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Director



NORTH CAROLINA
Environmental Quality

XXX xx, 2021

Mr. Ron Milz
Division Vice President, Manufacturing
Sonoco Hickory, Inc. – Hickory Plant
PO Box 2029
Hickory, North Carolina 28603

Dear Mr. Milz:

SUBJECT: Air Quality Permit No. 04691T32
Facility ID: 1800184
Sonoco Hickory, Inc. – Hickory Plant
Hickory, Catawba County, North Carolina
Fee Class: Title V
PSD Class: Major

In accordance with your completed Air Quality Permit Application for a Renewal and PAL Renewal of a Title V permit both received on June 1, 2020, we are forwarding herewith Air Quality Permit No. 04691T32 to Sonoco Hickory, Inc. – Hickory Plant, 1246 Main Avenue SE, Hickory, 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 "ATTACHMENT 1" to this cover letter. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to 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 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 be subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Catawba County has triggered Increment Tracking for PM₁₀. However, this permit modification does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from XXX xx, 2021 (Enter Permit Issuance Date) until XXX xx, 2026 (Enter Permit Expiration Date), 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 Gautam Patnaik, P. E., at 919-707-8735 or gautam.patnaik@ncdenr.gov.

Sincerely yours,

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

Enclosure

c: Michael Sparks, EPA Region 4 (Permit and Review)
Mooresville Regional Office
Central Files
Connie Horne (cover letter only)

ATTACHMENT to Air Quality Permit No. 04691T32

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

Emission Source ID	Emission Source Description
IES-1 (VOC PAL)	Mixing Station
IES-2, IES-3 & IES-4 (VOC PAL)	Three solvent storage tanks (4,000 gallon capacity, 4,000 gallon capacity, and 2,000 gallon capacity, respectively)
IES-5, IES-6, & IES-7 (VOC PAL)	Three (3) ink storage tanks (4,000 gallon capacity, 2,000 gallon capacity and 1,800 gallon capacity, respectively)
IES-GEN (MACT ZZZZ, NSPS JJJJ)	Natural gas-fired emergency generator (56 kilowatts maximum capacity)
IES-10 (VOC PAL)	Wash tank (90 gallon capacity)

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 to Permit

The following changes were made to the Sonoco Hickory, Inc. - Hickory Plant, Hickory, Air Permit No. 04691T31:

Pages	Section	Description of Changes
	Insignificant Activities	Remove IES-8 and IES-9
11	2.3	Actuals PAL - Renewed VOC limit for 401tons per year
11	2.3 A. 1. f.,	Source testing for the RTO completed on June 23, 2021 indicated 98.7% destruction removal efficiency
15	2.3 A 1.c. ix.,	Initial testing was completed on June 23, 2021 and established the minimum average firebox temperature for the regenerative thermal oxidizer at 1,645° Fahrenheit.
15	2.3 A 1. dd., iii., (A)	Performance tests to be done if the monthly production rate exceeds the average production rate documented during prior performance testing by more than 10 percentage points.
15	2.3 A 1. Dd., iv.,	Annual testing of RTO removed however, if a performance test shows noncompliance with an emission limit, he Permittee shall return to conducting annual performance tests.
19	2.4	Applicant to file a Title V Air Quality Permit Application pursuant to 15A NCAC 2Q .0504 for the Regenerative Thermal Oxidizer (ID No. RTO-1) on or before 12 months after commencing operation of this control device.
20 through 31	General Conditions	Updated "General Conditions"



AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
04691T32	04691T31	XXX xx, 2021	*XXX 31, 2026

* Effective and expiration dates for the Actuals Plantwide Applicability Limitations (Actuals PAL) portion of this permit are separate from the rest of the permit. The effective date for the PAL is XXX xx, 2021 and the expiration date is XXX xx, 2031.

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: **Sonoco Hickory, Inc. – Hickory Plant**
Facility ID: **1800184**

Facility Site Location: **1246 Main Avenue SE**
City, County, State, Zip: **Hickory, Catawba County, North Carolina 28602**

Mailing Address: **PO Box 2029**
City, State, Zip: **Hickory, North Carolina 28603**

Application Number: **1800184.20A**
Complete Application Date: **June 1, 2020**

Primary SIC Code: **3089**
Division of Air Quality, **Mooresville Regional Office**
Regional Office Address: **610 East Center Avenue, Suite 301**
Mooresville, NC 28115

Permit issued this the xxst day of XXX, 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
Press 12 (VOC PAL)	59 inches wide web flexographic press with ten printing stations and a natural gas-fired drying oven (2.4 million Btu per hour heat input capacity)	NA	NA
Press 13 (VOC PAL)	59 inches wide web flexographic press with ten printing stations and a natural gas-fired drying oven (2.4 million Btu per hour heat input capacity)	NA	NA
Press 14 (VOC PAL)	35 inches wide web flexographic press with eight printing stations and one natural gas-fired drying oven (2.4 million Btu per hour heat input capacity)	NA	NA
Press-15 [±] (VOC PAL)	65-inch wide-web flexographic press with ten printing stations and two direct natural gas-fired dryers (0.8 million Btu per hour maximum heat input capacity each)	**RTO-1	Regenerative Thermal Oxidizer with natural gas-fired pilot burner (8.16 million Btu per hour heat input rate) that controls emissions from the flexographic press, Press-15
Room-15 (VOC PAL)	Press 15 ink room		
Laminator-6 (VOC PAL)	Solventless Laminator	NA	NA
Laminator-14 (VOC PAL)	Laminator, including a natural gas-fired dryer (1.0 million Btu per hour maximum heat input)	NA	NA

** Pursuant to Application No. 1800184.21A, this control device (ID No. RTO-1) is listed as a 15A NCAC 02Q .0501(b)(2) modification. The Permittee shall file a Title V Air Quality Permit Application on or before 12 months after commencing operation in accordance with General Condition NN.1. The permit shield described in General Condition R does not apply and compliance certification as described in General Condition P is not required.

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. The following sources:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Press 12	59 inches wide web flexographic press with ten printing stations and a natural gas-fired drying oven (2.4 million Btu per hour heat input capacity)	NA	NA
Press 13	59 inches wide web flexographic press with ten printing stations and a natural gas-fired drying oven (2.4 million Btu per hour heat input capacity)	NA	NA
Press-15	65-inch wide-web flexographic press with ten printing stations and two direct natural gas-fired dryers (0.8 million Btu per hour maximum heat input capacity each)	RTO-1	Regenerative Thermal Oxidizer with natural gas-fired pilot burner (8.16 million Btu per hour heat input rate) that controls emissions from the flexographic press, Press-15
Room-15	Press 15 ink room		

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 less than or equal to 30 or $E = 55.0 \times P^{0.11} - 40$ for P greater than 30 Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Volatile organic compounds	Actuals PAL Permit Requirements See Section 2.3	15A NCAC 02D .0530
HAPS	See Section 2.2 A.1	15A NCAC 02D .1111
Odorous emissions	See Section 2.2 A.3 <i>State-enforceable only</i>	15A NCAC 02D .1806
Toxic Air Pollutants	See Section 2.2 A.4 <i>State-enforceable only</i>	15A NCAC 02Q .0711

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

- a. Emissions of particulate matter from the presses shall not exceed an allowable emission rate as calculated by the following equation:

$$\text{For } P \leq 30, E = 4.10 \times P^{0.67}$$
$$\text{For } P > 30, E = 55.0 \times P^{0.11} - 40$$

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 emission 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. 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.

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

- d. No reporting is required for particulate emissions from these presses.

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

- a. Emissions of sulfur dioxide from these sources 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 natural gas combustion for this source these sources.

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

- a. Visible emissions from the presses 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 emission 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/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping or reporting is required for visible emissions from operation of these sources.

B. One wide web flexographic press and associated drying oven (ID No. Press 14) and One Solventless Laminator (ID No. Laminator-6)

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 less than or equal to 30 or $E = 55.0 \times P^{0.11} - 40$ for P greater than 30 Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour (<i>Press 14 only</i>)	15A NCAC 02D .0515
Sulfur Dioxide	2.3 pounds per million Btu heat input (<i>Press 14 only</i>)	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Volatile organic compounds	Actuals PAL Permit Requirements See Section 2.3	15A NCAC 02D .0530
Toxic Air Pollutants	See Section 2.2 A.2 <i>State-enforceable only</i> (<i>Laminator-6 only</i>)	15A NCAC 02D .1100
HAPS	See Section 2.2 A.1	15A NCAC 02D .1111
Odorous emissions	See Section 2.2 A.3 <i>State-enforceable only</i>	15A NCAC 02D .1806
Toxic Air Pollutants	See Section 2.2 A.4 <i>State-enforceable only</i>	15A NCAC 02Q .0711

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

- a. Emissions of particulate matter from the press (**ID No. Press 14**) shall not exceed an allowable emission rate as calculated by the following equation:

$$\text{For } P \leq 30, E = 4.10 \times P^{0.67}$$

$$\text{For } P > 30, E = 55.0 \times P^{0.11} - 40$$

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 emission 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.

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

- c. The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.

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

- d. No reporting is required for particulate emissions from these sources (**ID No. Press 14 and Laminator-6**).

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

- a. Emissions of sulfur dioxide from this source (**ID No. Press 14**) 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 B.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 natural gas combustion for this source this source (**ID No. Press 14**).

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

- a. Visible emissions from these sources (**ID No. Press 14 and Laminator-6**) 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 emission testing is required, the testing shall be performed in accordance with and General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. No monitoring, recordkeeping or reporting is required for visible emissions from operation of these sources (**ID No. Press 14 and Laminator-6**).

C. One laminating process, including a natural gas-fired dryer (ID No. Laminator-14)

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 less than or equal to 30 or $E = 55.0 \times P^{0.11} - 40$ for P greater than 30 Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Volatile organic compounds	Actuals PAL Permit Requirements See Section 2.3	15A NCAC 02D .0530
HAPS	See Section 2.2 A.1	15A NCAC 02D .1111
Toxic Air Pollutants	See Section 2.2 A.2 <i>State-enforceable only</i>	15A NCAC 02D .1100
Odorous emissions	See Section 2.2 A.3 <i>State-enforceable only</i>	15A NCAC 02D .1806
Toxic Air Pollutants	See Section 2.2 A.4 <i>State-enforceable only</i>	15A NCAC 02Q .0711

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

- a. Emissions of particulate matter from this source (**ID No. Laminator 14**) shall not exceed an allowable emission rate as calculated by the following equation(s):

$$\text{For } P \leq 30, E = 4.10 \times P^{0.67}$$
$$\text{For } P > 30, E = 55.0 \times P^{0.11} - 40$$

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

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

- c. The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.

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

- d. No reporting is required for particulate emissions from this source (**ID No. Laminator 14**).

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

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

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 natural gas combustion for this source (**ID No. Laminator-14**).

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

- a. Visible emissions from the laminator (**ID No. Laminator-14**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour 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.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. No monitoring, recordkeeping or reporting is required for visible emissions from operation of these sources.

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

A. Facility-wide affected emission sources

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAPS	10 tons per rolling 12-month period of each HAP; and 25 tons per rolling 12-month period of any combination of HAP	15A NCAC 02D .1111
Toxic Air Pollutants	Toxic air pollutant emissions shall not exceed their modeled emission rates. <i>State-enforceable only</i>	15A NCAC 02D .1100
Odorous emissions	Odorous emissions must be controlled; <i>State-enforceable only</i>	15A NCAC 02D .1806
Toxic Air Pollutants	Toxic Permit Emission Rates (TPERs) <i>State-enforceable only</i>	15A NCAC 02Q .0711

1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.820(a)(2)]

- a. For **facility wide sources**, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart KK: National Emission Standards for the Printing and Publishing Industry" and Subpart A "General Provisions."

Definitions and Nomenclature [40 CFR 63.822]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.822 shall apply.

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

- c. The Permittee has chosen to commit to and meet the following criteria for the purposes of establishing the facility to be an area source with respect to this MACT standard. The Permittee shall use less than:
- i. 10 tons per each rolling 12-month period of each HAP; and
 - ii. 25 tons per rolling 12-month period of any combination of HAP;
- at the facility, including materials used for source categories or purposes other than printing and publishing. [40 CFR 63.820(a)(2)]
- d. For purposes of Section 2.2 A.1.c, the Permittee may exclude material used in routine janitorial or facility grounds maintenance, personal uses by employees or other persons, the use of products for the purpose of maintaining electric, propane, gasoline and diesel powered motor vehicles operated by the facility, and the use of HAP contained in intake water (used for processing or noncontact cooling) or intake air (used either as compressed air or for combustion). [40 CFR 63.820(a)(4)]

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

- e. The Permittee shall maintain records of all required measurements and calculations needed to demonstrate compliance with Section 2.1 A.1.c, including the mass of all HAP containing materials used and the mass fraction of HAP present in each HAP containing material used, on a monthly basis. [40 CFR 63.829(d)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained or the limitations in Section 2.1 A.1.c are exceeded.
- f. All records kept pursuant to Section 2.1 A.1.e shall be recorded monthly in a logbook (written or electronic format), maintained on-site and made available to an authorized representative upon request.

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

- g. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the

preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly total of each HAP and combination of HAP used at the facility for the previous 17 months. The HAP usage shall be calculated for each of the 12-month periods over the previous 17 months.

STATE-ENFORCEABLE ONLY

2. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

- a. Pursuant to 15A NCAC 02D .1100, and in accordance with the approved application¹ for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

Emission Source ID No.	Emission Source description	Toxic Air Pollutant	Emission limit (pounds per hour)
Laminator-14	Laminator	Ethyl Acetate (141-78-6)	59.5
Laminator-6	Solventless Laminator		37.6

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .0605]

- b. No monitoring, recordkeeping or reporting for ethyl acetate emissions is required.

STATE-ENFORCEABLE ONLY

3. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

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

STATE-ENFORCEABLE ONLY

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

- a. Pursuant to 15A NCAC 02Q .0711 "Emission Rates Requiring a Permit," for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that facility-wide actual emissions do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 02Q .0711(a). The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 02Q .0711.
- b. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
- c. PRIOR to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 02D .1100 "Control of Toxic Air Pollutants".
- d. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

Pollutant (CAS)	lb/yr	lb/day	lb/hr
Hydrochloric Acid (7647-01-0).			0.18
Styrene (100-42-5)			2.7
Toluene (108-88-3)		98	14.4

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .0605]

- e. No monitoring, recordkeeping or reporting for toxic air pollutants is required.

¹ Approved June 24, 2008.

2.3 - Actuals PAL Permit Requirements

A. Facility-wide affected emission sources when using regenerative thermal oxidizer with natural gas-fired pilot (RTO-1)

1. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. Pursuant to 15A NCAC 02D .0530 and 40 CFR 51.166(w), the following Actuals Plantwide Applicability Limitations (PAL) shall not be exceeded:

PAL Pollutant	Actuals PAL (Tons Per Rolling 12-Months)	Effective Date	Expiration Date
VOC	401	XXX xx, 2021	XXX xx, 2030

- b. Pursuant to 40 CFR 51.166(w)(ii), any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the limit in Paragraph a., above, meets the requirements in 40 CFR 51.166(w)(1) through (15) of this section, and complies with the PAL permit:
- Is not a major modification for VOC;
 - Does not have to be approved through the plan's major NSR program; and
 - Is not subject to the provisions in paragraph 40 CFR 51.166(r)(2) [restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program].
- c. If the Permittee applies to renew the PAL permit in accordance with 40 CFR 51.166(w)(10) before the end of the PAL effective period in Section 2.3.A.1. a above, then the PAL permit shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the DAQ. [40 CFR 51.166(w)(7)(iii)]
- d. Once the PAL permit expires, the Permittee is subject to the requirements in 40 CFR 51.166(w)(9). Upon PAL permit expiration, the DAQ shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each PAL emissions unit as the DAQ determines is appropriate. The DAQ will retain the ultimate discretion to decide whether and how the allowable emissions will be allocated. [40 CFR 51.166(w)(7)(v)]

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

- e. The Permittee shall revalidate the emission factors and any other data used for calculations of VOC emissions through performance testing or other scientifically valid means approved by the DAQ. The Permittee shall perform such revalidation **once every five years after the issuance of the PAL permit**, in accordance with General Condition JJ. If the Permittee does not perform this revalidation, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.² [40 CFR 51.166(w)(12)(ix)]
- f. The parameter values in Section 2.3 A.1. h. ii., and iv., do not apply during performance testing. If, during performance testing, the parameter value in Section 2.3 A.1.h.ii is not adhered to, is more stringent (i.e, the temperature is greater), and the destruction removal efficiency (DRE) provide less than 98.7% of DRE, the permittee shall submit a request to revise the value(s) in the permit at the same time the test report required pursuant to General Condition JJ.4 is submitted. The permit revision will be processed pursuant to 15A NCAC 02Q .0514. If, during performance testing, the parameter value in Section 2.3 A.1.ii is not adhered to and is less stringent (i.e, the temperature(s) is less) and the DRE remains unchanged or greater, the Permittee may request to revise the value(s) in the permit pursuant to 15A NCAC 02Q .0515.

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

- Press-15 and associated ink room PTE requirements*
- Press 15 and the associated ink room (**ID Nos. Press-15 and Room-15**) shall each be operated in an enclosure meeting the criteria for a permanent total enclosure (PTE) as determined pursuant to 40 CFR 51, Appendix M, Method 204 as follows:
 - Any natural draft opening (NDO) shall be at least four equivalent opening diameters from each

² The most recent revalidation was completed using emission testing performed on July 18, 2018.

- VOC emitting point unless otherwise specified by the Administrator.
- (B) The total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling.
- (C) The average facial velocity (FV) of air through all NDO's shall be at least 3,600 m/hr (200 fpm). The direction of air flow through all NDO's shall be into the enclosure.
- (D) All access doors and windows whose areas are not included in ii. and are not included in the calculation in iii. shall be closed during routine operation of the process.
- (E) All VOC emissions must be captured and contained for discharge through a control device.
- ii. Each PTE shall be equipped with continuous parameter monitoring system (CPMS) that shall monitor the pressure differential between inside the enclosure and outside the enclosure.
- iii. With the exception of paragraph iv below, whenever these sources are in operation the pressure inside each PTE shall be maintained at a pressure differential of **at least -0.007 " W.C. on a 3-hour, rolling average basis** in relation to outside the PTE.
- iv. The Permittee shall assume, during the periods of operation of these sources when paragraphs i. through iii. are satisfied, the capture efficiency (CE) is 100%; otherwise the CE is 0%.

Press 15 and associated ink room VOC Emissions (VOC_{tot15})

- h. i. During periods when CE is equal to 100%, the Permittee shall calculate VOC emissions per month at the end of each month by multiplying the total amount of each type of VOC-containing material consumed by Press 15 and the associated ink room (**ID Nos. Press-15 and Room-15**) during the month by the VOC content of the material multiplied by the factor one minus the destruction efficiency (DE)/100.
- ii. During periods when CE is equal to 0%, the Permittee shall calculate VOC emissions per month at the end of each month by multiplying the total amount of each type of VOC-containing material consumed by Press 15 and the associated ink room (**ID Nos. Press-15 and Room-15**) during the month by the VOC content of the material.
- iii. The total VOC emissions (VOC_{tot15}) from Press 15 and the associated ink room (**ID Nos. Press-15 and Room-15**) shall be the sum of the emissions determined by i. and ii. above.

Uncontrolled Press and Laminator VOC Emissions (VOC_{other})

- j. i. For all other presses and laminators, excluding Press 15, the Permittee shall calculate VOC emissions per month at the end of each month by multiplying the total amount of each type of VOC-containing material consumed by the presses and laminators during the month by the VOC content of the material.

Uncontrolled Press, Material Handling, Mixing and Cleaning Emissions (VOC_{misc})

- ii. For material handling, mixing and cleaning operations, the Permittee shall calculate VOC emissions at the end of each month. VOC emissions shall be determined by multiplying the total amount of each type of VOC-containing material consumed during the month by the VOC content of the material.
- iii. The VOC_{misc} emissions from these operations may be accounted for and included in the emission calculations of the uncontrolled presses and laminators, VOC_{other}, when justifiable.

Combustion Source VOC Emissions (VOC_{com})

- k. i. The Permittee shall calculate VOC emissions per month at the end of each month per the following equation:

$$VOC_{com} = \sum_{i=1}^n [(V_i) \times (EF_i)] \quad \text{Equation k}$$

Where:

- EF_i = Emission factor for VOC emissions from combustion of fuel, i
- V_j = Volume of fuel, i, combusted per month
- VOC_{com} = VOC emissions from combustion of all fuels, i, tons per month

- ii. The Permittee may, as an alternative to paragraph i, calculate the VOC combustion emissions on a per month basis as the facility-wide potential to emit VOC combustion emissions (as provided in the PAL application) divided by 12 if more conservative.

Storage Tanks (VOC_{TANKS})

- l. For storage tanks with VOC emissions, the Permittee:
 - i. shall calculate VOC emissions per month at the end of each month for each tank. VOC emissions shall be calculated utilizing the latest EPA TANKS emissions calculation program.

- ii. may, as an alternative to paragraph i, calculate VOC emissions as a given storage tank's annual potential-to-emit VOC emissions (as provided in the PAL application) divided by 12 if more conservative.

Facility-wide VOC Emissions ($VOC_{facility}$)

- m. The Permittee shall calculate facility-wide VOC emissions per month at the end of each month per the following equation.

$$VOC_{facility,m} = VOC_{tot15} + VOC_{other} + VOC_{misc} + VOC_{TANKS} + VOC_{COM} \quad \text{Equation m}$$

- n. The Permittee shall calculate the facility-wide VOC emissions on a 12-month rolling total basis, $VOC_{12-month}$, as the summation of the current month's facility-wide VOC emissions, $VOC_{facility,12}$ plus the eleven previous $VOC_{facility,m}$ values.

$$VOC_{12-month} = \sum_{m=1}^{12} VOC_{facility,m} \quad \text{Equation n}$$

- o. The Permittee shall include in emissions calculations for compliance purposes emissions from startups, shutdowns, and malfunctions. [40 CFR 51.166(w)(7)(iv)]
- p. The Permittee shall provide a demonstrated means of validating the published content of VOC that is contained in or created by all materials used in or at the PAL emissions units. [40 CFR 51.166(w)(12)(iii)(a)]
- q. The Permittee shall assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process. [40 CFR 51.166(w)(12)(iii)(b)]
- r. If the vendor of the material provides a range of VOC content for such material, the Permittee shall use the highest value of the range to calculate the VOC emissions unless the DAQ approves the site-specific data (such as Method 24 analysis) showing that another value in the range is more appropriate. [40 CFR 51.166(w)(12)(iii)(b)]

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

- s. The Permittee shall record monthly in a logbook (written or electronic format) the following:
 - i. VOC_{tot15} , VOC_{other} , VOC_{misc} , VOC_{TANKS} , VOC_{COM} and $VOC_{facility,m}$ and $VOC_{12-month}$;
 - ii. the amounts of each solvent and coating used;
 - iii. the hours of operation of each press and laminator; and
 - iv. The hours of operation of the regenerative thermal oxidizer (RTO-1).
- t. The results of the oxidizer inspections and maintenance activities, oxidizer inlet temperature data and **each PTE pressure differential CPMS data** shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request.
- u. The Permittee shall record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for a PAL emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit. [40 CFR 51.166(w)(12)(vii)]
- v. The Permittee shall retain on site a copy of all records necessary to determine compliance with any requirement in 40 CFR 51.166(w) and of the PAL, including a determination of each PAL emissions unit's 12-month rolling total emissions, for 5 years from the date of such record. 40 CFR 51.166(w)(13)(i)]
- w. The Permittee shall retain a copy of the following records, for the duration of the PAL effective period plus 5 years:
 - i. A copy of the PAL permit application and any applications for revisions to the PAL; and
 - ii. Each annual certification of compliance pursuant to Title V and the data relied on in certifying the compliance. *This requirement applies only to the data used to certify compliance with the terms of the actuals PAL permit in this Section 2.3.* [40 CFR 51.166(w)(13)(ii)]
- x. The records may be retained in electronic format.
- y. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the 12-month rolling facility wide VOC emissions exceed 401 tons per year or if the recordkeeping and monitoring requirements in section 2.3 A.1 g through x are not met.

Reporting [15A NCAC 02Q .0508(f) and 40 CFR 51.166(w)(7)(ix)]

Semi-annual report [40 CFR 51.166(w)(14)(i)]

- z. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. In addition to the records of maintenance and inspections of the oxidizer, this report shall contain the information required in paragraphs 40 CFR 51.166(w)(14)(i)(a) through (g) as follows:
- (a) The identification of Permittee and the permit number.
 - (b) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph 40 CFR 51.166 (w)(13)(i).
 - (c) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.
 - (d) A list of any PAL emissions units modified or added to the major stationary source during the preceding 6-month period.
 - (e) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
 - (f) A notification of a shutdown of any PAL permit monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the PAL emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by 40 CFR 51.166(w) (12)(vii).
 - (g) A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.

Deviation report [40 CFR 51.166(w)(14)(ii)]

- aa. The Permittee shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available, in accordance with General Condition I. The reports shall contain the following information:
- (a) The identification of owner and operator and the permit number;
 - (b) The PAL requirement that experienced the deviation or that was exceeded;
 - (c) Emissions resulting from the deviation or the exceedance; and
 - (d) A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.

Re-validation results [40 CFR 51.166(w)(14)(ii)]

- bb. The Permittee shall submit to the Regional Air Quality Supervisor the results of any re-validation within three months after completion of such revalidation.

Regenerative Thermal Oxidizer Requirements

Notifications [15A NCAC 02Q .0308(a)]

- cc. i. The Permittee shall notify the DAQ of the actual completion date of the actual construction of the regenerative thermal oxidizer (ID No. RTO-1) postmarked within 15 days after such date.

Regenerative Thermal Oxidizer Initial Performance Testing [15A NCAC 02Q .0308(a)]

- ii. Initial Performance Tests – Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall demonstrate compliance with PAL limits in Section 2.3 A. 1. a., above, by conducting an initial performance test on the 65-inch wide-web flexographic press with ten printing stations and two direct natural gas-fired dryers (0.8 million Btu per hour maximum heat input capacity each, ID No. Press-15) and Press 15 ink room (ID No. Room-15). Initial testing shall be conducted in accordance with the following:
- iii. The pollutants and emission sources to be tested during the initial performance test are listed in the following table:

Emission Sources	Pollutant
65-inch wide-web flexographic press with ten printing stations and two direct natural gas-fired dryers (0.8 million Btu per hour maximum heat input capacity each, ID No. Press-15) and Press 15 ink room (ID No. Room-15) controlled by the Regenerative Thermal Oxidizer with natural gas-fired pilot burner (8.16 million Btu per hour heat input rate, ID No. RTO-1)	VOC

- iv. The Permittee shall utilize EPA reference methods contained in 40 CFR 60, Appendix A AND in accordance with testing protocols (using testing protocol submittal forms) approved by the DAQ.
- v. The Permittee shall submit protocols to the DAQ at least 45 days prior to compliance testing.
- vi. 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.
- vii. To the extent possible, testing shall be conducted at the maximum normal operating operation.
- viii. The regenerative thermal oxidizer (RTO-1) is 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. “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.
- ix. Initial testing was completed on June 23, 2021 and established the minimum average firebox temperature for the regenerative thermal oxidizer at 1,645° Fahrenheit,³ As required by 2.3 A. 1. cc. viii., above.

Regenerative Thermal Oxidizer Periodic Performance Tests [15A NCAC 02Q .0308(a)]

- dd. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall demonstrate compliance with the PAL limits in Section 2.3 A. 1. a., above, by conducting periodic performance tests on the test on the 65-inch wide-web flexographic press with ten printing stations and two direct natural gas-fired dryers (0.8 million Btu per hour maximum heat input capacity each, ID No. Press-15) and Press 15 ink room (ID No. Room-15). Periodic testing shall be conducted in accordance with the following for all control options operating scenarios:
 - i. The pollutants and emission sources to be tested during the periodic performance tests are listed in the following table:

Emission Sources	Pollutant
65-inch wide-web flexographic press with ten printing stations and two direct natural gas-fired dryers (0.8 million Btu per hour maximum heat input capacity each, ID No. Press-15) and Press 15 ink room (ID No. Room-15) controlled by the Regenerative Thermal Oxidizer with natural gas-fired pilot burner (8.16 million Btu per hour heat input rate, ID No. RTO-1)	VOC

- ii. Testing shall be conducted in accordance with Section 2.3 A. 1. cc. ii. through vi., above.
- iii. The Permittee shall conduct periodic performance tests when the following conditions are met:
 - (A) The monthly production rate exceeds the average production rate documented during prior performance testing by more than 10 percentage points, or
- iv. 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.

³As per the “Stack Test Observation Report” dated 06/23/2021, by the Stationary Source Compliance Branch.

- v. 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 General Condition 17 is submitted. The permit revision will be processed pursuant to 15A NCAC 02Q .0514. 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 .0515.
- iv. The Permittee shall comply with applicable emission standards at all times, including during periods of testing.

Regenerative Thermal Oxidizer Monitoring and Recordkeeping [15A NCAC 02Q .0308(a)]

- ee. The Permittee shall calculate the VOC emissions monthly from the Press 15 and the associated ink room (**ID Nos. Press-15 and Room-15**)
 - i. Monthly VOC emissions, in tons, shall be calculated by the following equations and emission factors:
Press 15 and associated ink room VOC Emissions (VOC_{tot15})
 - ii. During periods when the capture efficiency (CE) is equal to 100%, the Permittee shall calculate VOC emissions per month at the end of each month by multiplying the total amount of each type of VOC-containing material consumed by Press 15 and the associated ink room (**ID Nos. Press-15 and Room-15**) during the month by the VOC content of the material multiplied by the factor one minus the destruction efficiency (DE)/100. [*Note – the destruction efficiency of RTO-1 to be calculated during Initial Performance Testing and Periodic Performance Tests as per Section 2.3 A. 1. cc., and dd., of the permit, above*).
 - ii. During periods when CE is equal to 0%, the Permittee shall calculate VOC emissions per month at the end of each month by multiplying the total amount of each type of VOC-containing material consumed by Press 15 and the associated ink room (**ID Nos. Press-15 and Room-15**) during the month by the VOC content of the material.
 - iii. The total VOC emissions (VOC_{tot15}) from Press 15 and the associated ink room (**ID Nos. Press-15 and Room-15**) shall be the sum of the emissions determined by i. and ii. above.
 - v. The total VOC emissions (VOC_{tot15}) from Press 15 and the associated ink room (**ID Nos. Press-15 and Room-15**) to be added monthly to the facility wide VOC emissions Equation m in section 2.3 A. 1. m., of the permit, above.
 - vi. The monthly emissions shall be recorded in a logbook (written or electronic format) and made available to an authorized representative upon request.

Regenerative Thermal Oxidizer other requirements

- ff. 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. RTO-1**) to monitor the temperature in the combustion chamber (the second half of the oxidizer away from the flame zone) to ensure the average combustion temperature does not drop below the temperature range established during the performance tests. To ensure compliance and effective operation of the RTO (**ID No. RTO-1**), the Permittee shall:
 - i. maintain a 3-hour rolling average firebox temperature for each of the two fireboxes comprising the RTO (**ID No. RTO-1**) at or above the minimum average temperatures established during latest performance test⁴.
 - ii. maintain records of the 3-hour rolling average temperatures for each firebox.
 - iii. 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 plan shall be submitted to the DAQ regional office for approval and maintained on site. The malfunction plan shall identify malfunctions, as described by the manufacturer, and ensure the operators are prepared to correct such malfunctions as soon as practical. The Permittee shall keep any necessary parts for routine repairs of the temperature monitoring and recording system readily available.
 - iv. The Permittee shall perform periodic inspection and maintenance for the oxidizers 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.

⁴The minimum average temperatures established was 1,645° Fahrenheit.

- v. 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.

Regenerative Thermal Oxidizer Reporting [15A NCAC 02Q .0308(a)]

- gg. The Permittee shall submit a semi-annual summary report of monitoring and recordkeeping activities given in Section 2.3 A. 1. ee., through ff., of the permit, 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 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 the regenerative thermal oxidizer combustion chamber temperature falling below the temperature range established during the performance test or noting that no such instances have occurred. And
 - iii. All instances of deviations from the requirements of this permit must be clearly identified.

2.4 - Filing a Title V Application and Notification Requirement

A. 15A NCAC 2Q .0504: OPTION FOR OBTAINING CONSTRUCTION AND OPERATION PERMIT

1. The Permittee shall file a Title V Air Quality Permit Application pursuant to 15A NCAC 2Q .0504 for the Regenerative Thermal Oxidizer (ID No. RTO-1) on or before 12 months after commencing operation of this control device.
2. Within 15 days after startup of this control device listed in 2.4 A. a. the Permittee shall provide written notice of the start up to the DAQ Regional Office Supervisor.

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 NO_x 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 ensure 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