ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
MICHAEL ABRACZINSKAS
Director

NORTH CAROLINA
Environmental Quality

DRAFT

Mr. Sujeet Rao
Industrial Excellence Senior Manager
Prysmian Cable and Systems USA, LLC
2512 Penny Road
Claremont, NC 28610

SUBJECT: Air Quality Permit No. 07334T31
Facility ID: 1800419
Prysmian Cable and Systems USA, LLC
Claremont
Catawba County
Fee Class: Title V
PSD Class: Major

Dear Mr. Rao:

In accordance with your completed Air Quality Permit Application for a Significant 501(b)(2) Part 2 modification of your Title V permit, we are forwarding herewith Air Quality Permit No. 07334T31 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 02Q .0503(8) have been identified as such in the permit. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 4. 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.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to file a petition for contested case hearing in the North Carolina Office of Administrative Hearings. Information regarding the right, procedure, and time limit for permittees and other persons aggrieved to file such a petition is contained in the attached "Notice Regarding the Right to Contest A Division of Air Quality Permit Decision."

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to existing 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 NCGS 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 NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-

215.114A and 143-215.114B.

Catawba County has triggered increment tracking under PSD for PM_{10}. Any increment changes associated with this modification were addressed in the Part 1 permit application (No. 1800419.21A).

This Air Quality Permit shall be effective from DRAFT until November 30, 2024, 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 Connie Horne, at (919) 707-8722 or Connie.Horne@deq.nc.gov.

Sincerely yours,

Mark J. Cuilla, EIT, CPM, Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Brad Akers, EPA Region 4 (Permit and Review)
Laserfiche (1800419)

NOTICE REGARDING THE RIGHT TO CONTEST A DIVISION OF AIR QUALITY PERMIT DECISION

Right of the Permit Applicant or Permittee to File a Contested Case: Pursuant to NCGS 143-215.108(e), a permit applicant or permittee who is dissatisfied with the Division of Air Quality's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 in the Office of Administrative Hearings within 30 days after the Division notifies the applicant or permittee of its decision. If the applicant or permittee does not file a petition within the required time, the Division's decision on the application is final and is not subject to review. The filing of a petition will stay the Division's decision until resolution of the contested case.

Right of Other Persons Aggrieved to File a Contested Case: Pursuant to NCGS 143-215.108(e1), a person other than an applicant or permittee who is a person aggrieved by the Division's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 within 30 days after the Division provides notice of its decision on a permit application, as provided in NCGS 150B-23(f), or by posting the decision on a publicly available Web site. The filing of a petition under this subsection does not stay the Division's decision except as ordered by the administrative law judge under NCGS 150B-33(b).

General Filing Instructions: A petition for contested case hearing must be in the form of a written petition, conforming to NCGS 150B-23, and filed with the Office of Administrative Hearings, 1711 New Hope Church Road, Raleigh NC, 27609, along with a fee in an amount provided in NCGS 150B-23.2. A petition for contested case hearing form may be obtained upon request from the Office of Administrative Hearings or on its website at https://www.oah.nc.gov/hearings-division/filing/hearing-forms. Additional specific instructions for filing a petition are set forth at 26 NCAC Chapter 03.

Service Instructions: A party filing a contested case is required to serve a copy of the petition, by any means authorized under 26 NCAC 03 .0102, on the process agent for the Department of Environmental Quality:

William F. Lane, General Counsel
North Carolina Department of Environmental Quality
1601 Mail Service Center
Raleigh, North Carolina 27699-1601

If the party filing the petition is a person aggrieved other than the permittee or permit applicant, the party **must also** serve the permittee in accordance with NCGS 150B-23(a).

* * *

Additional information is available at https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case. Please contact the OAH at 984-236-1850 or oah.postmaster@oah.nc.gov with all questions regarding the filing fee and/or the details of the filing process.

Summary of Changes to Permit

The following changes were made to Air Permit No. 07334T30:*

Page No.	Section	Description of Changes
Cover Letter	---	Modified to reflect current permit number, issue and effective dates
All	Headers	Amended permit revision number
1-39	Entire permit, where applicable	Modified to reflect current permit number, issue and effective dates
10	2.1 A.4	Removed "15A NCAC 02Q .0504: OPTION FOR OBTAINING CONSTRUCTION AND OPERATION PERMIT". This requirement was satisfied with the application (.23A) received November 15, 2023
32-39	Section 4	Updated the General Conditions to version 7.0 dated 08/21/2023

* This list is not intended to be a detailed record of every change made to the permit but a summary of those changes.

State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
07334T31	07334T30	DRAFT	November 30, 2024

NOTE: Per General Condition K, a permit application for the renewal of this Title V permit shall be submitted no later than May 30, 2024.

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 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, 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:	**Prysmian Cables and Systems USA, LLC**
Facility ID:	**1800419**
Primary SIC Code:	**3229**
NAICS Code:	**327212**
Facility Site Location:	**2512 Penny Road**
City, County, State, Zip:	**Claremont, Catawba County, North Carolina 28610**
Mailing Address:	**2512 Penny Road**
City, State, Zip:	**Claremont, North Carolina 28610**
Application Number(s):	**1800419.23A**
Complete Application Date(s):	**November 15, 2023**
Division of Air Quality, Regional Office Address:	**Mooresville Regional Office 610 East Center Avenue, Suite 301 Mooresville, NC 28115**

Permit issued this the XXth day of May, 2023.

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Mark J. Cuilla, EIT, CPM, Chief, Air Permitting Section
By Authority of the Environmental Management Commission

Table of Contents

List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
BAE	Baseline Actual Emissions
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CEDRI	Compliance and Emissions Data Reporting Interface
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
CSAPR	Cross-State Air Pollution Rule
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
GHGs	Greenhouse Gases
HAP	Hazardous Air Pollutant
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
OAH	Office of Administrative Hearings
PAE	Projected Actual Emissions
PAL	Plantwide Applicability Limitation
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
tpy	Tons Per Year
VOC	Volatile Organic Compound

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

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

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-1	Chemical vapor deposition units - Cells 5, 6, and 7	3WS	Wet scrubber (13,000 acfm) consisting of a variable throat venturi scrubber (10 to 15 inches water pressure drop) with greater than 90 gallons per minute caustic solution injection (pH 8 or higher as determined from source testing)
ES-4	Gas cabinets – Cells 5, 6, and 7		
ES-14	Collapse furnaces - Cells 5, 6, and 7		
ES-11	Chemical Room		
ES-18	SiCl4 Storage Room		
ES-Etch	Etching Operations	4WS	Wet scrubber (3,254 acfm) consisting of a packed scrubber (2.5 to 5.0 inches water pressure drop) with greater than 264 gallons per minute of alkaline solution injection (pH 10.5)
ES-9 **CAM**	POS – no dopant material used Over-cladding Units – Cell 4 and four Cell 5 units AOS – dopant material used Over-cladding Units – Cell 4 and four Cell 5 units	1DS And 1SCR, I-ES-SCR-FGH1, and I-ES-SCR-AIH1	Fabric filter with hydrated lime injection (30 dry pounds per hour lime injection or higher as determined by testing; 9,800 square feet of filter area or greater) Ammonia injected catalytic NO_x reduction system (ID No. 1SCR space velocity 11,214 hour) with natural gas-fired flue gas re-heater (10 million Btu per hour heat input) and natural gas-fired ammonia injector dilution air heater (one million Btu per hour heat input) installed on 1DS
ES-9a **CAM**	POS – no dopant material used Over-cladding Units - Cells 6, 7, and five Cell 5 units AOS – dopant material used Over-cladding Units – Cell 4 and four Cell 5 units	2DS And 2SCR, I-ES-SCR-FGH2, and I-ES-SCR-AIH2	Fabric filter with hydrated lime injection (30 dry pounds per hour lime injection or higher as determined by testing; 9,800 square feet of filter area or greater) Ammonia injected catalytic NO_x reduction system (ID No. 2SCR space velocity 11,214 hour) with natural gas-fired flue gas re-heater (10 million Btu per hour heat input) and natural gas-fired ammonia injector dilution air heater (one million Btu per hour heat input) installed on 2DS
ES-12	Over-cladding Units – Deposition Machines	1BH, 2BH, 3BH, and 4BH Or 1DS	Fabric filters (2,156 square feet of filter area each) Fabric filter with hydrated lime injection (30 dry pounds per hour lime injection or higher as determined by testing; 9,800 square feet of filter area or greater)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-13	Over-cladding Units – Sintering Operations	3WS Or 5WS	Wet scrubber (13,000 acfm) consisting of a variable throat venturi scrubber (10 to 15 inches water pressure drop) with greater than 90 gallons per minute caustic solution injection (pH 8 or higher as determined from source testing) Wet scrubber (13,000 acfm) consisting of a variable throat venturi scrubber (10 to 15 inches water pressure drop) with greater than 90 gallons per minute caustic solution injection (pH 8 or higher as determined from source testing)
ES-boiler1 **MACT DDDDD**	One natural gas-fired boiler (8.0 million Btu per hour)	N/A	N/A
ES-boiler2 **MACT DDDDD**	One natural gas-fired boiler (8.0 million Btu per hour)	N/A	N/A
ES-boiler3 **MACT DDDDD**	One natural gas-fired boiler (8.76 million Btu per hour)	N/A	N/A
ES-boiler4 **MACT DDDDD**	One natural gas-fired boiler (8.76 million Btu per hour)	N/A	N/A
ES-WB-3 **MACT DDDDD**	One hot water boiler (8.0 million Btu per hour)	N/A	N/A
ES-SB **MACT DDDDD**	One steam boiler (2.1 million Btu per hour)	N/A	N/A

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

A. Chemical Vapor Deposition Units (ID No. ES-1), Gas cabinets (ID No. ES-4), Collapse Furnaces (ID No. ES-14), Chemical Room (ID No. ES-11) and SiCl4 Bulk Storage Room (ID No. ES-18) with associated Wet Scrubber (ID No. 3WS)
Over-cladding Units (ID No. ES-9) with associated fabric filter with hydrated lime injection (ID No. 1DS) in series with ammonia injected selective catalytic NOx reduction system (ID No. 1SCR),
Over-cladding Units (ID No. ES-9a) with associated fabric filter hydrated lime injection (ID No. 2DS) in series with ammonia injected selective catalytic NOx reduction system (ID No. 2SCR),
Over-cladding Units – Deposition Machines (ID No. ES-12) with associated fabric filters (ID No. 1BH, 2BH, 3BH, and 4BH) or fabric filter with hydrated lime injection (ID No. 1DS)
Over-cladding Units - Sintering Operations (ID No. ES-13) with associated Wet Scrubbers (ID Nos. 3WS or 5WS)

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E=4.10\ (P)^{0.67}$, for process rates ≤ 30 tons per hour, OR $E=55.0\ (P)^{0.11} - 40$, for process rates > 30 tons per hour Where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Nitrogen Oxides	**Affected Sources - ES-9 and ES-9a** See Section 2.2 A and B Multiple Emissions Sources	15A NCAC 02Q .0317 (15A NCAC 02D .0530) **PSD Avoidance Condition**
Toxic Air Pollutants	State enforceable only Cl_2, HCl, HF, NH_3 See Section 2.2 C Multiple Emissions Sources	15A NCAC 02D .1100
Particulate Matter	**Affected Sources – ES-9 and ES-9a** Compliance Assurance Monitoring (CAM) See Sections 2.3 A and B Multiple Emissions	15A NCAC 02D .0614

1. ALTERNATIVE OPERATING SCENARIOS [15A NCAC 02Q .0508(j)]
The Permittee, contemporaneously with making a change from one alternative operating scenario to another, shall record in a logbook (written or electronic format) the scenario under which it is operating. [15A NCAC 02Q .0508(p)]

a. The Primary Operating Scenario (POS) is defined as the two Over-cladding Units **(ID Nos. ES-9 and ES-9a)** not using dopant material (i.e., no Hydrogen Fluoride (HF) or Sulfur Dioxide (SO_2) emissions) and not utilizing lime injection in the control devices **(ID Nos. 1DS and 2DS)**.
b. The Alternative Operating Scenario (AOS) is defined as the two Over-cladding Units **(ID Nos. ES-9 and ES-9a)** using dopant material (i.e., HF and SO_2) and lime injection in the control devices **(ID Nos. 1DS and 2DS)**.

2. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources **(ID Nos. ES-1, ES-9, ES-9a, ES-12 and ES-13)** shall not exceed an allowable emission rate as calculated by the following equations:

$E = 4.10 \times P^{0.67}$ (for process rates less than or equal to 30 tons per hour), or
$E = 55.0 \times P^{0.11} - 40$ (for process rates greater than 30 tons per hour)

Where E = allowable emission rate 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.

b. The following testing, monitoring, recordkeeping and reporting requirements apply to the Chemical Vapor Deposition Units **(ID No. ES-1)** and Over-cladding Units – Sintering Operations **(ID No. ES-13)**.

Testing [15A NCAC 02Q .0508(f)]

i. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

ii. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with emission limit(s) above by testing this source **(ID No. ES-13)** for particulate emissions in accordance with a testing protocol approved by the DAQ. Details of the emission testing and reporting requirements can be found in General Conditions JJ. Testing shall be completed and the results submitted within 180 days of beginning operation unless an alternate date is approved by the DAQ. If the results of this test are above the limit given in Section 2.1 A.2 above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

iii. Particulate matter emissions from the Chemical Vapor Deposition units **(ID No. ES-1)** shall be controlled by a wet scrubber system **(ID No. 3WS)**. Particulate matter emissions from the Over-cladding Units – Sintering Operations **(ID No. ES-13)** shall be controlled by a wet scrubber system **(ID Nos. 3WS or 5WS)**. To comply with the provisions of this Permit and ensure that optimum control efficiency is maintained, the Permittee shall establish an inspection and maintenance schedule/checklist based on manufacturer's recommendations. Additionally, a quarterly internal inspection shall be conducted on the wet scrubbers by the Permittee to ensure structural integrity such that optimum control efficiency is achieved. As a minimum, the inspection and maintenance program shall include inspection of spray nozzles, packing material, chemical feed system, and the cleaning/calibration of all associated instrumentation.

iv. The Permittee shall ensure the proper performance of the scrubber by monitoring the following operational parameters each 12-hour shift:

ID No. 3WS

(A) Recycle liquid flow rates (greater than 90 gallons per minute),
(B) Liquid make-up flow rates (greater than 1gallon per minute),
(C) pH of recirculation tank scrubbing solution (pH 8 or higher as determined from source testing) and,
(D) Pressure drop across the scrubber (10 to 15 inches of water).

v. The Permittee shall ensure the proper performance of the scrubber by monitoring the following operational parameters each 12-hour shift.

ID No. 5WS

(A) Recycle liquid flow rates (greater than 90 gallons per minute),
(B) Liquid make-up flow rates (greater than 1 gallon per minute),
(C) pH of recirculation tank scrubbing solution pH of recirculation tank scrubbing solution (pH 8 or higher as determined from source testing), and
(D) Pressure drop across the scrubber (10 to 15 inches of water).

vi. During each performance test conducted as specified in Section 2.1 A.2.b.i above, the Permittee shall confirm or re-establish the operating limits in Section 2.1 A.2.b.iv and 2.1 A.2.b.v above. If the new operating limits re-established during periodic testing are more stringent, the Permittee shall submit a request to revise the value(s) in the permit at the same time the test report required pursuant to General Condition JJ is submitted. The permit revision will be processed pursuant to 15A NCAC 02Q .0514. If, during performance testing, the new operating limits are less stringent, the Permittee may request to revise the value(s) in the permit pursuant to 15A NCAC 02Q .0515.

vii. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .0515 if records of the monitoring results are not maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

viii. 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 each 12-hour shift:
(A) The date and time of each recorded action,
(B) The results of each inspection,
(C) The results of any maintenance performed on the scrubber system,
(D) Any variance from manufacturer's recommendations, if any, and corrections made,
(E) The recycle liquid flow rates,
(F) Liquid make-up flow rates,
(G) pH of the scrubber solutions, and
(H) The pressure drop across the scrubber.

ix. The Permittee shall be deemed in non-compliance with 02D .0515 if records of the monitoring results are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

x. The Permittee shall submit the results of any inspection, maintenance, or monitoring performed for each control device within 30 days of a written request by the DAQ.

xi. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.1 A.2.a.iii through 2.1 A.2.a.vii above 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. The following testing, monitoring, recordkeeping and reporting requirements apply to the **Over-cladding Units (ID Nos. ES-9 and ES-9a) and Over-cladding Units – Deposition Machines (ID No. ES-12)**

Testing [15A NCAC 02Q .0508(f)]

i. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

ii. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with emission limit(s) above by testing these source(s) **(POS – ES-9 and ES-9a)** and **(ID No. ES-12)** for particulate emissions in accordance with a testing protocol approved by the DAQ. Details of the emission testing and reporting requirements can be found in General Conditions JJ. Testing shall be completed and the results submitted within 180 days of beginning operation unless an alternate date is approved by the DAQ. If the results of this test are above the limit given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

iii. The Permittee shall ensure the proper performance of the lime injection/fabric filter system **(ID Nos. 1DS and 2DS)** and fabric filter systems **(ID Nos. 1BH, 2BH, 3BH, and 4BH)** by monitoring and recording the following operating parameters at least once per 12-hour shift:
(A) AOS - Lime injection rate in the lime injection/fabric filters **(ID Nos. 1DS and 2DS)** (minimum 30 dry pounds per hour) and,
(B) POS/AOS - Pressure drop across the lime injection/fabric filters **(ID Nos. 1DS and 2DS)** (0.1 to 9 inches of water) and,
(C) Pressure drop across the fabric filters **(ID Nos. 1BH, 2BH, 3BH, and 4BH)** (0.1 to 9 inches of water).
(D) The above records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in non-compliance with Section 2.1 A.2.c.iii if records of the operating parameters are not maintained.

iv. During each performance test conducted as specified in Section 2.1 A.2.c.i above, the Permittee shall confirm or reestablish the operating limits in Section 2.1 A.2.c.iii above. If the new operating limits re-established during periodic testing are more stringent, the Permittee shall submit a request to revise the value(s) in the permit at the same time the test report required pursuant to General Condition JJ is submitted. The permit revision will be

processed pursuant to 15A NCAC 02Q .0514. If, during performance testing, the new operating limits are less stringent, the Permittee may request to revise the value(s) in the permit pursuant to 15A NCAC 02Q .0515.

v. The Permittee shall perform inspections and maintenance of the fabric filters **(ID Nos. 1DS, 2DS, 1BH, 2BH, 3BH, and 4BH)** 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:
   (A) A monthly visual inspection of the system ductwork and material collection unit for leaks; and
   (B) An annual (for each 12-month period following the initial inspection) internal inspection of the fabric filters structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and fabric filter are not inspected and maintained.

vi. 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:
   (A) The date and time of each recorded action;
   (B) The results of each inspection;
   (C) The results of any maintenance performed on the fabric filters; and
   (D) Any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

vii. The Permittee shall submit the results of any inspection, maintenance, and monitoring performed on the fabric filters and hydrated lime injection systems within 30 days of a written request by the DAQ.

viii. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 2.1 A.2.c.iii through 2.1 A.2.c.v above 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 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from Chemical Vapor Deposition Units **(ID No. ES-1)**, Over-cladding Units **(ID Nos. ES-9 and ES-9a)**, and Over-cladding Units – Deposition Machines **(ID No. ES-12) and Over-cladding Units - Sintering Operations (ID No. ES-13)** 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 02Q .0508(f)]

b. i. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

ii. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit(s) above by testing these source(s) **(POS – ID Nos. ES-9 and ES-9a)** and **(ID Nos. ES-12 and ES-13)** for visible emissions in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and requirements can be found in General Condition JJ. Testing shall be completed and the results submitted within 180 days of beginning operation unless an alternate date is approved by the DAQ. If the results of this test are above the limit given in Section 2.1 A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. The Permittee shall observe the emissions points to reestablish normal within 30 days of the operation of each additional Chemical Vapor Deposition lathe (ID No. ES-1).

d. To ensure compliance, once a week the Permittee shall observe the emission points of these sources for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. The Permittee shall establish "normal" for these source(s) **(POS – ID Nos. ES-9 and ES-9a) and (ID Nos. ES-12 and ES-13)** in the first 30 days following the beginning of operations. 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 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 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.3.a above.

The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required weekly observations are not conducted as required; or if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

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

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.1 A.3.d through 2.1 A.3.f above postmarked on or before January 30 of each calendar year 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 deviation from the requirements of this permit must be clearly identified.

B. Over-cladding Units (ID No. ES-9) with associated fabric filter with hydrated lime injection (ID No. 1DS) in series with ammonia injected selective catalytic NOx reduction system (ID No. 1SCR) Over-cladding Units (ID No. ES-9a) with associated fabric filter with hydrated lime injection (ID No. 2DS) in series with ammonia injected selective catalytic NOx reduction system (ID No. 2SCR)

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

Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Primary Operating Scenario and Alternative Operating Scenario for emission sources **(ID Nos. ES-9 and ES-9a)** are defined in Section 2.1 A.1.a and 2.1 A.1.b above.
b. AOS - Emissions of sulfur dioxide from these source groups 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 02Q .0508(f)]
c. AOS - If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring, Recordkeeping, and Reporting Requirements
d. AOS - No monitoring, recordkeeping or reporting is required for these sources.

C. Etching Operations (ID No. ES-Etch) venting to a Wet Scrubber (ID No. 4WS)

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

Pollutant	Limits/Standards	Applicable Regulation
Toxic Air Pollutants	**State-enforceable only** Cl_2, HCl, HF, NH_3 See Section 2.2 C Multiple Emissions Sources	15A NCAC 02D .1100

D. Four natural gas-fired boilers (ID Nos. ES-boiler1 through ES-boiler4)

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	0.40 lb per million Btu	15A NCAC 02D .0503
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Hazardous Air Pollutants	Work Practice Standards	15A NCAC 02D .1111 *40 CFR Part 63, Subpart DDDDD*

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas discharged from these sources **(ID Nos. ES-boiler1 through ES-boiler4)** into the atmosphere shall not exceed 0.40 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Conditions JJ. If the results of this test exceed the limit given in Section 2.1 D.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring, Recordkeeping, and Reporting Requirements

c. No monitoring, recordkeeping, or reporting is required for particulate emissions from the firing of natural gas in these sources **(ID Nos. ES-boiler1 through ES-boiler4)**.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these boilers **(ID Nos. ES-boiler1 through ES-boiler4)** 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 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring, Recordkeeping, and Reporting Requirements [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas in these sources **(ID Nos. ES-boiler1 through ES-boiler4)**.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these boilers **(ID Nos. ES-boiler1 through ES-boiler4)** 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 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limit given in Section 2.1 D.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring, Recordkeeping, and Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of natural gas in these sources **(ID Nos. ES-boiler1 through ES-boiler4)**.

4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, 40 CFR 63.7490(d), 40 CFR 63.7499(l)]

a. For these sources **(ID Nos. ES-boiler1 through ES-boiler4)** (*existing sources(s) designed to burn gas 1 fuels with a heat input capacity greater than or equal to 5 million Btu per hour and less than 10 million Btu per hour*), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."

Definitions and Nomenclature [40 CFR 63.7575]

b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.7565]

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

Compliance Date [40 CFR 63.7495(c)]

d. The Permittee shall complete the initial tune up and the one-time energy assessment no later than March 18, 2022. (*i.e, March 18, 2019 plus three years*)

Notifications [40 CFR 63.7545(e)(1), (8), 40 CFR 63.7530(e)]

e. The Permittee shall submit a Notification of Compliance Status to the DAQ. The notification must be signed by a responsible official and submitted by May 17, 2022. The notification shall contain the following:
   i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned.
   ii. the following certification(s) of compliance, as applicable:
      (A) "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR 63 Subpart DDDDD at the site according to the procedures in.40 CFR 63.7540(a)(10)(i) through (vi)" [i.e., Section 2.1 D.4.f.i and h.ii]; and
      (B) "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)" [i.e., Section 2.1 D.4.g] and is an accurate depiction of the facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended.

Work Practice Standards [15A NCAC 02Q .0508(f)]

f. i. The Permittee shall conduct a tune-up every two years while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up, as specified below.
      (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may perform the burn inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown.
      (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
      (C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown);
      (D) Optimize total emissions of carbon monoxide. This optimization should be consistent with the

manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject; and

(E) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

[40 CFR 63.7500(a), (e), 40 CFR 63.7540(a)(10), (a)(11)]

ii. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up. [40CFR 63.7515(d)]

iii. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13), 40 CFR 63.7515(g)]

iv. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

v. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 D.4.f are not met.

Energy Assessment Requirements [15A NCAC 02Q .0508(f)]

g. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR 63 Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) in Table 3 appropriate for the on-site technical hours listed in 40 CFR 63.7575. [40 CFR 63.7500(a)(1), Table 3] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.7555]

h. The Permittee shall:

i. keep a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]

ii. maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:

(A) the concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the source;

(B) a description of any corrective actions taken as a part of the tune-up; and

(C) the type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit; and

[40 CFR 63.7540(a)(10)(vi)]

iii. the associated records for Section 2.1 D.4.f and 2.1 D.4.g.

iv. maintain records in a form suitable and readily available for expeditious review;

v. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and

vi. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.

[40 CFR 63.7560, 40 CFR 63.10(b)(1)]

vii. be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in Section 2.1 D.4.h.

Reporting Requirements [15A NCAC 02Q .0508(f)]

i. i. The Permittee shall submit compliance reports to the DAQ on a 2-year basis. The first report shall cover the period beginning on the March 18, 2022 and ending on December 31, 2023. Subsequent 2-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 30 for the preceding reporting period. [40 CFR 63.7550(a), (b)]

ii. The compliance report must also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). You must use the appropriate electronic report in CEDRI for this subpart. Instead of

using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]

iii. The compliance report must contain the following information:
(A) company name and address;
(B) process unit information, emissions limitations, and operating parameter limitations;
(C) date of report and beginning and ending dates of the reporting period;
(D) include the date of the most recent tune-up for each unit required according to Section 2.1 D.4.f. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown; and
(E) statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
[40 CFR 63.7550(a) and (c), Table 9]

iv. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in Section 2.1 D.4.i are not met.

E. One natural gas-fired hot water boiler (ID No. ES-WB-3)

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	0.40 lb per million Btu	15A NCAC 02D .0503
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Hazardous Air Pollutants	Work Practice Standards	15A NCAC 02D .1111 *40 CFR Part 63, Subpart DDDDD*

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas discharged from this source **(ID No. ES-WB-3)** into the atmosphere shall not exceed 0.40 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Conditions JJ. If the results of this test exceed the limit given in Section 2.1 E.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring, Recordkeeping, and Reporting Requirements

c. No monitoring, recordkeeping, or reporting is required for particulate emissions from the firing of natural gas in this source **(ID No. ES-WB-3)**.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from boiler **(ID No. ES-WB-3)** 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 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring, Recordkeeping, and Reporting Requirements [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas in this source **(ID No. ES-WB-3)**.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from this boiler **(ID No. ES-WB-3)** 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 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limit given in Section 2.1 E.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring, Recordkeeping, and Reporting [15A NCAC 02Q .0508(f)]

No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of natural gas in this source **(ID Nos. ES-WB-3)**.

4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, 40 CFR 63.7490(b), 40 CFR 63.7499(l)]

a. For this source **(ID Nos. ES-WB-3)** (*i.e., new source, units designed to burn gas 1 fuels with a heat input capacity equal to or greater than 5MMBtu/hr and less than 10 MMBtu/hr, with no autotrim*), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."

Definitions and Nomenclature [40 CFR 63.7575]

b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.7565]

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

Compliance Date [40 CFR 63.7495(a)]

d. The Permittee shall comply with the applicable requirements upon startup of this source.

Notifications [40 CFR 63.7545]

e. i. As specified in 40 CFR 63.9(b)(4) and (5), the Permittee shall submit an Initial Notification to the DAQ not later than 15 days after the actual date of startup of the affected source. [40 CFR 63.7545(c)]

ii. The Permittee shall submit a Notification of Compliance Status to the DAQ within 60 days of startup and signed by a responsible official. The notification shall contain the following:
(A) a description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned. [40 CFR 63.7545(e)(1)]

iii. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 E.4.e are not met.

Work Practice Standards [15A NCAC 02Q .0508(f)]

f. i. The Permittee shall conduct a tune-up every 2 years while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up, as specified below:
(A) as applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown.
(B) inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
(C) inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown).
(D) optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject.
(E) measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

[40 CFR 63.7500(a), 40 CFR 63.7540(a)(10), (a)(11)]

ii. Each 2-year tune-up shall be conducted no more than 25 months after the previous tune-up. The initial tune-up shall be conducted no later than 25 months after the initial startup of the source. [40 CFR 63.7515(d)]

iii. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.[40 CFR 63.7540(a)(13), 40 CFR 63.7515(g)]

iv. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to,

monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

v. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 E.4.f are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f)]

g. The Permittee shall:

i. keep a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]

ii. maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (A) through (C) below:

(A) the concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

(B) a description of any corrective actions taken as a part of the tune-up; and

(C) the type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 CFR 63.7540(a)(10)(vi)]

iii. keep the associated records for Section 2.1 E.4.f.

iv. maintain records in a form suitable and readily available for expeditious review;

v. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and

vi. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years. [40 CFR 63.7560, 40 CFR 63.10(b)(1)]

vii. be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained pursuant to Section 2.1 E.4.g.

Reporting Requirements [15A NCAC 02Q .0508(f)]

h. i. The Permittee shall submit compliance reports to the DAQ on a 2-year basis. The first report shall cover the period beginning on the compliance date specified in Section 2.1 E.4.d (i.e., start-up) and ending on the earliest December 31st less than two years from the compliance date. Subsequent 2-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 30. [40 CFR 63.7550(a), (b)]

ii. The compliance report must also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]

iii. The compliance report must contain the following information:

(A) Company name and address;

(B) Process unit information, emissions limitations, and operating parameter limitations;

(C) Date of report and beginning and ending dates of the reporting period;

(D) Include the date of the most recent tune-up for each unit required according to Section 2.1 E.4.f. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.

(E) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

[40 CFR 63.7550(a) and (c), Table 9]

iv. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in Section 2.1 E.4.h are not met.

F. One natural gas-fired steam boiler (ID No. ES-SB)

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	0.40 lb per million Btu	15A NCAC 02D .0503
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Hazardous Air Pollutants	Work Practice Standards	15A NCAC 02D .1111 *40 CFR Part 63, Subpart DDDDD*

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas discharged from this source **(ID No. ES-SB)** into the atmosphere shall not exceed 0.40 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Conditions JJ. If the results of this test exceed the limit given in Section 2.1 F.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring, Recordkeeping, and Reporting Requirements

c. No monitoring, recordkeeping, or reporting is required for particulate emissions from the firing of natural gas in this source **(ID No. ES-SB)**.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from boiler **(ID No. ES-SB)** 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 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring, Recordkeeping, and Reporting Requirements [15A NCAC 02Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas in this source **(ID No. ES-SB)**.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from this boiler **(ID No. ES-SB)** 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 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test exceed the limit given in Section 2.1 F.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring, Recordkeeping, and Reporting [15A NCAC 02Q .0508(f)]

No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of natural gas in this source **(ID Nos. ES-SB)**.

4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, 40 CFR 63.7490(b), 40 CFR 63.7499(l)]

a. For **this (ID Nos. ES-SB)** (*i.e., new source, units designed to burn gas 1 fuels with a heat input capacity less than 5MMBtu/hr, with no autotrim)*, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."

Definitions and Nomenclature [40 CFR 63.7575]

b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.7565]

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

Compliance Date [40 CFR 63.7495(a)]

d. The Permittee shall comply with the applicable requirements upon startup of this source.

Notifications [40 CFR 63.7545]

e. i. As specified in 40 CFR 63.9(b)(4) and (5), the Permittee shall submit an Initial Notification to the DAQ not later than 15 days after the actual date of startup of the affected source. [40 CFR 63.7545(c)]
   ii. The Permittee shall submit an initial Notification of Compliance Status to the DAQ within 60 days of startup and signed by a responsible official. The notification shall contain the following:
      (A) a description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned. [40 CFR 63.7545(e)(1)]
   iii. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 F.4.e are not met.

Work Practice Standards [15A NCAC 02Q .0508(f)]

f. i. The Permittee shall conduct a tune-up every 5 years while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up, as specified below:
      (A) as applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled or unscheduled shutdown but the burner must be inspected at least once every 72 months.
      (B) inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
      (C) inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown).
      (D) optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject.
      (E) measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

      [40 CFR 63.7500(a), 40 CFR 63.7540(a)(10), (a)(12)]
   ii. Each 5-year tune-up shall be conducted no more than 61 months after the previous tune-up. The initial tune-up shall be conducted no later than 61 months after the initial startup of the source. [40 CFR 63.7515(d)]
   iii. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13), 40 CFR 63.7515(g)]
   iv. At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to,

monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

v. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1 F.4.f are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f)]

g. The Permittee shall:

i. keep a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]

ii. maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (A) through (C) below:

(A) the concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

(B) a description of any corrective actions taken as a part of the tune-up; and

(C) the type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 CFR 63.7540(a)(10)(vi)]

iii. keep the associated records for Section 2.1 F.4.f.

iv. maintain records in a form suitable and readily available for expeditious review;

v. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and

vi. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years. [40 CFR 63.7560, 40 CFR 63.10(b)(1)]

vii. be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained pursuant to Section 2.1 F.4.g.

Reporting Requirements [15A NCAC 02Q .0508(f)]

h. i. The Permittee shall submit compliance reports to the DAQ on a 5-year basis. The first report shall cover the period beginning on the compliance date specified in Section 2.1 F.4.d (i.e., start-up) and ending on the earliest December 31st within five years from the compliance date. Subsequent 5-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 30. [40 CFR 63.7550(a), (b)]

ii. The compliance report must also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/).) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]

iii. The compliance report must contain the following information:

(A) Company name and address;

(B) Process unit information, emissions limitations, and operating parameter limitations;

(C) Date of report and beginning and ending dates of the reporting period;

(D) Include the date of the most recent tune-up for each unit required according to Section 2.1 F.4.f. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.

(E) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

[40 CFR 63.7550(a) and (c), Table 9]

iv. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in Section 2.1 F.4.h are not met.

2.2 Multiple Emission Source(s) Specific Limitations and Conditions

A. Over-cladding Units (ID No. ES-9, excluding cell 5 units)
Two 8.76 MMBtu/hr natural gas-fired boilers (ID Nos. ES-boiler 3 and ES-boiler 4)

Insignificant Sources
Two natural gas-fired hot water boilers (ID Nos. I-WB-1 and I-WB-2);
One waste water sludge dryer (ID No. I-SD-1);
One diesel-fired fire pump (ID No. I-FP);
One parts washer (ID No. I-PW); and
Multiple roof top air handling units (ID No. I-AHU)

The following provides a summary of limits and/or standards for the emission sources described above.

Pollutant	Limits/Standards	Applicable Regulation
Nitrogen Oxides	Total emissions of nitrogen oxides shall be less than 250 tons per consecutive 12-month period.	15A NCAC 02Q .0317 **PSD Avoidance**

1. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS
for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. POS & AOS - Total emissions of nitrogen oxides from equipment in Cell 4 and two boilers **(ID Nos. I-WB-1 and I-WB-2)** shall be less than 250 tons per consecutive 12-month period. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if NOx emissions exceed this limit.

b. To ensure compliance with the above emissions limits, nitrogen oxides from Over-cladding Units contained in **Cell 4 (ID No. ES-9, excluding cell 5 units)** shall be controlled by a fabric filter with hydrated lime injection **(ID No. 1DS)** in series with a selective catalytic NOx reduction system **(ID No. 1SCR).**
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if NOx emissions from these sources are not controlled as provided above.

Testing [15A NCAC 02Q .0508(f)]

c. Over-cladding Units
   i. POS & AOS - Uncontrolled NOx emissions from individual torch Over-cladding Units **Cell 4 only (ID No. ES-9)** shall be tested to determine emission rates in pounds of NOx per unit-hour to be used in demonstrating compliance with the PSD avoidance condition.
   ii. POS & AOS - Uncontrolled over-cladding emission rates must be revalidated annually by May 30 of each calendar year.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if uncontrolled NOx emissions from these sources are not tested and validated as provided above.

d Dry Scrubber System (Lime Injection and Fabric Filter)
   i. AOS - NOx emissions from Over-cladding Units **(Cell 4; ID No. ES-9)** shall be tested prior to the dry scrubber control **(ID No. 1DS)** to determine the dry scrubber uncontrolled NOx rate used in demonstrating compliance with the PSD avoidance condition.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if NOx emissions from these sources are not tested and validated as provided above.

e. SCR System
   i. POS & AOS - NOx emissions from Over-cladding Units **(Cell 4; ID No. ES-9)** shall be tested prior to and after the SCR control **(ID No. 1SCR)** to validate the data generated by the continuous NO and NO_2 emission analyzers. The control efficiency calculated from the test and the analyzers at the time of the test shall be within 5% to validate the analyzers.
   ii. POS & AOS - Initial validation test results for SCR control efficiency must be submitted to the Regional Supervisor, DAQ, within 120 days (or alternate date approved by DAQ) of SCR **(ID No. 1SCR)** startup. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if NOx emissions from these sources are not tested as provided above.

Testing [15A NCAC 02Q .0508(f)]

f. POS & AOS – If emissions testing is required, the Permittee shall perform such testing in accordance with 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 02D .0530.

Monitoring and Recordkeeping [15A NCAC 02Q .0508(f)]

g. POS & AOS – Continuous NO and NO2 emission analyzers shall be installed upstream and downstream of the SCR **(ID No. 1SCR)** to monitor emissions from the Over-cladding Units **(ID No. ES-9)** venting to and from the selective catalytic NOx reduction system **(ID No. 1SCR).**
   i. Analyzers shall be calibrated daily.
   ii. Measurements of NO and NO2 shall be recorded after calibration at the inlet and outlet monitors.
   iii. NO and NO2 concentrations at the inlet shall be summed and NO and NO_2 concentrations at the outlet shall be summed for the determination of a daily control efficiency.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if NOx emissions are not monitored as required above.

h. POS & AOS – Calculation of monthly NOx emissions shall be made at the end of each month. Facility-wide NOx emissions shall be determined by adding emissions from the boilers **(ID No. ES-boiler3 and ES-boiler4)** and insignificant sources **(ID Nos. I-WB-1, I-WB-2, I-SD-1, I-FP, I-PW, and I-AHU)**; using AP-42 emission factors, and the Over-cladding Units in Cell 4 **(ID No. ES 9)** including dry scrubber NOx emission rate, and the SCR control efficiency for periods when the SCR system was used. Calculation of NOx emissions using test data from **(ID No. ES 9)** shall be performed as follows:
   i. NOx emissions from boilers and insignificant sources shall be determined using current EPA AP-42 emissions factors and actual heat input rates.
   ii. NOx emissions from Over-cladding Units in Cells 4 **(ID No. ES-9)** shall be determined by multiplying operating hours for each over-cladding unit group type by the pounds of NOx per unit-hour determined from source testing. The number of operating hours for small and large torch groups shall be a separate record. Emissions of NOx shall be calculated using the uncontrolled emission rate demonstrated in the most recent stack test, as provided in Section 2.2 A.1.c.
   iii. Inclusion of SCR Emissions Reductions – Calculation of NOx emissions may include SCR emissions reductions during SCR operating periods. The daily control efficiency determined in accordance with 2.2 A.1.e shall be used to reduce the amount of uncontrolled emissions calculated per 2.2 A.1.c.ii on a daily basis.
      (A) If a daily measurement is not available during a period that the SCR is operational, the last available measurement shall be used in place of the missing data provided that the missing data does not exceed more than 25% of the data for any one-month period.
      (B) If a daily measurement is not available during a period that the SCR is operational, and the missing data exceeds more than 25% of the data for any one-month period, no control efficiency shall be assumed for that day.
      (C) Inspection and Maintenance Requirements - To comply with the provisions of this permit and ensure that emissions do not exceed the regulatory limits, the Permittee shall establish an inspection and maintenance (I&M) schedule/checklist for the SCR based on manufacturer's recommendations. As a minimum, the I&M program will include an annual inspection of the burners, catalyst, the catalyst housing, and associated ducting to ensure structural integrity.

i. Operating hours for the SCR, Over-cladding Units, SCR control efficiency calculations, NOx emission calculations, inspection/calibration/maintenance of the NOx analyzers, inspection and maintenance of the SCR, and the total monthly amount of NOx emissions must be recorded in an emissions log. The Permittee shall make the log available to officials of the DAQ upon request. The emissions log must be kept on file for a minimum of five years. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if calculation or records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

j. POS & AOS – The Permittee shall submit a semiannual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities given in Sections 2.2 A.1.g and 2.2 A.1.h above 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. Monthly NOx emissions for each of the previous 17 calendar months; and,
   ii. 12-month rolling NOx emissions for each consecutive 12-month period ending in the previous six months.

B. Cells 5, 6, and 7 Equipment consisting of:
Over-cladding Units (ID No. ES-9a)
Two 8.0 million Btu per hour heat input natural gas-fired boilers (ID Nos. ES-boiler1 and ES-boiler2);
Two 10.0 million Btu per hour SCR flue gas re-heaters (ID Nos. IES-SCR-FGH1 and IES-SCR-FGH2); and
Two 1.0 million Btu per hour SCR ammonia injector dilution air heaters (ID Nos. IES-SCR-AIH1 and IES-SCR-AIH2).

The following provides a summary of limits and/or standards for the emission sources described above.

Pollutant	Limits/Standards	Applicable Regulation
Nitrogen Oxides	Total emissions of nitrogen oxides shall be less than 250 tons per consecutive 12-month period.	15A NCAC 02Q .0317 **PSD Avoidance**

1. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. POS & AOS - The nitrogen oxides emissions increase due to equipment operation shall be less than 250 tons per consecutive 12-month period. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if NOx emissions exceed this limit.

Control Requirements

b. AOS - To ensure compliance with the above emissions limits, nitrogen oxides from Over-cladding Units- Cells 5, 6, and 7 **(ID No. ES-9a)** shall be controlled by:
   i. A fabric filter with hydrated lime injection **(ID No. 2DS), or**
   ii. A fabric filter with hydrated lime injection **(ID No. 2DS)** in series with a selective catalytic NOx reduction system **(ID No. 2SCR).**

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if NOx emissions are not controlled as provided above.

Testing Requirements [15A NCAC 02Q .0508(f)]

c. New Technology Over-cladding Units
   i. POS & AOS - Uncontrolled NOx emissions from individual new technology torch Over-cladding Units - Cells 5, 6, and 7 **(ID No. ES-9a)** shall be tested to determine emission rates in pounds of NOx per unit-hour to be used in demonstrating compliance with the PSD avoidance condition.
   ii. POS & AOS - The test results must be submitted to the Regional Supervisor within 120 days (or alternate date approved by DAQ) from the commencement of operation of the Over-cladding Units – Cells 5, 6, and 7 **(ID No. 9a).**
   iii. POS & AOS - Uncontrolled over-cladding emission rates must be revalidated annually.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if NOx emissions from these sources are not tested and validated as provided above.

d. Dry Scrubber System (Lime Injection and Fabric Filter)
   i. AOS - NOx emissions from Over-cladding Units - Cells 5, 6, and 7 **(ID No. ES-9a)** prior to the dry scrubber control **(ID Nos. 2DS)** shall be tested to determine dry scrubber control emission rate to be used in demonstrating compliance with the PSD avoidance condition.
   ii. AOS - The test results must be submitted to the Regional Supervisor within 120 days (or alternate date approved by DAQ) from the commencement of operation of the Over-cladding Unit **(ID No. ES-9a).**

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if NOx emissions from these sources are not tested and validated as provided above.

e. SCR System
   i. POS & AOS - NOx emissions from Over-cladding Units **(Cells 5, 6, 7; ID No. ES-9a)** shall be tested prior to and after the SCR controls **(ID Nos. 2SCR)** to validate the data generated by the continuous NO and NO2 emission analyzers. The control efficiency calculated from the test and the analyzers at the time of the test shall be within 5% to validate the analyzers.

ii. POS & AOS - Initial validation test results for SCR control efficiency must be submitted to the Regional Supervisor, within 120 days (or alternate date approved by DAQ) of SCR **(ID Nos. 2SCR)** startup.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if NOx emissions from these sources are not tested as provided above.

f. **General**

POS & AOS - Emissions testing is required. The testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.2 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring and Recordkeeping Requirements

g. POS & AOS - Continuous NO and NO2 emission analyzers shall be installed upstream and downstream of each SCR **(ID Nos. 2SCR)** to monitor emissions from the Over-cladding Units **(ID No. ES-9a)** venting to and from each selective catalytic NOx reduction system **(ID Nos. 2SCR).**

i. Analyzers shall be calibrated daily.
ii. Measurements of NO and NO2 shall be recorded after calibration at the inlet and outlet monitors.
iii. NO and NO2 concentrations at the inlet shall be summed and NO and NO2 concentrations at the outlet shall be summed for the determination of a daily control efficiency.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if NOx emissions are not monitored as provided above.

h. POS & AOS - Calculation of monthly NOx emissions shall be made at the end of each month. Monthly NOx emissions shall be determined by adding calculated emissions from the Over-cladding Units **(ID No. ES-9a)** in Cells 5, 6, and 7 including dry scrubber NOx emission rate, and the SCR control efficiency for periods when the selective catalytic NOx reduction system was used, two boilers at 8.0 million Btu per hour heat input **(ES-boiler1 and ES-boiler2)**, two 10 million Btu per hour heat input each SCR flue gas re-heaters **(I-SCR-FGH1 and I-SCR-FGH2)**, and two one million Btu per hour each SCR ammonia dilution air heaters **(ID No. I-SCR-AIH1 and I-SCR-AIH2)** as follows:

i. NOx emissions from boilers and SCR heaters shall be determined using current EPA AP-42 emissions factors and actual heat input rates.
ii. Uncontrolled NOx emission from Over-cladding Units – Cells 5, 6, and 7 **(ID No. ES 9a)** shall be determined by multiplying operating hours for Over-cladding Units by the uncontrolled pounds of NOx per unit-hour determined from source testing.
iii. Inclusion of SCR Emissions Reductions
   (A) Calculation of NOx emissions may include SCR emissions reductions during SCR operating periods. The daily control efficiency determined in accordance with 2.2 B.1.h shall be used to reduce the amount of uncontrolled emissions calculated per 2.2 B.1.h.ii. on a daily basis.
      (1) If a daily measurement is not available during a period that the SCR is operational, the last available measurement shall be used in place of the missing data provided that the missing data does not exceed more than 25% of the data for any one-month period.
      (2) If a daily measurement is not available during a period that the SCR is operational, and the missing data exceeds more than 25% of the data for any one-month period, no control efficiency shall be assumed for that day.
iv. Inspection and Maintenance Requirements - To comply with the provisions of this permit and ensure that emissions do not exceed the regulatory limits, the Permittee shall establish an inspection and maintenance (I&M) schedule/checklist for the SCRs based on manufacturer's recommendations. As a minimum, the I&M program will include an annual inspection of the burners, catalyst, the catalyst housing, and associated ducting to ensure structural integrity.

Operating hours for the SCR, Over-cladding Units, SCR control efficiency calculations, NOx emission calculations, inspection/calibration/maintenance of the NOx analyzers, inspection and maintenance of the SCRs, and the total monthly amount of NOx emissions must be recorded in an emissions log. The Permittee shall make the log available to officials of the DAQ upon request. The emissions log must be kept on file for a minimum of five years. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .0530 if records are not maintained.

Reporting Requirements

i. POS & AOS - Submit a semiannual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities given in Sections 2.2 B.1.g and 2.2 B.1.h above 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. Monthly NOx emissions for each of the previous 17 calendar months; and,
ii. 12-month rolling NOx emissions for each consecutive 12-month period ending in the previous six months.

C. Chemical Vapor Deposition Units (ID No. ES-1) consisting of:
Cells 5, 6, and 7 with Gas Cabinets (ID No. ES-4), Collapse Furnaces (ID No. ES-14), Chemical Room (ID No. ES-11, and SiCl4 Storage Room (ID No. ES-11 venting to Wet Scrubber (ID No. 3WS); and,
Over-cladding Units (ID No. ES-9) consisting of:
Cell 4, and four Cell 5 units venting to fabric filter with hydrated lime injection (ID No. 1DS) venting to an ammonia injected selective catalytic NOx reduction system (ID No. 1SCR); and,
Over-cladding Units (ID No. ES-9a) consisting of:
Cells 6, 7, and five Cell 5 units venting to fabric filter system (ID No. 2DS) venting to an ammonia injected selective catalytic NOx reduction system (ID No. 2SCR); and,
Etching Operations (ID No. ES-Etch) equipped with a Wet Scrubber System (ID No. 4WS); and,
Over-cladding Units - Sintering Operations (ID No. ES-13) equipped with:
Wet Scrubber (ID Nos. 3WS or 5WS)

The following provides a summary of limits and/or standards for the emission sources described above.

Pollutant	Limits/Standards	Applicable Regulation
Toxic Air Pollutants	**State-enforceable Only** Emissions of HCl, Cl_2, HF, and NH_3 must be emitted at or below the emission rates tabulated in the next table in order to comply with the following acceptable ambient levels. HCl: 0.7 milligrams/cubic meter - 1hr Cl_2: 0.9 milligrams/ cubic meter - 1 hr and 0.0375 milligrams /cubic meter - 24 hr HF: 0.25 milligrams/cubic meter - 1hr 0.03 milligrams/cubic meter - 24 hr NH_3: 2.7 milligrams/cubic meter - 1hr	15A NCAC 02D .1100

STATE-ONLY REQUIREMENT

1. 15A NCAC 02D .1100 "CONTROL OF TOXIC AIR POLLUTANTS"

Emission Limits and Control Requirements

Emission Point	Affected Sources	Pollutant	Emission Limit
EP-11	Wet Scrubber #1 **(ID No. 3WS)** Envirocare #1 Includes emission from: Cells 5, 6, and 7 CVD[1] **(ID Nos. ES-1)** Cells 5, 6, and 7 GC[2] **(ID No. ES-4)**, Cells 5, 6 and 7 CF[3] **(ID No. ES-14)** Chemical Room **(ID No. ES-11)** $SiCl_4$ Storage Room **(ID No. ES-18)**	Hydrogen Chloride Chlorine	34.2 lb/hr 43.97 lb/hr 212.71 lb/day
EP-13	Wet Scrubber **(ID Nos. 3WS or 5WS)**		

Emission Point	Affected Sources	Pollutant	Emission Limit
EP-21	Combined stack for SCRs **(ID Nos. 1SCR and 2SCR)**	Ammonia	1.584 lb/hr per SCR
EP-11 EP-18 EP-21 EP-19 EP-21 EP-4WS EP-13	Wet Scrubber #1 **(ID No. 3WS)** Envirocare #1 Includes emission from: Cells 5, 6, and 7 CVD[1] **(ID Nos. ES-1)** Cells 5, 6, and 7 GC[2] **(ID No. ES-4)**, Cells 5, 6 and 7 CF[3] **(ID No. ES-14)** Chemical Room **(ID No. ES-11)** $SiCl_4$ Storage Room **(ID No. ES-18)** Dry scrubber **(ID No. 1DS)** or SCR **(ID No. 1SCR)** Cells 4, and four Cell 5 OC[4] units **(ID No. ES-9)** Dry scrubber #1 **(ID No. 2DS)** or SCR **(ID No. 2SCR)** Cells 6, 7, and five Cell 5 OC[4] units **(ID No. ES-9a)** Wet Scrubber **(ID No. 4WS)** Includes emission from: Etching operations **(ID No. ES-Etch)** Wet Scrubber **(ID Nos. 3WS or 5WS)**	Hydrogen Fluoride	2.85 lb/hr 37.95 lb/day

1. Chemical Vapor Depositions
2. Gas Cabinets
3. Collapse Furnaces
4. Over-cladding Units

a. The Permittee has submitted a toxic air pollutant dispersion modeling analysis (October 28, 2021) for the facility's toxic air pollutant emissions as listed in the above table. The modeling was reviewed and approved by the AQAB on (January 4, 2022). Placement of the emission sources, configuration of the emission points, and operation of the sources shall be in accordance with the submitted dispersion modeling analysis and should reflect any changes from the original analysis submittal as outlined in the AQAB review memo.

b. Emissions from the CVD processes will be controlled by the scrubber **(ID No. 3WS).**

c. AOS - Emissions from the Over-cladding Units **(ID Nos. ES-9 and ES-9a)** shall be controlled by two fabric filters each with hydrated lime injection **(ID Nos. 1DS and 2DS)**.

d. Emissions from the Over-cladding Units - Sintering Operations **(ID No. ES-13)** shall be controlled by either wet scrubber **(ID Nos. 3WS or 5WS)**.

e. **General**
If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

Monitoring, Recordkeeping and Reporting [15A NCAC 02Q .0508(f)]

f. Monitoring, recordkeeping, and reporting pertain to inspection and maintenance of control devices and parametric monitoring to ensure control efficiencies. These are addressed above in 2.1 A.1.b.iii through 2.1 A.1.b.xi. and 2.1 A.1.c.iii through 2.1 A.1.c.viii.

g. Continuous emission analyzers for ammonia emissions from the selective catalytic NOx reduction systems **(ID Nos. 1SCR and 2SCR)** shall be inspected and maintained in accordance with the manufacturer's recommendations. As a minimum, the instruments shall be calibrated daily. Records of calibrations, inspections, and maintenance shall be kept in a logbook and maintained on site. Records shall be made available to the DAQ personnel upon request. All required records on file for a minimum of two years.

2.3 Compliance Assurance Monitoring (CAM; 40 CFR Part 64)

A. One Fabric Filter with Hydrated Lime Injection (ID No. 1DS) POS and AOS

1. 15A NCAC 02D .0614: Compliance Assurance Monitoring

a. Primary Operating Scenario and Alternative Operating Scenario for emission sources **(ID Nos. ES-9)** is defined in Section 2.1 A.1.a and b above.

Applicable Regulations, Emission Limit, Monitoring Requirements and Control Technology

b. i. Regulation:
(A) 15A NCAC 02D .0515

ii. Emission limits:
(A) Emissions of particulate matter shall not exceed an allowable emission rate as calculated by the following equations:

$E = 4.10 \times P^{0.67}$ (for process rates less than or equal to 30 tons per hour), or
$E = 55.0 \times P^{0.11} - 40$ (for process rates greater than 30 tons per hour)

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

iii. Monitoring Requirements:
(A) POS & AOS – Pressure drop across the fabric filter, and
(B) AOS – Lime injection rate.

iv. Control Technology:
(A) Fabric Filter with hydrated lime injection – **(ID No. 1DS)**

Monitoring Approach

c. The key elements of the monitoring approach for particulate matter, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

	Indicator #1 – POS & AOS Pressure drop across the fabric filter.	**Indicator #2 - AOS** Lime injection rate.
Measurement Approach	Pressure drop across the fabric filter will be monitored with a differential pressure gauge.	Amount of lime will be monitored using batch hopper.
Indicator Range	An excursion is defined as an hourly average differential pressure (DP) less than 0.1 inches of water pressure drop or more than 9 inches of water pressure drop. An excursion triggers an inspection, corrective action, and a reporting requirement.	An excursion is defined as an injection rate reading less than 33 pounds per hour. An excursion triggers an inspection, corrective action, and a reporting requirement.
QIP Threshold	The QIP threshold is six excursions in a six-month reporting period.	The QIP threshold is six excursions in a six-month reporting period.
Performance Criteria: Data Representativeness	Differential pressure taps are located at the fabric filter inlet and outlet.	The injection rate can be is set to feed 30 dry pounds per hour and is verified once per 24-hour period.
Verification of Operational Status	N/A	N/A

	Indicator #1 – POS & AOS Pressure drop across the fabric filter.	**Indicator #2 - AOS** Lime injection rate.
QA/QC Practices and Criteria	Daily zero checks to verify gauge operability. The pressure gauge is calibrated monthly using a second gauge and the gauge is replaced when the difference exceeds 5%.	The flow meter is calibrated annually based on manufacturer's instructions.
Monitoring Frequency	Monitored Continuously	Monitored Continuously
Data Collection Procedure	Manually, once per day.	Manually, once per day.
Averaging Period	N/A	N/A

Recordkeeping and Reporting [15A NCAC 02Q .0508(f), 40 CFR 64.9]

d. The Permittee shall comply with the recordkeeping requirements of 40 CFR 64.9(b) and submit a summary report of the monitoring and recordkeeping activities given in Section 2.3 A.1.b, above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The reports shall comply with the reporting requirements of 40 CFR 64.9(a) and include, at a minimum the following information, as applicable:

i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

B. One Fabric Filter With Hydrated Lime Injection (ID No. 2DS) POS and AOS

1. 15A NCAC 02D .0614: Compliance Assurance Monitoring

a. Primary Operating Scenario and Alternative Operating Scenario for emission sources **(ID No. ES-9a)** is defined in Section 2.1 A.1.a and b above.

Applicable Regulations, Emission Limit, Monitoring Requirements and Control Technology

b. i. Regulation:
(A) 15A NCAC 02D .0515

ii. Emission limits:
(A) Emissions of particulate matter shall not exceed an allowable emission rate as calculated by the following equations:

$E = 4.10 \times P^{0.67}$ (for process rates less than or equal to 30 tons per hour), or
$E = 55.0 \times P^{0.11} - 40$ (for process rates greater than 30 tons per hour)

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

iii. Monitoring Requirements:
(A) POS & AOS – Pressure drop across the fabric filter, and
(B) AOS – Lime injection rate.

iv. Control Technology:
(A) Fabric Filter with hydrated lime injection – **(ID No. 2DS)**

Monitoring Approach

c. The key elements of the monitoring approach for particulate matter, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

	Indicator #1 – POS & AOS Pressure drop across the fabric filter.	**Indicator #2 - AOS** Lime injection rate.
Measurement Approach	Pressure drop across the fabric filter will be monitored with a differential pressure gauge.	Amount of lime will be monitored using batch hopper.
Indicator Range	An excursion is defined as an hourly average differential pressure (DP) less than 0.1 inches of water pressure drop or more than 9 inches of water pressure drop. An excursion triggers an inspection, corrective action, and a reporting requirement.	An excursion is defined as an injection rate reading less than 33 pounds per hour. An excursion triggers an inspection, corrective action, and a reporting requirement.
QIP Threshold	The QIP threshold is six excursions in a six-month reporting period.	The QIP threshold is six excursions in a six-month reporting period.
Performance Criteria: Data Representativeness	Differential pressure taps are located at the fabric filter inlet and outlet.	The injection rate can be is set to feed 30 dry pounds per hour and is verified once per 24-hour period.
Verification of Operational Status	N/A	N/A
QA/QC Practices and Criteria	Daily zero checks to verify gauge operability. The pressure gauge is calibrated monthly using a second gauge and the gauge is replaced when the difference exceeds 5%.	The flow meter is calibrated annually based on manufacturer's instructions.
Monitoring Frequency	Monitored Continuously	Monitored Continuously
Data Collection Procedure	Manually, once per day.	Manually, once per day.
Averaging Period	N/A	N/A

Recordkeeping and Reporting [15A NCAC 02Q .0508(f), 40 CFR 64.9]

d. The Permittee shall comply with the recordkeeping requirements of 40 CFR 64.9(b) and submit a summary report of the monitoring and recordkeeping activities in Section 2.3 B.1.b, above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The reports shall comply with the reporting requirements of 40 CFR 64.9(a) and include, at a minimum, the following information, as applicable:

i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

SECTION 3 – INSIGNIFICANT ACTIVITIES PER 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description[1,2]
I-AHU	Multiple roof top air handling units
I-ES-15	Collapse process hoods
I-ES-5	Prep hoods
I-ES-13, I-ES-13a, ES-13b	Three central vacuum systems with fabric filter (IES-13CD)
I-ES-10	Glass saw hoods
I-ES-SCR-FGH1 and I-ES-SCR-FGH2	Two natural gas-fired flue gas re-heaters (10 million Btu per hour each)
I-ES-SCR-AIH1 and I-ES-SCR-AIH2	Two natural gas-fired ammonia injector dilution air heaters (1.0 million Btu per hour each)
I-SD-1	Waste water sludge dryer
I-ES-7	Draw towers
I-Clean	Machine cleaning stations with 10 eight-gallon capacity acetone baths
I-BEL	Sixteen Buffering extruder lines
I-JEL	Eleven Jacketing extruder lines
I-JM	Jacket Melters
I-FH	Eight flame heaters for the jacket extruder lines (0.044 million Btu per hour each)
I-PL	Sixteen Printing lines
I-FBW	Fluidized bed washer
I-PW	Parts washer
I-Draw Clean	Cleaning stations
I-WB-1 and I-WB-2	Two hot water boilers (0.75 million Btu per hour each)
I-WH-1 and I-WH-2	Two domestic water heaters (0.75 million Btu per hour each)
I-ANNEAL	Annealing Furnace
I-CORRAL	One natural gas-fired corral lathe (0.10 million Btu per hour)
I-M-1 and I-M-2	Two natural gas-fired munters (2.4 million Btu per hour each)
I-ES-FP **MACT ZZZZ**	Diesel-fired fire pump 105 HP
I-CT-601	Fiber Plant 2 cell Cooling Tower
I-CT-701	Fiber Plant 3 cell Cooling Tower
I-CT-702	Fiber Plant 3 cell Cooling Tower
I-CT-801	Fiber Plant 3 cell Cooling Tower
I-CT-1	Cable Plant Cooling Tower

[1] Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement (Federal or State) or that the Permittee is exempted from demonstrating compliance with any applicable requirement.

[2] When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit.”

SECTION 4 - GENERAL CONDITIONS (version 7.0, 08/21/2023)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
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 02Q .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(s) 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 Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .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 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

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

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
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. **Title V Permit Modifications**
1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**
1. Reporting Requirements [15A NCAC 02Q .0508(f)]
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.

   If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.
2. Section 502(b)(10) Changes [15A NCAC 02Q .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.
3. Off Permit Changes [15A NCAC 02Q .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.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A **Reporting Requirements for Excess Emissions** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

1. "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 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*
2. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
3. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
   a. Pursuant to 15A NCAC 02D .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 02D .0535(f)(3).

I.B **Reporting Requirements for Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

1. "Permit 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.
2. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) quarterly by notifying the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535. 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.C **Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .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 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .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. **RESERVED**

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .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 02Q .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 02Q .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 02Q .0508(f) and 02Q .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 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all terms and conditions in the permit (including emissions limitations, standards, or work practices), except for conditions identified as being State-enforceable Only. 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;
4. the method(s) used for determining the compliance status of the source during the certification period;
5. each deviation and take it into account in the compliance certification; and
6. as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (CAM) occurred.

Q. **Certification by Responsible Official** [15A NCAC 02Q .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 02Q .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 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .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 02Q .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 02Q .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 02Q .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 02Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. 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 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .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 02Q .0107 and 02Q .0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .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 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .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 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .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 02Q .0501(d)]
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 02Q .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. **National Emission Standards Asbestos – 40 CFR Part 61, Subpart M** [15A NCAC 02D .1110]
The Permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

FF. **Title IV Allowances** [15A NCAC 02Q .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 02D .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 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]
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 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]
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 02D .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 02Q .0508(i)(16)]
Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .1110, or .1111 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance for emission sources subject to Rules .0524, .1110, or .1111, the Permittee shall provide and submit all notifications, conduct all testing, and submit all test reports in accordance with the requirements of 15A NCAC 02D .0524, .1110, or .1111, as applicable. Otherwise, if emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
    a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
        i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
        ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
        iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in 15A NCAC 02D .2600 if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
    b. The Director may authorize the DAQ to conduct independent tests of any source subject to a rule in 15A NCAC 02D to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in 15A NCAC 02D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 02Q .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 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .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 02Q .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 02Q .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. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. **Fugitive Dust Control Requirement** [15A NCAC 02D .0540]
As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .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).

NN. **Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]
1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (Air Permitting Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) in writing at least seven days before the change is made.
    a. The written notification shall include:
        i. a description of the change at the facility;
        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.
    b. In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]
For permits modifications subject to 45-day review by the federal EPA, EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.