

ROY COOPER

Governor

ELIZABETH S. BISER

Secretary

MICHAEL ABRACZINSKAS

Director



September 27, 2021

Mr. Paul Pereira
Plant Manager
Enviva Pellets Hamlet, LLC
1125 North NC Highway 177
Hamlet, North Carolina 28345

SUBJECT: Air Quality Permit No. 10365T06
Facility ID: 7700096
Enviva Pellets Hamlet, LLC
Hamlet, North Carolina
Richmond County
PSD Status: Minor
Fee Class: Title V

Dear Mr. Pereira:

In accordance with your completed Air Permit Application for a 1st Time Title V Permit received on July 24, 2020 and application for renewal of Permit No. 10365R05 with requested modifications received on November 25, 2020, we are forwarding herewith Air Quality Permit No. 10365T06 to Enviva Pellets Hamlet, LLC, 1125 North NC Highway 177, Hamlet, North Carolina, authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT."

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



North Carolina Department of Environmental Quality | Division of Air Quality

217 West Jones Street | 1641 Mail Service Center | Raleigh, North Carolina 27699-1641

919.707.8400

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

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of 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.

Richmond County has triggered increment tracking under PSD for NO_x, PM-10, and PM-2.5. This modification will result in a decrease of 19.4 pounds per hour of NO_x, an increase of 0.68 pounds per hour of PM-10, and an increase of 1.65 pounds per hour of PM-2.5.

This Air Quality Permit shall be effective from September 27, 2021 until August 31, 2026, 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 Kevin Godwin at (919) 707-8480 or kevin.godwin@ncdenr.gov.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "Mark J. Cuilla".

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

c: Michael Sparks, EPA Region 4 (Permit and review)
Heather Carter, Supervisor, Fayetteville Regional Office
Shannon Vogel, Stationary Source Compliance Branch
Central Files
Connie Horne (Cover letter only)

ATTACHMENT to Permit No. 10365T06

Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description
IES-CHIP-1	Log chipping (138 tons per hour)
IES-BARKHOG	Bark hog (50 tons per hour)
IES-DB-1 and IES-DB-2	Two natural gas-fired duct burners (2.5 million Btu per hour each)
IES-GWH	Green wood handling operations
IES-GN	Emergency generator (671 brake horsepower) NSPS III, MACT ZZZZ
IES-FWP	Fire water pump (131 brake horsepower) NSPS III, MACT ZZZZ
IES-DRYSHAVE	Dried shaving material handling (25 tons per hour)
IES-PV-1 and IES-PV-2	Two propane vaporizers (1.0 million Btu per hour each)
IES-TK-1	Diesel fuel storage tank (1,000 gallons capacity)
IES-TK-2	Diesel fuel storage tank (185 gallons capacity)
IES-TK-3	Diesel fuel storage tank (5,000 gallons capacity)
IES-GWSP-1 through IES-GWSP-5	Green wood storage piles
IES-BFSP-1 and IES-BFP-2	Bark fuel storage piles
IES-BFB	Bark fuel bin
IES-DEBARK-1	Debarker (275 tons per hour)
IES-WHH	Wet hardwood hopper
IES-PW-1 and IES-PW-2	Parts Washers
IES-ADD	Additive hopper
I-PAVEDROADS	Paved Roads
I-UNPAVEDROADS	Unpaved Roads
IES-ELECTRICBOILER-1 and IES-ELECTRICBOILER-2	Two electric boilers

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement 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."
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows: <http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.

Summary of Changes

The following changes were made to the existing Permit 10365R05:

Page No.	Section	Description of Changes
Cover letter pages 1 & 2	N/A	Changed Responsible Official to Paul Pereira, Plant Manager.
	N/A	Changed: dates, revision number of permit, issue date of permit, increment tracking for NOx, PM10, PM2.5
N/A	Summary of Changes Table	Updated the “summary of changes to permit” table
N/A	Insignificant Activities List	Included the following sources: Two natural gas-fired duct burners (IES-DB-1 and DB-2), Two propane vaporizers (IES-PV-1 and PV-2), Additive hopper (IES-ADD), A second small parts washer (IES-PW-2), and Two electric boilers (ID Nos. IES-ELECTRICBOILER-1 and 2)
1	Permit cover letter	Revised: Permit No., replaces permit No., permit issuance date, application number, complete application date
Throughout	N/A	Updated Specific Emission Source, Multiple Emission Source, and General Conditions to Title V template.
3	Table of Emission Sources	Updated natural gas-fired regenerative thermal oxidizer (ID No. CD-RTO) firing rate to 54.4 million Btu per hour, Removed low pressure fines relay system (ID No. ES-PCLP) and associated baghouse from the permit, Removed the Pellet Dust Collection Transfer Bin (ES-PDCTB) and associated baghouse from the permit, Added language to reflect use of diesel as an accelerant during cold start-up of the furnace, Included the following footnote; “All air flow from the dry hammermills is controlled by the baghouses (ID Nos. CD-HM-BH1 through CD-HM-BH8), the WESP (ID No. CD-WESP), and the RTO (ID No. CD-RTO). Under normal operations, all air flow from the baghouses on the dry hammermills is ducted to the dryer furnace for treatment by the WESP and the RTO. In the event of reduced furnace/dryer operation, a portion of the air flow from the baghouses on the dry hammermills is ducted directly to the WESP for treatment by the WESP and RTO. In the event of the shutdown of the furnace/dryer system, all air flow from the baghouses on the dry hammermills is ducted directly to the WESP for treatment by the WESP and RTO.”
6	2.1 A. 1. e.	Modified condition to remove the dryer furnace as a control device and to read, “Particulate matter emissions from dry hammermills (ES-HM-1 through 8) shall be controlled by baghouses (CD-HM-1 through 8), in series with one wet electrostatic precipitator (CD-WESP), and one regenerative thermal oxidizer (CD-RTO).”
11	2.2 A. 1. and 2.	Removed Conditions relating to 15A NCAC 02D .0535 and 02D .0540 as they are covered under the Title V General Conditions.

Page No.	Section	Description of Changes
	new 2.2 A.1. n. (old 2.2 A.3. n.)	Modified language to the following: “All air flow from the dry hammermills shall be controlled by the baghouses (ID Nos. CD-HM-BH1 through CD-HM-BH8), the WESP (ID No. CD-WESP), and the RTO (ID No. CD-RTO). Under normal operations, all air flow from the baghouses on the dry hammermills shall be ducted to the dryer furnace for treatment by the WESP and the RTO. In the event of reduced furnace/dryer operation, a portion of the air flow from the baghouses on the dry hammermills may be ducted directly to the WESP for treatment by the WESP and RTO. In the event of the shutdown of the furnace/dryer system, all air flow from the baghouses on the dry hammermills may be ducted directly to the WESP for treatment by the WESP and RTO.”
17	2.2 A. 4., 5., and 6.	Removed Conditions relating to 15A NCAC 02Q .0207, 02Q .0304, and 02Q .0504 as they are either no longer applicable or covered under the Title V General Conditions.
22	2.2 A. 1. 1	Modified language to reflect that the duration of cold start-up is typically 8 to 12 hours.



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
10365T06	10365R05	September 27, 2021	August 31, 2026

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: **Enviva Pellets Hamlet, LLC**
Facility ID: **7700096**

Facility Site Location: **1125 North NC Highway 177**
City, County, State, Zip: **Hamlet, Richmond County, North Carolina 28345**

Mailing Address: **7200 Wisconsin Avenue**
City, State, Zip: **Bethesda, Maryland 20814**

Application Number: **7700096.20B and .20C**
Complete Application Date: **August 5, 2020 and November 30, 2020**

Primary SIC Code: **2499**
Division of Air Quality, **Fayetteville Regional Office**
Regional Office Address: **Systel Building**
225 Green Street, Suite 714
Fayetteville, North Carolina, 28301

Permit issued this the 27th day of September, 2021

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

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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-FURNACEBY PASS	Furnace/dryer bypass, diesel startup*	N/A	N/A
ES-GHM-1, ES-GHM-2, and ES-GHM-3	Green hammermills	CD-WESP CD-RTO	One wet electrostatic precipitator (31,039 square feet of collector plate area) One natural gas-fired regenerative thermal oxidizer (54.4 million Btu per hour heat input)
ES-DRYER 02D .1112 Case-by-case MACT**	Green wood direct-fired rotary dryer system (250.4 million Btu per hour heat input) with integral transfer cyclones	CD-WESP CD-RTO	One wet electrostatic precipitator (31,039 square feet of collector plate area) One natural gas-fired regenerative thermal oxidizer (54.4 million Btu per hour heat input)
ES-DWH	Dried wood handling	CD-DWH-BH-1 and CD-DWH-BH-2	Two baghouses (378 square feet filter surface area, each)
ES-HM-1 through ES-HM-8 02D .1112 Case-by-case MACT**	Eight (8) dry hammermills with integral transfer cyclones Eight (8) dry hammermills with integral transfer cyclones	CD-HM-BH-1 through CD-HM -BH-8*** CD-WESP CD-RTO CD-HM-BH-1 through CD-HM -BH-8*** ES-DRYER	Eight (8) baghouses (2,575 square feet filter surface area) One wet electrostatic precipitator (31,039 square feet of collector plate area) One natural gas-fired regenerative thermal oxidizer (54.4 million Btu per hour heat input) -Or- Eight (8) baghouses (2,575 square feet filter surface area) One Dryer furnace (250.4 million Btu per hour heat input)
-continued-	-continued-	-continued-	-continued-

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-HM-1 through ES-HM-8 02D .1112 Case-by-case MACT**	Eight (8) dry hammermills with integral transfer cyclones	CD-WESP CD-RTO	One wet electrostatic precipitator (31,039 square feet of collector plate area) One natural gas-fired regenerative thermal oxidizer (54.4 million Btu per hour heat input)
ES-HMC	Hammermill collection conveyor	CD-HMC-BH	One baghouse (378 square feet filter surface area)
ES-PMFS	Pellet mill feed silo	CD-PMFS-BH	One baghouse (471 square feet of filter surface area)
ES-CLR-1 through ES-CLR-6 02D .1112 Case-by-case MACT**	Twelve (12) pellet presses and six (6) pellet coolers with integral transfer cyclones	CD-RCO/RTO	One natural gas-fired regenerative catalytic oxidizer/regenerative thermal oxidizer (32 million Btu per hour heat input)
ES-PCHP	One pellet cooler high-pressure fines relay system	CD-PCHP-BH	One baghouse (1,665 square feet of filter surface area)
ES-FPH, ES-PB-1, ES-PB-2, ES-PL-1 through ES-PL-3	Finished product handling and two (2) pellet loadout bins and three (3) pellet loadouts	CD-FPH-BH	One baghouse (1,665 square feet of filter surface area)

* Diesel fuel may be used as an accelerant for start-up of the furnace.

**Case-by-case 112(g) MACT requirements apply until after all controls have been constructed and are operational to reduce the facility-wide HAP emissions to below the major source thresholds.

*** All air flow from the dry hammermills is controlled by the baghouses (ID Nos. CD-HM-BH1 through CD-HM-BH8), the WESP (ID No. CD-WESP), and the RTO (ID No. CD-RTO). Under normal operations, all air flow from the baghouses on the dry hammermills is ducted to the dryer furnace for treatment by the WESP and the RTO. In the event of reduced furnace/dryer operation, a portion of the air flow from the baghouses on the dry hammermills is ducted directly to the WESP for treatment by the WESP and RTO. In the event of the shutdown of the furnace/dryer system, all air flow from the baghouses on the dry hammermills is ducted directly to the WESP for treatment by the WESP and RTO.

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

The emission source(s) and associated air pollution control device(s) 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. Three green hammermills (ES-GHM-1, 2, and 3) controlled by a wet electrostatic precipitator (ID No. CD-WESP) in series with a regenerative thermal oxidizer (ID No. CD-RTO),

Wood-fired direct heat drying system (ID No. ES-DRYER) with associated integral cyclone controlled by a wet electrostatic precipitator (ID No. CD-WESP) in series with a regenerative thermal oxidizer (ID No. CD-RTO), and

Furnace and dryer bypass (ID No. ES-F/DBYPASS)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10 \times P^{0.67}$ for $P < 30$ tph $E = 55 \times P^{0.11} - 40$ for $P \geq 30$ tph where, E = allowable emission rate (lbs/hr) P = process weight rate (tph)	15A NCAC 02D .0515
Sulfur dioxide	2.3 pounds per million Btu (ID Nos. ES-DRYER, ES-FURNACEBYPASS, and CD-RTO)	15A NCAC 02D .0516
Visible emissions	20 percent opacity when averaged over a 6-minute period	15A NCAC 02D .0521
Hazardous Air Pollutants (HAP)	Less than 25 tons for combined HAPs per consecutive 12-month period. Less than 10 tons for each single HAP per consecutive 12-month period. See Section 2.2 A.3	15A NCAC 02Q .0317 avoidance of 15A NCAC 02D .1112 [§ 112(g) Case-by-case MACT]
Volatile organic compounds (VOC), Nitrogen Oxides (NOx), and Carbon Monoxide (CO)	Less than 250 tons per consecutive 12-month period, See Section 2.2 A.3	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .0530
Toxic air pollutants	State-enforceable only See Section 2.2 A.4.	15A NCAC 02Q .0711

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from these sources (**ID Nos. ES-GMH-1 through GMH-3, ES-DRYER, and ES-FURNACEBYPASS**) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67} \quad \text{for } P < 30 \text{ tph}$$

$$E = 55 \times P^{0.11} - 40 \quad \text{for } P \geq 30 \text{ tph}$$

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.

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 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

- c. For these sources (**ID Nos. ES-GHM-1, 2, and 3 and ES-FURNACEBYPASS**) the Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above (or the formulas contained in 15A NCAC 02D .0515), can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.
- d. No reporting is required for particulate emissions from these sources (**ID Nos. ES-GHM-1, 2, and 3 and ES-FURNACEBYPASS**).

For wet electrostatic precipitator and regenerative thermal oxidizer:

- e. Particulate matter emissions shall be controlled as follows:
 - i. Particulate matter emissions from the green hammermills (**ID Nos. ES-GHM-1, 2, and 3**) and rotary dryer (**ID No. ES-DRYER**) shall be controlled by one wet electrostatic precipitator (**CD-WESP**) in series with one regenerative thermal oxidizer (**ID No. CD-RTO**),
 - ii. Particulate matter emissions from the wood-fired direct heat drying system (**ID No. ES-DRYER**) shall be controlled by a wet electrostatic precipitator (**ID No. CD-WESP**) in series with a regenerative thermal oxidizer (**ID No. CD-RTO**)
- f. To ensure compliance and effective operation of the wet electrostatic precipitator (**ID No. CD-WESP**), the Permittee shall:
 - i. operate the wet electrostatic precipitator with at least the minimum number of grids operating during compliance testing specified in Section 2.2 A.1. below;
 - ii. maintain the minimum secondary voltage and minimum current at the level established during compliance testing specified in Section 2.2 A.1. below;
 - iii. monitor and record the secondary voltage and current for each grid of the precipitator daily. The daily observation must be made for each day of the calendar year period. The Permittee shall be allowed three (3) days of absent observations per semiannual period.
 - iv. The Permittee may re-establish any parametric operating value during periodic testing. Compliance with previously approved parametric operating values is not required during periodic required testing or other tests undertaken to re-establish parametric operating values by the Permittee.

If the new parametric operating values 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 2.1 A.1.c. above is submitted. The permit revision will be processed pursuant to 15A NCAC 02Q .0316. If during performance testing, the new parametric operating values are less stringent, the Permittee may request to revise the value(s) in the permit pursuant to 15A NCAC 02Q .0500.

- g. To ensure compliance, the Permittee shall perform inspections and maintenance on the wet electrostatic precipitator (**ID No. CD-WESP**), the regenerative thermal oxidizer (**ID No. CD-RTO**), and integral cyclones as recommended by the manufacturer. In addition to the manufacturer's

inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:

- i. a monthly visual inspection of the system ductwork and material collection units for leaks;
- ii. an annual (not to exceed 12-month following the initial or most recent inspection) inspection of the heat transfer medium and associated inlet/outlet valves on the regenerative thermal oxidizer (**ID No. CD-RTO**);
- iii. an annual (not to exceed 12-months following the initial or most recent inspection) internal inspection of the wet electrostatic precipitator (**ID No. CD-WESP**). This inspection must include (but is not limited to) the following:
 - (A) visual checks of critical components,
 - (B) checks for any equipment that does not alarm when de-energized, to ensure it is operational,
 - (C) checks for signs of plugging in the hopper and gas distribution equipment, and replacement of broken equipment as required.

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

- h. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the control devices; and
 - iv. 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), 15A NCAC 02D .0605(b)(3)]

- i. The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.
- j. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 A.1. e. through 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. All instances of deviations from the requirements of this permit must be clearly identified.

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

- a. Emissions of sulfur dioxide from these sources (**ID Nos. ES-DRYER, ES-FURNACEBYPASS, and ES-CD-RTO**) 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 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

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

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from firing biomass in the dryer system, natural gas in the thermal oxidizers or use of diesel as an accelerant during cold start-up of the furnace.

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

- a. Visible emissions from these sources (**ID Nos. ES-GHM-1 through 3, ES-DRYER, and ES-FURNACEBYPASS**) 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 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. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (**ID Nos. ES-GHM-1 through ES-GHM-3 and ES-DRYER**), for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. For all new emission sources or control devices listed in the above table, the Permittee shall establish “normal” in the first 30 days following the commencement of operation. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monthly 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 (two six-minute averages) 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 monthly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made; or if “normal” is not established for these sources in the first 30 days following the effective date of this permit/of beginning operation.

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

- d. To ensure compliance during idle mode operation, the Permittee shall observe the emission points of this source (**ID Nos. ES-FURNACEBYPASS**) for any visible emissions above normal. “Normal” visible emissions shall be established during the first instance of idle mode operation. The idle mode observation must be made for each furnace idle mode event of the calendar year period to ensure compliance with this requirement. If visible emissions from this source is observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the furnace idle mode 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 (two six-minute averages) 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 idle mode observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made; or if “normal” is not established for these sources in the first 120 days following the effective date of this permit/of beginning operation.

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.c and d 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.

B. Dried wood handling (ID No. ES-DWH) with associated baghouses (ID Nos. CD-DWH-BH-1 and 2);

Eight (8) dry hammermills (ID Nos. ES-HM-1 through ES-HM-8) with associated integral cyclones in series with eight (8) baghouses (ID Nos. CD-HM-BH-1 through CD-HM-BH-8) in series with a wet electrostatic precipitator (ID No. CD-WESP) in series with a regenerative thermal oxidizer (ID No. CD-RTO);

OR;

Eight (8) dry hammermills (ID Nos. ES-HM-1 through ES-HM-8) with associated integral cyclones in series with eight (8) baghouses (ID Nos. CD-HM-BH-1 through CD-HM-BH-8) in series with a wood-fired direct heat drying system furnace (ID No. ES-DRYER-1) in series with a wet electrostatic precipitator (ID No. CD-WESP) in series with a regenerative thermal oxidizer (ID No. CD-RTO);

Hammermill Collection conveyor (ID No. ES-HMC)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10 \times P^{0.67}$ for $P < 30$ tph $E = 55 \times P^{0.11} - 40$ for $P \geq 30$ tph where, E = allowable emission rate (lb/hr) P = process weight rate (tph)	15A NCAC 02D .0515
Visible emissions	20 percent opacity when averaged over a 6-minute period	15A NCAC 02D .0521
VOC NOx CO	Less than 250 tons per consecutive 12-month period, Less than 250 tons per consecutive 12-month period, Less than 250 tons per consecutive 12-month period See Section 2.2 A.1.	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .0530
Hazardous Air Pollutants (HAP)	Less than 25 tons for combined HAPs per consecutive 12-month period. Less than 10 tons for each single HAP per consecutive 12-month period. See Section 2.2 A.3.	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .1112 MACT
Toxic air pollutants	State-enforceable only See Section 2.2 A.4.	15A NCAC 02Q .0711

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources (ID Nos. ES-DWH, ES-HM-1 through ES-HM-8, and ES-HMC) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67} \quad \text{for } P < 30 \text{ tph}$$

$$E = 55 \times P^{0.11} - 40 \quad \text{for } P \geq 30 \text{ tph}$$

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.

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 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

- c. A notification of the actual date of initial startup of the new sources and/or new control devices shall be postmarked within 15 days after such date.

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

- d. For these sources (**ID Nos. ES-HMC**), the Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.
- e. No reporting is required for particulate emissions from these sources (**ID No. ES-HMC**).

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

- f. Particulate matter emissions shall be controlled as follows:
 - i. Particulate matter emissions from the dried wood handling operations (**ID No. ES-DWH**) shall be controlled by two baghouses (**ID Nos. CD-DWH-BH-1 and 2**);
 - ii. Particulate matter emissions from the eight (8) dry hammermills (**ID Nos. ES-HM-1 through ES-HM-8**) with integral cyclones shall be controlled by eight (8) baghouses (**ID Nos. CD-HM-BH-1 through CD-HM-BH-8**) in series with a wet electrostatic precipitator (**ID No. CD-WESP-1**) in series with a regenerative thermal oxidizer (**ID No. CD-RTO-1**);
OR;
Particulate matter emissions from the eight (8) dry hammermills (**ID Nos. ES-HM-1 through ES-HM-8**) with integral cyclones shall be controlled by eight baghouses (**ID Nos. CD-HM-BH-1 through CD-HM-BH-8**) routed to a wood-fired direct heat drying system furnace (**ID No. ES-DRYER**), controlled by a wet electrostatic precipitator (**ID No. CD-WESP**) in series with a regenerative thermal oxidizer (**ID No. CD-RTO**);
- g. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a monthly visual inspection of the system ductwork and material collection units for leaks; and
 - ii. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilters' structural integrity.
 - iii. monitor the wet electrostatic precipitator (**ID No. CD-WESP**) and the thermal regenerative oxidizer (**ID No. CD-RTO**) as specified in Section 2.1 A.1.g and h.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork, baghouses, wet electrostatic precipitator, and regenerative thermal oxidizer are not inspected and maintained.

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

- h. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site for five years and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;

- ii. the results of each inspection;
- iii. the results of any maintenance performed on any control devices; and
- iv. any variance from manufacturer's recommendations, if any, and corrections made.

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

- i. The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.
- j. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 B.1.c and 2.1. B.1.f through 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. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources (**ID Nos. ES-DWH, ES-HM-1 through ES-HM-8, and ES-HMC**) 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 are above the limit given in Section 2.1 B.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (**ID Nos. ES-DWH, ES-HM-1 through ES-HM-8, and ES-HMC**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. For all new emission sources or control devices listed in the above table, the Permittee shall establish "normal" in the first 30 days following the commencement of operation. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monthly 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 (two six-minute averages) is below the limit given in Section 2.1 B.2.a above.

The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made; or if "normal" is not established for these sources in the first 30 days following the effective date of this permit / of beginning operation.

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

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site for five years 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)]

- e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 B.2.c and d 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. Pellet mill feed silo (ID No. ES-PMFS) with associated baghouse (ID No. CD-PMFS-BH);

Twelve (12) Pellet Presses and Six (6) Pellet Coolers (ID Nos. ES-CLR-1 through ES-CLR-6) with integral transfer cyclones in series with a regenerative catalytic oxidizer (ID No. CD-RCO/RTO) that can also operate as a regenerative thermal oxidizer;

Pellet cooler high-pressure fines relay system (ID No. ES-PCHP) with associated baghouse (ID No. CD-PCHP-BH);

Finished product handling (ID No. ES-FPH), pellet loadout bins (ID Nos. ES-PB-1 and ES-PB-2), and pellet loadouts (ID Nos. ES-PL-1 through ES-PL-3) with associated baghouse (ID No. CD-FPH-BH)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10 \times P^{0.67}$ for $P < 30$ tph $E = 55 \times P^{0.11} - 40$ for $P \geq 30$ tph where, E = allowable emission rate (lb/hr) P = process weight rate (tph)	15A NCAC 02D .0515
Sulfur dioxide	CD-RCO/RTO only 2.3 pounds per million Btu	15A NCAC 02D .0516
Visible emissions	20 percent opacity when averaged over a 6-minute period	15A NCAC 02D .0521
VOC NOx CO	Less than 250 tons per consecutive 12-month period, Less than 250 tons per consecutive 12-month period, Less than 250 tons per consecutive 12-month period See Section 2.2 A.1.	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .0530
Hazardous Air Pollutants (HAP)	Less than 25 tons for combined HAPs per consecutive 12-month period. Less than 10 tons for each single HAP per consecutive 12-month period. See Section 2.2 A.3.	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .1112 MACT
Toxic air pollutants	State-enforceable only See Section 2.2 A.4.	15A NCAC 02Q .0711

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from these sources (**ID No. ES-PMFS, ES-CLR-1 through ES-CLR-6, ES-PCHP, ES-FPH, ES-PB-1, ES-PB-2, ES-PL-1, ES-PL-2, and ES-PL-3**) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67} \quad \text{for } P < 30 \text{ tph}$$

$$E = 55 \times P^{0.11} - 40 \quad \text{for } P \geq 30 \text{ tph}$$

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.

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

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

Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall test the outlet of the regenerative thermal oxidizers (**ID Nos. CD-RCO/RTO**) for total suspended particulate (TSP) in accordance with a testing protocol submitted at least 45 days prior to the scheduled test date and approved by the DAQ. Testing shall be completed within 180 days of commencement of operation and the results submitted within 30 days following sample collection in accordance with 15A NCAC 02D .2602(f) unless an alternate date is approved by the DAQ. Notification shall be provided to DAQ at least 15 days prior to testing. Testing shall be conducted as specified in Section 2.2 A.2.e. If the results of this test are above the limit given in Section 2.1 D.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

- c. A notification of the actual date of initial startup of the new sources and/or new control devices shall be postmarked within 15 days after such date.

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

- d. Particulate matter emissions shall be controlled as follows:
- i. Particulate matter emissions from the pellet mill feed silo (**ID No. ES-PMFS**) shall be controlled by a baghouse (**ID No. CD-PMFS-BH**);
 - ii. Particulate matter emissions from the pellet coolers (**ID Nos. ES-CLR-1 through CLR-6**) equipped with integral transfer cyclones shall be controlled with a regenerative catalytic/thermal oxidizer (**ID No. CD-RCO/RTO**);
 - iii. Particulate matter emissions from the pellet cooler high pressure fines relay system (**ID No. ES-PCHP**) shall be controlled by a baghouse (**ID No. CD-PCHP-BH**);
 - iv. Particulate matter emissions from finished product handling (**ID No. ES-FPH**), pellet loadout bins (**ID Nos. ES-PB-1 and PB-2**), and pellet loadout (**ID No. ES-PL-1, PL-2, and PL-3**) shall be controlled by a baghouse (**ID No. CD-FPH-BH**).
- e. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- i. a monthly visual inspection of the system ductwork and material collection units for leaks; and
 - ii. an annual (for each 12-month period following the initial inspection) internal inspection of the cyclones, baghouses' and regenerative catalytic/ thermal oxidizers' structural integrity; and
 - iii. an annual (for each 12-month period following the initial inspection) internal inspection of the heat transfer medium and associated inlet/outlet valves on the regenerative catalytic/ thermal oxidizer.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork, cyclones, baghouses and regenerative catalytic/ thermal oxidizer are not inspected and maintained.

- f. The Permittee may re-establish any parametric operating value during periodic testing. Compliance with previously approved parametric operating values is not required during periodic required testing or other tests undertaken to re-establish parametric operating values by the Permittee. Until parametric operating values have been established, the permittee shall operate the control device in accordance with the manufacturer's recommended values.

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

- g. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site for five years and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on any control devices; and
 - iv. any variance from manufacturer's recommendations, if any, and corrections made.

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

- h. The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.
- i. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 C.1.e and g 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.

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

- a. Emissions of sulfur dioxide from these sources (**ID Nos. CD-RCO/RTO**) 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 C.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

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

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of propane or natural gas in the regenerative catalytic/thermal oxidizer (**ID No. CD-RCO/RTO**).

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

- a. Visible emissions from these sources (**ID No. ES-PMFS, ES-CLR-1 through ES-CLR-6, ES-PCHP, ES-FPH, ES-PB-1 and ES-PB-2, ES-PL-1 through ES-PL-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 are above the limit given in Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (**ID No. ES-PMFS, ES-CLR-1 through ES-CLR-6, ES-PCHP, ES-FPH, ES-PB-1 and ES-PB-2, ES-PL-1 through ES-PL-3**) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. For all new emission sources or control devices listed in the above table, the Permittee shall establish

“normal” in the first 30 days following the commencement of operation. If visible emissions from these sources are observed to be above normal, the Permittee shall either:

- i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monthly 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 (two six-minute periods) is below the limit given in Section 2.1 C.2.a above.

The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made; or if “normal” is not established for these sources in the first 30 days following the effective date of this permit / of beginning operation.

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

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site for five years 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)]

- e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 C.2.c and d 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.

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

A. Facility-wide Emission Sources

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
VOC NOx CO	Less than 250 tons per 12-month period, Less than 250 tons per 12-month period, Less than 250 tons per 12-month period	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .0530
HAPs	Less than 25 tons total HAPs and less than 10 tons of an individual HAP per consecutive 12-month rolling time period See Section 2.2 A.3.	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .1112
Odorous Emissions	State enforceable only	15A NCAC 02D .1806
Toxic Air Pollutants	State enforceable only Emission rates requiring a permit	15A NCAC 02Q .0711

1. **15A NCAC 02Q .0317: avoidance of 15A NCAC 02D .0530 “PREVENTION OF SIGNIFICANT DETERIORATION”**
 - a. In order to avoid applicability of 15A NCAC 02D .0530(g), the above emission sources shall discharge into the atmosphere less than 250 tons facility-wide for each pollutant: volatile organic compounds (VOC), nitrogen oxides (NOx), and carbon monoxide (CO) per consecutive 12-month period. [15A NCAC 02D .0530]
 - b. To ensure that the limits established in Section 2.2.A.1.a above are not exceeded prior to the construction and operation of the proposed control devices:
 - i. the green hammermills and dryer will be controlled by a regenerative thermal oxidizer (**ID No. CD-RTO**),
 - ii. the pellet mills and pellet coolers will be controlled by regenerative catalytic oxidizer/regenerative thermal oxidizer (**ID No. CD-RCO/RTO**),
 - iii. the facility will not process more than 625,011 oven dried tons per year (ODT/year) with a maximum of 85% softwood, on a rolling 12-month average basis,
 - iv. the total dry hammermill throughput shall not exceed 85% of the total facility-wide wood pellet production, on a rolling 12-month basis, rolled monthly, and
 - v. calculations of the facility-wide CO, NOx, and VOC emissions shall be recorded monthly in a log (written or electronic format).
 - c. To ensure that the limits established in Section 2.2.A.1.a above are not exceeded after the construction and operation of the proposed control devices:
 - i. the green hammermills, and the dryer will be controlled by a regenerative thermal oxidizer (**ID No. CD-RTO**),
 - ii. the pellet mills and pellet coolers will be controlled by regenerative catalytic oxidizer/regenerative thermal oxidizer (**ID No. CD-RCO/RTO**),
 - iii. the dry hammermills will be controlled by a wet electrostatic precipitator (**ID No. CD-WESP**) in series with regenerative thermal oxidizer (**ID No. CD-RTO**) or routed to the dryer furnace for treatment by the wet electrostatic precipitator (**ID No. CD-WESP**) in series with regenerative thermal oxidizer (**ID No. CD-RTO**).

iv. the facility will not process more than 625,011 oven dried tons per year (ODT/year) with a maximum of 85% softwood, on a rolling 12-month average basis, and

d. Calculations of the facility-wide CO, NO_x, and VOC emissions shall be recorded monthly in a log (written or electronic format).

$$E_{CO(\text{total})} = \sum E_{CO(\text{CD-RTO})} + \sum E_{CO(\text{CD-RCO/RTO})} + \sum E_{CO(\text{furnace bypass})} + \text{Constant}$$

$$E_{NOx(\text{total})} = \sum E_{NOx(\text{CD-RTO})} + \sum E_{NOx(\text{CD-RCO/RTO})} + \sum E_{NOx(\text{furnace bypass})} + \text{Constant}$$

$$E_{VOC(\text{total})} = \sum E_{VOC(\text{CD-RTO})} + \sum E_{VOC(\text{CD-RCO/RTO})} + \sum E_{VOC(\text{furnace bypass})} + \text{Constant}$$

Where:

- $E_{CO, NOx, VOCs(\text{Total})}$ = total tons of CO, NO_x, VOC emissions per month from the facility
- $E_{CO, NOx, VOCs(\text{from CD-RTO})}$ = total tons of CO, NO_x, VOC emissions per month from the outlet of CD-RTO (controls green hammermills, dryer system, dry hammermills)
- $E_{CO, NOx, VOCs(\text{from RCO/RTO})}$ = total tons of CO, NO_x, VOC emissions per month from the outlet of CD-RCO/RTO (controls twelve pellet presses and six pellet coolers)
- $E_{CO, NOx, VOCs(\text{from furnace bypass})}$ = total tons of CO, NO_x, VOC emissions per month from the furnace bypass
- Constant $_{CO, NOx, VOCs}$ = equates to the monthly PTE emissions of CO, NO_x, and VOCs from the miscellaneous sources including emergency generator, fire water pump, wood yard sources and storage tanks

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

e. Initial Performance Tests – Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall demonstrate compliance with PSD avoidance limits in Section 2.2 A.1.a above by conducting an initial performance test on the wood-fired direct heat drying system (**ID No. ES-DRYER**), the green hammermills (**ID No. ES-GHM-1, ES-GHM-2, and ES-GHM-3**), the dry hammermills (**ID No. ES-HM-1 to ES-HM-8**), the dried wood handling operations (ES-DWH), and the pellet presses and coolers (**ID No. ES-CLR-1 through ES-CLR-6**). 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. Initial testing shall be conducted in accordance with the following:

i. The pollutants and emission sources to be tested during the initial performance test are listed in the following table:

Emission Sources*	Pollutant
Dryer system, green hammermills and dry hammermills controlled via a WESP and CD-RTO	VOC
	NO _x
	CO

ii. The Permittee shall utilize EPA reference methods contained in 40 CFR 60, Appendix A, 40 CFR Part 63, and OTM 26 AND in accordance with a testing protocol (using testing protocol submittal form) approved by the DAQ.

- iii. The Permittee shall submit a protocol to the DAQ at least 45 days prior to compliance testing and shall submit a notification of periodic compliance testing at least 15 days in advance of the testing.
 - iv. The Permittee shall be responsible for ensuring, within practicable limits, that the equipment or processes being tested are operated at or near the maximum normal production rate or at a lesser rate if specified by the Director or his delegate.
 - v. To the extent possible, testing shall be conducted at the maximum normal operating softwood percentage.
 - vi. CD-RTO and RCO/RTO are each comprised of fireboxes, with each firebox containing two temperature probes. During the initial compliance test, the Permittee shall establish the minimum average firebox temperature for each of the fireboxes comprising the regenerative thermal oxidizer and the minimum average firebox temperature (same as the inlet temperature of the catalyst) of the regenerative catalytic oxidizer/regenerative thermal oxidizer. “Average firebox temperature” means the average temperature of the two temperature probes in each firebox. The minimum average firebox temperature for each firebox shall be based upon the average temperature of the two temperature probes over the span of the test runs. Documentation for the minimum average firebox temperature for each firebox shall be submitted to the DAQ as part of the initial compliance test report.
 - vii. Testing shall be completed for the RTO stack (**ID No. CD-RTO**) within 180 days of commencement of operation of the rerouted dry hammermill exhaust unless an alternate date is approved in advance by DAQ.
 - viii. The Permittee shall submit a written report of the test results to the Regional Supervisor, DAQ, within 30 days following sample collection in accordance with 15A NCAC 02D .2602(f) unless an alternate date is approved in advance by DAQ.
- f. Periodic Performance Tests – Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall demonstrate compliance with the PSD avoidance limits in Section 2.2 A.1.a above by conducting periodic performance tests on the wood-fired direct heat drying system (**ID No. ES-DRYER**), the green hammermills (**ID Nos. ES-GHM-1, ES-GHM-2, and ES-GHM-3**), the dry hammermills (**ID Nos. ES-HM-1 to ES-HM-8**), the dried wood handling operations (**ID No. ES-DWH**), and the pellet presses and coolers (**ID Nos. ES-CLR-1 through ES-CLR-6**). 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. Periodic testing shall be conducted in accordance with the following:
- i. The pollutants and emission sources to be tested during the periodic performance tests are listed in the following table:

Emission Sources	Pollutant
Dryer system, green hammermills and dry hammermills controlled via WESP and CD-RTO	VOC
	NOx
	CO
Pellet coolers, pellet presses controlled via CD-RCO/RTO	VOC
Dried wood handling operations (CD-DWH-BH-1 or CD-DWH-BH-2)	VOC

- ii. Testing shall be conducted in accordance with Section 2.2 A.1.f.iii through xi below.

- iii. The Permittee shall conduct periodic performance tests when the following conditions are met:
 - (A) The monthly average softwood content exceeds the average softwood percentage documented during prior performance testing by more than 10 percentage points, or
 - (B) The monthly production rate exceeds the average production rate documented during prior performance testing by more than 10 percentage points, or
 - (C) At a minimum testing shall be conducted annually. Annual performance tests shall be completed no later than 13 months after the previous performance test.
- iv. The Permittee shall conduct the periodic performance test and submit a written report of the test results to the Regional Supervisor, DAQ, within 90 days from the date the monthly softwood content or overall production rate increased as described in Section 2.2 A.1.f.iii (A) and (B) above unless an alternate date is approved in advance by DAQ.
- v. When performance testing has occurred at 85 percent softwood AND 90 percent of the maximum permitted throughput, subsequent periodic performance testing shall occur on an annual basis and shall be completed no later than 13 months after the previous performance test. The Permittee shall submit a written report of the periodic performance test results to the Regional Supervisor, DAQ, within 30 days following sample collection in accordance with 15A NCAC 02D .2602(f)(4) unless an alternative date is approved in advance by DAQ.
- vi. The Permittee may request that the performance tests be conducted less often for a given pollutant if the performance tests for at least 3 consecutive years show compliance with the emission limit. If the request is granted, the Permittee shall conduct a performance test no more than 36 months after the previous performance test for the given pollutant.
- vii. If a performance test shows noncompliance with an emission limit for a given pollutant, the Permittee shall return to conducting annual performance tests (no later than 13 months after the previous performance test) for that pollutant.
- viii. The Permittee shall submit a written report of results for any periodic performance test to the DAQ, not later than 30 days after sample collection, in accordance with 15A NCAC 02D .2602(f)(4) unless an alternative date is approved in advance by DAQ.
- ix. The Permittee may re-establish any parametric operating value during periodic testing. Compliance with previously approved parametric operating values is not required during periodic required testing or other tests undertaken to re-establish parametric operating values by the Permittee.
- x. When establishing new parametric monitoring values via source testing, the Permittee shall include an application for an Administrative Amendment to the permit with the submittal of the test results.
- xi. The Permittee shall comply with applicable emission standards at all times, including during periods of testing.

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

Regenerative Thermal Oxidizer and Regenerative Catalytic Oxidizer

- g. The Permittee shall install, calibrate, operate, maintain, and inspect a continuous temperature monitoring, and recording system, in accordance with manufacturer's recommendations for the regenerative thermal oxidizer (**ID No. CD-RTO**) and the regenerative catalytic oxidizer/regenerative thermal oxidizer (**ID No. CD-RCO/RTO**) to monitor the temperature in the combustion chamber to ensure the average combustion temperature does not drop below the temperature range established during the initial performance test. To ensure compliance and effective operation of the RTO (**ID No. CD-RTO**) and RTO/RCO (**ID No. CD-RCO/RTO**), the Permittee shall:
 - i. maintain a 3-hour rolling average firebox temperature for comprising the RTO and RTO/RCO at or above the minimum average temperatures established during the most recent performance testing. For the RTO (**ID No. CD-RTO**), the minimum 3-hour average firebox temperature is 1,584°F and the minimum 3-hour average firebox temperature for the RTO/RCO (**ID No. CD-**

RCO/RTO is 920°F as measured during the initial performance tests on January 14, 2020 through January 17, 2020.

- ii. maintain records of the 3-hour rolling average temperatures for each firebox.
- iii. perform inspections and maintenance on the regenerative thermal oxidizer (**ID No. CD-RTO**) and the regenerative catalytic oxidizer/regenerative thermal oxidizer (**ID No. CD-RCO/RTO**), as specified above in Section 2.1 A.1.g
- h. The Permittee shall develop and maintain a written malfunction plan for the temperature monitoring and recording system that describes, in detail, the operating procedures for periods of malfunction and a protocol to address malfunctions so that corrective actions can immediately be implemented. The malfunction plan shall identify malfunctions, as described by the manufacturer, and ensure the operators are prepared to correct such malfunctions as soon as practicable. The Permittee shall keep any necessary parts for routine repairs of the temperature monitoring and recording system readily available.
- i. The Permittee shall perform periodic inspection and maintenance for the oxidizers as recommended by the manufacturer. The Permittee shall perform periodic catalyst activity checks for the regenerative catalytic oxidizer as recommended by the manufacturer. At a minimum, the Permittee shall perform an annual (not to exceed 12-month) internal inspection of the primary heat exchanger and associated inlet/outlet valves of the control device to ensure structural integrity.
- j. The monthly pellet production in oven dried tons (ODT), the rolling 12-month total pellet production in ODT, monthly average softwood content, and 12-month rolling average softwood content shall be recorded in a monthly log kept on site. The results of the calculations and the total amount of facility-wide VOC, NO_x, and CO emissions shall be recorded monthly in a logbook (written or electronic format) and made available to an authorized representative upon request.
- k. The furnace bypass (**ID No. ES-FURNACEBYPASS**) shall be limited to no more than 50 hours per year for startups (for temperature control) and shutdowns. The furnace bypass shall be limited to a cold startup of 15% maximum heat input rate (or 37.56 million Btu per hour). The cold startup period of time begins when the wood-fired furnace is started up and lasts until the wood-fired furnace's refractory is heated to a temperature sufficient to sustain combustion operations and typically last from 8 - 12 hours.
- l. The furnace bypass (**ID No. ES-FURNACEBYPASS**) in idle mode, defined as a maximum heat input of 15 million Btu per hour, shall be limited to no more than 500 hours per year.
- m. All air flow from the dry hammermills shall be controlled by the baghouses (**ID Nos. CD-HM-BH1 through CD-HM-BH8**), the WESP (**ID No. CD-WESP**), and the RTO (**ID No. CD-RTO**). Under normal operations, all air flow from the baghouses on the dry hammermills shall be ducted to the dryer furnace for treatment by the WESP and the RTO. In the event of reduced furnace/dryer operation, a portion of the air flow from the baghouses on the dry hammermills may be ducted directly to the WESP for treatment by the WESP and RTO. In the event of the shutdown of the furnace/dryer system, all air flow from the baghouses on the dry hammermills may be ducted directly to the WESP for treatment by the WESP and RTO.
- n. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate all emission sources including associated control devices in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

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

- o. The Permittee shall submit a semi-annual summary report of monitoring and recordkeeping activities given in Section 2.2. A.1.g through n 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. The monthly facility-wide VOC, NO_x, and CO emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.
 - ii. A report indicating and explaining all instances of the average minimum regenerative thermal oxidizer and regenerative catalytic oxidizer combustion chamber temperature falling below the temperature range established during the performance test or noting that no such instances have occurred.
 - iii. The monthly and 12-month facility-wide total pellet production [as required in Condition 2.2 A.1.j above], and
 - iv. The monthly and 12-month rolling hardwood/softwood mix [as required in Condition 2.2 A.1.j above].
- p. All instances of deviations from the requirements of this permit must be clearly identified.

State-enforceable only

2. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

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

3. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .1112 “112(g) Case-by-Case Maximum Available Control Technology (MACT)”

- a. The following conditions in this section are enforceable after all controls have been constructed and are operational to reduce facility-wide HAP emissions to below the major source thresholds. Following the applicability of this condition, the facility will be classified as a HAP minor source.
- b. In order to remain classified a minor source for hazardous air pollutants (HAP) and avoid applicability of 15A NCAC 02D .1111, "Maximum Achievable Control Technology," facility-wide HAP emissions shall be less than the following limitations:
 - a. 25 tons per consecutive 12-month period of total, combined HAP; and,
 - b. 10 tons per consecutive 12-month period of any individual HAP.

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

- c. **Initial Performance Tests** –Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall establish emission factors for HAPs by conducting an initial performance test consistent with Section 2.2.A.1.e. If the results of this test are above the limit given in Section 2.2 A.3.b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1112.

- i. The pollutants to be tested during the initial performance test are listed in the following table:

Emission Source	Pollutant
Dryer system, green hammermills and dry hammermills controlled via WESP and CD-RTO	Acetaldehyde Acrolein Formaldehyde Methanol Phenol Propionaldehyde

- ii. The Permittee shall utilize EPA reference methods contained in 40 CFR 60, Appendix A, 40 CFR Part 63, and OTM 26 AND in accordance with a testing protocol (using testing protocol submittal form) approved by the DAQ.
 - iii. The Permittee shall submit a protocol to the DAQ at least 45 days prior to compliance testing and shall submit a notification of periodic compliance testing at least 15 days in advance of the testing.
 - iv. The Permittee shall be responsible for ensuring, within practicable limits, that the equipment or processes being tested are operated at or near the maximum normal production rate or at a lesser rate if specified by the Director or his delegate.
 - v. To the extent possible, testing shall be conducted at the maximum normal operating softwood percentage.
 - vi. The regenerative thermal oxidizer (**ID No. CD-RTO**) and the regenerative catalytic/regenerative thermal oxidizer (**ID No. CD-RCO/RTO**) are comprised of fireboxes, with each firebox containing two temperature probes. During the initial compliance test, the Permittee shall establish the minimum average firebox temperature (same as the inlet temperature of the catalyst) for each of the fireboxes comprising the regenerative thermal oxidizer and regenerative catalytic/regenerative thermal oxidizer. “Average firebox temperature” means the average temperature of the two temperature probes in each firebox. The minimum average firebox temperature for each firebox shall be based upon the average temperature of the two temperature probes over the span of the test runs. Documentation for the minimum average firebox temperature for each firebox shall be submitted to the DAQ as part of the initial compliance test report.
 - vii. Testing shall be completed for the RTO stack (**ID No. CD-RTO**) within 180 days of commencement of operation of the rerouted dry hammermill exhaust unless an alternate date is approved in advance by DAQ.
 - viii. The Permittee shall submit a written report of the test results to the Regional Supervisor, DAQ, within 30 days following sample collection in accordance with 15A NCAC 02D .2602(f) unless an alternate date is approved in advance by DAQ.
- d. Periodic Performance Tests – Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall establish emission factors for HAPs by conducting periodic performance tests on the emission points consistent with Section 2.1.A.1.f. If the results of this test are above the limit given in Section 2.2 A.3.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1112.
- i. The pollutants to be tested during the periodic performance test are listed in the following table:

Emission Source	Pollutant
Dryer system, green hammermills and dry hammermills controlled via WESP and CD-RTO; Pellet coolers, pellet presses controlled via CD-RCO/RTO; and Dried wood handling operations (CD-DWH-BH-1 or CD-DWH-BH-2)	Acetaldehyde Acrolein Formaldehyde Methanol Phenol Propionaldehyde

- ii. Periodic testing shall be conducted in accordance with Section 2.2 A.1.f.ii through x above.

- e. **Monitoring/Recordkeeping/Reporting** [15A NCAC 02Q .0508(f)]
Monitoring, recordkeeping, and reporting shall be performed in accordance with Section 2.2 A.1.g through q above.

State-enforceable only

4. 15A NCAC 02Q .0711: EMISSION RATES REQUIRING A PERMIT

- a. The facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions of any Toxic Air Pollutant (TAP) listed in 15A NCAC 02Q .0711 or in this permit from all sources at the facility (excluding those sources exempt under 15A NCAC 02Q .0702 "Exemptions"), including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TAP permitting emission rates (TPER) listed in 15A NCAC 02Q .0711 without first obtaining an air permit to construct or operate.
- b. PRIOR to exceeding any of the TPERs listed in 15A NCAC 02Q .0711, the Permittee shall be responsible for obtaining an air permit to emit TAPs and for demonstrating compliance with the requirements found in 15A NCAC 02D .1100 "Control of Toxic Air Pollutants."
- c. The Permittee shall maintain at the facility records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A NCAC 02Q .0711.
- d. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required pursuant to 15A NCAC 02Q .0711 and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

Pollutant (CAS Number)	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
1,3-Butadiene (106-99-0)	11			
Acetaldehyde (75-07-0)				6.8
Acrolein (107-02-8)				0.02
Ammonia (7664-41-7)				0.68
Arsenic and compounds	0.053			
Beryllium (7440-41-7)	0.28			
Benzene (71-43-2)	8.1			
Benzo(a)pyrene (50-32-8)	2.2			
Cadmium (7440-43-9)	0.37			
Carbon tetrachloride (56-23-5)	460			
Chlorobenzene (108-90-7)		46		
Chlorine (7782-50-5)		0.79		
Chloroform (67-66-3)	290			
Di(2-ethylhexyl)phthalate (117-81-7)		0.63		
Ethylene dichloride (107-06-2)	260			
Formaldehyde (50-00-0)				0.04
Hexachlorodibenzo-p-dioxin (57653-85-7)	0.0051			
Hydrogen chloride (7647-01-0)				0.18
Manganese and compounds		0.63		

Pollutant (CAS Number)	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Mercury, vapor (7439-97-6)		0.013		
Methyl chloroform (71-55-6)		250		
Methyl ethyl ketone (78-93-3)		78		
Methyl isobutyl ketone (108-10-1)		52		7.6
Methylene chloride (75-09-2)	1600		0.39	
Nickel (7440-02-0)		0.13		
Pentachlorophenol (87-86-5)		0.063	0.0064	
Perchloroethylene (127-18-4)	13000			
Phenol (108-95-2)			0.24	
Polychlorinated biphenyls (1336-36-3)	5.6			
Styrene (100-42-5)			2.7	
Tetrachlorodibenzo-p-dioxin (1746-01-6)	0.00020			
Trichloroethylene (79-01-6)	4000			
Toluene (108-88-3)		98		14.4
Trichlorofluoromethane (75-01-4)			140	
Vinyl chloride (75-01-4)	26			
Xylene (1330-20-7)		57		16.4

SECTION 3 - GENERAL CONDITIONS (version 5.5, 08/25/2020)

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 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. **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

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 and Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 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.*)

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

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 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.
2. 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).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B Other Requirements under 15A NCAC 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. Emergency Provisions [40 CFR 70.6(g)]

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

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

5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 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 and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements

as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

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

Q. Certification by Responsible Official [15A NCAC 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. Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) – FEDERALLY-ENFORCEABLE ONLY

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

FF. Title IV Allowances [15A NCAC 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 this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter 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 Section 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 (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

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 Environmental Protection Agency (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.

ATTACHMENT

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
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
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
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
PM₁₀	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
SO₂	Sulfur Dioxide
TAP	Toxic Air Pollutant
tpy	Tons Per Year
VOC	Volatile Organic Compound