

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

Division of Air Quality



## AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
08618T04	08618T03	May 16, 2003	April 30, 2008

Until such time as this permit expires or is modified or revoked, the below named Permittee is authorized to operate, as outlined in Part I, "Air Quality Title V Operation Permit," and to construct and operate, as outlined in Part II, "Air Quality Construction and Operation Permit," 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, 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:** **Cardinal FG Float Glass Plant**  
**Facility Site Location:** **342 Mooresville Boulevard**  
**City, County, State, Zip:** **Mooresville, Iredell County, North Carolina, 28115**

**Mailing Address:** **342 Mooresville Boulevard**  
**City, State, Zip:** **Mooresville, North Carolina 28115**

**Application Number:** **4900261.02B**  
**Complete Application Date:** **December 30, 2002**  
**Renewal Application Due Date:** **August 1, 2007**  
**Primary SIC Code:** **3211**

**Division of Air Quality,**  
**Regional Office Address:** **Mooresville Regional Office**  
**919 North Main Street**  
**Mooresville, North Carolina 28115**

Permit issued this the 16th day of May, 2003

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Laura S. Butler, P.E., Chief, Air Permits Section  
By Authority of the Environmental Management Commission

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## PART I AIR QUALITY TITLE V OPERATING PERMIT

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) listed in Part I of this permit is based on plans, specifications, operating parameters, and other information as submitted in the air permit application.

### SECTION 1- PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S)

The following table contains a summary of all permitted emission sources and associated air pollution control devices:

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device I.D. No.</b>	<b>Control Device Description</b>
P01	one (1) natural gas-fired, side port, regenerative, glass melting furnace (184 million Btu per hour heat input [with 3R], and 650 tons per 24 hours process weight rate capacity)	C01	“3R” process or reaction and reduction in the regenerators is a licensed NO <sub>x</sub> reduction method from Pilkington PLC.
P02	cullet (broken glass) return to process from glass breakers, conveyed on belt conveyors and discharged to a storage silo or ground storage pad (650 tons per 24 hours process weight rate capacity)	C02	one (1) bagfilter (6,120 square feet of filter area)
P03	bottom of three elevators (150 tons per hour each) for conveying raw materials, batch materials, and cullet (two elevators/300 tons per hour process weight rate capacity)	C03	one (1) bagfilter (325 square feet of filter area)
P04	top of three elevators (150 tons per hour each) for conveying raw materials, batch materials, and cullet (two elevators/300 tons per hour process weight rate capacity)	C04	one (1) bagfilter (150 square feet of filter area)
P05	batch mixers - the process of mixing raw materials withdrawn from storage bins, conveyed into hopper scales for weighing, and conveyed to storage or a charging bin behind the furnace (150 tons per hour process weight rate capacity)	C05	one (1) bagfilter (150 square feet of filter area)

Emission Source I.D. No.	Emission Source Description	Control Device I.D. No.	Control Device Description
P06	one (1) diesel fired 1500 kw emergency generator	NA	NA
P07	annealing lehr - the process consists of a roller hearth oven (electric) designed to cool the glass ribbon after it exits the float bath. The glass ribbon is transported by driven rollers.	NA	NA
P08	glass cutting - a blade, with lubricant, cuts the continuous ribbon of glass into separate pieces	NA	NA

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

**2.1- Emission Source(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 to which those requirements apply:

**A. Glass Melting Furnace (ID No. P01)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation (15A NCAC)
sulfur dioxide	2.3 pounds per million Btu heat input	2D .0516
particulate matter	0.5 pounds of particulate (filterable or front-half only) per ton of glass produced	2D .0524 40 CFR Part 60, Subpart CC
visible emissions	20 percent opacity	2D .0521
particulate matter	<u>BACT</u> 0.5 pounds of particulate/ton of glass produced (filterable or front half) 0.5 pounds of particulate/ton of glass produced (condensable or back half) 1.0 pounds of particulate/ton of glass produced (total)	2D .0530 [40 CFR 51.166] (Prevention of Significant Deterioration)
nitrogen oxide	<u>BACT</u> [normal production mode] 7.0 pounds of NO <sub>x</sub> /ton of glass produced based on a 30 day rolling average	
	<u>BACT</u> [furnace cleaning mode] 10.6 pounds of NO <sub>x</sub> /ton of glass produced based on a 30 day rolling average	
sulfur dioxide	<u>BACT</u> [normal production mode] 2.0 pounds of SO <sub>x</sub> /ton of glass produced	

Regulated Pollutant	Limits/Standards	Applicable Regulation (15A NCAC)
sulfur dioxide	<u>BACT</u> [furnace cleaning mode] 4.0 pounds of SO <sub>x</sub> /ton of glass produced	2D .0530 [40 CFR 51.166] (Prevention of Significant Deterioration)
carbon monoxide	10 pounds per ton of glass produced	15A NCAC 2D .0501(e)
arsenic cadmium nickel sulfuric acid sulfuric acid fluoride fluoride soluble chromate	<u>N. C. Air Toxics, (State-enforceable Only)</u> 367.9 pounds per year 297.8 pounds per year 0.19 pounds per 24 hours 1.59 pounds per hour 38.1 pounds per 24 hours 0.66 pounds per hour 15.8 pounds per 24 hours 0.61 pounds per 24 hours	2D .1100

**1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

- a. Emissions of sulfur dioxide from this source shall not exceed **2.3 pounds per million Btu heat input**. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

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

- b. If emissions testing is required by the DAQ, the Permittee shall perform such testing in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

**2. 15A NCAC 2D .0524: NSPS [40 CFR Part 60, Subpart CC]**

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

**Emission Limitations** [15A NCAC 2D .0524]

- b. Under 60.292(a)(1), the glass melting furnace with a non-modified process shall not emit particulate matter at a rate greater than 0.5 pound (filterable or front-half only) per ton of glass produced.

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

- c. If emissions testing is required by the DAQ, the Permittee shall perform such testing in accordance with 15A NCAC 2D .0501(c)(3) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A. 2. b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- d. In addition to the reporting required under 40 CFR 60.7, the Permittee is required to NOTIFY the Mooresville Regional Office in WRITING, of the following:
  - i. If the glass melting furnace without modified process is changed to one with modified process, the owner or operator shall notify the Mooresville Regional Office at least 60 days before the change is scheduled to occur.

- ii. Within 30 days after conducting the testing required under Item c above, the Permittee shall submit a written report of the test results to the Mooresville Regional Office.

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

- a. Visible emissions from the melt furnace (**ID No. P01**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

**Testing** [15A NCAC 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. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a day the Permittee shall observe the emission point of this source for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either: (a) be deemed to be in noncompliance with 15A NCAC 2D .0521 or (b) demonstrate that the percent opacity from the emission point of the emission source in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 A. 3. a. above. If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

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

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

**4. 15A NCAC 2D .0530, [40 CFR 51.166, (Prevention of Significant Deterioration)]**

- a. For "Prevention of Significant Deterioration," the following "Best Available Control Technology" (BACT) permit limits shall not be exceeded from the glass melt furnace for particulate (including PM-10), sulfur dioxide, and nitrogen oxides:

Pollutants

BACT Limits

particulate (including PM-10)

0.5 pounds per ton of glass produced (filterable or front half)

0.5 pounds per ton of glass produced (condensable or back half)

1.0 pounds total per ton of glass produced

118.6 tons per year

sulfur dioxide

normal production mode

2.0 pounds per ton of glass produced

furnace cleaning mode<sup>1</sup>

4.0 pounds per ton of glass produced

nitrogen oxide

normal production mode

7.0 pounds of NO<sub>x</sub>/ton of glass produced based on a 30 day rolling average

furnace cleaning mode

10.6 pounds of NO<sub>x</sub>/ton of glass produced based on a 30 day rolling average

**Testing** [15A NCAC 2D .0501 (c)(3), (4), and (7)]

- b. If emissions testing is required by the DAQ, the Permittee shall perform such testing in accordance with 15A NCAC 2D .0501(c)(3), (4), and (7) and General Condition JJ found in Section 3.

If the results of this test are above the limits given in Section 2.1 A. 4. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the above sulfur dioxide emission limits for the normal production mode by testing the glass melt furnace (ID No. P01) annually, during the 2nd quarter of each calendar year. The capacity at which the annual testing is conducted shall be based on production records and shall be as approved by the DAQ, Mooresville Regional Office. At least forty-five (45) days prior to performing this required emissions testing, the Permittee shall develop and submit a testing protocol to the Mooresville Regional Supervisor, Division of Air Quality for review and approval. All testing protocols must be approved by the Division of Air Quality prior to performing such tests. Testing must also be performed in accordance with General Condition JJ found in Section 3.

If the results of this test are above the limit given in Section 2.1 A. 4. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

- d. Under the provisions of NCGS 143-215.108, the Permittee shall perform an initial compliance demonstration with the above sulfur dioxide and PM-10 emission limits by testing the glass melt furnace (ID No. P01) during the first scheduled maintenance and cleaning operating mode. The capacity at which the testing is conducted shall be based on production records and shall be as approved by the DAQ, Mooresville Regional Office. At least forty-five (45) days prior to performing this required emissions testing, the Permittee shall develop and submit a testing protocol to the Mooresville Regional Supervisor, Division of Air Quality for review and approval. All testing protocols must be approved by the Division of Air Quality prior to performing such tests. Testing must also be performed in accordance with General Condition JJ found in Section 3.

If the results of this test are above the limits given in Section 2.1 A. 4. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- e. The glass melt furnace shall not produce more than 650 tons including cullet per 24 hour period beginning at 7:00 am. A daily record shall be maintained which documents the glass tonnage per this 24 hour period. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained.

- f. To ensure compliance with the above sulfur dioxide limit, the usage of salt cake shall be limited to 10 pounds of salt cake per 1000 pounds of sand. On a per batch basis, the quantity of sand and salt cake shall be measured and recorded to document compliance with the above limitation.

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

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<sup>1</sup> Furnace cleaning is defined as the process of burning sulfate deposits with natural gas and the removal of the sulfate deposits from the refractory of the furnace heat exchanger.

- g. A continuous emissions monitor for nitrogen oxide emissions shall be installed, calibrated, maintained, tested, and operated in accordance with 40 CFR Part 60, Appendix B, "Performance Specifications" and Appendix F, "Quality Assurance Procedures."
- h. Control of nitrogen oxide emissions from the glass melt furnace shall be by the 3R Process. The operation and inspections of the 3R Process shall be per Pilkington PLC and any other applicable equipment manufacturer. Inspections and maintenance of the 3R Process shall be documented in a logbook (written or electronic). During furnace cleaning, as defined in 2.1 A. 4. a., the "3R" process may be shut down as necessary during the two week period cleaning is performed.  
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these inspections and maintenance are not conducted or the records are not maintained.

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

- i. The Permittee shall submit a summary report of inspection and maintenance activities within 30 days of a written request by the DAQ.
- j. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
- k. The Permittee shall submit any excess nitrogen oxide emission reports as measured by the continuous emission monitor (CEM), 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. If there are no excess emissions, the Permittee shall submit a report stating that no excess emissions occurred during the semiannual reporting period.
- l. Within 30 days after conducting the testing required under Items b, c, and d above, the Permittee shall submit a written report of the test results to the Mooresville Regional Office.
- m. Two weeks prior to any furnace cleaning [defined in 2.1 A. 4. a.], the Permittee shall provide written notice to the Mooresville Regional Office specifically defining the start and completion dates of the cleaning.

**5. 15A NCAC 2D .0501(e): COMPLIANCE WITH NATIONAL AMBIENT AIR QUALITY STANDARDS**

- a. Carbon monoxide emissions from the melt furnace (ID No. P01) shall not exceed 10 pounds per ton of glass produced.

**Testing**

- b. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the above emission limit by testing the glass melt furnace (ID No. P01) for carbon monoxide annually, during the 2nd quarter of each calendar year. The initial test shall be performed during the 2nd quarter of 2003. At least forty-five (45) days prior to performing this required emissions testing, the Permittee shall develop and submit a testing protocol to the Regional Supervisor, Division of Air Quality for review and approval. All testing protocols must be approved by the Division of Air Quality prior to performing such tests. Testing must also be performed in accordance with General Condition JJ found in Section 3. The capacity at which the annual testing is conducted shall be based on production records and shall be as approved by the DAQ, Mooresville Regional Office.

If the results of this test are above the limit given in Section 2.1 A. 5. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0501(e).

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

- c. Monitoring shall consist of an annual emission compliance test. If after two consecutive annual tests, with results significantly less than the 10 pounds per ton limit, the annual testing may be terminated upon a written request by the Permittee with review and approval by the DAQ.

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

- d. Within 30 days after conducting the testing required under Item b above, the Permittee shall submit a written report of the test results to the Mooresville Regional Office.

**State Only Requirement**

**6. 15A NCAC 2D .1100, North Carolina Toxic Air Pollutant Emissions Limitation and Reporting Requirement**

- a. 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 Sources</b>	<b>Toxic Air Pollutants</b>	<b>Emission Limits</b>
Glass Melt Furnace (ID No. P01)	arsenic cadmium nickel sulfuric acid sulfuric acid fluoride fluoride soluble chromate	367.9 pounds per year 297.8 pounds per year 0.19 pounds per 24 hours 1.59 pounds per hour 38.1 pounds per 24 hours 0.66 pounds per hour 15.8 pounds per 24 hours 0.61 pounds per 24 hours

**Testing**

- b. If emissions testing is required by the DAQ, the Permittee shall perform such testing in accordance with General Condition JJ found in Section 3.

**Monitoring/Recordkeeping/Reporting** [15A NCAC 2d .1105]

- c. No monitoring, recordkeeping or reporting is required.

**B. Cullet Return (ID No. P02), Bottom of Elevator (ID No. P03), Top of Elevator (ID No. P04), and Batch Mixers (ID No. P05)**

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

<b>Regulated Pollutant</b>	<b>Limits/Standards</b>	<b>Applicable Regulation</b>
particulate matter	BACT 0.0067 grains per actual cubic foot exhaust volume to atmosphere	15A NCAC 2D .0530 [40 CFR 51.166 (Prevention of Significant Deterioration)]
visible emissions	20 percent opacity	15A NCAC 2D .0521

**1. 15A NCAC 2D .0530, [40 CFR 51.166, (Prevention of Significant Deterioration)]**

- a. For “Prevention of Significant Deterioration,” the following “Best Available Control Technology” (BACT) permit limit shall not be exceeded from the Cullet Return (ID No. P02), Bottom of Elevator (ID No. P03), Top of Elevator (ID No. P04), and Batch Mixers (ID No. P05) for particulate (including PM-10):

<u>Pollutants</u>	<u>BACT Limit</u>
particulate (including PM-10)	0.0067 grains per actual cubic foot exhaust volume to atmosphere

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

- b. If emissions testing is required by the DAQ, the Permittee shall perform such testing in accordance with 15A NCAC 2D .0501(c)(3) and General Condition JJ found in Section 3. 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 .0530.

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

- c. Particulate matter emissions from these sources shall each be controlled by a bagfilter. To ensure that optimum control efficiency is maintained, the Permittee shall perform periodic inspections and maintenance on the bagfilters as recommended by the manufacturer. In addition, the inspection and maintenance performed shall include once annually, as a minimum, an internal inspection of the bagfilter for fabric and component integrity. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these inspections and maintenance are not conducted.
- d. The Permittee shall operate and maintain a pressure drop indicator on each bagfilter. The pressure drop across the bagfilters for sources, Cullet Return (ID No. P02), Bottom of Elevator (ID No. P03), Top of Elevator (ID No. P04), and Batch Mixers (ID No. P05) shall be maintained within the range established and documented by the bagfilter manufacturer. A record of these documented pressure drop ranges, shall be maintained on site, and be made available to an authorized DAQ representative upon request.

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

- e. The results of inspection and maintenance shall be maintained in a log book (written or electronic form), kept on site, and made available to an authorized DAQ representative upon request. The log book shall record the following:
- I. date of actions;
  - ii. the results of maintenance and inspections performed on the baghouse;
  - iii. the pressure drop once daily at a minimum; and
  - iii. any variance from the manufacturer's recommendations, if any, and corrections made.
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained.

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

- f. The Permittee shall submit a summary report of inspection and maintenance activities within 30 days of a written request by the DAQ. 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 shall not be more than 20 percent opacity when averaged over a six-minute period except that six minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period. [15A NCAC 2D .0521(d)]

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

- b. If emissions testing is required by the DAQ, the Permittee shall perform such testing in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 B. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a week the Permittee shall observe the emission point of this source for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either: (a) be deemed to be in noncompliance with 15A NCAC 2D .0521 or (b) demonstrate

that the percent opacity from the emission point of the emission source in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 B. 2. a. above. If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

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

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 emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and

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. Emergency Generator (ID No. P06)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
particulate matter sulfur dioxide nitrogen oxide	<u>BACT</u> diesel fuel usage limited to 2,964 gallons per 12 month period, and diesel fuel sulfur content limited to 0.05 percent by weight.	15A NCAC 2D .0530, [40 CFR 51.166 (Prevention of Significant Deterioration)]
visible emissions	20 % opacity	15A NCAC 2D .0521

**1. 15A NCAC 2D .0516: Sulfur Dioxide Emissions from Combustion Sources**

Emissions of sulfur dioxide from this source shall not exceed **2.3 pounds per million Btu heat input**. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

**2. NCAC 2D .0530, [40 CFR 51.166, (Prevention of Significant Deterioration)]**

- a. For “Prevention of Significant Deterioration,” the following “Best Available Control Technology” (BACT) permit limits shall not be exceeded from the emergency generator for particulate (including PM-10), sulfur dioxide, and nitrogen oxides:

<u>Pollutants</u>	<u>BACT Limits</u>
particulate (including PM-10)	diesel fuel usage limited to 2,964 gallons per 12 month
sulfur dioxide	period, and a diesel fuel sulfur content limited to 0.05 percent by
nitrogen oxide	weight

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

- b. The maximum sulfur content of any diesel fuel received and combusted in the emergency generator shall not exceed 0.05 percent by weight. [15A NCAC 2Q .0508(bb)]

- c. The Permittee shall monitor the sulfur content of the diesel fuel by using a supplier certification per shipment received that the sulfur content is less than 0.05 percent. The results of the diesel fuel supplier certifications shall be recorded on a monthly basis and include the following information:
  - i. the name of the diesel fuel supplier;
  - ii. the sulfur content of the diesel fuel received during the month;
  - iii. the method used to determine the sulfur content of the diesel fuel; and
  - iv. a certified statement signed by the responsible official that the records of supplier certification submitted represent all of the diesel fuel combusted during the reporting period.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained.
- d. The emergency generator shall not combust more than 2,964 gallons per year, calculated as the sum of each consecutive twelve (12) month period. The Permittee shall record the actual number of gallons combusted in the emergency generator monthly as measured by a totalizing fuel meter to the generator day tank. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if this measurement is not conducted or this record is not maintained.

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

- e. The Permittee shall submit a summary report of the diesel fuel 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.
- f. The Permittee shall submit a summary report of diesel fuel usage within 30 days after each calendar year quarter, due and postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September. The report shall contain the following:
  - i. the actual number of gallons combusted in the emergency generator by month over the previous fourteen (14) months.
  - ii. the monthly gallons combusted summed for each of the three twelve month periods over the previous fourteen months.

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

- a. Visible emissions from this source shall not be more than 20 percent opacity when averaged over a six-minute period except that six minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period. [15A NCAC 2D .0521(d)]

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

- b. If emissions testing is required by the DAQ, the Permittee shall perform such testing in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ found in Section 3. 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** [15A NCAC 2Q .0508(f)]

- c. To assure compliance, during operation, the Permittee shall observe the emission point of this source for any visible emissions above normal. If visible emissions from this source are observed to be above normal, the Permittee shall either: (a) be deemed to be in noncompliance with 15A NCAC 2D .0521 or (b) demonstrate that the percent opacity from the emission point of the emission source in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given in Section 2.1 C.3. a. above. If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.
- d. **Recordkeeping** [15A NCAC 2Q .0508(f)]  
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 emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

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

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

**D. Annealing Lehr (ID No. P07)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
sulfur dioxide	<u>BACT</u> process usage limited to 25 tons per 12 month period, and fugitive emissions limited to 0.75 pounds/hour	15A NCAC 2D .0530, [40 CFR 51.166 (Prevention of Significant Deterioration)]

**15A NCAC 2D .0530, [40 CFR 51.166, (Prevention of Significant Deterioration)]**

- a. For “Prevention of Significant Deterioration,” the following “Best Available Control Technology” (BACT) permit limits shall not be exceeded from the annealing Lehr for sulfur dioxide:

<u>Pollutants</u>	<u>BACT Limits</u>
sulfur dioxide	process usage limited to 25 tons per 12 month period, and fugitive emissions limited to 0.75 pounds per hour.

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

- b. If emissions testing is required by the DAQ, the Permittee shall perform such testing in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the pounds per hour limit given in Section 2.1 D. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

- c. The annual usage of sulfur dioxide in the annealing Lehr shall be limited to 25 tons, calculated as the sum of each consecutive twelve (12) month period. The sulfur dioxide usage shall be measured by maintaining a record of gas cylinder replacement. Each cylinder shall be weighed prior to and after usage to obtain the pounds of sulfur dioxide used in the process. Total monthly usage shall be recorded in a logbook (written or electronic form).  
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these measurements are not conducted or the records are not maintained.

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

- d. The Permittee shall submit a summary report of sulfur dioxide usage within 30 days after each calendar year quarter, due and postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period

between April and June, and October 30 for the calendar year for the preceding three-month period between July and September. The report shall contain the following:

- i. the actual monthly sulfur dioxide usage in the annealing lehr over the previous fourteen (14) months.
- ii. the monthly sulfur dioxide usage summed for each of the three twelve month periods over the previous fourteen months.

**E. Glass Cutting Operation (ID No. P08)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
volatile organic compounds	fugitive emissions limited to less than 40 tons per rolling 12 month period	<u>Avoidance of:</u> 15A NCAC 2D .0530, [40 CFR 51.166 (Prevention of Significant Deterioration)]
volatile organic compounds	work practice standards	15A NCAC 2D .0958

**1. Avoidance of 15A NCAC 2D .0530, [40 CFR 51.166, (Prevention of Significant Deterioration)]**

- a. In order to avoid applicability of this regulation, the glass cutting operation with a lubrication fluid (ID No. P08) shall discharge into the atmosphere less than 40 tons of volatile organic compounds per consecutive twelve month period. [15A NCAC 2D .0530]

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

- b. Calculations of VOC emissions shall be made each month. VOC emissions shall be determined by multiplying the total amount of each type of VOC-containing lubricating fluid consumed during the month by the VOC content of the material.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the amounts of VOC containing materials and the calculated VOC emissions are not monitored and recorded.

- c. Calculations and the total amount of VOC emissions shall be recorded monthly in a logbook (written or electronic format).

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the VOC emissions exceed the limit in 2.1 E. 1 a.

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

- d. The Permittee shall submit a summary report of monitoring and recordkeeping activities within 30 days after each calendar year quarter, due and postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September. The report shall contain the following:
  - i. The monthly VOC emissions for the previous 14 months. The emissions shall be calculated for each of the 12-month periods over the previous 14 months.
  - ii. The total gallons of lubricating fluid used monthly.

## 2. 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:
  1. store all material, including waste material, containing volatile organic compounds in tanks or in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,
  2. clean up spills of volatile organic compounds as soon as possible following proper safety procedures,
  3. store wipe rags containing volatile organic compounds in closed containers,
  4. not clean sponges, fabric, wood, paper products, and other absorbent materials with volatile organic compounds,
  5. transfer solvents containing volatile organic compounds 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,
  6. clean mixing, blending, and manufacturing vats and containers containing volatile organic compounds by adding cleaning solvent and close the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be transferred into a closed container, a closed tank or a treatment facility regulated under section 402 of the Clean Water Act. [15A NCAC 2D .0958(c)]

### **Monitoring**

- 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 volatile organic compounds. 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.

### **Recordkeeping**

- 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**

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

## SECTION 3 - GENERAL CONDITIONS

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

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

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(aa)]

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)]

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(c)]

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.

E. **Duty to Comply** [15A NCAC 2Q .0508(j)]

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 of Ownership or Operation [15A NCAC 2Q .0524]  
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 2Q .0524.
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. 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.
  - b. 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.
  - c. 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)(3)]

“Excess Emissions” - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, or .1200 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” - any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions, but not including excess emissions as defined above.

#### 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 corrected measures have been accomplished; and
    - iii. submit, if requested, to the Regional Supervisor or Director within 15 days after the request a written report as described in 15A NCAC 2D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 2Q .0508(f)(3), 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 on the next business day after becoming aware of the deviation. A written report shall be submitted within two business days to the Regional Supervisor and shall include the probable cause of such deviation and any corrective actions or preventative actions taken. All reports of deviations from permit requirements shall be certified by a responsible official.

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

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 2D .0535. Note that 15A NCAC 2D .0535(g) is state-enforceable only.

**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 .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(k)]

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(n)]

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)]

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(t)]

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 **January 30** 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. 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:

- a. the identification of each term or condition of the permit that is the basis of the certification;
- b. the compliance status;
- c. whether compliance was continuous or intermittent; and

- d. the method(s) used for determining the compliance status of the source, currently and over the reporting 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:

- a. the information contained in the application or presented in support thereof is determined to be incorrect;
- b. the conditions under which the permit or permit renewal was granted have changed;
- c. violations of conditions contained in the permit have occurred;
- d. the EPA requests that the permit be revoked under 40 CFR §§ 70.7(g) or 70.8(d); or
- e. 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(m)]

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(r) 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(o)]

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(n)]

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(g)]

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(h)]

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(aa)]

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.

- a. 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.
- b. 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.
- c. 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.
- d. The Permittee shall submit three copies of the test report to the DAQ. The test report shall contain at a minimum the following information:
  - i. a certification of the test results by sampling team leader and facility representative;
  - ii. 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);
  - iii. 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;
  - iv. all field, analytical, and calibration data necessary to verify that the testing was performed as specified in the applicable test methods;
  - v. example calculations for at least one test run using equations in the applicable test methods and all test results including intermediate parameter calculations; and
  - vi. 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.
- e. The testing requirement(s) shall be considered satisfied only upon written approval of the test results by the DAQ.
- f. 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; and
  - c. 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(f)]

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>DEHNR</b>	Department of Environment, Health 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 Pollutants
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>NSPS</b>	New Source Performance Standard
<b>OAH</b>	Office Administrative Hearings
<b>PM</b>	Particulate Matter
<b>PM<sub>10</sub></b>	Particulate Matter (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

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

<b>Source</b>	<b>Exemption Reference</b>
Raw Material Receiving	criteria pollutant emissions less than five (5) tons per year and HAPs less than 1000 pounds per year