

# DRAFT

date, 2008

Mr. Bob Sitler  
Vice President  
Lexington Furniture Industries - Plant No. 5  
1300 National Highway  
Thomasville, North Carolina 27360

Dear Mr. Sitler:

SUBJECT: Air Quality Permit No. 04015T13  
Facility ID: 2900179  
Lexington Furniture Industries - Plant No. 5  
Lexington  
Davidson County  
Fee Class: Title V

In accordance with your completed Air Quality Permit Application for **renewal** of your Title V permit received **February 15, 2008**, we are forwarding herewith Air Quality Permit No. **04015T13** to Lexington Furniture Industries – Plant No. 5, 1893 Brown Street, Lexington, Davidson County, 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. Bob Sitrler

Date, 2008

Page 2

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

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

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

This Air Quality Permit shall be effective from **date, 2008** until **date, 2013** 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: Gregg Worley, EPA Region 4 (with review)  
Winston-Salem Regional Office  
Central Files

## Attachment - Permit Modification/Changes

The following table describes the modifications to the current permit as part of the renewal process.

Page(s)	Section	Description of Change(s)
Cover	-	-amended all dates and permit revision numbers
All	Header	-amended permit revision number
3-5	Equipment table	-added "firtube design" to description of boilers -added ID Nos. per source for finishing equipment per ESM breakdown -added MACT Subpart designation for kilns
6	2.1 A 2.1 A.1.c	-grouped all wood-fired boilers into one permit Section -added testing requirement (renumbered subsequent sections)
7	2.1 A.1.f	-added ID Nos.
8	2.1 A.3.d	-updated shell language
9	2.1 B	-amended equipment description
10	2.1 B.3.c	-updated shell language
11	2.1 C 2.1 C (table) 2.1 C.1.b	-amended equipment description -clarified sulfur dioxide emission limit -corrected cross reference
12	2.1 C.2.b 2.1 C.2.c 2.1 C.2.f 2.1 C.3.b	-corrected cross reference -updated shell language -added "no reporting" language -corrected cross reference
13	2.1 C.3.d 2.1 C.3.f 2.1 C.4.b	-updated shell language -added "no reporting" language -corrected cross reference
14	2.1 D 2.1 D.1.b	-amended equipment description -corrected cross reference
15	2.1 D.2.b 2.1 D.3.b 2.1 E  2.1 E (table)	-corrected cross reference -corrected cross reference -amended equipment description -grouped previously separate permit Sections (renumbered subsequent Sections) -added ID No. clarifications
16-18	2.1 E.1-3	-added ID Nos. for newly grouped permit Section
20	2.1 F.2.c 2.1 F.2.d	-corrected cross reference -updated shell language
21	2.1 G.2.b	-corrected cross reference
22	2.1 G.2.c	-updated shell language
24	2.1 H.3.c	-updated shell language
25	2.1 I.1.a 2.1 J (table) 2.1 K	-updated shell language -added MACT Subpart reference -amended equipment description
26	2.1 K (table) 2.2 B	-added table of applicable standards -amended equipment descriptions
36-45	General Conditions	-updated shell conditions (v2.20)

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
<b>04015T13</b>	<b>04015T12</b>	<b>Date, 2008</b>	<b>Date, 2013</b>

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:** **Lexington Furniture Industries –  
Plant No. 5**

**Facility ID:** **2900179**

**Facility Site Location:** **1893 Brown Street**  
**City, County, State, Zip:** **Lexington, Davidson County, North Carolina 27292**  
**Mailing Address:** **1300 National Highway**  
**City, State, Zip:** **Thomasville, North Carolina 27360**

**Application Number:** **2900179.08A**  
**Complete Application Date:** **February 15, 2008**

**Primary SIC Code:** **2511**  
**Division of Air Quality:** **Winston-Salem Regional Office**  
**Regional Office Address:** **585 Waughtown Street**  
**Winston-Salem, North Carolina 27107**

**Permit issued this the xxth day of xxxxxxxx, 2008.**

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

Table Of Contents

**PART I -**

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

SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

2.1 - Emission Source(s) Specific Limitations and Conditions  
(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)

2.2 - Multiple Emission Source(s) Specific Limitations and Conditions  
(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)

SECTION 3: GENERAL PERMIT CONDITIONS

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
ES4-B1 ES4-B2	Two <b>firetube-design</b> wood fuel-fired boilers (13.1 and 16.6 million Btu per hour <b>maximum</b> heat input capacity, respectively)	CD4-B1	One multicyclone (42 nine-inch diameter tubes)
ES4-B3	One <b>firetube-design</b> wood fuel-fired boiler (28.4 million Btu per hour <b>maximum</b> heat input capacity)	CD4-B2	One multicyclone (36 nine-inch diameter tubes)
ES4-B4	One <b>firetube-design</b> No. 5 fuel oil/No. 6 fuel oil-fired boiler (20.4 million Btu per hour <b>maximum</b> heat input capacity)	NA	NA
ES4-B6	One <b>firetube-design</b> natural gas/No. 2 fuel oil/No. 5 fuel oil/No. 6 fuel oil-fired boiler (5.23 million Btu per hour <b>maximum</b> heat input capacity)	NA	NA
ES5-B6	One <b>firetube-design</b> wood fuel-fired boiler (24.0 million Btu per hour <b>maximum</b> heat input capacity)	CD5-B6	One multicyclone (28 nine-inch diameter tubes)
ES5-B7	One <b>firetube-design</b> natural gas/No. 2 fuel oil-fired boiler (16.8 million Btu per hour maximum heat input capacity)	NA	NA
ES4-F1 <b>(MACT, Subpart JJ)</b>	Finishing operations consisting of: -18 spray booths (8 direct vent, 8 baffles, and 2 water filled; <b>Nos. 1 through 18</b> )	NA	NA

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES4-F2 <b>(MACT, Subpart JJ)</b>	Finishing operations consisting of:  -4 drying ovens (Nos. 1 through 4) -6 day pumping tanks (Nos. 5 through 10) -3 dip tanks (Nos. 11, 12, and 13) -2 wash-off tanks (Nos. 14 and 15) -5 bulk finishing material tanks (Nos. 16 through 20) -spray finish cans (No. 21)	NA	Na
ES4-F3.1 and ES4-F3.2 <b>(MACT, Subpart JJ)</b>	Two tunnel type down draft finishing systems, each with an associated natural gas-fired curing oven (1.5 million Btu per hour heat input each)	NA	NA
ES5-F1 <b>(MACT, Subpart JJ)</b>	Finishing operations consisting of:  -14 spray booths (2 direct vent, 10 cavity back, and 2 water filled; Nos. 1 through 14)	NA	NA
ES5-F2 <b>(MACT, Subpart JJ)</b>	Finishing operations consisting of:  -3 drying ovens (Nos. 1, 2, and 3) -5 day pumping tanks (Nos. 4 through 8) -2 dip tanks (Nos. 9 and 10) -2 wash-off tanks (Nos. 11 and 12) -5 bulk finishing material tanks (Nos. 13 through 17)	NA	NA
ES4-G1 ES5-G1 <b>(MACT, Subpart JJ)</b>	Gluing operations	NA	NA

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES4-WD1 ES5-WD1	Woodworking operations	CD4-DF1  CD4-DF2 and CD4-DF3  CD4-DF4  CD4-DF5 and CD4-DF6  CD4-DF7  CD4-DF9  CD5-BF1 through CD5-BF4	One bagfilter (3,255 square feet of filter area)  Two bagfilters (3,873 square feet of filter area each)  One bagfilter (4,614 square feet of filter area)  Two bagfilters (2,678 square feet of filter area each)  One bagfilter (5,767 square feet of filter area)  One bagfilter (4,015 square feet of filter area)  Four bagfilters (4,614 square feet of filter area each)
ES4-WD1A <b>(MACT, Subpart JJ)</b>	Finger jointing operations	CD4-DF8	One bagfilter (3,160 square feet of filter area)
ES4-K1 <b>(MACT, Subpart DDDD)</b>	Lumber drying kilns	NA	NA
ES4-T1 <b>(NSPS, Subpart Kb)</b>	Nos. 2/5/6 fuel oil fixed roof storage tank	NA	NA

## SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

- A. Two firetube-design wood fuel-fired boilers (ID Nos. ES4B1 and ES4-B2) with associated multicyclone (ID No. CD4-B1)**  
**One firetube-design wood fuel-fired boiler (ID No. ES4-B3) with associated multicyclone (ID No. CD4-B2)**  
**One firetube-design wood fuel-fired boiler (ID No. ES5-B6) with associated multicyclone (ID No. CD5-B6)**

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	0.44 pounds per million Btu heat input	15A NCAC 2D .0504
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible Emissions	(ID No. ES4-B3 only) 20 percent opacity  (ID Nos. ES4-B1, ES4-B2, and ES5-B6 only) 40 percent opacity	15A NCAC 2D .0521
Odors	<b>State-enforceable only</b> – See Section 2.2 A Odorous emissions must be controlled	15A NCAC 2D .1806

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

- a. Emissions of particulate matter from the combustion of wood that are discharged from these sources (ID Nos. ES4-B1, ES4-B2, ES4-B3, and ES5-B6) into the atmosphere shall not exceed 0.44 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.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit above by testing the wood fuel-fired boilers (ID Nos. ES4-B1, ES4-B2, ES4-B3, and ES5-B6) for particulate matter with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 – General Condition JJ. Testing shall be completed and the results submitted [date one year from permit issuance] 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.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504.

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

- d. Particulate matter emissions from these sources (**ID Nos. ES4-B1, ES4-B2, ES4-B3, and ES5-B6**) shall be controlled by **three** multicyclones (**ID Nos. CD4-B1, CD4-B2, and CD5-B6**) as **described above**. 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 units 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 and ductwork are not inspected and maintained.

- 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; 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 request from the DAQ, the Permittee shall submit a report of any maintenance performed on any multicyclone system (**ID Nos. CD4-B1, CD4-B2, and CD5-B6**).
- g. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

- a. Emissions of sulfur dioxide from these sources (**ID Nos. ES4-B1, ES4-B2, ES4-B3, and ES5-B6**) 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.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of wood fuel in these sources (**ID Nos. ES4-B1, ES4-B2, ES4-B3, and ES5-B6**).

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

- a. Visible emissions from this source (**ID Nos. ES4-B3**) 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.
- b. Visible emissions from these sources (**ID Nos. ES4-B1, ES4-B2, and ES5-B6**) 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)]

- c. 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.3.a and b above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- d. To assure compliance, once a day the Permittee shall observe the emission points of these sources (**ID Nos. ES4-B1, ES4-B2, ES4-B3, and ES5-B6**) 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 the emission sources are not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 2D .0501(c)(8) (**Method 9**) for 12 minutes is below the limits given in Section 2.1 A.3.a and b 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.

- e. 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)]

- f. 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 No. 5 fuel oil/No. 6 fuel oil-fired boiler (ID No. ES4-B4)**

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

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Particulate matter	0.50 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
Odors	<b>State-enforceable only</b> – See Section 2.2 A Odorous emissions must be controlled	15A NCAC 2D .1806

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

- a. Emissions of particulate matter from the combustion of No. 5 fuel oil/No. 6 fuel oil that are discharged from this source (**ID No. ES4-B4**) into the atmosphere shall not exceed 0.50 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.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0504.

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

- c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of No. 5 fuel oil/No. 6 fuel oil in this source (**ID No. ES4-B4**).

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

- a. Emissions of sulfur dioxide from this source (**ID Nos. ES4-B4**) 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.2.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 No. 5 fuel oil/No. 6 fuel oil received and burned in this source (**ID No. ES4-B4**) shall not exceed 2.1 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the fuel oil exceeds this limit.
- d. To assure compliance, the Permittee shall monitor the sulfur content of the No. 5 fuel oil/No. 6 fuel oil by using fuel oil supplier certification per shipment received. The results of the fuel oil supplier certifications shall be recorded in a logbook (written or electronic format) on a quarterly basis and include the following:
- i. the name of the fuel oil supplier;

- ii. the maximum sulfur content of the fuel oil received during the quarter;
- iii. the method used to determine the maximum sulfur content of the fuel oil; and
- iv. a certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 5 fuel oil/No. 6 fuel oil fired during the period. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the fuel oil is not monitored and recorded.

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

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

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

- a. Visible emissions from this source (**ID No. ES4-B4**) 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 B.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a day the Permittee shall observe the emission points of this source (**ID No. ES4-B4**) 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 the emission source is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. If visible emissions from this source are observed to be above normal, the Permittee shall either:

- i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
- ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) (**Method 9**) for 12 minutes is below the limit given in 2.1 B.3.a above.

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

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

iii. the results of any corrective actions performed.

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

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

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

**C. One firetube-design natural gas/No. 2 fuel oil/No. 5 fuel oil/No. 6 fuel oil-fired boiler (ID No. ES4-B6)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate matter	0.47 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, and Less than 6,750 hours of operation per year	15A NCAC 2Q .0317 (PSD Avoidance)
Odor	State-enforceable only See Section 2.2 A	15A NCAC 2D .1806

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

- a. Emissions of particulate matter from the combustion of natural gas/No. 2 fuel oil/No. 5 fuel oil/No. 6 fuel oil, that are discharged from this source (**ID No. ES4-B6**) 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 C.1.a** above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

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

- c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas/No. 2 fuel oil/No. 5 fuel oil/No. 6 fuel oil in this source (**ID No. ES4-B6**).

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

- a. Emissions of sulfur dioxide from this source (**ID No. ES4-B6**) 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 C.2.a** above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from **the firing of natural gas/No. 2 fuel oil** for this source (**ID No. ES4-B6**).
- d. The maximum sulfur content of any No. 5 fuel oil/No. 6 fuel oil received and burned in this source (**ID No. ES4-B6**) shall not exceed 2.1 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the fuel oil exceeds this limit.
- e. To assure compliance, the Permittee shall monitor the sulfur content of the No. 5 fuel oil/No. 6 fuel oil by using fuel oil supplier certification per shipment received. The results of the fuel oil supplier certifications shall be recorded in a logbook (written or electronic format) on a quarterly basis and include the following information:
  - i. the name of the fuel oil supplier;
  - ii. the maximum sulfur content of the fuel oil received during the quarter;
  - iii. the method used to determine the maximum sulfur content of the fuel oil; and
  - iv. a certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 5 fuel oil/No. 6 fuel oil fired during the period.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the fuel oil is not monitored and recorded.

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

- f. **No reporting is required for sulfur dioxide emissions from the firing of natural gas/No. 2 fuel oil for this source (ID No. ES4-B6).**
- g. The Permittee shall submit a summary report of the fuel oil 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.

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

- a. Visible emissions from this source (**ID No. ES4-B6**) 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. 3.a** above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. No monitoring/recordkeeping is required for visible emissions from the firing of natural gas/No. 2 fuel oil in this source (**ID No. ES4-B6**).

- d. To assure compliance, once a day while firing No. 5 fuel oil/No. 6 fuel oil, the Permittee shall observe the emission points of this source (**ID No. ES4-B6**) 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 the emission source is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. If visible emissions from this source are observed to be above normal, the Permittee shall either:
- i. take appropriate action to correct the above-normal emission as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) (**Method 9**) for 12 minutes is below the limit given in **Section 2.1 C.3.a** above.
- If the above-normal emissions are not corrected per i. above or if the demonstration in ii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.
- e. 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)]

- f. No reporting is required for visible emissions from the firing of natural gas/No. 2 fuel oil in this source (**ID No. ES4-B6**).
- g. 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.

**4. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS  
for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

- a. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and major modifications, this source (**ID No. ES4-B6**) shall discharge into the atmosphere less than 40 tons of sulfur dioxide per consecutive 12-month period. This source (**ID No. ES4-B6**) shall be limited to 6,750 hours of operation per year such that sulfur dioxide emissions shall not exceed 40 tons for any consecutive 12-month period.

**Testing** [15A NCAC 2D .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 limit given in **Section 2.1 C.4.a** above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- c. The Permittee shall keep monthly records of the hours of operation for this source (**ID No. ES4-B6**) in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the hours of operation are not maintained.

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

- d. 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. The report shall contain the monthly hours of operation of this source (**ID No. ES4-B6**) for the previous 17 months and the annual hours of operation for each of the 12-month periods over the previous 17 months.

**D. One firetube-design natural gas/No. 2 fuel oil-fired boiler (ID No. ES5-B7)**

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

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulations</b>
Particulate matter	0.41 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
Odor	<b>State-enforceable only</b> <b>See Section 2.2 A</b>	15A NCAC 2D .1806

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

- a. Emissions of particulate matter from the combustion of natural gas/No. 2 fuel oil, that are discharged from this source (**ID No. ES5-B7**) into the atmosphere shall not exceed 0.41 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 D.1.a** above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

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

- c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas/No. 2 fuel oil in this source (**ID No. ES5-B7**).

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

- a. Emissions of sulfur dioxide from this source (**ID No. ES5-B7**) 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 D.2.a** above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from natural gas/No. 2 fuel oil for this source (**ID No. ES5-B7**).

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

- a. Visible emissions from this source (**ID No.ES5-B7**) 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.3.a** above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas/No. 2 fuel oil in this source (**ID No. ES5-B7**).

**E. Eighteen spray booths (eight direct vent, eight baffles, and two water filled; ID Nos. ES4-F1.1 through ES4-F1.18)**

**One gluing operation (ID No. ES4-G1)**

**Fourteen spray booths (two direct vent, ten cavity back, and two water filled; ID Nos. ES5-F1.1 through ES5-F1.14)**

**One gluing operation (ID No. ES5-G1)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Particulate matter	Adequate duct work and properly designed collectors	15A NCAC 2D .0512
Visible emissions	<b>(ID Nos. ES5-F1.1 through ES5-F1.14)</b> 20 percent opacity	15A NCAC 2D .0521
	<b>(ID Nos. ES4-F1.1 through ES4-F1.18)</b> 40 percent opacity	
Volatile organic compounds	<b>(ID No. ES5-F1.1 through ES5-F1.14 only)</b> Less than 250 tons per year	15A NCAC 2Q .0317 (PSD Avoidance)
Odors	<b>State-enforceable only</b> <b>See Section 2.2 A</b>	15A NCAC 2D .1806
Hazardous air pollutants	<b>See Section 2.2 B</b>	15A NCAC 2D .1111

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

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

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

- b. Particulate matter emissions from these sources (**ID Nos. ES4-F1.1 through ES4-F1.18 and ES5-F1.1 through ES5-F1.14**) shall be controlled by **water fill, cavity back, baffles, and adequate ductwork as described above**. To assure compliance, the Permittee shall perform inspections and maintenance. As a minimum, the inspection and maintenance program shall include:
- weekly external inspection of the spraybooths' **water fills, cavity backs, and baffles** noting the condition; and
  - 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 **filters** are not inspected and maintained.
- c. The results of inspection and maintenance for these sources (**ID Nos. ES4-F1.1 through ES4-F1.18 and ES5-F1.1 through ES5-F1.14**) shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
  - the results of each inspection; and
  - the results of maintenance performed on any 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 **water fills, cavity backs, baffles, 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. ES5-F1.1 through ES5-F1.14**) 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 not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.
- b. **Visible emissions from these sources (ID Nos. ES4-F1.1 through ES4-F1.18) 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 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)]

- c. 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 E.2.a and b** above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

**Monitoring/Recordkeeping** [15A NCAC 2Q .0508(c)(8)]

- d. To assure compliance, once a month the Permittee shall observe the emission points of these sources (**ID Nos. ID Nos. ES4-F1.1 through ES4-F1.18 and ES5-F1.1 through ES5-F1.14**) for any visible emissions above normal. **The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement.** If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - i. **take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or**
  - ii. demonstrate that the percent opacity from the emission points of these sources in accordance with 15A NCAC 2D .0501(c)(8) (**Method 9**) for **12 minutes** is below the limit given in **Section 2.1 E.2.a and b** 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.

- e. 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 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)]

- f. 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 15A NCAC 2D .0530(g), these sources (**ID No. ES5-F1.1 through ES5-F1.14**) shall discharge into the atmosphere less than 250 tons of VOCs per consecutive 12-month period.

**Testing** [15A NCAC 2D .0501(c)(17)]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(17) and General Condition JJ. If the results of this test are above the limit given in **Section 2.1 E.3.a** above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

**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 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. 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 the VOC emissions exceed this limit **or if the records are not maintained.**

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

- 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. The report shall contain the following:
  - i. the monthly VOC emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months, and
  - ii. all instances of deviations from the requirements of this permit must be clearly identified.

**F. Woodworking operations (ID No. ES4-WD1) consisting of separate group processes controlled by bagfilters (ID Nos. CD4-DF1 through CD4-DF7 and CD4-DF9)**

**Woodworking operations (ID No. ES5-WD1) consisting of separate group processes controlled by bagfilters (ID Nos. CD5-BF1 through CD5-BF4)**

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

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulations</b>
Particulate matter	Adequate ductwork and properly designed collectors	15A NCAC 2D .0512
Visible emissions	<b>(ID No. ES5-WD1 only)</b> 20 percent opacity	15A NCAC 2D .0521
	<b>(ID No. ES4-WD1 only)</b> 40 percent opacity	
Odor	<b>State-enforceable only</b> <b>See Section 2.2 A</b>	15A NCAC 2D .1806

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

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

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

- b. Particulate matter emissions from these sources (**ID Nos. ES4-ED1 and ES5-WD1**) shall be controlled by twelve bagfilters (**ID Nos. CD4-DF1 through CD4-DF7, CD4-DF9, and CD5-BF1 through CD5-BF4**) 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 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 and bagfilters are not inspected and maintained.
- c. The results of inspection and maintenance for the bagfilters (**ID Nos. CD4-DF1 through CD4-DF7, CD4-DF9, and CD5-BF1 through CD5-BF4**) 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 bagfilters.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0512 if these records are not maintained.

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

- d. The Permittee shall submit the results of any maintenance performed on the control devices (**ID Nos. CD4-DF1 through CD4-DF7, CD4-DF9, and CD5-BF1 through CD5-BF4**) 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 this source (**ID No. ES4-WD1**) 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.
- b. Visible emissions from this source (**ID No. ES5-WD1**) 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)]

- c. 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 F.2.a and b** above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- d. To assure compliance, once a week the Permittee shall observe the emission points of these sources (**ID Nos. ES4-WD1 and ES5-WD1**) for any visible emissions above normal. **The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement.** If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - i. **take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or**
  - ii. demonstrate that the percent opacity from the emission points of the emission sources in accordance with 15A NCAC 2D .0501(c)(8) (**Method 9**) for **12 minutes** is below the limit given in **Section 2.1 F.2.a and b** 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.

- e. 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)]

- f. 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.

**G. One finger jointing operation (ID No. ES4-WD1A) and associated bagfilter (ID No. CD4-DF8)**

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

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulations</b>
Particulate matter	Adequate ductwork and properly designed collectors	15A NCAC 2D .0512
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Odor	<b>State-enforceable only</b> <b>See Section 2.2 A</b>	15A NCAC 2D .1806
Hazardous air pollutants	<b>See Section 2.2 B</b>	15A NCAC 2D .1111

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

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

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

- b. Particulate matter emissions from this source (**ID No. ES4-WD1A**) shall be controlled by one bagfilter (**ID No. CD4-DF8**). To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:
  - i. monthly external inspection of the ductwork and bagfilter noting the structural integrity; and
  - ii. annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter noting structural integrity and the condition of the filters.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0512 if the filters are not inspected and maintained.
- c. The results of inspection and maintenance for the bagfilter shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection; and
  - iii. the results of maintenance performed on any control device.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0512 if these records are not maintained.

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

- d. The Permittee shall submit the results of any maintenance performed on the control device (**ID No. CD4-DF8**) 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 this source (**ID No. ES4-WD1A**) 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 G.2.a** above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a month the Permittee shall observe the emission points of this source (**ID No. ES4-WD1A**) for any visible emissions above normal. **The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement.** If visible emissions from this source are observed to be above normal, the Permittee shall either:
  - i. **take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or**
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) (**Method 9**) for **12 minutes** is below the limit given in **Section 2.1 G.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.

- 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.

**H. Two down draft tunnel spray booths each with a natural gas-fired curing oven (ID No. ES4-F3)**

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

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulations</b>
Particulate matter	Adequate duct work and properly designed collectors	15A NCAC 2D .0512
Sulfur dioxide	2.3 pounds per million Btu	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Odor	<b>State-enforceable only See Section 2.2 A</b>	15A NCAC 2D .1806
Hazardous air pollutants	<b>See Section 2.2 B</b>	15A NCAC 2D .1111

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

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

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

- b. Particulate matter emissions from this source (**ID No. ES4-F3**) shall be controlled by dry filters and 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' dry filters noting their condition; and
  - ii. annual (for each 12 month period following the initial inspection) internal inspection of the associated ductwork noting structural integrity.

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

- c. The results of inspection and maintenance for this source 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 booths.

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

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

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

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

- a. Emissions of sulfur dioxide from this source (**ID No. ES4-F3**) 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 H.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in this source (**ID No. ES4-F3**).

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

- a. Visible emissions from this source (**ID No. ES4-F3**) 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 H.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a month the Permittee shall observe the emission points of this source (**ID No. ES4-F3**) for any visible emissions above normal. **The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement.** If visible emissions from this source are observed to be above normal, the Permittee shall either:
  - i. **take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or**
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) (**Method 9**) **for 12 minutes** is below the limit given in Section 2.1 H.3.a above.

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

- 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.

**I. Fixed roof fuel oil storage tank (ID No. ES4-T1)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Volatile organic compounds	40 CFR 60 Subpart Kb	15A NCAC 2D .0524
Odor	<b>State-enforceable only See Section 2.2 A</b>	15A NCAC 2D .1806

**1. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR 60 Subpart Kb)**

**Monitoring** [15A NCAC 2Q .0508(f) and 40 CFR 60.116b(a) and (b)]

- a. The Permittee shall maintain records of the following information on this tank (ID No. ES4-T1):
- the dimensions of the storage vessel; and
  - an analysis showing the capacity of the storage vessel.

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

**J. Lumber drying kilns (ID No. ES4-K1)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulations
Odor	<b>State-enforceable only See Section 2.2 A</b>	15A NCAC 2D .1806
Hazardous air pollutants	National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Manufacturers -No requirements other than initial notification	15A NCAC 2D .1111

**K. Finishing operations (ID No. ES4-F2) consisting of:**

**Four drying ovens (Nos. 1 through 4)**

**Six day pumping tanks (Nos. 6 through 10)**

**Three dip tanks (Nos. 11, 12, and 13)**

**Two wash-off tanks (Nos. 14 and 15)**

**Five bulk finishing material tanks (Nos. 16 through 20)**

**Spray finish cans (No. 21)**

**Finishing operations (IS No. ES5-F2) consisting of:**

**Three drying ovens (Nos. 1, 2, and 3)**

**Five day pumping tanks (Nos. 4 through 8)**

**Two dip tanks (Nos. 9 and 10)**

**Two wash-off tanks (Nos. 11 and 12)**

**Five bulk finishing material tanks (Nos. 13 through 17)**

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

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulations</b>
Hazardous air pollutants	See Section 2.2 B	15A NCAC 2D .1111

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

### State-enforceable only

#### A. All emission sources

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

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Odors	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.

#### B. Affected Source – All facilities subject to 40 CFR Part 63, Subpart JJ: NATIONAL EMISSIONS STANDARD FOR WOOD FURNITURE MANUFACTURING OPERATIONS

- Eighteen spray booths (eight direct vent, eight baffles, and two water filled; ID Nos. ES4-F1.1 through ES4-F1.18)
- One gluing operation (ID No. ES4-G1)
- Fourteen spray booths (two direct vent, ten cavity back, and two water filled; ID Nos. ES5-F1.1 through ES5-F1.14)
- One gluing operation (ID No. ES5-G1)
- Finishing operations (ID No. ES4-F2) consisting of:
  - Four drying ovens (Nos. 1 through 4)
  - Six day pumping tanks (Nos. 6 through 10)
  - Three dip tanks (Nos. 11, 12, and 13)
  - Two wash-off tanks (Nos. 14 and 15)
  - Five bulk finishing material tanks (Nos. 16 through 20)
  - Spray finish cans (No. 21)
- Finishing operations (IS No. ES5-F2) consisting of:
  - Three drying ovens (Nos. 1, 2, and 3)
  - Five day pumping tanks (Nos. 4 through 8)
  - Two dip tanks (Nos. 9 and 10)
  - Two wash-off tanks (Nos. 11 and 12)
  - Five bulk finishing material tanks (Nos. 13 through 17)
- Two down draft tunnel spray booths each with a natural gas-fired curing oven (ID No. ES4-F3)
- One finger jointing operation (ID No. ES4-WD1A) and associated bagfilter (ID No. CD4-DF8)

**APPLICABILITY**

1. The wood furniture manufacturing operations (**ID Nos. ES4-F1, ES4-F2, ES4-F3, ES4-G1, ES5-F1, ES5-F2, ES5-G1, and ES4-WD1A**) 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 [40 CFR 63.801]**

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

**REGULATED POLLUTANTS [40 CFR 63.801]**

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

**40 CFR 63, SUBPART A “GENERAL PROVISIONS”**

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

**SUMMARY OF EMISSION LIMITS**

5. The following table provides a summary of emission limits:

**SUMMARY OF EMISSION LIMITS**

<b>Emission Point</b>	<b>Existing Source</b>
<u>Finishing Operations</u>	
(a) Achieve a weighted average VHAP content across all coatings (Maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied); or	1.0 <sup>a</sup>
(b) Use compliant finishing materials (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied): -stains -washcoats -sealers -topcoats -basecoats -enamels -thinners (maximum % HAP allowable); or	1.0 <sup>a</sup> 1.0 <sup>ab</sup> 1.0 <sup>a</sup> 1.0 <sup>a</sup> 1.0 <sup>ab</sup> 1.0 <sup>ab</sup> 10.0
(c) As an alternative, use control device; or	1.0 <sup>c</sup>
(d) Use any combination of (a), (b), and (c)	1.0
<u>Cleaning Operations</u>	
Strippable spray booth material (maximum VOC content, kg VOC/kg solids [lb VOC/lb solids])	0.8
<u>Contact Adhesives</u>	
(a) Use compliant contact adhesives (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied) based on the following criteria:  i. for aerosol adhesives, and for contact adhesives applied to nonporous substrates  ii. for foam adhesives use products that meet flammability requirements  iii. for all other contact adhesives (including foam adhesives used in products that do not meet flammability requirements); or	NA <sup>d</sup>  1.8  1.0
(b) Use a control device	1.0 <sup>e</sup>

<sup>a</sup> The limits refer to the VHAP content of the coating, as applied<sup>b</sup> Washcoats, basecoats, and enamels must comply with the limits presented in this table if they are purchased premade, that is, if they are not formulated onsite by thinning other finishing materials. If they are formulated onsite, they must be formulated using compliant finishing materials, i.e., those that meet the limits specified in this table, and thinners containing no more than 3.0 percent HAP by weight.<sup>c</sup> The control device must operate at an efficiency that is equivalent to no greater than 1.0 kilogram/pound for existing sources (or 0.8 kilogram/pound for new sources) of VHAP being emitted from the affected emission source per kilogram/pound of solids used.<sup>d</sup> There is no limit on the VHAP content of these adhesives.<sup>e</sup> The control device must operate at an efficiency that is equivalent to no greater than 1.0 kilogram/pound for existing sources (or 0.2 kilogram/pound for new sources) of VHAP emitted per kilogram/pound of solids used.

**WORK PRACTICE STANDARDS**

6. The facility shall adhere to the work practice standards as specified by 40 CFR 63.803.
  - a. **Work Practice Implementation Plan** – The Permittee shall prepare, maintain, and follow a written Work Practice Implementation Plan that defines environmentally desirable work practices for each wood furniture manufacturing operation and addresses each of the work practice standards specified in items (b) through (l) below.
  - b. **Operator Training** – All personnel involved in finishing, contact adhesive, cleaning, and wash-off operations shall be trained. New personnel shall be trained prior to performing their job duties. Those personnel hired before the compliance date shall be trained within six months of the compliance date. As a minimum, all personnel shall receive annual refresher training.
  - c. **Inspection and Maintenance Plan** – A written leak inspection and maintenance plan shall be followed. This plan shall specify:
    - i. an inspection schedule for all equipment used to transfer or apply coatings, regulated contact adhesives, or organic HAP solvents. The minimum inspection frequency for each piece of equipment is once per month;
    - ii. methods for documenting the date and results of each inspection and any repairs made; and
    - iii. the time frame between identifying and reporting a leak which adheres to, as a minimum, an attempt at repair within five days of leak detection and final repairs within 15 days of detection unless new equipment must be purchased. If new equipment must be purchased, the leak must be repaired within three months of discovery.
  - d. **Cleaning and wash-off solvent accounting system** – An accounting system shall be maintained to record:
    - i. the quantities and types of organic HAP solvent used per month for cleaning and wash-off operations;
    - ii. the number of pieces washed off, and the reason for the wash-off; and
    - iii. the quantity of spent solvent from each wash-off and cleaning operation and whether it is recycled on-site or disposed off-site;
  - e. **Chemical composition of cleaning and wash-off solvents** – The compounds listed in Table 4 of Subpart JJ shall not be used in wash-off or cleaning operation;
  - f. **Spray booth cleaning** – Spray booths and spray booth components other than conveyors, continuous coaters and their enclosures, and metal filters, shall not be cleaned with solvent containing more than 8 percent by weight VOCs unless the spray booth is being refurbished. Refurbish means to replace the spray booth coating or to replace other protective material used to cover the booth. If the spray booth is being refurbished, no more than 1.0 gallon of organic HAP solvent shall be used to prepare the booth prior to applying booth coating. Organic HAP solvents with greater than 8.0 percent VOCs may be used to clean conveyors, continuous coaters and their enclosures, and metal filters.
  - g. **Storage requirements [63.803(g)]** – All affected sources shall use normally closed containers for storing finishing, cleaning, wash-off materials, and contact adhesives.
  - h. **Application equipment requirements [63.803(h)]** – The use of conventional air spray guns to apply finishing materials shall be limited to the following circumstances:
    - i. to apply finishes that have a VOC content of no greater than 1.0 lb VOC/lb solids, as applied;
    - ii. for touch up and repair under the following circumstances:
      - (A) the touch up and repair occurs after the completion of the finishing operation; or
      - (B) the touch up and repair occurs after the application of stain and before the application of any type of finishing material, and the materials used for touch up and repair are applied from a container that has a volume of no more than 2.0 gallons;
    - iii. when spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;
    - iv. when emissions from the finishing application station are directed to a control device;

- v. the conventional air spray gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or
- vi. in special circumstances in which the conventional air spray gun is used to apply stain on a part for which it is economically infeasible to use any other spray technology. These special circumstances require approval from the Director and must meet the criteria as defined in 40 CFR 63.803(h).
- i. **Line cleaning [63.803(i)]** – All affected sources shall pump or drain all organic HAP solvent used for line cleaning into normally closed containers.
- j. **Gun cleaning [63.803(j)]** – All affected sources shall collect all organic HAP solvent used to clean spray guns into normally closed containers.
- k. **Wash-off operations [63.803(k)]** – Emissions from wash-off operations shall be controlled by the following:
  - i. the use of normally closed tanks for wash-off; and
  - ii. minimization of dripping by tilting or rotating the part to drain as much solvent as possible.
- l. **Formulation assessment plan [63.803(l)]** - The Permittee shall prepare and maintain with the Work Practice Implementation Plan a formulation assessment plan that includes the following:
  - i. identifies VHAPs from Table 5 of Subpart JJ that are being used in the finishing operations;
  - ii. establishes a baseline level of usage by the affected source for each VHAP identified in Table 5 of Subpart JJ. The baseline usage level shall be the highest annual usage from calendar years 1994, 1995, or 1996. For formaldehyde, the baseline level of usage shall be based on the amount of free formaldehyde present in the finishing material when it is applied. For styrene, the baseline level of usage shall be an estimate of unreacted styrene, which shall be calculated by multiplying the amount of styrene monomer in the finishing material, when it is applied, by a factor of 0.16;
  - iii. tracks the annual usage for each VHAP identified in Table 5 of Subpart JJ;
  - iv. requires that exceedance of the baseline level (as stated in item ii, above) for any VHAP identified in Table 5 of Subpart JJ, after November 1998 be reported in **writing** to the DAQ. The report shall describe and quantify the increase, and shall explain the reason(s) for the exceedance of the baseline level; and
  - v. if after November 1998 an affected source uses a VHAP of potential concern from Table 6 of Subpart JJ, and a baseline has not been previously established for that VHAP, the baseline will be established as the de minimus level, based on 70 year exposure levels and data in the proposed rulemaking pursuant to Section 112(g) of the CAA, for that pollutant. If the usage of such VHAP exceeds the de minimus level, the reason for exceedance shall be reported to the DAQ.

**COMPLIANCE COATINGS**

- 7. Finishing operations (**ID Nos. ES4-F1, ES4-F2, ES4-F3, ES4-G1, ES5-F1, ES5-F2, and ES5-G1**) shall utilize the compliant coatings compliance option.
  - a. **Emission Limits** - The Permittee shall comply with all provisions per 40 CFR 63.802 as applicable to the finishing operations (**ID Nos. ES4-F1, ES4-F2, ES4-F3, ES4-G1, ES5-F1, ES5-F2, and ES5-G1**). All thinners, stains, washcoats, sealers, topcoats, basecoats, and enamels used at the facility shall meet the emission limitations as stated in the table below:

Regulated material	Emission Limitation
Thinners	10 percent by weight VHAP
Stains, washcoats, sealers, topcoats, basecoats, and enamels	1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied

- b. **Work Practice Standards** - Refer to Section 2.2 B.6 above.
- c. **Compliance Procedures and Monitoring Requirements**
  - i. **Noncontinuous coaters** - The Permittee shall demonstrate that only compliant thinners are used. The Permittee shall demonstrate that all stains, washcoats, sealers, topcoats, basecoats, and enamels are compliant, as applied.
    - (A) The VHAP content of each thinner shall not exceed 10.0 percent by weight;
    - (B) The VHAP content of each stain, sealer, and topcoat shall not exceed 1.0 kg per kg solids, as applied;
    - (C) The VHAP content of each washcoat, basecoat, and enamel not formulated on-site shall not exceed 1.0 kg per kg solids, as applied; and
    - (D) Each washcoat, basecoat, or enamel formulated on-site shall be formulated with a compliant coating [subject to (B) or (C) above] and thinners containing no more than 3.0 percent VHAP by weight.
  - ii. **Continuous Coaters** - The Permittee shall demonstrate that only compliant thinners are used. The Permittee shall demonstrate that all stains, washcoats, sealers, topcoats, basecoats, and enamels are compliant, as applied. Compliance may be demonstrated via one of the following methods:
    - (A) using thinners containing no more than 10.0 percent VHAP by weight and compliant coatings (stains, sealers, washcoats, topcoats, basecoats, and enamels no more than 1.0 kg VHAP per kg solids (1.0 lb VHAP per lb of solids)) and maintaining the VHAP content of the coating in the reservoir such that it does not exceed 1.0 kg VHAP per kg solids (1.0 lb VHAP per lb solids); or
    - (B) **if the continuous coater is used to apply washcoats, basecoats, or enamels**, using thinners containing no more than 3.0 percent by weight VHAP and washcoats, basecoats, or enamels with VHAP contents no more than 1.0 kg VHAP per kg solids (1.0 lb VHAP per lb of solids); or
    - (C) using compliant coatings (stains, sealers, washcoats, topcoats, basecoats, and enamels) with no more than 1.0 kg VHAP per kg solids (1.0 lb VHAP per lb solids), compliant thinners (no more than 10 percent by weight VHAP), and monitoring the viscosity (at some standard temperature) of the material in the coating reservoir such that it is never less than the viscosity (at the same standard temperature) of the compliant coating (stains, sealers, washcoats, topcoats, basecoats, and enamels) with less than 1.0 kg VHAP per kg solids (1.0 lb VHAP per lb solids) originally added to the reservoir PRIOR to addition of thinner.
- d. **Performance Test Method** - EPA Method 311 (40 CFR Part 63 Appendix A) shall be used in conjunction with formulation data to determine the VHAP content of liquid coatings. Formulation data shall be used to identify VHAP present in the coating. EPA Method 311 shall then be used to quantify those VHAP. If the coating does not release VOC or HAP byproducts during the cure, for example, all VOC and HAP present in the coating is solvent, then batch formulation information shall be accepted.
- e. **Recordkeeping Requirements** - The Permittee shall fulfill all recordkeeping requirements of 40 CFR 63.10, according to the applicability criteria in 40 CFR 63.800(d). In accordance with 40 CFR 63.10(b)(10), all records shall be maintained for a period of five years and, at a minimum, the most recent two years of data shall be retained on-site. The Permittee shall maintain files of all required information (including all reports and notifications) in a form suitable and readily available for expeditious inspection and review. Required recordkeeping includes, but is not limited to, the following:
  - i. per 40 CFR 63.10(b)(xiv), the owner or operator shall maintain records of all documentation supporting initial notifications and notifications of compliance status;
  - ii. per 40 CFR 63.806(b), the owner or operator shall maintain:

- (A) a certified product data sheet for each thinner and each finishing material subject to an emission limit; and
  - (B) records of the VHAP content, in kg VHAP/kg solids (lb VHAP/lb solids), as applied, of each finishing material subject to an emission limit.
- iii. if the facility is using continuous coaters and the viscosity method of compliance [as specified under Section 2.2 B.7.c.ii.(C) above], the owner or operator shall maintain records of:
- (A) solvent and coating additions to the continuous coater reservoir;
  - (B) viscosity measurements; and
  - (C) data demonstrating that viscosity is an appropriate parameter for demonstrating compliance; and
- iv. records of all compliance certifications submitted and all other information submitted with compliance certifications and/or compliance status reports.
- f. **Reporting Requirements** - In addition to any other notification requirements to the EPA, the Permittee is required to NOTIFY the Regional Supervisor, DAQ, in **writing** of the following:
- i. **Notification of compliance status** - Per 40 CFR 63.807(b), a notification of compliance status shall be submitted no later than 60 days after the compliance date. The report shall include:
    - (A) a statement indicating whether the stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners being used are compliant;
    - (B) **if the facility is using continuous coaters**, a statement indicating whether:
      - (1) compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, and compliant thinners are being used; or
      - (2) compliant coatings, as determined by the VHAP content of the coating in the reservoir, are being used, the viscosity of the coating in the reservoir is being monitored, and compliant thinners are being used. In this case, the report should include data which demonstrates that viscosity is an appropriate parameter for demonstrating compliance.
  - ii. **Continuous compliance demonstrations** - The owner or operator shall submit semiannual reports covering the previous six months of wood furniture manufacturing operations. The first report shall be submitted within 30 calendar days after the end of the first six-month period. The first six-month period shall include the six full calendar months following the initial compliance date's calendar month. Subsequent reports shall be submitted within 30 calendar days after the end of each six-month period following the first six-month period. The reports shall include:
    - (A) a compliance certification signed by a responsible official of the company that owns or operates the affected source which states:
      - (1) whether the affected source was in compliance; or, if the affected source was not in compliance, the measures taken to bring the affected source into compliance;
      - (2) that all stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners used each day in the semiannual period have been compliant, as applicable, or otherwise identifies the periods of noncompliance and the reason(s) for noncompliance;
      - (3) **if the facility is using continuous coaters**,
        - (a) that compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, have been used; or
        - (b) that compliant coatings and compliant thinners have been used, and that the viscosity of the coating in the reservoir is no less than the viscosity of the initial compliant coating; or
        - (c) otherwise identifies the periods of noncompliance and the reason(s) for noncompliance.

**STRIPPABLE SPRAY BOOTHS**

8. Strippable spray booth coating applications (**ID Nos. ES4-F1, ES4-G1, ES5-F1, and ES5-G1**)
- a. **Emission Limits** - The Permittee shall comply with all provisions per 40 CFR 63.802 as applicable to strippable spray booth coatings (**ID Nos. ES4-F1, ES4-G1, ES5-F1, and ES5-G1**). All strippable spray booth coatings shall meet the emission limit as stated in the table below:

Regulated material	Emission Limitation
Strippable spray booth coatings	0.8 kg VOC per kg solids (0.8 lb VOC/lb solids), as applied

- b. **Work Practice Standards** - Refer to Section 2.2 B.6, above.
- c. **Compliance Procedures and Monitoring Requirements**  
The VOC content of each strippable spray booth coating shall not exceed 0.8 kg VOC per kg solids (0.8 lb VOC/lb solids), as applied.
- d. **Performance Test Method** - EPA Method 24 (40 CFR Part 63 Appendix A) shall be used in conjunction with formulation data to determine the VOC content of liquid coatings. If the coating does not release the VOC byproducts during the cure, for example, all the VOC present in the coating is solvent, then batch formulation information shall be accepted.
- e. **Recordkeeping Requirements** - The Permittee shall fulfill all recordkeeping requirements of 40 CFR 63.10, according to the applicability criteria in 40 CFR 63.800(d). In accordance with 40 CFR 63.10(b)(10), all records shall be maintained for a period of five years and, at a minimum, the most recent two years of data shall be retained on-site. The Permittee shall maintain files of all required information (including all reports and notifications) in a form suitable and readily available for expeditious inspection and review. Required recordkeeping includes, but is not limited to, the following:
- i. per 40 CFR 63.10(b)(xiv), the owner or operator shall maintain records of all documentation supporting initial notifications and notifications of compliance status;
  - ii. per 40 CFR 63.806(b), the owner or operator shall maintain:
    - (A) a certified product data sheet for each strippable spray booth coating; and
    - (B) records of the VOC content, in kg VOC/kg solids (lb VOC/lb solids), as applied, of each strippable spray booth material; and
  - iii. records of all compliance certifications submitted and all other information submitted with compliance certifications and/or compliance status reports.
- f. **Reporting Requirements** - In addition to any other notification requirements to the EPA, the Permittee is required to NOTIFY the Regional Supervisor, DAQ in **writing** of the following:
- i. **Notification of compliance status** - Per 40 CFR 63.807(b), a notification of compliance status shall be submitted no later than 60 days after the compliance date. The report shall include a statement indicating whether compliant strippable spray booth coatings are being used.
  - ii. **Continuous compliance demonstrations** - The Permittee shall submit semiannual reports covering the previous six months of wood furniture manufacturing operations. The first report shall be submitted within 30 calendar days after the end of the first six-month period. The first six-month period shall include the six full calendar months following the initial compliance date's calendar month. Subsequent reports shall be submitted within 30 calendar days after the end of each six-month period following the first six-month period. The report shall include a compliance certification signed by a responsible official of the company that owns or operates the affected source which states that compliant strippable spray booth coatings have been used each day in the semiannual period, or should otherwise identify each day noncompliant materials were used.

**CONTACT ADHESIVES**9. Contact Adhesive Operations (**ID No. ES4-G1, ES4-WD1A, and ES5-G1**)

- a. **Emission Limits** - The Permittee shall comply with all provisions per 40 CFR 63.802 as applicable to the contact adhesive operations (**ID No. ES4-G1, ES4-WD1A, and ES5-G1**). All **nonaerosol** contact adhesives applied to porous surfaces shall meet the emission limits as stated in the table below:

Regulated material	Emission Limitation
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
all other contact adhesives	1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied

- b. **Work Practice Standards** - Refer to Section 2.2 B.6, above.
- c. **Compliance Procedures and Monitoring Requirements**
- i. The Permittee shall demonstrate that only compliant contact adhesives are used. The Permittee shall demonstrate that all nonaerosol contact adhesives applied to porous surfaces are compliant, as applied.
    - (A) the VHAP content of each contact adhesive which meets flammability requirements shall not exceed 1.8 kg VHAP per kg solids (1.8 lb VHAP/lb solids), as applied; and
    - (B) the VHAP content of each contact adhesive which does not meet flammability requirements shall not exceed 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied.
  - d. **Performance Test Method** - EPA Method 311 (40 CFR Part 63 Appendix A) shall be used in conjunction with formulation data to determine the VHAP content of liquid coatings. Formulation data shall be used to identify the VHAP present in the coating. EPA Method 311 shall then be used to quantify those VHAP. If the coating does not release the VOC or HAP byproducts during the cure, for example, all the VOC and HAP present in the coating is solvent, then batch formulation information shall be accepted.
  - e. **Recordkeeping Requirements** - The Permittee shall fulfill all recordkeeping requirements of 40 CFR 63.10, according to the applicability criteria in 40 CFR 63.800(d). In accordance with 40 CFR 63.10(b)(10), all records shall be maintained for a period of five years and, at a minimum, the most recent two years of data shall be retained on-site. The Permittee shall maintain files of all required information (including all reports and notifications) in a form suitable and readily available for expeditious inspection and review. Required recordkeeping includes, but is not limited to, the following:
    - i. per 40 CFR 63.10(b)(xiv), the owner or operator shall maintain records of all documentation supporting initial notifications and notifications of compliance status;
    - ii. per 40 CFR 63.806(b), the owner or operator shall maintain:
      - (A) a certified product data sheet for each contact adhesive subject to an emission limit; and
      - (B) records of the VHAP content, in kg VHAP/kg solids (lb VHAP/lb solids), as applied, of each contact adhesive subject to an emission limit; and
    - iii. records of all compliance certifications submitted and all other information submitted with compliance certifications and/or compliance status reports.

- f. **Reporting Requirements** - In addition to any other notification requirements to the EPA, the Permittee is required to NOTIFY the Regional Supervisor, DAQ in **writing** of the following:
- i. **Notification of compliance status** - Per 40 CFR 63.807(b), a notification of compliance status shall be submitted no later than 60 days after the compliance date. The report shall include a statement indicating whether contact adhesives are being used and whether the contact adhesives used are **compliant** contact adhesives. The statement should indicate that **compliant** contact adhesives are being used for all **nonaerosol** contact adhesive applications unless the contact adhesives are being used solely on nonporous substrates.
  - ii. **Continuous compliance demonstrations** - The Permittee shall submit semiannual reports covering the previous six months of wood furniture manufacturing operations. The first report shall be submitted within 30 calendar days after the end of the first six-month period. The first six-month period shall include the six full calendar months following the initial compliance date's calendar month. Subsequent reports shall be submitted within 30 calendar days after the end of each six-month period following the first six-month period. The reports shall include a compliance certification signed by a responsible official of the company that owns or operates the affected source which states:
    - (A) that compliant contact adhesives have been used each day in the semiannual period, or should otherwise identify each day noncompliant contact adhesives were used; or
    - (B) otherwise identifies the periods of noncompliance and the reason(s) for noncompliance.

### **SECTION 3 - GENERAL CONDITIONS (v2.20)**

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.

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

As required by 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 2D .0540(f). "Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

ATTACHMENT

**List of Acronyms**

<b>AOS</b>	Alternate Operating Scenario
<b>BACT</b>	Best Available Control Technology
<b>Btu</b>	British thermal unit
<b>CEM</b>	Continuous Emission Monitor
<b>CFR</b>	Code of Federal Regulations
<b>CAA</b>	Clean Air Act
<b>DAQ</b>	Division of Air Quality
<b>DENR</b>	Department of Environment and Natural Resources
<b>EMC</b>	Environmental Management Commission
<b>EPA</b>	Environmental Protection Agency
<b>FR</b>	Federal Register
<b>GACT</b>	Generally Available Control Technology
<b>HAP</b>	Hazardous Air Pollutant
<b>MACT</b>	Maximum Achievable Control Technology
<b>NCAC</b>	North Carolina Administrative Code
<b>NCGS</b>	North Carolina General Statutes
<b>NESHAPS</b>	National Emission Standards for Hazardous Air Pollutants
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>NSPS</b>	New Source Performance Standard
<b>OAH</b>	Office of Administrative Hearings
<b>PM</b>	Particulate Matter
<b>PM<sub>10</sub></b>	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
<b>POS</b>	Primary Operating Scenario
<b>PSD</b>	Prevention of Significant Deterioration
<b>QIP</b>	Quality Improvement Plan (40 CFR 64.8)
<b>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State Implementation Plan
<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>tpy</b>	Tons Per Year
<b>VOC</b>	Volatile Organic Compound