspection of the multicyclone's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504 if the multicyclones (**ID Nos. CD-2A and CD-2B**) and ductwork are not inspected and maintained.

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

- e. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. a report of any maintenance performed on the multicyclones (**ID Nos. CD-2A and CD-2B**); and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

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

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

- f. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on the multicyclones (**ID Nos. CD-2A and CD-2B**).
- g. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

AOS - Firing coal only

3. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of coal, that are discharged from this source (**ID No. ES-5**) into the atmosphere shall not exceed 0.38 pounds per million Btu heat input.

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.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit(s) above by testing this source (**ID No. ES-5**) for particulate matter while firing coal only in accordance to 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 by **January 4, 2009**, 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.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

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

- d. Particulate matter emissions from this source (**ID No. ES-5**) shall be controlled by two multicyclones (**ID Nos. CD-2A and CD-2B**). 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 are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a monthly external visual inspection of the system ductwork, and material collection unit for leaks; and
 - ii. an annual (for each 12 month period from initial inspection) internal inspection of the multicyclones' structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503 if the multicyclones (**ID Nos. CD-2A and CD-2B**) and ductwork are not inspected and maintained.

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

- e. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. a report of any maintenance performed on the multicyclones (**ID Nos. CD-2A and CD-2B**); and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503 if these records are not maintained.

Reporting [15A NCAC 2Q .0508]

- f. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on the multicyclones (**ID Nos. CD-2A and CD-2B**).
- g. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

- a. Emissions of sulfur dioxide from this source (**ID No. ES-5**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 2D .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. If the results of this test are above the limit given in Section 2.1 B.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- c. The maximum sulfur content of any coal received and burned in this source (**ID No. ES-5**) shall not exceed 1.5 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the coal exceeds this limit.
- d. To assure compliance, the Permittee shall monitor the sulfur content of the coal by using coal supplier certification per total shipment received. The coal supplier certification shall be recorded in a logbook (written or electronic format) per total shipment and include the following information:
 - i. the name of the coal supplier;
 - ii. the maximum sulfur content of the coal received per total shipment;
 - iii. a statement verifying that the methods used to determine the maximum sulfur content of the coal was in accordance with the following:
 - (A) sampling -- ASTM Method D 2234;
 - (B) preparation -- ASTM Method D 2013;
 - (C) gross calorific value (Btu) -- ASTM Method D-5865;
 - (D) moisture content --ASTM Method D 3173;
 - (E) sulfur content -- ASTM Method D 3177 or ASTM Method D 4239; and
 - iv. a certified statement signed by the responsible official that the records of coal supplier certification submitted represent all of the coal fired during the reporting period.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the coal is not monitored and recorded.

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

- e. The Permittee shall submit a summary report of the coal supplier certifications 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 .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source (**ID No. ES-5**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent.

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. 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 .0521.

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

- c. To assure compliance, once a day the Permittee shall observe the emission points of this source (**ID No. ES-5**) for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. If visible emissions from this source (**ID No. ES-5**) are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable 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.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.

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

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.

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

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

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

**6. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS
for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

- a. In order to avoid the applicability of the regulation, the total annual sulfur dioxide emissions and total nitrogen oxides emissions from this source (**ID No. ES-5**) shall each be less than 40 tons each per consecutive twelve-month period. To ensure nitrogen oxides emissions do not exceed this level, wood and coal will not be burned simultaneously, and the amount of wood combusted per 12-month consecutive period will not exceed 10,179 tons. To limit the sulfur dioxide emissions to this level, the sulfur content of the coal burned in this source (**ID No. ES-5**) shall not exceed 1.2 percent by weight, and the amount of coal fired will be limited to no more than 1,750 tons per consecutive 12-month period.

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

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ. If the results of this test are above the limits given in Section 2.1 B.6.a, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- c. The use of coal in this source (**ID No. ES-5**) shall be limited such that sulfur dioxide emissions shall not exceed 40 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or electronic format), according to the following formula:

$$\text{Total actual lb of sulfur dioxide emitted} = X[(38)(S) \text{ lb SO}_2/\text{ton coal}] + Y(0.4 \text{ lb SO}_2/\text{ton wood})$$

Where: X is the amount of coal used in tons
Y is the amount of wood burned in tons
S is the percent sulfur in the coal

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not kept or if sulfur dioxide emissions exceed the limit in Section 2.1 B.6.a.

- d. The combustion of wood in this source (**ID No. ES-5**) shall be limited such that nitrogen oxides emissions shall be less than 40 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or electronic format), according to the following formula:

$$\text{Total actual lb of nitrogen oxides emitted} = X(11.0 \text{ lb NO}_x/\text{ton coal}) + Y(7.84 \text{ lb NO}_x/\text{ton wood})$$

Where: X is the amount of coal burned in tons
Y is the amount of wood burned in tons

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not kept or the nitrogen oxides emissions exceed the limit in Section 2.1 B.6.a.

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

- e. The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall contain the following:
- i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions shall be calculated for each of the 12-month periods over the previous 17 months;
 - ii. The monthly quantities of coal consumed for the previous 17 months;
 - iii. The monthly particulate matter emissions for the previous 17 months. The emissions shall be calculated for each of the 12-month periods over the previous 17 months;
 - iv. The monthly quantities of wood burned for the previous 17 months; and
 - v. All instances of deviations from the requirements of this permit must be clearly identified.

C. Wood Furniture finishing operations including:

- Nine dry filter-type spray booths (ID Nos. ES-1.1 through ES-1.9)
- Three dry filter-type spray booths (ID Nos. ES-3, ES-12, ES-14)
- One glaze stain baffle-type spray booth (ID No. ES-2)
- One reverse roll coater (ID No. ES-15)
- Two steam-heated drying ovens (ID Nos. DO-1, DO-2)
- Gluing and assembly operation (ID No. ES-6)
- Finish pump room (ID No. ES-PR)
- Nine finish storage day tanks (ID Nos. ES-ST1 through ES-ST9)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	Adequate duct work and properly designed collectors	15A NCAC 2D .0512
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Volatile organic compounds	<p>(ID Nos. ES-3, ES-12, and ES-14 combined) Less than 40 tons per consecutive 12-month period</p> <p>(ID No. ES-15 only) Less than 40 tons per consecutive 12-month period</p>	15A NCAC 2Q .0317 (PSD Avoidance)
Hazardous air pollutants	See Section 2.2 A	15A NCAC 2D .1111 (40 CFR 63, Subpart JJ)

1. 15A NCAC 2D .0512: PARTICULATES FROM MISCELLANEOUS WOOD PRODUCTS FINISHING PLANTS

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

Dry filter-type spray booths can include paper, metal, plastic, or other dry filter media.

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

- b. Particulate matter emissions from these sources (**ID Nos. ES- 1, ES-3, ES-12, ES-14, and ES-2**) shall be controlled by dry filters or baffles and/or adequate ductwork. To assure compliance, the Permittee shall perform inspections and maintenance. As a minimum, the inspection and maintenance program shall include:
 - i. weekly inspection of the spray booths' filters noting the condition; and
 - ii. annual (for each 12 month period following initial inspection) inspection of the associated ductwork noting structural integrity.

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

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

- c. The results of inspection and maintenance for these sources (**ID Nos. ES- 1, ES-3, ES-12, ES-14, and ES-2**) 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 filters.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 filters or ductwork within 30 days of a written request by the DAQ.
- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

- a. Visible emissions from these sources (**ID Nos. ES-1, ES-3, ES-12, ES-14, and ES-2**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 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. If the results of this test are above the limit given in Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a month the Permittee shall observe the emission points of these sources (**ID Nos. ES-1, ES-3, ES-12, ES-14, and ES-2**) for any visible emissions above normal. The monthly observation must be made for each of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources (**ID Nos. ES-1, ES-3, ES-12, ES-14, and ES-2**) are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable 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 sources (**ID Nos. ES-1, ES-3, ES-12, ES-14, and ES-2**) in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 C.2.a above.

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

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

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

Reporting [15A NCAC 2Q .0505(f)]

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

**3. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS
for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

- a. In order to avoid applicability of this regulation, these sources (**ID Nos. ES-3, ES-12, and ES-14**) combined shall discharge into the atmosphere less than 40 tons of VOCs per consecutive 12-month period.
- b. In order to avoid applicability of this regulation, this source (**ID No. ES-15**) shall discharge into the atmosphere less than 40 tons of VOCs per consecutive 12-month period.

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

- c. Calculations of VOC emissions per month shall be made at the end of each month. VOC emissions shall be determined by multiplying the total amount of each type of VOC-containing material consumed during the month for each source by the VOC content of the material. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the amounts of VOC containing materials or the VOC emissions are not monitored and recorded.
- d. The Permittee shall maintain a record of the following for these sources (**ID Nos. ES-3, ES-12, and ES-14**) for each calendar month:
 - i. total quantity (in gallons) of each type of coating used at each booth;
 - ii. VOC content (in lb VOC/gal coating) of each type of coating used;
 - iii. total, combined monthly VOC emissions (in tons/month); and
 - iv. total, combined VOC emissions for the previous consecutive 12-month period (in tons/12-month).Calculations and the total amount of VOC emissions shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained or if VOC emissions exceed the limit provided in Section 2.1 C.3.a above.
- e. The Permittee shall maintain a record of the following for this source (**ID No. ES-15**) for each calendar month:
 - i. total quantity (in gallons) of each type of coating used;
 - ii. VOC content (in lb VOC/gallon coating) of each type of coating used;
 - iii. total monthly VOC emissions (in tons/month); and
 - iv. total VOC emissions for the previous consecutive 12-month period (in tons/12-month).

Calculations and the total amount of VOC emissions shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained or if VOC emissions exceed the limit provided in Section 2.1 C.3.b above.

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

- 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. The report shall contain the following:
 - i. the combined monthly VOC emissions totals for these sources (**ID Nos. ES-3, ES-12, and ES-14**) for the previous 17 months;
 - ii. the combined 12-month rolling VOC emission totals for these sources (**ID Nos. ES-3, ES-12, and ES-14**) for the previous 17 months;
 - iii. the monthly VOC emission totals for this source (**ID No. ES-15**) for the previous 17 months; and
 - iv. the 12-month rolling VOC average emission totals for this source (**ID No. ES-15**) for the previous 17 months.

D. Woodworking operations (ID No. ES-7) with associated:

- simple cyclone (ID No. CD-4) in series with one bagfilter (ID No. CD-9),
- simple cyclone (ID No. CD-5) in series with one bagfilter (ID No. CD-6),
- bagfilter (ID No. CD-8),
- bagfilter (ID No. CD-10),
- bagfilter (ID No. CD-16), and
- bagfilter (ID No. CD-18)

Woodworking operations (ID No. ES-8) with associated bagfilters (ID Nos. CD-11, CD-13, and CD-17)

Expanded sanding operation (ID No. ES-9) with associated simple cyclone (ID No. CD-12) in series with one bagfilter (ID No. CD-8)

Post sanding operation (ID No. ES-10) with associated bagfilter (ID No. CD-9)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	Adequate duct work and properly designed collectors	15A NCAC 2D .0512
Visible emissions	20 percent opacity	15A NCAC 2D .0521

1. 15A NCAC 2D .0512: PARTICULATES FROM MISCELLANEOUS WOOD PRODUCTS FINISHING PLANTS

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

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

- b. Particulate matter emissions from these sources (**ID Nos. ES-7 through ES-10**) shall be controlled by three cyclones (**ID Nos. CD-4, CD-5, and CD-12**) and nine bagfilters (**ID Nos. CD-6, CD-8 through CD-11, CD-13, CD-16, CD-17 and CD-18**) as described above. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:
 - i. monthly external inspection of the ductwork, cyclones and bagfilters noting the structural integrity; and
 - ii. annual (for each 12 month period following the initial inspection) internal inspection of the bagfilters noting the structural integrity and the condition of the filters.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0512 if the ductwork, cyclones and bagfilters are not inspected and maintained.

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

- c. The results of inspection and maintenance for the bagfilters (**ID Nos. CD-6, CD-8 through CD-11, CD-13, CD-16, CD-17 and CD-18**) and cyclones (**ID Nos. CD-4, CD-5, and CD-12**) 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 the above records are not maintained.

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

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

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

- a. Visible emissions from these sources (**ID Nos. ES-7 thru ES-10**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 2D .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. If the results of this test are above the limit given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a week the Permittee shall observe the emission points of these sources (**ID Nos. ES-7 through ES-10**) for any visible emissions above normal. The weekly observation must be made for each of the calendar year periods to ensure compliance with this requirement. If visible emissions from these sources (**ID Nos. ES-7 through ES-10**) are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable 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 sources (**ID Nos. ES-7 through ES-10**) in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 D.2.a above.

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

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

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.

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

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

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

E. Lumber Drying Kilns (ID Nos. ES-11A through ES-11H)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous air pollutants	National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products No applicable requirements other than initial notification	15A NCAC 2D .1111 (40 CFR 63, Subpart DDDD)

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

A. Affected Source - All facilities subject to 40 CFR Part 63 Subpart JJ: NATIONAL EMISSIONS STANDARD FOR WOOD FURNITURE MANUFACTURING OPERATIONS

One furniture finishing operation including:

- Nine dry filter-type spray booths (ID Nos. ES-1.1 through ES-1.9)**
- Three dry filter-type spray booths (ID Nos. ES-3, ES-12, ES-14)**
- One glaze stain baffle-type spray booth (ID No. ES-2)**
- One reverse roll coater (ID No. ES-15)**
- Two steam-heated drying ovens (ID Nos. DO-1, DO-2)**
- Gluing and assembly operation (ID No. ES-6)**
- Finish pump room (ID No. ES-PR)**
- Nine finish storage tanks (ID Nos. ES-ST1 through ES-ST-9)**

APPLICABILITY

1. The wood furniture manufacturing operations (**ID Nos. ES-1.1 through ES-1.9, ES-3, ES-12, ES-14, ES-2, ES-15, DO-1, DO-2, ES-6, ES-PR, and ES-ST1 through ES-ST9**) shall comply with all requirements of 15A NCAC 2D .1111 "Maximum Achievable Control Technology" and 40 CFR Part 63 Subpart JJ "National Emission Standards for Wood Furniture Manufacturing Operations." [40 CFR 63.800]

DEFINITIONS AND NOMENCLATURE

2. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.801 shall apply.

REGULATED POLLUTANTS

3. Volatile Hazardous Air Pollutants (VHAPs), Volatile Organic Compounds (VOCs), and Organic HAP solvent as defined in 40 CFR 63.801.

GENERAL PROVISIONS

4. The Permittee shall comply with the requirements of 40 CFR Part 63 Subpart A "General Provisions," according to the applicability of Subpart A to such sources, as identified in Table 1 of 40 CFR Part 63 Subpart JJ.

WORK PRACTICE STANDARDS

5. The Permittee shall adhere to the work practice standards as specified by 40 CFR 63.803.
 - a. **Recordkeeping Requirements** - The Permittee shall prepare, maintain, and follow a written work practice implementation plan in accordance with 40 CFR 63.806(e) that defines environmentally desirable work practices for each wood furniture manufacturing operation and addresses each of the work practice standards specified in items (i) through (xi), below:
 - i. Operator training - in accordance with 40 CFR 63.803(b),
 - ii. Inspection and maintenance plan - in accordance with 40 CFR 63.803(c),
 - iii. Cleaning and wash-off solvent accounting system - in accordance with 40 CFR 63.803(d),
 - iv. Chemical composition of cleaning and wash-off solvents - in accordance with 40 CFR 63.803(e),
 - v. Spray booth cleaning - in accordance with 40 CFR 63.803(f),
 - vi. Storage requirements - in accordance with 40 CFR 63.803(g),
 - vii. Application equipment requirements - in accordance with 40 CFR 63.803(h),

- viii. Line cleaning - in accordance with 40 CFR 63.803(i),
 - ix. Gun cleaning - in accordance with 40 CFR 63.803(j),
 - x. Wash-off operations - in accordance with 40 CFR 63.803(k), and
 - xi. Formulation assessment plan - in accordance with 40 CFR 63.803(l).
- b. **Reporting Requirements** - The Permittee shall submit the compliance status report to the Regional Supervisor in accordance with 40 CFR 63.804(f)(8) and 63.807(b). The Permittee shall submit semiannual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(8) and 63.807(c). The Permittee shall follow the requirements in 40 CFR 63.807(e) as required and 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).

FINISHING OPERATIONS

6. Per 40 CFR 63.804(a)(4), the Permittee has chosen to use the **compliant coatings** compliance option for the finishing operations (**ID Nos. ES-1.1 through ES-1.9, ES-3, ES-12, ES-14, ES-2, ES-15, DO-1, DO-2, ES-6, ES-PR, and ES-ST1 through ES-ST9**).
- a. **Emission Limits** - The Permittee shall comply with all provisions of 40 CFR 63.802(a)(1) and 63.804(a)(2) as applicable to the finishing operations. All thinners, stains, washcoats, sealers, topcoats, basecoats, and enamels used at the facility shall meet the emission limitations as detailed in the following table:

Emission Source	Regulated material	Emission Limitation
<i>Existing Affected Sources</i> (ID Nos. ES-1.1 through ES-1.9, ES-3, ES-12, ES-14, ES-2, DO-1, DO-2, ES-6, ES-PR, and ES-ST1 through ES-ST9)	Thinners	10% by weight HAP
	Stains, washcoats, sealers, topcoats, basecoats, and enamels	1.0 lb VHAP/lb (or kg VHAP/kg) solids, as applied
	Washcoat, basecoat, or enamel formulated on-site	Coatings - 1.0 lb VHAP/lb (or kg VHAP/kg) solids Thinners - 3.0% by weight VHAP
<i>New Affected Sources</i> (ID No. ES-15)	Thinners	10% by weight HAP
	Stains	1.0 lb VHAP/lb (or kg VHAP/kg) solids, as applied
	Washcoats, sealers, topcoats, basecoats, and enamels	0.8 lb VHAP/lb (or kg VHAP/kg) solids, as applied
	Washcoat, basecoat, or enamel formulated	Coatings – 0.8 lb VHAP/lb (or kg VHAP/kg) solids Thinners - 3.0% by weight VHAP

- b. **Compliance Procedures and Monitoring Requirements** - Emission sources (**ID Nos. ES-1.1 through ES-1.9, ES-3, ES-12, ES-14, and ES-2**) are using noncontinuous coaters. The Permittee shall demonstrate that only compliant thinners are used and that all stains, washcoats, sealers, topcoats, basecoats, and enamels are compliant, as applied, in accordance with 40 CFR 63.804(g)(2).
- c. **Performance Test Method** - EPA Method 311 [40 CFR Part 63 Appendix A] shall be used to determine the VHAP content of liquid coatings in accordance with 40 CFR 63.805(a).
- d. **Recordkeeping Requirements** - The Permittee shall keep records in accordance with 40 CFR 63.806(a) following the applicability criteria in 40 CFR 63.800(d), 63.804(g)(2), 63.806(b)(1) and (b)(2), 63.806(h), 63.806(i), and 63.806(j).

- e. **Reporting Requirements** - The Permittee shall submit the compliance status report to the Regional Supervisor in accordance with 40 CFR 63.804(f)(2) and 63.807(b). The Permittee shall submit semiannual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(2) and 63.807(c). The Permittee shall follow the requirements in 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).

CLEANING OPERATIONS

- 7. a. **Emission Limits** - The Permittee shall comply with the limits of 40 CFR 63.802(a)(3) applicable to the strippable spray booth operations (**ID Nos. ES-1.1 through ES-1.9, ES-3, ES-12, ES-14 and ES-2**) as detailed in the following table:

Emission Source	Regulated material	Emission Limitation
(ID Nos. ES-1.1 through ES-1.9, ES-3, ES-12, ES-14 and ES-2)	strippable spray booth coatings	0.8 lb VOC per lb (or kg VHAP/kg) solids, as applied

- b. **Compliance Procedures and Monitoring Requirements** - The Permittee shall demonstrate that only compliant strippable spray booth coatings are used in accordance with 40 CFR 63.804(g)(7).
- c. **Performance Test Method** - EPA Method 311 [40 CFR Part 63 Appendix A] shall be used to determine the VHAP content of liquid coatings in accordance with 40 CFR 63.805(a).
- d. **Recordkeeping Requirements** - The Permittee shall keep records in accordance with 40 CFR 63.806(a) following the applicability criteria in 40 CFR 63.800(d), 63.806(b)(1) and (b)(3), 63.806(h), 63.806(i), and 63.806(j).
- e. **Reporting Requirements** - The Permittee shall submit the compliance status report to the Regional Supervisor in accordance with 40 CFR 63.804(f)(7) and 63.807(b). The Permittee shall submit semiannual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(7) and 63.807(c). The Permittee shall follow the requirements in 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).

CONTACT ADHESIVE OPERATIONS

- 8. a. **Emission Limits** - The Permittee shall comply with all provisions of 40 CFR 63.802(a)(2) and 63.804(b-c) as applicable to the contact adhesive operations (**ID No. ES-6**) as detailed in the following table:

Emission Source	Regulated material	Emission Limitation
ES-6	foam contact adhesives used in products which meet flammability requirements per California Technical Bulletin 116, 117, or 133, the Business and Institutional Furniture Manufacturers Association's (BIFMA's) X5.7, UFAC flammability testing, or any similar requirements from local, State, or Federal fire regulatory agencies	1.8 kg VHAP per kg solids (1.8 lb VHAP per lb solids), as applied
ES-6	all other contact adhesives	1.0 kg VHAP per kg solids (1.0 lb VHAP per lb solids), as applied

- b. **Compliance Procedures and Monitoring Requirements** - When emission source (**ID No. ES-6**) is using foam and other contact adhesives, the Permittee shall demonstrate that only compliant adhesives are used in accordance with 40 CFR 63.804(g)(5).
- c. **Performance Test Method** - EPA Method 311 [40 CFR Part 63 Appendix A] shall be used to determine the VHAP content of liquid coatings in foam and other contact adhesives in accordance with 40 CFR 63.805(a).
- d. **Recordkeeping Requirements** - When foam and other contact adhesives are used, the Permittee shall keep records in accordance with 40 CFR 63.806(a) following the applicability criteria in 40 CFR 63.800(d), 63.806(b)(1) and (b)(2), 63.806(h), 63.806(i), and 63.806(j).
- e. **Reporting Requirements** - When foam and other adhesives are used, the Permittee shall submit the compliance status report to the Regional Supervisor in accordance with 40 CFR 63.804(f)(5) and 63.807(b). When foam and other contact adhesives are used, the Permittee shall submit semiannual reports to the Regional Supervisor in accordance with 40 CFR 63.804(g)(5) and 63.807(c). When foam and other contact adhesives are used, the Permittee shall follow the requirements in 40 CFR 63.807(a) following the applicability criteria in 40 CFR 63.800(d).

State-Enforceable only

B. All emission sources

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	State-enforceable only Odorous emissions must be controlled	15A NCAC 2D .1806

1. 15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

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

SECTION 3 - GENERAL CONDITIONS (v2.19)

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 NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

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

- 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.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
CAA	Clean Air Act
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