

# DRAFT

date, 2008

Mr. Calvin House  
Plant Manager  
Burlington Industries  
1001 Turnpike Road  
Raeford, North Carolina 28376

Dear Mr. House:

SUBJECT: Air Quality Permit No. 00242T14  
Facility ID: 4700001  
Burlington Industries LLC – Raeford Plant  
Raeford  
Hoke County  
Fee Class: Title V

In accordance with your completed Air Quality Permit Application for **renewal and modification of your** Title V permit received **August 27, 2007 and January 15, 2008**, we are forwarding herewith Air Quality Permit No. **00242T14** to Burlington Industries LLC – Raeford Plant, 1001 Turnpike Road, Raeford, 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. Calvin House

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)  
Fayetteville Regional Office  
Central Files

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

<b>Emission Source ID</b>	<b>Emission Source Description</b>
<b>I-202</b>	Parts cleaner
<b>I-500</b>	Yarn and top dyeing
<b>I-550</b>	Wool, polywool, and top drying
<b>I-600</b>	Bulk storage tanks
<b>I-AMU1 through I-AMU3</b>	Three air make-up heaters (4.0 million Btu per hour maximum heat input capacity each)
<b>I-CD</b>	Carbonizer/Dryer with associated natural gas/propane-fired thermal oxidizer ( <b>ID No. CDOX2</b> )
<b>I-LO</b>	Logo machine

Attachment – Table of Changes

Page	Section	Description
Attachment	Insignificant activities	-updated permit revision number -added sources per Permittee request
Cover	-	-amended all permit revision numbers and all dates
TOC	-	-removed reference to Part II
All	Header	-amended permit revision number
3	Equipment Table	-clarified equipment descriptions -removed asterisks and language referencing Part II -added new fuel types to backup boilers
4	2.1 A 2.1 A.1.a	-clarified equipment description -updated shell language
5	2.1 A.1.b 2.1 A.1.c 2.1 A.1.f	-updated shell language -added ID Nos. -corrected paragraph order and added ID Nos.
6	2.1 A.2.c 2.1 A.2.d	-added ID Nos. -added ID Nos. and updated shell language
7	2.1 B (table) 2.1 B.1.a 2.1 B.1.c 2.1 B.1.d 2.1 B.1.e	-corrected cross reference and rule citation -updated shell language -added testing requirement -corrected paragraph order and added ID Nos. -corrected paragraph order
8	2.1 B.1.f 2.1 B.1.g 2.1 B.2.a 2.1 B.2.c	-corrected paragraph order and added ID Nos. -corrected paragraph order -updated shell language -added ID Nos.
9	2.1 B.2.e 2.1 B.3.a 2.1 B.3.c	-updated shell language -updated shell language -updated shell language
10	2.1 C 2.1 C (table) 2.1 C.1.a 2.1 C.1.b 2.1 C.1.c 2.1 C.2.a	-added fuel types to equipment description -added reference to Toxics Avoidance Condition -added fuel types -updated shell language -added fuel types -updated shell language
11	2.1 C.2.c 2.1 C.2.d 2.1 C.2.e 2.1 C.3.a 2.1 C.3.c	-added fuel types and ID Nos. -added fuel types and ID Nos. -added fuel types -updated shell language -added fuel types and ID Nos.
11-12	2.1 C.3.d	-added fuel types and ID Nos.
12-13	2.1 C.4	-added Toxics Avoidance Condition for recycled oil combustion
13	2.1 D (table)	-corrected rule citation
14	2.1 E 2.1 E (table) 2.1 E.1.a	-clarified equipment description -corrected rule citation -updated shell language
15	2.1 E.1.c 2.1 E.1.d 2.1 E.2.a 2.1 E.2.c 2.1 E.3.a	-updated shell language -added “no reporting” language -updated shell language -updated shell language and added ID Nos. -updated shell language

<b>Page</b>	<b>Section</b>	<b>Description</b>
15-16	2.1 E.3.c	-updated shell language and added ID Nos.
16	2.1 E.3.f	-updated shell language
17	2.1 F 2.1 F (table) 2.1 F.1.a 2.1 F.1.b 2.1 F.1.c 2.1 F.1.d	-clarified equipment description -corrected rule citation -updated shell language and added ID Nos. -updated shell language -updated shell language -added “no reporting” language
18	2.1 F.2.a 2.1 F.2.c 2.1 F.3.a 2.1 F.3.c	-updated shell language -updated shell language and added ID Nos. -updated shell language -updated shell language and added ID Nos.
19	2.2 A 2.2 A (table)	-clarified equipment description -clarified applicable standard/limit
20	2.2 B (table)	-corrected rule citation -added reference to 2D .0540
21	2.2 B.1.d	-updated shell language
22	2.2 B.2.b	-updated shell language
23	2.2 B.5	-added 2D .0540 permit condition
24	General Conditions	-added shell version number (v2.19)
-	Part II	-removed Part II

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
00242T14	00242T13	Date, 2008	Date, 2013

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:** **Burlington Industries LLC – Raeford Plant**

**Facility ID:** **4700001**

**Facility Site Location:** **1001 Turnpike Road**  
**City, County, State, Zip:** **Raeford, Hoke County, North Carolina 28376**  
**Mailing Address:** **1001 Turnpike Road**  
**City, State, Zip:** **Raeford, North Carolina 28376**

**Application Number:** **4700001.07B and 4700001.08A**  
**Complete Application Date:** **August 27, 2007 and January 15, 2008**

**Primary SIC Code:** **2284**  
**Division of Air Quality:** **Fayetteville Regional Office**  
**Regional Office Address:** **Systel Building**  
**225 Green Street, Suite 714**  
**Fayetteville, NC 28301-5094**

Permit issued this the xxth day of xxxxxxxx, 2008.

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
ESS1	One starch storage silo	CDBS1	One polyester felt fabric filter (260 square feet of filter area)
ESS2	One polyvinyl alcohol storage silo	CDBS2	One polyester felt fabric filter (170 square feet of filter area)
ESB1	One coal-fired boiler (44 million Btu per hour maximum heat input capacity)	CDMCB1	One multicyclone consisting of a primary and secondary chamber (25 nine-inch diameter tubes each chamber)
ESSH1 ESSH2	Two shearers	CDSH1 CDSH2	Two bagfilters (590 and 393 square feet of filter area, respectively)
ESB4 ESB5	Two natural gas/No. 2 fuel oil/No. 2 (equivalent recycled) fuel oil/No. 5 fuel oil/No. 6 fuel oil/No. 4 (equivalent recycled) fuel oil-fired boilers (29.3 and 53 million Btu per hour maximum heat input capacity, respectively)	NA	NA
ES206	Laboratory	NA	NA
ES-INSP	Inspection – spot cleaning of fabric	NA	NA
ESTF1 ESTF2	Two natural gas/propane-fired tenter frames (9 million Btu per hour maximum heat input capacity each)	CDOX1 CDOX2	Two natural gas/propane-fired thermal oxidizers (14 million Btu per hour maximum heat input capacity, one each)
ESSN1	One natural gas/propane-fired singer (0.9 million Btu per hour maximum heat input capacity)	CDSN1  CDSN2	One cyclone (31.5 inches in diameter)  On spray chamber (4.84 gallons per hour minimum liquid injection rate)

## SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

**A. One starch storage silo (ID No. ESS1) with associated polyester felt fabric filter (ID No. CDBS1)**

**One polyvinyl alcohol storage silo (ID No. ESS2) with associated polyester felt fabric filter (ID No. CDBS2)**

**Two shearers (ID Nos. ESSH1 and ESSH2) with associated bagfilters (ID Nos. CDSH1 and CDSH2)**

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	(For process weights up to 30 tons per hour) $E = 4.10 \times P^{0.67}$  (For process weights greater than 30 tons per hour) $E = 55.0 \times P^{0.11} - 40$  Where: E = allowable emissions in pounds per hour P = process weight in tons per hour	15A NCAC 2D .0515
Visible emissions	20 percent opacity	15A NCAC 2D .0521

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

a. Emissions of particulate matter from **these sources (ID Nos. ESS1, ESS2, ESSH1, and ESSH2)** shall not exceed an allowable emission rate as calculated by the following equations:

(For process weights up to 30 tons per hour)  
 $E = 4.10 \times P^{0.67}$

(For process weights greater than 30 tons per hour)  
 $E = 55.0 \times P^{0.11} - 40$

Where: E = allowable emissions in pounds per hour  
 P = process weight in tons per hour

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

**Testing** [15A NCAC 2D .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 .0515.

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

- c. Particulate matter emissions from **these sources (ID Nos. ESS1, ESS2, ESSH1, and ESSH2)** shall be controlled by **four** bagfilters (**ID Nos. CDBS1, CDBS2, CDCH1, and CDSH2**) 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 shall include the following:
- i. a monthly visual inspection of the system ductwork and material collection unit for leaks, and
  - ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilters' structural integrity.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and bagfilters are not inspected and maintained.
- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
  - ii. the results of each inspection;
  - iii. the results of any maintenance performed on the bagfilters; and
  - iv. any variance from manufacturer's recommendations, if any, and corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.
- e. The monitoring and recordkeeping requirements in Sections 2.1 A.1.c and d above apply for bagfilters (**ID Nos. CDSH1 and CDSH2**) only when the exhaust from the bagfilters are vented to the atmosphere.

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

- f. The Permittee shall submit the results of any maintenance performed on the bagfilters (**ID Nos. CDBS1, CDBS2, CDSH1, and CDSH2**) within 30 days of a written request by the DAQ.
- g. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

- a. Visible emissions from these sources (**ID No. ESS1, ESS2, ESSH1, and ESSH2**) 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 A.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, the Permittee shall observe the emission points of **these sources (ID Nos. ESS1 and ESS2)** during each loading for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
- 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
  - 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 A.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. To assure compliance, once a month following the venting of the bagfilters' exhaust to the atmosphere, the Permittee shall observe the emission points **of these sources (ID Nos. ESSH1 and ESSH2)** 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. The Permittee shall establish "normal" for these sources in the first 30 days following the venting of the bagfilters' exhaust to the atmosphere. If visible emissions from **these sources** are observed to be above normal, the Permittee shall either:
- 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
  - 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 A.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.

- 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:
- the date and time of each recorded action;
  - 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
  - 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.

**B. One coal-fired boiler (ID No. ESB1) with associated multicyclone (ID No. CDMCB1)**

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.31 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	See Section 2.2 A	15A NCAC 2Q .0317 (PSD Avoidance)
Hazardous air pollutants	See Section 2.2 B.2	15A NCAC 2Q .0317 (MACT Avoidance)

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

- a. Emissions of particulate matter from the combustion of coal that are discharged from **this source (ID No. ESB1)** into the atmosphere shall not exceed 0.31 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 .0503.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit above by testing the source (**ID No. ESB1**) for particulate matter in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in Section 3 – General Condition JJ. Testing shall be completed and the results submitted by **[date one year from permit issuance]** unless an alternative date is approved by the DAQ. 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 .0503.

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

- d. Particulate matter emissions from **this source (ID No. ESB1)** shall be controlled by **one** multicyclone (**ID No. CDMCB1**). To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer’s inspection and maintenance recommendations, or if there **are** no manufacturer’s inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
  - i. a monthly external visual inspection of the system ductwork, and material collection unit for leaks, and
  - ii. an annual (for each 12 month period from initial inspection) internal inspection of the multicyclone’s structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503 if the multicyclone 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 multicyclone; and

iv. any variance from manufacturer's recommendations, if any, and corrections made.  
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503 if these records are not maintained.

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

- f. Within 30 days of a written request from the DAQ, the Permittee shall submit a report of any maintenance performed on the multicyclone (**ID No. CDMCB1**).
- 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 **this source (ID No. ESB1)** 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 coal received and burned in **this source (ID No. ESB1)** shall not exceed 1.5 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the coal exceeds this limit.
- d. To assure compliance, the Permittee shall monitor the sulfur content of the coal by using coal supplier certifications per total shipment received. The coal supplier certification shall be recorded in a logbook (written or electronic format) per total shipment and include the following information:
  - i. the name of the coal supplier;
  - ii. the maximum sulfur content of the coal received per total shipment;
  - iii. a statement verifying that the methods used to determine the maximum sulfur content of the coal was in accordance with the following:
    - A. sampling – ASTM Method D 2234;
    - B. preparation – ASTM Method D 2013;
    - C. gross calorific value (Btu) – ASTM Method D 5865;
    - D. moisture content – ASTM Method D 3173; and
    - E. sulfur content – ASTM Method D 3177 or ASTM Method D 4239.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the coal is not monitored and recorded.

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

- e. The Permittee shall submit a summary report of the coal supplier certifications postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. **The report shall contain** a certified statement signed by the responsible official that the records of coal supplier certification submitted represent all of the coal fired during the reporting period. 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. ESB1)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent no 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. ESB1)** for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. If visible emissions from this source 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 B.3.a above.

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

- 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. Two natural gas/No. 2 fuel oil/No. 2 (equivalent recycled) fuel oil/No. 5 fuel oil/No. 6 fuel oil/No. 4 (equivalent recycled) fuel oil-fired boilers (ID Nos. ESB4 and ESB5)**

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.31 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
Toxic air pollutants	<b>State-enforceable only</b> Recycled fuel oil equivalency requirements	15A NCAC 2Q .0317 (Toxics Avoidance)
Sulfur dioxide	<b>See Section 2.2 A</b>	15A NCAC 2Q .0317 (PSD Avoidance)

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

- a. Emissions of particulate matter from the combustion of natural gas/No. 2 fuel oil/No. 2 (equivalent recycled) fuel oil/No. 5 fuel oil/No. 6 fuel oil/No. 4 (equivalent recycled) fuel oil that are discharged from **these sources (ID Nos. ESB4 and ESB5)** into the atmosphere shall not exceed 0.31 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. 2 (equivalent recycled) fuel oil/No. 5 fuel oil/No. 6 fuel oil/No. 4 (equivalent recycled) fuel oil in these **sources (ID Nos. ESB4 and ESB5)**.

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

- a. Emissions of sulfur dioxide from **these sources (ID Nos. ESB4 and ESB5)** 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/reporting is required for sulfur dioxide emissions from the firing of natural gas/No. 2 fuel oil/No. 2 (equivalent recycled) fuel oil in these sources (ID Nos. ESB4 and ESB5).
- d. The maximum sulfur content of any No. 5 fuel oil/No. 6 fuel oil/No. 4 (equivalent recycled) fuel oil received and burned in these sources (ID Nos. ESB4 and ESB5) 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/No. 4 (equivalent recycled) 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
  - iii. 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/No. 4 (equivalent recycled) 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. 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 these sources (ID Nos. ESB4 and ESB5) 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/reporting is required for visible emissions from the firing of natural gas/No. 2 fuel oil/No. 2 (equivalent recycled) fuel oil in these sources (ID Nos. ESB4 and ESB5).
- d. To assure compliance, once a day the Permittee shall observe the emission points of these sources (ID Nos. ESB4 and ESB5) while combusting No. 5 fuel oil/No. 6 fuel oil/No. 4 (equivalent recycled) fuel oil 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 days of absent observations per semi-annual period. If visible emissions from these sources are observed to be above normal, the Permittee shall either:

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

- 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.

**State-enforceable only**

**4. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS  
for 15A NCAC 2Q .0700: TOXIC AIR POLLUTANT PROCEDURES**

- a. Vendor supplied recycled No. 2 (equivalent recycled) fuel oil and No. 4 (equivalent recycled) fuel oil requirements – In accordance with 15A NCAC 2Q .0317, the Permittee is avoiding the applicability of 15A NCAC 2Q .0700, Toxic Air Pollutant Procedures, by using recycled fuels which are equivalent to their virgin counterparts. The Permittee is allowed to use the recycled fuel oils supplied by a DAQ-approved vendor as follows:

<b>Constituent/Property</b>	<b>Allowable Level</b>
Arsenic	1.0 ppm maximum
Cadmium	2.0 ppm maximum
Chromium	5.0 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	
No. 2	100°F minimum
No. 4	130°F minimum
Sulfur	
No. 2	0.5% maximum (by weight)
No. 4	2.0% maximum (by weight)
Ash	1.0% maximum

**Testing** [15A NCAC 2D .0605]

- b. The DAQ reserves the right to require additional testing and/or monitoring of the recycled fuel oil on an annual basis or without notice.

**Monitoring/Recordkeeping** [15A NCAC 2D .0605]

- c. The Permittee is responsible for ensuring that the recycled fuel oil, as received at the site, meets the approved criteria for unadulterated fuel. The Permittee is held responsible for any discrepancies discovered by DAQ as a result of any sampling and analysis of the fuel oil.
- d. The Permittee shall maintain at the facility for a minimum of three years, and shall make available to representatives of the DAQ upon request, accurate records of the following:
  - i. the actual amount of recycled fuel oil delivered to, and combusted at the facility on an annual basis;
  - ii. each load of recycled fuel oil received shall include the following:
    - A. a delivery manifest document clearly showing the shipment content and amount, its place and date of loading, and place and date of destination;
    - B. a batch specific analytical report that contains an analysis for all constituents/properties listed above. Analytical results of the samples representative of the recycled oil shipment from the vendor shall be no more than one year old when received;
    - C. batch signature information consisting of the following:
      - (1) a batch number;
      - (2) tank identification with batch volume of recycled oil;
      - (3) date and time the batch completed treatment; and
      - (4) volume(s) delivered; and
    - D. a certification indicating that the recycled fuel oil does not contain detectable PCBs (<2 ppm).

**Reporting** [15A NCAC 2D .0605]

- e. Within 30 days after each calendar year, regardless of the amount received or combusted, the Permittee shall submit in writing to the Regional Supervisor, DAQ, the following:
  - i. a summary of the results of the analytical testing for the previous 12 months; and
  - ii. the total gallons of recycled fuel oils from each approved vendor and combusted at the facility for the previous 12 months.

**D. Laboratory (ID No. ES206)**

**Inspection – spot cleaning of fabric (ID No. ES-INSP)**

The following provides a summary of limits and/or standards for the emission source(s) described above.

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
Volatile organic compounds	See Section 2.2 B.1	15A NCAC 2D .0958
Hazardous air pollutants	See Section 2.2 B.2	15A NCAC 2Q .0317 (MACT Avoidance)
Toxic air pollutants	State enforceable only See Section 2.2 B.4	15A NCAC 2Q .0711

**E. Two natural gas/propane-fired tenter frames (ID Nos. ESTF1 and ESTF2) with associated thermal oxidizers (ID Nos. CDOX1 and CDOX2)**

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	(For process weights up to 30 tons per hour) $E = 4.10 \times P^{0.67}$  (For process weights greater than 30 tons per hour) $E = 55.0 \times P^{0.11} - 40$  Where: E = allowable emissions in pounds per hour P = process weight in tons per hour	15A NCAC 2D .0515
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	<b>See Section 2.2 A</b>	15A NCAC 2Q .0317 <b>(PSD Avoidance)</b>
Volatile organic compounds	<b>See Section 2.2 B.1</b>	15A NCAC 2D .0958
Hazardous air pollutants	<b>See Section 2.2 B.2</b>	15A NCAC 2Q .0317 <b>(MACT Avoidance)</b>
Toxic air pollutants	<b>State enforceable only</b> <b>See Section 2.2 B.3</b>	15A NCAC 2D .1100
Toxic air pollutants	<b>State enforceable only</b> <b>See Section 2.2 B.4</b>	15A NCAC 2Q .0711

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

- a. Emissions of particulate matter from **these sources (ID Nos. ESTF1 and ESTF2)** shall not exceed an allowable emission rate as calculated by the following equations:

(For process weights up to 30 tons per hour)  
 $E = 4.10 \times P^{0.67}$

**(For process weights greater than 30 tons per hour)**  
 **$E = 55.0 \times P^{0.11} - 40$**

Where: E = allowable emissions in pounds per hour  
P = process weight in tons per hour

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

**Testing** [15A NCAC 2D .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 E.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- c. The Permittee shall maintain production records such that the process rates “P” in tons per hour, as specified by the formulas contained above can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.
- d. No reporting is required for particulate emissions from these sources (**ID Nos. ESTF1 and ESTF2**).

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

- a. Emissions of sulfur dioxide from **these sources (ID Nos. ESTF1 and ESTF2)** 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 E.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 and propane in **these sources (ID Nos. ESTF1 and ESTF2)**.

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

- a. Visible emissions from **these sources (ID Nos. ESTF1 and ESTF2)** 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 E.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 **these sources (ID Nos. ESTF1 and ESTF2)** for any visible emissions above normal. The daily observation must be made for each day of the calendar year period the sources are operating to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions **as soon as practicable and** within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or

- ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) (**Method 9**) for 12 minutes is below the limit given in Section 2.1 E.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 Permittee shall establish and maintain a list (written or electronic format) of the styles by number and unique routing that do not result in uncontrolled visible emissions above the opacity limit in Section 2.1 E.3.a as follows:
  - i. a new style may be added to the above list if it is evaluated on the tenter frame for the presence of visible emissions that are not above normal without oxidizer control after the source has operated for a period of at least 15 minutes.
  - ii. a style shall be removed from the above list if it is observed with visible emissions above normal and determined to exceed the opacity limit in Section 2.1 E.3 a above.
- e. Visible emissions from these sources (**ID Nos. ESTF1 and ESTF2**), when processing a style not identified in Section 2.1 E.3.d above shall be controlled by a thermal oxidizer (**ID Nos. CDOX1 and CDOX2**) at a temperature of at least 100 degrees Fahrenheit above the drying temperature of the sources.
  - i. The Permittee shall measure the operating temperature of the thermal oxidizer prior to processing the style through the tenter frame and record this temperature and the tenter frame drying temperature in a logbook (written or electronic format).
  - ii. The Permittee shall perform periodic inspections and maintenance of the thermal oxidizers as recommended by the manufacturer. As a minimum, the Permittee shall perform an annual internal inspection of the combustion chamber of each oxidizer to ensure structural integrity of the system.

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

- f. **The Permittee shall keep** records of all monitoring and maintenance activities shall be recorded in a logbook (written or electronic format) on-site and made available to DAQ personnel upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

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

- 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.

**F. One natural gas/propane-fired singer (ID No. ESSN1) with associated cyclone (ID No. CDSN1) and spray scrubber (ID No. CDSN2) installed in series**

The following provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	(For process weights up to 30 tons per hour) $E = 4.10 \times P^{0.67}$  (For process weights greater than 30 tons per hour) $E = 55.0 \times P^{0.11} - 40$  Where: E = allowable emissions in pounds per hour P = process weight in tons per hour	15A NCAC 2D .0515
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	<b>See Section 2.2 A</b>	15A NCAC 2Q .0317 <b>(PSD Avoidance)</b>

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

- a. Emissions of particulate matter from **this source (ID No. ESSN1)** shall not exceed an allowable emission rate as calculated by the following equations:

(For process weights up to 30 tons per hour)  
 $E = 4.10 \times P^{0.67}$

(For process weights greater than 30 tons per hour)  
 $E = 55.0 \times P^{0.11} - 40$

Where: E = allowable emissions in pounds per hour  
P = process weight in tons per hour

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

**Testing** [15A NCAC 2D .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 F.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- c. **The Permittee shall maintain production records such that the process rates “P” in tons per hour, as specified by the formulas contained above can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.**
- d. **No reporting is required for particulate emissions from this source (ID No. ESSN1).**

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

- a. Emissions of sulfur dioxide from **this source (ID No. ESSN1)** 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 F.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 and propane in **this source (ID No. ESSN1)**.

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

- a. Visible emissions from **this source (ID No. ESSN1)** 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 F.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 Nos. ESSN1)** 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 F.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.

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

**A. One coal-fired boiler (ID No. ESB1)**

**Two natural gas/No. 2 fuel oil/No. 2 (equivalent recycled) fuel oil/No. 5 fuel oil/No. 6 fuel oil/No. 4 (equivalent recycled) fuel oil-fired boilers (ID Nos. ESB4 and ESB5)**

**Two natural gas/propane-fired tenter frames (ID Nos. ESTF1 and ESTF2) with associated natural gas/propane-fired thermal oxidizers (ID Nos. CDOX1 and CDOX2)**

**One natural gas/propane-fired singer (ID No. ESSN1)**

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	Less than 250 tons per year <b>combined</b>	15A NCAC 2Q .0317 <b>(PSD Avoidance)</b>

**1. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS  
for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION**

- a. In order to avoid the applicability of 15A NCAC 2D .0530(g) for major sources and major modifications, these sources (**ID Nos. ESB1, ESB4, ESB5, ESTF1, ESTF2, CDOX1, CDOX2, and ESSN1**) shall discharge into the atmosphere less than 250 tons of sulfur dioxide combined, per 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 2.2 A.1.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 fuel usage in a logbook (written or electronic format), as follows:
  - i. the total quantity (in million standard cubic feet) of natural gas and propane fired in the affected sources;
  - ii. the total quantity (in 1,000 gallons) of fuel oil fired in the affected sources;
  - iii. the total quantity (in tons) of coal fired in the affected sources;
  - iv. the fuel oil supplier certifications for any fuel oil fired in the affected sources, including the sulfur content of the fuel oil (in percent by weight); and
  - v. the sulfur content of the coal burned in the affected sources (in percent by weight).

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if records of the fuel usage and sulfur contents are not created and retained as required above.

- d. The use of fuel oil in all combustion sources shall be limited such that sulfur dioxide emissions shall not exceed 250 tons for any consecutive 12-month period. Calculations shall be made monthly using the fuel quantities consumed for the last consecutive 12-month period and recorded in a logbook (written or electronic format), according to the following formula:

$$P \text{ (lbs SO}_2\text{)} = \frac{[X] \times [0.6 \text{ lbs SO}_2\text{]}}{[\text{million ft}^3 \text{ gas}]} + \frac{[Y] \times [T] \times [38 \text{ lbs SO}_2\text{]}}{[\text{ton coal}]} + \frac{[Z] \times [157 \text{ lbs SO}_2\text{]} \times [S]}{[1000 \text{ gallons fuel}]}$$

$$\text{Total tons of SO}_2 \text{ Emitted} = [P \text{ lbs of SO}_2] \times [1 \text{ ton SO}_2] / [2000 \text{ lbs SO}_2]$$

Where: P is the actual pounds of sulfur dioxide emitted

X is the millions of cubic feet of natural gas and propane used in sources **ESB4, ESB5, ESTF1, ESTF2, CDOX1, CDOX2, and ESSN1**

Y is the tons of coal used in ESB1

Z is the thousands of gallons of fuel oil used in **ESB4 and ESB5**

S is the percent sulfur in the fuel oil

T is the percent by weight of sulfur in the coal

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the sulfur dioxide emissions calculations records are not maintained or if the sulfur dioxide emissions exceed the limit given in Section 2.2 A.1.a above.

**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 sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
  - ii. the monthly quantities of natural gas, Propane, No. 5 fuel oil, No. fuel oil, and coal consumed for the previous 17 months; and
  - iii. the average sulfur content of the fuel oil and the coal.

**B. Facility-wide affected sources**

Regulated Pollutant	Limits/Standards	Applicable Regulation
Volatile organic compounds	Work practice standards	15A NCAC 2D .0958
Hazardous air pollutants	Less than 10 tons per year of any HAP and Less than 25 tons per year of any combination of HAPs	15A NCAC 2Q .0317 <b>(MACT Avoidance)</b>
Toxic air pollutants	<b>State enforceable only</b> <b>See Section 2.2 B.3</b>	15A NCAC 2D .1100
Toxic air pollutants	<b>State enforceable only</b> <b>See Section 2.2 B.4</b>	15A NCAC 2Q .0711
<b>Particulate matter</b>	<b>Fugitive dust emissions shall be controlled</b>	<b>15A NCAC 2D .0540</b>

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

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

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

- b. To assure compliance with paragraph a. above, the Permittee shall, at a minimum, perform a visual inspection once per month of all operations and processes utilizing VOCs. The inspections shall be conducted during normal operations. If the required inspections are not conducted the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0958.
- c. The results of the inspections 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 inspection; and
  - ii. the results of each inspection noting whether or not noncompliant conditions were observed.
- If the required records are not maintained, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0958.

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

- d. 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.

**2. 15A NCAC 2Q .0317: AVOIDANCE CONDITIONS  
for 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY**

- a. In order to remain classified a minor source for hazardous air pollutants and avoid applicability of this regulation, facility-wide emissions of hazardous air pollutants shall be less than:
- i. 10 tons per year of each hazardous air pollutant, and
  - ii. 25 tons per year of all hazardous air pollutants combined.
- The Permittee shall be deemed in noncompliance with this condition and 15A NCAC 2D .1111 if the hazardous air pollutant emissions exceed these limits.

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

- b. To ensure compliance with the limits in Section 2.2 B.2.a above, the Permittee shall maintain the following monthly records:
  - i. the amount of the fuel fired in these sources (**ID Nos. ESB1, ESB4, ESB5, ESTF1, ESTF2, ESSN1, CDOX1, and CDOX2**) and the amount of hazardous air pollutants emitted, including hydrochloric acid emitted from the coal combustion. Hazardous air pollutant emissions shall be calculated based upon US EPA AP-42 emission factors and coal, fuel oil, natural gas, and propane consumption;
  - ii. the amount of hazardous air pollutants emitted from all materials containing hazardous air pollutants including dyes, coatings, and solvent-based cleaners used at the plant as follows:
    - A. quantity of individual hazardous air pollutants in pounds emitted by the facility each month and for the 12-month period ending on that month; and
    - B. quantity of all hazardous air pollutants in pounds emitted by the facility each month and for the 12-month period ending on that month.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if these records are not maintained.

- c. The Permittee shall keep a record of the applicability determination on-site at the facility for a period of five years after the determination, or until the facility becomes an affected facility. The determination must include the analysis demonstrating why the Permittee believes the facility is unaffected pursuant to 40 CFR 63.10(b)(3). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if these records are not maintained.

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

- d. 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. The report shall contain the following records:
  - i. greatest quantity in pounds of an individual hazardous air pollutant emitted,
    - A. for each month during the semi-annual period, and
    - B. for each 12-month period ending on each month during the semi-annual period using a 12-month rolling total; and
  - ii. pounds of all hazardous air pollutants emitted,
    - A. for each month during the semi-annual period, and
    - B. for each 12-month period ending on each month during the semi-annual period using a 12-month rolling total.

**State-enforceable only**

**3. 15A NCAC 2D .1100: CONTROL OF TOXIC AIR POLLUTANTS**

Pursuant to 15A NCAC 2D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

<b>Emission Source(s)</b>	<b>Toxic Air Pollutant(s)</b>	<b>Emission Limit(s)</b>
<b>ESTF1 and ESTF2</b>	Formaldehyde	3.672 pounds/hour total
	Acetic acid	81.84 pounds/hour total
<b>I-500</b>	Acetic acid	1.72 pounds/hour
<b>I-600</b>	Acetic acid	0.123 pounds/hour

- a. To ensure compliance with the limits above, the following minimum stack heights shall apply:

Emission Source(s)	Stack Height (meters)
<b>ESTF1 and ESTF2</b>	15.2
<b>I-500</b>	4.27
<b>I-600</b>	3.65

**State-enforceable only**

**4. 15A NCAC 2Q .0711: TOXIC AIR POLLUTANT EMISSIONS LIMITATION REQUIREMENT**

Pursuant to 15A NCAC 2Q .0711 “Emission Rates Requiring a Permit,” for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that facility-wide actual emissions do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 2Q .0711. The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 2Q .0711.

- a. A Permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
- b. PRIOR to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D .1100 “Control of Toxic Air Pollutants”.
- c. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below.

Pollutant (CAS Number)	TPERs Limitations			
	Carcinogens (lbs/year)	Chronic Toxicants (lbs/day)	Acute Systemic Toxicants (lbs/hour)	Acute Irritants (lbs/hour)
Trichloroethylene (79-01-6)	4000			
Xylene (1330-20-7)		57		16.4

**5. 15A NCAC 2D .0540: PARTICULATES FROM FUGITIVE NON-PROCESS DUST EMISSION SOURCES**

- a. 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).

### **SECTION 3 - GENERAL CONDITIONS (v2.19)**

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

A. **General Provisions** [NCGS 143-215 and 15A NCAC 2Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 2D and 2Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 2Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environment and Natural Resources upon request.

C. **Severability Clause** [15A NCAC 2Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 2Q .0507(e) and 2Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NO<sub>x</sub> budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

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

- E. **Duty to Comply** [15A NCAC 2Q .0508(i)(2)]  
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.
- F. **Circumvention** - STATE ENFORCEABLE ONLY  
The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.
- G. **Permit Modifications**
1. Administrative Permit Amendments [15A NCAC 2Q .0514]  
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 2Q .0514.
  2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 2Q .0524 and 2Q .0505]  
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 2Q.0524 and 2Q .0505.
  3. Minor Permit Modifications [15A NCAC 2Q .0515]  
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 2Q .0515.
  4. Significant Permit Modifications [15A NCAC 2Q .0516]  
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 2Q .0516.
  5. Reopening for Cause [15A NCAC 2Q .0517]  
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 2Q .0517.
- H. **Changes Not Requiring Permit Modifications**
1. Section 502(b)(10) Changes [15A NCAC 2Q .0523(a)]
    - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
    - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
      - i. the changes are not a modification under Title I of the Federal Clean Air Act;
      - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
      - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
      - iv. the Permittee shall attach the notice to the relevant permit.
    - c. The written notification shall include:
      - i. a description of the change;
      - ii. the date on which the change will occur;

- iii. any change in emissions; and
- iv. any permit term or condition that is no longer applicable as a result of the change.
- d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
2. Off Permit Changes [15A NCAC 2Q .0523(b)]

The Permittee may make changes in the operation or emissions without revising the permit if:

  - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
  - b. the change is not covered under any applicable requirement.
3. Emissions Trading [15A NCAC 2Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 2D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 2Q .0523(c).

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

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

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

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

#### **Excess Emissions**

1. If a source is required to report excess emissions under NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 2D .0535 as follows:
  - a. Pursuant to 15A NCAC 2D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
    - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
      - name and location of the facility;
      - nature and cause of the malfunction or breakdown;
      - time when the malfunction or breakdown is first observed;
      - expected duration; and
      - estimated rate of emissions;
    - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
    - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 2D .0535(f)(3).

#### **Permit Deviations**

3. Pursuant to 15A NCAC 2Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:

- a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 2D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

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

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 2D .0535, including 15A NCAC 2D .0535(c) as follows:

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

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

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

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
  - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
  - b. the permitted facility was at the time being properly operated;
  - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
  - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

**K. Permit Renewal [15A NCAC 2Q .0508(e) and 2Q .0513(b)]**

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

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 2Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 2Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 2Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 2Q .0508(f) and 2Q .0508(l)]

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

P. **Compliance Certification** [15A NCAC 2Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

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

Q. **Certification by Responsible Official** [15A NCAC 2Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 2Q .0512]

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

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 2Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 2Q .0503]

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

U. **Property Rights** [15A NCAC 2Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 2Q .0508(l) and NCGS 143-215.3(a)(2)]

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

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

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

W. **Annual Fee Payment** [15A NCAC 2Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 2Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environment and Natural Resources. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 2Q .0519.

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

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 2Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 2Q .0107 and 2Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 2Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 2Q .0107.

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

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 2Q .0100 and .0300.

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

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

BB. **Financial Responsibility and Compliance History** [15A NCAC 2Q .0507(d)(3)]

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

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

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

3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

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

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

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

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

**FF. Title IV Allowances [15A NCAC 2Q .0508(i)(1)]**

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

**GG. Air Pollution Emergency Episode [15A NCAC 2D .0300]**

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 2D .0300.

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

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 2D .0202(b).

**II. Ambient Air Quality Standards [15A NCAC 2D .0501(e)]**

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 2D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

**JJ. General Emissions Testing and Reporting Requirements [15A NCAC 2Q .0508(i)(16)]**

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

1. The Permittee shall submit a completed Protocol Submittal Form to the DAQ Regional Supervisor at least 45 days prior to the scheduled test date. A copy of the Protocol Submittal Form may be obtained from the Regional Supervisor.

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

**KK. Reopening for Cause** [15A NCAC 2Q .0517]

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

5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 2Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

ATTACHMENT

**List of Acronyms**

<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>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