

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL ABRACZINSKAS
Director



XXX xx, 2020

Mike Sarder
Plant Manager
Louisiana-Pacific Corporation - Roxboro
10475 Boston Road
Roxboro, North Carolina 27573
Dear Mr. Sarder:

SUBJECT: Air Quality Permit No. 07760T24
Facility ID: 7300061
Louisiana-Pacific Corporation - Roxboro
Roxboro, Person County
Fee Class: Title V
PSD Class: Major

In accordance with your completed Air Quality Permit Application for a One Step Significant 15A NCAC 02Q .0501(c)(1) modification of a Title V permit, received September 8, 2020, we are forwarding herewith Air Quality Permit No. 07760T24 to Louisiana-Pacific Corporation - Roxboro, Roxboro, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." 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 both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for adjudicatory hearing may be obtained upon request from the Office of Administrative adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS



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

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

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Person County has triggered increment tracking under PSD for PM₁₀ and SO₂. However, this permit modification does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from XXX xx, 2020 until May 31, 2021, 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,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

cc:

Raleigh Regional Office
Central Files
Kelly Fortin, US EPA Region IV (Permit and Review)
Connie Horne (Cover letter only)

Summary of Changes to Permit

The following changes were made to the Louisiana-Pacific Corporation – Roxboro, Roxboro, Air Permit No. 07760T23*:

Page(s)	Source ID	Description of Change(s)
	Cover letter	Updated facility name and Responsible Officer title
	Insignificant Activities list	There were no changes to the insignificant activities list
1	Permit	Updated facility name
6	summary of all permitted emission sources and associated air pollution control devices table	The foot note under this table requiring sources (ID Nos. D-1A through D-5A) shall file a Title V Air Quality Permit Application on or before 12 months after commencing operation is not removed
39	2.2 B. 1. q. iii.,	Test all the new dryers (ID Nos. D-1A through D-5A) within 180 days of installation of all the new dryers (ID Nos. D-1A through D-5A).
52 to 61	General Conditions	Updated

*This refers to the previous permit unless otherwise stated.

ATTACHMENT to Permit No. 07760T24

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

Emission Source ID No.	Emission Source Description
IS-EO-1 [MACT, DDDD]	Edgeseal operation consisting of 2 paint booths: one on the main line, which also applies/sprays a logo and end strips; one on the T&G. End strips are also applied to the product by water based aerosol cans just next to the spray booth. (Group 1 miscellaneous coating operations)
IS-PO-1 [MACT, DDDD]	Printing operations consisting of the Logo and APA stamp operations and Re-grade. The APA stamp goes on the saw line, where the Logo goes on in the paint booth. Boards that fail quality standards required for APA certification are re-graded by covering the APA stamp either manually with a roller or a spray system located between the saw line and stacker units ¹ (Group 1 miscellaneous coating operations)
IS-C-1 [MACT, DDDD]	paint spray booth (Group 1 miscellaneous coating operations)
IS-N-1 [MACT, DDDD]	nail line marking (Group 1 miscellaneous coating operations)
IS-SP-1 [MACT, DDDD]	stencil painting or “end stripping” (Group 1 miscellaneous coating operations)
IS-D-1	diesel fuel tank
IS-G-1	gasoline fuel tank
IS-B-1	battery charging operation
IS-WC-1	welding and cutting torch
IS-DD-1	two zep cleaning stations - degreaser drums (55 gallons)
IS-BC-1	blade cleaning operation
IS-HH-1	hand held grinding equipment
IS-PP-1	portable pump
IS-CO-1	compressor oil
IS-TO-1	thermal oil storage
IS-HO-1	hydraulic oil storage reservoir
IS-HO-2	hydraulic oil system
IS-HO-3	hydraulic oil tank (19,800 gallons)
IS-P-1	propane tank (1,500 pounds)
IS-DB-1	debarker
IS-W-2	waferizer
IS-CT-1	cutting torch

¹ Applicability Determination 2760 received by DAQ on December 29, 2015. Email response that same day that no permit application was necessary.

IS-BS-1	bench scale grinding
IS-W-3	welder
IS-UO-1	used oil tank
IS-W-1	wax tanks
IS-DF-1 [MACT, ZZZZ]	diesel fire pump (275 bhp)
IS-WE-1 & IS-WE-2	two volatile organic liquid storage tanks (12,000 gallon capacity each)
IS-MDI-3 & IS-MDI-4	one volatile organic liquid or soybean oil storage tank ¹ and one volatile organic liquid storage tank, respectively (30,000 gallon capacity each)
IS-PF-5 & IS-PF-6	two volatile organic liquid storage tanks (15,000 gallon capacity each)
I-MO [MACT, DDDD]	mark-out system at the TechShield line (Group 1 miscellaneous coating operations)

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 “The Regulatory Guide for Insignificant Activities/Permits Exempt Activities”. The link to this site is as follows: <http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.



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

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
07760T24	07760T23	XXX xx, 2019	May 31, 2021

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: Louisiana-Pacific Corporation – Roxboro
Facility ID: 7300061

Facility Site Location: 10475 Boston Road
City, County, State, Zip: Roxboro, Person County, North Carolina 27574

Mailing Address: 10475 Boston Road
City, State, Zip: Roxboro, North Carolina, 27573

Application Numbers: 7300061.20B
Complete Application Date: September 8, 2020

Primary SIC Code: 2493
**Division of Air Quality,
Regional Office Address:** Raleigh Regional Office
3800 Barrett Drive
Raleigh, North Carolina, 27609

Permit issued this the XXst day of XXX, 2020.

William D. Willets, P.E., Chief, Air Permitting Section
By Authority of the Environmental Management Commission

Table Of Contents

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

SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

2.1 - Emission Source(s) Specific Limitations and Conditions
(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)

2.2 - Multiple Emission Source(s) Specific Limitations and Conditions
(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)

2.3- Permit Shield for Nonapplicable Requirements

SECTION 3: GENERAL PERMIT CONDITIONS

ATTACHMENT

List of Acronyms

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
BARK1 D-1 through D-5 MACT DDDD	<u>Wafer Drying Process</u> one bark/wood (dry and wet)-fuel/recycled resinated wood fuel ¹ -fired burner (190 million Btu per hour maximum heat input rate) providing direct heat to five triple-pass direct fired wafer dryers ²	PCYCD-1 through PCYCD-5, WESP-1, WESP-2, RTO-4, RTO-5 and RTO-6	five cyclones (144 inches in diameter each) installed one each on the dryers, two wet electrostatic precipitators (22,651 square feet of collection area each), and three propane/natural gas-fired regenerative thermal oxidizers (11.0 million Btu per hour heat input rate, each)
BARK1 MACT DDDD	<u>Wafer Drying Process</u>		
³ *D-1A	one bark/wood (dry and wet)-fuel/recycled resinated wood fuel ¹ -fired burner (190 million Btu per hour maximum heat input rate) providing heat to single-pass direct fired wafer dryer ²	PCYCD-1, WESP-1, WESP-2, RTO-4, RTO-5 and RTO-6	One cyclone (144 inches in diameter) installed on the dryer and in series with two wet electrostatic precipitators (22,651 square feet of collection area each), and three propane/natural gas-fired regenerative thermal oxidizers (11.0 million Btu per hour heat input rate, each)
³ *D-2A	one bark/wood (dry and wet)-fuel/recycled resinated wood fuel ¹ -fired burner (190 million Btu per hour maximum heat input rate) providing heat to single-pass direct fired wafer dryer ²	PCYCD-2, WESP-1, WESP-2, RTO-4, RTO-5 and RTO-6	One cyclone (144 inches in diameter) installed on the dryer and in series with two wet electrostatic precipitators (22,651 square feet of collection area each), and three propane/natural gas-fired regenerative thermal oxidizers (11.0 million Btu per hour heat input rate, each)
³ *D-3A	one bark/wood (dry and wet)-fuel/recycled resinated wood fuel ¹ -fired burner (190 million Btu per hour maximum heat input rate) providing heat to single-pass direct fired wafer dryer ²	PCYCD-3, WESP-1, WESP-2, RTO-4, RTO-5 and RTO-6	One cyclone (144 inches in diameter) installed on the dryer and in series with two wet electrostatic precipitators (22,651 square feet of collection area each), and three propane/natural gas-fired regenerative thermal oxidizers (11.0 million Btu per hour heat input rate, each)
³ *D-4A	one bark/wood (dry and wet)-fuel/recycled resinated wood fuel ¹ -fired burner (190 million Btu per hour maximum heat input rate) providing heat to single-pass direct fired wafer dryer ²	PCYCD-4, WESP-1, WESP-2, RTO-4, RTO-5 and RTO-6	One cyclone (144 inches in diameter) installed on the dryer and in series with two wet electrostatic precipitators (22,651 square feet of collection area each), and three propane/natural gas-fired regenerative thermal oxidizers (11.0 million Btu per hour heat input rate, each)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
3*D-5A	one bark/wood (dry and wet)-fuel/recycled resinated wood fuel ¹ -fired burner (190 million Btu per hour maximum heat input rate) providing heat to single-pass direct fired wafer dryer ²	PCYCD-5, WESP-1, WESP-2, RTO-4, RTO-5 and RTO-6	One cyclone (144 inches in diameter) installed on the dryer and in series with two wet electrostatic precipitators (22,651 square feet of collection area each), and three propane/natural gas-fired regenerative thermal oxidizers (11.0 million Btu per hour heat input rate, each)
TOH-1 TOH-2 NSPS Dc; MACT DDDD	<p><u>Primary Operating Scenario (POS)</u> two wood fuel/recycled resinated wood fuel/natural gas-fired thermal oil heaters (40 million Btu per hour heat input rate each) exhausting directly to the bark burner and indirectly supplying heat to the presses</p>	<p>PCYCD-1 through PCYCD-5, WESP-1 and WESP-2, and RTO-4 through RTO-6</p>	<p>five cyclones (144 inches in diameter each) installed one each on the dryers, two wet electrostatic precipitators (22,651 square feet of collection area each), and three propane/natural gas-fired regenerative thermal oxidizers (11.0 million Btu per hour heat input rate, each)</p>
TOH-1 TOH-2 .1109 Case-by-Case MACT; MACT DDDDD	<p><u>Alternate Operating Scenario (AOS)</u> two wood fuel/recycled resinated wood fuel/natural gas-fired thermal oil heaters (40 million Btu per hour heat input rate each) exhausting to stacks (atm) while firing natural gas only</p>	N/A	N/A
CYC9	saw trim recovery (screen) cyclone (84 inches in diameter) exhausting to CP-003	N/A	N/A
CP-003 and CP-004	Fuel Prep System raw fuel bin transfer and loading system (high pressure blower)	B-3 and/ or CYC3	one bagfilter (2,219 square feet of filter area) and/or one bypass cyclone (96 inches in diameter)
CP-007	sanderdust bin transfer and loading system	B-7	one bagfilter (479 square feet of filter area)
FUELPREP	metering bin transfer and loading system	B-8 and/or CYC8	one bagfilter (2,219 square feet of filter area) and/or one bypass cyclone (84 inches in diameter)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
CP-002	<u>OSB forming process</u> blender and forming bin aspiration systems	B-2	one bagfilter (2,219 square feet of filter area)
CP-005 and CYC5	mat reject and flying saw system with bypass cyclone (120 inches in diameter)	B-5, and/or CYC5-2 (wet); or CYC5-1 (dry)	one bagfilter (5,235 square feet of filter area) and/or two bypass cyclones (120 inches in diameter)
PV-1 and PV-2 MACT DDDD	<u>OSB board processing operation</u> two OSB press enclosure vents from one totally enclosed hot press	RTO-3	one propane/natural gas-fired regenerative thermal oxidizer (24 million Btu per hour heat input)
TS-1.ADH and TS-1.CO MACT QQQQ	<u>TechShield® Coating Operation consisting of:</u> Adhesive roll coating operation and associated sheathing application Cleaning operations	N/A	N/A
CP-001	<u>Finishing process</u> sawtrim and finishing line clean-up operation	B-1 and/or CYC1	one bagfilter (5,235 square feet of filter area) and/or one bypass cyclone (120 inches in diameter)
CP-006	tongue and groove and sanderdust aspiration system	B-6 and/or CYC6	one bagfilter (3,698 square feet of filter area) and/or one bypass cyclone (96 inches in diameter)
ENG1 MACT ZZZZ⁴	one diesel-fired emergency generator (1,332 horsepower)	N/A	N/A
F-1	bark handling fugitives	N/A	N/A

¹ Per the application (7300061.08A) request and for the purpose of CISWI NSPS applicability, the Permittee is allowed to only combust wood and recycled resinated wood-waste that is not classified as a "solid waste" as of May 12, 2010, issuance of Permit No. 07760T17.

² Per email dated March 17, 2016 each dryer and associated process cyclone has an inlet airflow design of 55,000 ACFM (275,000 ACFM total) and each WESP has an inlet airflow design of 150,000 ACFM (300,000 ACFM total).

³ D-1A through D-5A are the replacement dryers for D-1 through D-5 (Application # 7300061.19A).

⁴ [40 CFR § 63.6580, Subpart ZZZZ] per 63.6590(a)(1)(i) Stationary RICE located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002. Therefore, per 63.6590(b)(3) an existing emergency RICE does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

*These emission sources (ID Nos. D-1A through D-5A) are 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 Devices(s) Specific Limitations and Conditions

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

A. Wafer drying process consisting of:

- 1) **one bark burner (ID No. BARK1), two thermal oil heaters (ID Nos. TOH-1 and TOH-2), and five wafer dryers (ID Nos. D-1 through D-5); controlled by five process cyclones (ID Nos. PCYCD-1 through PCYCD-5), two wet electrostatic precipitators (ID Nos. WESP-1 and WESP-2), and three regenerative thermal oxidizers (ID Nos. RTO-4 through RTO-6)**

AND

- 2) **one bark burner (ID No. BARK1), two thermal oil heaters (ID Nos. TOH-1 and TOH-2), and five wafer dryers (ID Nos. D-1A through D-5A); controlled by five process cyclones (ID Nos. PCYCD-1 through PCYCD-5), two wet electrostatic precipitators (ID Nos. WESP-1 and WESP-2), and three regenerative thermal oxidizers (ID Nos. RTO-4 through RTO-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 (PM)	<p><u>AOS - firing natural gas only</u> 0.35 pounds per million Btu heat input (ID Nos. TOH-1 and TOH-2)</p>	15A NCAC 02D .0503
	<p>$E=55.0(P)^{0.11} - 40$</p> <p>where E = allowable emission rate in pounds per hour P = process weight in tons per hour greater than 30 tons per hour</p> <p>Or</p> <p>$E=4.10(P)^{0.67}$</p> <p>where E = allowable emission rate in pounds per hour P = process weight in tons per hour less than 30 tons per hour</p>	15A NCAC 02D .0515

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	<i>POS - firing wood fuel and/or recycled resinated wood fuel and/or natural gas</i> 0.10 pounds per million Btu heat input (ID Nos. TOH-1 and TOH-2)	15A NCAC 02D .0524 (40 CFR 60, Subpart Dc)
PM-10	Compliance assurance monitoring (CAM) (See Section 2.2-C. – Multiple Emission Sources)	15A NCAC 02D .0614 (40 CFR 64)
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D 0521
	<i>POS - firing wood fuel and/or recycled resinated wood fuel and/or natural gas</i> 20 percent opacity (ID Nos. TOH-1 and TOH-2)	15A NCAC 02D .0524 (40 CFR 60, Subpart Dc)
Carbon monoxide	Less than 250 tons per year facility-wide (See Section 2.2-B. – Multiple Emission Sources)	15A NCAC 02Q .0317 for 15A NCAC 02D .0530
Nitrogen oxides		
Particulate matter		
PM-10		
Volatile organic compounds		
Volatile Organic Compounds	Compliance assurance monitoring (CAM) (See Section 2.3-B. – Multiple Emission Sources)	15A NCAC 02Q .0317 for 15A NCAC 02D .0614(b)(1)(E)
Toxic Air Pollutants	Toxic air pollutant emissions shall not exceed rates which cause established ambient levels to be exceeded; State-enforceable only (See Section 2.2 A.1. – Multiple Emission Sources)	15A NCAC 02D .1100
	Control of Toxic Air Pollutants – emission rates requiring a permit; State Enforceable Only (See Section 2.2 A.2. – Multiple Emission Sources)	15A NCAC 02Q .0711
Hazardous Air Pollutants	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products Manufacture (See Section 2.2-D. – Multiple Emission Sources)	15A NCAC 02D .1111 (40 CFR 63, Subpart DDDD)
	<i>AOS - firing natural gas only</i> Case-by-Case MACT: Best Combustion Practices (ID Nos. TOH-1 and TOH-2)	15A NCAC 02D .1109 [CAA § 112(j)] 15A NCAC 02D .1111 (40 CFR 63, Subpart DDDDD)
Odors	Odorous Emissions; State-enforceable only (See Section 2.2-A.4. – Multiple Emission Sources)	15A NCAC 02D .1806

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

- a. Emissions of particulate matter from the bark burner (**ID No. BARK1**), thermal oil heaters (**ID Nos. TOH-1 and TOH-2**), five wafer dryers (**ID Nos. D-1 through D-5**) and five new wafer dryers (**ID Nos. D-1A through D-5A**) shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0515(a)]

$$E = 55.0 \times P^{0.11} - 40$$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour greater than 30 tons per hour

Or

$$E = 4.10 \times P^{0.67}$$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour less than 30 tons per hour

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

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1-A. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

- c. Particulate matter emissions from the bark burner (**ID No. BARK1**), thermal oil heaters (**ID Nos. TOH-1 and TOH-2**), five wafer dryers (**ID Nos. D-1 through D-5**) and five new wafer dryers (**ID Nos. D-1A through D-5A**) shall be controlled by cyclones (**ID Nos. PCYCD-1 through PCYD-5**), wet electrostatic precipitators (WESPs) (**ID Nos. WESP-1 and WESP-2**) and regenerative thermal oxidizers (RTOs) (**ID Nos. RTO-4 through RTO-6**). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- i. a monthly external visual inspection of the system ductwork and material collection units for leaks. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork, cyclones, WESPs, and RTOs are not inspected and maintained.
- d. To ensure compliance and effective operation of the WESPs (**ID Nos. WESP-1 and WESP-2**), the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include:
- i. a weekly external visual inspection of critical components of the wet electrostatic precipitator such as voltmeters, quench inlet temperature gauges, outlet temperature gauges, nozzles, pumps, and piping;
 - ii. a weekly check for any equipment that does not generate an alarm in the turned-off state, to ensure it is switched on;
 - iii. during planned maintenance shutdown periods for the WESP check for signs of plugging and buildup; and
 - iv. a monthly external visual inspection of the system ductwork and material collection unit for leaks and corrosion.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the wet electrostatic

precipitators and duct work are not inspected and maintained.

- e. In accordance with good operating practices, once per shift the Permittee shall monitor and record the secondary voltage, quench inlet gas temperature and exit gas temperature of the WESPs (**ID Nos. WESP-1 and WESP-2**). The secondary voltage, inlet gas temperature, and exit gas temperature shall be recorded electronically or in a written logbook, maintained on-site, and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the monitoring devices are not properly calibrated, operated, and maintained using procedures that take into account manufacturer's specifications and if the temperature and voltage records are not maintained. The Permittee shall be deemed in noncompliance if the secondary voltage is less than **35** kilovolts (kV), the inlet gas temperature is greater than **275** degrees Fahrenheit (°F), or the exit gas temperature is greater than **180** °F.
- f. The Permittee shall review, on a weekly basis, gas temperatures and voltage readings. If the gas temperatures and secondary voltage readings are observed to be outside the normal range, the Permittee shall inspect the wet electrostatic precipitators for malfunctions and repair, as necessary, in accordance to manufacturer's inspection and maintenance recommendations. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the inspections and repairs are not performed.
- g. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed;
 - iv. the causes for any variance from the normal operating ranges for the WESP's, if any, and corrective actions taken; and
 - v. any variance from manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

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

- h. The Permittee shall submit the results of any maintenance performed on the cyclones, WESPs, and RTOs within 30 days of a written request by the DAQ.
- i. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

- a. Emissions of sulfur dioxide from the bark burner (**ID No. BARK1**), five wafer dryers (**ID Nos. D-1 through D-5**), five new wafer dryers (**ID Nos. D-1A through D-5A**), TOHs (**ID Nos. TOH-1 and TOH-2**), and RTOs (**ID Nos. RTO-4 through RTO-6**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1-A. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

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

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas, propane, bark/wood (dry and wet) fuel, or recycled resinated wood fuel in these combustion sources.

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

- a. Visible emissions from the bark burner (**ID No. BARK1**), five wafer dryers (**ID Nos. D-1 through D-5**) and five new wafer dryers (**ID Nos. D-1A through D-5A**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

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

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

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

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The monthly observation must be made for each month of the calendar year periods to ensure compliance with this requirement. The Permittee shall establish "normal" for these sources (**ID Nos. D-1A through D-5A**) in the first 30 days following the effective date of beginning operation. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
- take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1-A.3. a. above.
- If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

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

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
 - the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - the results of any corrective actions performed.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

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

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

4. 15A NCAC 02D .0524: NSPS 40 CFR PART 60 SUBPART Dc

- a. While operating the **thermal oil heaters (ID Nos. TOH-1 and TOH-2)** under their Primary Operating Scenario (POS), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions." [15A NCAC 02D .0524]

Emission Limitations [15A NCAC 02D .0524]

- b. Particulate matter emissions from the thermal oil heaters (**ID Nos. TOH-1 and TOH-2**) shall not exceed **0.10** pounds per million Btu heat input.

- c. Visible emissions from the thermal oil heaters (**ID Nos. TOH-1 and TOH-2**) shall not be more than 20 percent opacity when averaged over a six-minute period, except for one six-minute period per hour of not more than **27** percent opacity.
Pursuant to 40 CFR Part 60.43c(d), the PM and opacity standards shall apply at all times except during periods of start-up, shutdown, and malfunction.

Monitoring and Recordkeeping [15A NCAC 02D .0524]

- d. The Permittee shall use a continuous opacity monitor system (COMS) to monitor and record opacity. The COMS shall be installed, calibrated, maintained, tested, and operated in accordance with 40 CFR Part 60 Appendix B "Performance Specifications" and Appendix F "Quality Assurance Procedures." The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the COMS is not calibrated, maintained, and tested. Records of these measurements shall be maintained on-site in written or electronic format and made available to DAQ personnel upon request.
- e. The Permittee shall record and maintain records of the amounts of each fuel combusted during each day. All records required under this rule shall be maintained for a period of two years following the date of such record.

Reporting Requirements [15A NCAC 02D .0524]

- f. In addition to any other reporting required by 40 CFR § 60.48c or notification requirements to the EPA, the Permittee is required to **NOTIFY** the DAQ in **writing** of the following:
- i. any excess opacity emission reports as measured by the COMS, postmarked on or before January 30, April 30, July 30, and October 30 of each calendar year for the preceding three-month period. If there are no excess emissions during the calendar quarter, the Permittee shall submit a report quarterly stating that no excess emissions occurred during the reporting period; and
 - ii. the Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and postmarked on or before July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

5. START-UP AND SHUTDOWN EMISSIONS

- a. **Start-up** emissions from the **thermal oil heaters (ID Nos. TOH-1 and TOH-2)** may be exhausted directly to the atmosphere. Pursuant to 40 CFR Part 60.11(d), the Permittee shall, to the extent practicable, maintain and operate the thermal oil heaters 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, which may include monitoring results, opacity observations, review of the operating and maintenance procedures, and inspection results.
- b. **Start-up and Shutdown** emissions from the **bark burner (ID No. BARK1)** may be exhausted directly to the atmosphere. Pursuant to 15A NCAC 02D .0535, the Permittee shall, to the extent practicable, maintain and operate the bark burner 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, which may include monitoring results, opacity observations, review of the operating and maintenance procedures, and inspection results. During periods of startup or shutdown, the facility will follow their written Plan, which includes:
- i. each Plan event will be documented and recorded in a logbook (written or electronic format), including the date, time and duration;
 - ii. visible emission observations will be performed for each event exceeding 24 hours, then once every 12 hours and appropriate actions taken to ensure compliance with permit limits until the event has ended;
 - iii. the Plan will be revised as needed in order to incorporate "Best Management Practices" as appropriate and to ensure that all practical steps have been taken to minimize the impact of the excess emissions on air quality; and

- iv. startup and shutdown reports shall be submitted any time an action taken by the Permittee during an “event” is not consistent with the procedures specified in the Plan, and the source exceeds any applicable emission limitation in the relevant emission standard. In accordance with Section 3 - General Conditions D. and I., the Permittee shall report the actions taken for that event within two working days after commencing actions inconsistent with the plan followed by a letter within seven working days after the end of the event. The startup and shutdown report shall consist of a telephone call (or facsimile (FAX) transmission) to the DAQ within two working days after commencing actions inconsistent with the Plan, and it shall be followed by a letter, postmarked within seven working days after the end of the event, signed by the responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup and shutdown plan, and describing all excess emissions and/or parameter monitoring exceedances which are believed to have occurred. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0535 if the Permittee has not taken the proper steps to minimize the impact on air quality; the Permittee cannot demonstrate that the excess emissions were unavoidable during startup and shutdown; or the Plan is not followed and the appropriate records are not maintained.

6. ALTERNATIVE OPERATING SCENARIOS [15A NCAC 02Q .0508(j)]

- a. The Permittee, contemporaneously with making a change from one alternate operating scenario to another while operating the thermal oil heaters (**ID Nos. TOH-1 and TOH-2**), shall record in a logbook (written or electronic format) the scenario under which it is operating. [15A NCAC 02Q .0508(j)]

7. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS for ALTERNATIVE OPERATING SCENARIOS [15A NCAC 02Q .0508(j)]

- a. Emissions of particulate matter from the combustion of natural gas that are discharged from the thermal oil heaters (**ID Nos. TOH-1 and TOH-2**) exhausting through their individual stacks into the atmosphere, while firing natural gas only, shall not exceed **0.35** pounds per million Btu heat input. [15A NCAC 02D .0503(a)]

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

- b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limit given in Section 2.1-A.7.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

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

- c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in these sources.

8. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS for ALTERNATIVE OPERATING SCENARIOS [15A NCAC 02Q .0508(j)]

- a. Visible emissions from the thermal oil heaters (**ID Nos. TOH-1 and TOH-2**) exhausting through their individual stacks into the atmosphere, while firing natural gas only, shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

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.8.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/reporting is required for visible emissions from the firing of natural gas in these sources.

9. Reserved

10. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

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

- a. For the existing sources (**ID Nos. TOH-1 and TOH-2**) designed to burn gas 1 fuels with a heat input capacity equal to or greater than 10 million Btu per hour, the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD. "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."
 - i. The Permittee shall comply with the CAA §112(j) standard in 2.1-A.9 above through **May 19, 2019**. The Permittee shall be subject to the requirements of this standard starting May 20, 2019. Note that the requirements of this standard may require action on behalf of the Permittee prior to May 20, 2019.

Definitions and Nomenclature [§63.7575]

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

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

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

Compliance Date [40 CFR 63.7510(e), §63.56(b)]

- d. The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019.

Notifications [§63.7545(e)(8), §63.7530(e),(f)]

- e. The Permittee shall submit a Notification of Compliance Status. The notification must be signed by a responsible official and sent before the close of business on the 60th day following the completion of the initial tune up and one time energy assessment (whichever is later). The notification shall contain the following:
 - i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned.
 - ii. the following certification(s) of compliance, as applicable:
 - A. "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR 63 Subpart DDDDD at the site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)" [i.e., conditions 2.1-A.10.g.i. through g.v. and 1. ii.]; and
 - B. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)" [2.1-A.10.k.] and is an accurate depiction of the facility at the time of the assessment.

General Compliance Requirements [§63.7505(a), §63.7500(f)]

- f. The Permittee shall be in compliance with the work practice standards in this subpart. These standards apply at all times the affected unit is operating.

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

- g. The Permittee shall conduct a tune-up of the source(s) annually as specified below.
 - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the

- Permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown;
- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown);
 - iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject; and
 - v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).
Measurements may be taken using a portable CO analyzer.

[§63.7500(a), (e), §63.7540(a)(10)]

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

[§63.7500(a)(3)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in conditions 2.1-A.10.c. through j. are not met.

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

- k. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR 63 Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) in Table 3 appropriate for the on-site technical hours listed in §63.7575: [§63.7500(a)(1), Table 3]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in condition 2.1-A.10.k. are not met.

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

- l. The Permittee shall keep the following:
 - i. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]
 - ii. maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
 - (A) the concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the source;
 - (B) a description of any corrective actions taken as a part of the combustion adjustment; and
 - (C) the type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
[40 CFR 63.7540(a)(10)(vi)]
 - iii. the associated records for conditions 2.1-A.10.f. through k.
- m. The Permittee shall:

- i. maintain records in a form suitable and readily available for expeditious review;
- ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
- iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.

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

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in conditions 2.1-A.10.l. through m.

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

- n. Pursuant to 40 CFR 63.7550(b), the Permittee shall submit compliance reports to the DAQ on an annual basis. The Permittee shall submit the compliance report postmarked on or before January 30 of each calendar year for the preceding 12-month period. The first report shall be postmarked on or before January 30, 2020.
 - i. This report must also be submitted electronically through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]
- o. The compliance report must contain the following information:
 - i. Company name and address;
 - ii. Process unit information, emissions limitations, and operating parameter limitations;
 - iii. Date of report and beginning and ending dates of the reporting period;
 - iv. The total operating time during the reporting period;
 - iv. If there are no deviations from the requirements of the work practice requirements in condition 2.1-A.10.g. above, a statement that there were no deviations from the work practice standards during the reporting period; and
 - v. Include the date of the most recent tune-up for each unit required according to condition 2.1-A.10.g. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown.
- p. If you have a deviation from a work practice standard during the reporting period, the report must contain the following information:
 - i. A description of the deviation and which emission limit or operating limit from which you deviated; and
 - ii. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

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

[40 CFR 63.7550(a) and (d), 63.7540(b), Table 9]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in conditions 2.1-A.10.n. through p. are not met.

B. Two OSB press enclosure vents (ID Nos. PV-1 and PV-2) from one totally enclosed hot press board processing operation controlled by one regenerative thermal oxidizer (ID No. RTO-3)

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	properly designed collectors and adequate ductwork	15A NCAC 02D .0512
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous Air Pollutants	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products Manufacture (See Section 2.2-D. – Multiple Emission Sources)	15A NCAC 02D .1111 (40 CFR 63, Subpart DDDD)
Carbon monoxide	Less than 250 tons per year facility-wide (See Section 2.2-B. – Multiple Emission Sources)	15A NCAC 02Q .0317 for 15A NCAC 02D .0530
Nitrogen oxides		
Particulate matter		
PM-10		
Volatile organic compounds		
Odors	Odorous Emissions; State-enforceable only (See Section 2.2-A.4. – Multiple Emission Sources)	15A NCAC 02D .1806
Toxic air pollutants	Toxic air pollutant emissions shall not exceed rates which cause established ambient levels to be exceeded; State-enforceable only (See Section 2.2 A.1. – Multiple Emission Sources)	15A NCAC 02D .1100
	Control of Toxic Air Pollutants – emission rates requiring a permit; State Enforceable Only (See Section 2.2 A.2. – Multiple Emission Sources)	15A NCAC 02Q .0711

1. 15A NCAC 02D .0512: PARTICULATES FROM MISCELLANEOUS WOOD PRODUCTS FINISHING PLANTS

- a. The Permittee shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors. In no case shall the ambient air quality standards be exceeded beyond the property line.

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

- b. Particulate matter emissions from the press vents shall be controlled by adequate ductwork and properly designed collectors. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:
- i. monthly external inspection of the associated ductwork noting structural integrity. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if the ductwork is not inspected and maintained.

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

- c. The results of inspection and maintenance for the ductwork shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
 - ii. the results of each inspection; and
 - iii. the results of maintenance performed on the ductwork.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if these records are not maintained.

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

- d. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.
- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

- a. Emissions of sulfur dioxide from this source shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1-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 or reporting is required for sulfur dioxide emissions from the firing of natural gas or propane in this source.

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

- a. Visible emissions from the press vents (**ID Nos. PV-1 and PV-2**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

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. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. To ensure compliance, once a month the Permittee shall observe the emission points of this source for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1-B.3.a. above.If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

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

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

iii. the results of any corrective actions performed.

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

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

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

C. Wood product forming and finishing operations consisting of several group processes:

Sawtrim and finishing line clean-up (ID No. CP-001), blender and forming bin aspiration systems (ID No. CP-002), raw fuel bin transfer and loading system (ID Nos. CP-003, CYC9 and CP-004), mat reject and flying saw system (ID No. CP-005 and CYC5), tongue and groove and sanderdust aspiration system (ID No. CP-006), sanderdust bin transfer and loading system (ID No. CP-007), and metering bin transfer and loading system (ID No. FUELPREP); controlled by seven bagfilters (ID Nos. B-1, B-2, B-3, B-5, B-6, B-7, and B-8) and six bypass cyclones (ID Nos. CYC1, CYC3, CYC5-1, CYC5-2, CYC6, and CYC8)

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	adequate duct work and properly designed collectors	15A NCAC 02D .0512
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Particulate matter	Less than 250 tons per year facility-wide (See Section 2.2-B. – Multiple Emission Sources)	15A NCAC 02Q .0317 for 15A NCAC 02D .0530
PM-10		
PM-10	Compliance assurance monitoring (CAM) (See Section 2.2-C. – Multiple Emission Sources)	15A NCAC 02D .0614 (40 CFR 64)
Toxic air pollutants	Toxic air pollutant emissions shall not exceed rates which cause established ambient levels to be exceeded; State-enforceable only (See Section 2.2 A.1. – Multiple Emission Sources)	15A NCAC 02D .1100
	Control of Toxic Air Pollutants – emission rates requiring a permit; State Enforceable Only (See Section 2.2 A.2. – Multiple Emission Sources)	15A NCAC 02Q .0711

1. 15A NCAC 02D .0512: PARTICULATES FROM MISCELLANEOUS WOOD PRODUCTS FINISHING PLANTS

a. The Permittee shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors. In no case shall the ambient air quality standards be exceeded beyond the property line.

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

b. Particulate matter emissions from the wood product forming and finishing sources (ID Nos. CP-001 through CP-007, CYC5, CYC9, and FUELPREP) shall be controlled by seven bagfilters (ID Nos. B-1, B-2, B-3, B-

5, B-6, B-7, and B-8) and six cyclones (**ID Nos. CYC1, CYC3, CYC5-1, CYC5-2, CYC6, and CYC8**). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:

- i. monthly external inspection of the ductwork, cyclones and bagfilters noting the structural integrity; and
- ii. annual (for each 12 month period following the initial inspection) internal inspection of the bagfilters noting the structural integrity and the condition of the filters.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if the ductwork, cyclones and bagfilters are not inspected and maintained.

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

- c. The results of inspection and maintenance for the cyclones and bagfilters shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection; and
 - iii. the results of maintenance performed on any control device.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if these records are not maintained.

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

- d. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.
- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

- a. Visible emissions from these sources (**ID Nos. CP-001 through CP-007, CYC5, CYC9, and FUEL PREP**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1-C. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The monthly observation must be made for each month of the calendar year periods to ensure compliance with this requirement. If visible emissions from these sources (**ID Nos. CP-001 through CP-007, CYC5, CYC9, and FUELPREP**) are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1-C.2. a. above.If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

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

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

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

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

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

D. TechShield® Coating Operation (ID No. TS-1) consisting of:

- Adhesive roll coating operation and associated sheathing application
- Cleaning operations

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	properly designed collectors and adequate ductwork	15A NCAC 02D .0512
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Particulate matter	Less than 250 tons per year facility-wide (See Section 2.2-B. – Multiple Emission Sources)	15A NCAC 02Q .0317 for 15A NCAC 02D .0530
PM-10		
Volatile Organic Compounds		
Hazardous Air Pollutants	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products (See Section 2.2-E. – Multiple Emission Sources)	15A NCAC 02D .1111 (40 CFR Part 63, Subpart QQQQ)
Odors	Odorous Emissions; State-enforceable only (See Section 2.2-A.4. – Multiple Emission Sources)	15A NCAC 02D .1806
Toxic air pollutants	Toxic air pollutant emissions shall not exceed rates which cause established ambient levels to be exceeded; State-enforceable only (See Section 2.2 A.1. – Multiple Emission Sources)	15A NCAC 02D .1100
	Control of Toxic Air Pollutants – emission rates requiring a permit; State Enforceable Only (See Section 2.2 A.2. – Multiple Emission Sources)	15A NCAC 02Q .0711

1. 15A NCAC 02D .0512: PARTICULATES FROM MISCELLANEOUS WOOD PRODUCTS FINISHING PLANTS

- a. The Permittee shall not cause, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors. In no case shall the ambient air quality standards be exceeded beyond the property line.

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

- b. Particulate matter emissions from the coating operation (**ID No. TS-1**) shall be controlled by adequate ductwork and properly designed collectors. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include:
- i. annual (for each 12 month period following the initial inspection) inspection of the associated ductwork noting structural integrity.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if the ductwork is not inspected and maintained.

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

- c. The results of inspection and maintenance for the coating operations (**ID No. TS-1**) shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- i. the date and time of each recorded action;
- ii. the results of each inspection; and
- iii. the results of maintenance performed on the ductwork.
- The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0512 if these records are not maintained.

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

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

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

- a. Visible emissions from the coating operation (**ID No. TS-1**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521 (d)]

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1-D.2.a. (**ID No. TS-1**) above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. To ensure compliance, the Permittee shall follow the monitoring, recordkeeping, and reporting requirements per Specific Conditions 2.1-D.1.b. – d. The Permittee shall be deemed in noncompliance with 02D .0521 if the monitoring and recordkeeping is not maintained.

E. Diesel-fired emergency generator (ID No. ENG-1; 1,332 hp)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Hazardous Air Pollutants	“Existing” Emergency RICE No requirements per 63.6590(b)	15A NCAC 02D .1111 (40 CFR Part 63, Subpart ZZZZ)

1. 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. [15A NCAC 02D .0516]

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1-E. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f) and 15A NCAC 02D .2601]

- c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from diesel fuel combustion for this emergency generator.

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

- a. Visible emissions from this emergency generator (**ID No. ENG-1**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1-E.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of diesel fuel in this emergency generator.

3. 15A NCAC 2D .1111, 40 CFR Part 63, Subpart ZZZZ “National Emission Standards For Hazardous Air Pollutants For “Existing” Emergency Stationary Reciprocating Internal Combustion Engines (ID No. ENG-1)

- a. Existing Emergency RICE units (onsite prior to December 19, 2002) do not have to meet the requirements of 40 CFR Part 63, Subpart ZZZZ or the General Provision located in 40 CFR Part 63, Subpart A. No initial notification is necessary. [40 CFR §63.6590(b)]

F. Bark Handling Fugitives (ID No. F-1)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
None	No applicable standards	None

2.2 - Multiple Emission Source(s) Specific Limitations and Conditions**A. Facility-wide Emission Sources**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	toxic air pollutant emissions shall not exceed rates which cause established ambient levels to be exceeded	15A NCAC 02D .1104 - State Enforceable Only
Toxic air pollutants	toxic air pollutant emissions shall not exceed the rates listed in 02Q .0711 unless ambient standards are not exceeded	15A NCAC 02Q .0711 - State Enforceable Only
Odorous emissions	adequate measures to minimize odorous emissions	15A NCAC 02D .1806 - State Enforceable Only

STATE ONLY TOXIC AIR POLLUTANT REQUIREMENT

1. **TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING REQUIREMENT** - Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application (application Nos. 7300061.04A and 7300061.09B), for an air toxic compliance demonstration (approved on April 28, 2004 and November 5, 2009, respectively), and approved application No. 7300061.13A (approval memorandum dated September 5, 2013); the following permit limits shall not be exceeded:

EMISSION SOURCE(S)	TOXIC AIR POLLUTANT(S)	EMISSION LIMIT(S)
RTO-4 through RTO-6 (combined) RTO-3	Acrolein (107-02-8)	20.32 lbs/hr 2.44 lbs/hr
RTO-4 through RTO-6 (combined)	Arsenic & Compounds (total mass of elemental AS, arsine and all inorganic compounds) (ASC-7778394)	0.0012 lbs/hr
RTO-4 through RTO-6 (combined) RTO-3 G-1 ^I	Benzene (71-43-2)	0.60 lbs/hr 0.24 lbs/hr 332.8 lbs/yr
RTO-4 through RTO-6 (combined)	Beryllium Metal, unreacted (Component of BEC) (7440-41-7)	0.02 lbs/hr
RTO-4 through RTO-6 (combined)	Cadmium Metal, elemental, unreacted (Component of CDC) (7440-43-9)	0.03 lbs/hr
RTO-4 through RTO-6 (combined)	Chromium (VI) Soluble Chromate Compounds (Component of CRC) (SolCR6)	0.00042 lbs/hr

EMISSION SOURCE(S)	TOXIC AIR POLLUTANT(S)	EMISSION LIMIT(S)
RTO-4 through RTO-6 (combined) RTO-3 CP-002 CP-003 and CP-004 CP-005 PF Tanks ¹ TechShield® process	Formaldehyde (50-00-0)	6.54 lbs/hr 7.50 lbs/hr 1.90 lbs/hr 0.16 lbs/hr 0.095 lbs/hr 0.27 lbs/hr 0.27 lbs/hr
RTO-4 through RTO-6 (combined)	Hydrogen Chloride (7647-01-0)	182.54 lbs/hr
RTO-4 through RTO-6 (combined)	Manganese & compounds (MNC)	23.81 lbs/hr
RTO-4 through RTO-6 (combined) RTO-3 CP-002 CP-005 PF Tanks ¹	Phenol (108-95-2)	2.06 lbs/hr 17.3 lbs/hr 0.79 lbs/hr 0.018 lbs/hr 3.18 lbs/hr

¹ Insignificant activities

- a. To ensure compliance with the above limits, the following restrictions shall apply:
 - i. Total chip drying shall be limited to **89** oven dried tons per hour (the dryer design limitation),
 - ii. Total OSB production shall be limited to **106,260** square feet (3/8 inch basis) per hour determined on a daily average.
- b. For compliance purposes, within 30 days after each calendar year quarter the following shall be reported to the Regional Supervisor, DAQ:
 - i. The total square feet of OSB production and total hours of operation while producing OSB for each day during the reporting quarter, and the highest hourly OSB production rate (based on a daily average) during the quarter.

STATE ONLY TOXIC AIR POLLUTANT REQUIREMENT

- 2. **TOXIC AIR POLLUTANT EMISSIONS LIMITATION** - 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. 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.
 - a. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
 - b. **PRIOR** to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D.1100 "Control of Toxic Air Pollutants".
 - c. In accordance with the approved application (application No. 7300061.09B), the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

Pollutant (CAS Number)	TPERs Limitations			
	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Acetaldehyde (75-07-0)				6.8

Pollutant (CAS Number)	TPERs Limitations			
	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Benzo(a)pyrene (50-32-8)	2.2			
Carbon tetrachloride (56-23-5)	460			
Chlorine (7782-50-5)		0.79		0.23
Chlorobenzene (108-90-7)		46		
Chloroform (67-66-3)	290			
Di(2-ethylhexyl)phthalate (117-81-7)		0.63		
Ethylene dichloride (107-06-2)	260			
n-Hexane (110-54-3)		23		
Methyl chloroform (71-55-6)		250		64
Methyl ethyl ketone (78-93-3)		78		22.4
Methyl isobutyl ketone (108-10-1)		52		7.6
Methylene chloride (75-09-2)	1600		0.39	
Mercury, aryl and inorganic compounds		0.013		
Nickel metal (7440-02-0)		0.13		
Pentachlorophenol (87-86-5)		0.063	0.0064	
Perchloroethylene (127-18-4)	13000			
Styrene (100-42-5)			2.7	
2,3,7,8-Tetrachlorodibenzo-p- dioxins (1746-01-6)	0.00020			
Toluene (108-88-3)		98		14.4
Trichloroethylene (79-01-6)	4000			
Vinyl chloride (75-01-4)	26			
Xylene (1330-20-7)		57		16.4

STATE-ONLY REQUIREMENT: ODOR REQUIREMENTS

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.

B. Limits to avoid Prevention of Significant Deterioration (PSD)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Carbon monoxide (CO)	less than 250 tons per year	15A NCAC 02Q .0317 for 15A NCAC 02D .0530
Nitrogen oxides (NOx)		
Particulate matter (PM)		
PM-10		
Volatile organic compounds (VOC)		

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

- a. In order to avoid applicability of this regulation, 15A NCAC 02D .0530(g), facility-wide emission sources shall discharge into the atmosphere less than 250 tons of carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM), PM-10, and volatile organic compounds (VOC), per consecutive 12-month period. [15A NCAC 02D .0530]

Testing [15A NCAC 02D .0501(c)(3)]

- b. If emissions testing is required, the Permittee shall perform such testing in accordance with 15A NCAC 02D .0501 and General Condition JJ. If the results of this test are above the limits given in Section 2.2-B.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall conduct a performance test to establish the appropriate mass emission rates from all affected sources controlled by thermal oxidizers (ID Nos. RTO-3 through RTO-6); as well as the proper operating temperatures, capture efficiency, and destruction efficiency of the capture and control devices in accordance with a testing protocol approved by the DAQ. Total VOC mass means expressing VOC as propane and requiring individual measurements of methanol and formaldehyde as specified in EPA’s Interim VOC Measurement Protocol for the Wood Products Industry – July 2007, referred to as "WPP1 VOC" (Wood Products Protocol 1 VOC). Particulate measurements are to include both filterables and condensables utilizing EPA Method 5/202. Details of the emissions testing and requirements can be found in General Condition JJ.
 - i. Periodic testing of the oxidizers shall be conducted within 60 months after the previous test.² If the results of this test are above the limits given in Sections 2.2 B.a. above for VOC emissions, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.
 - ii. Operating parameters or emission factors as specified in this permit do not apply during performance tests or emissions tests conducted in an attempt to establish new operating parameters or emission factors.

² Most recent testing conducted July 18-20, 2017 by Alliance Source Testing LLC. Test reference numbers 2017-191ST and 2017-192ST. Test results approved via memo issued October 10, 2018.

- d. The source shall be responsible for ensuring, within the limits of practicality, that the equipment or process being tested is operated at or near its maximum normal production rate, or at a lesser rate if specified by the Director or his delegate.

Production/Operational Limits [15A NCAC 02Q .0508(f)]

- e. In order to ensure compliance with the avoidance limit above, the following operational limits shall apply:
- i. the Permittee shall limit total press production to **684,786,667 square feet of finished product on a 3/8 inch basis** per consecutive 12-month period. The Permittee shall maintain monthly records of the total amount of oriented strand board (OSB) produced in a logbook (written or electronic format). The total press production shall be calculated as follows:

$$P_t = \sum_{i=1}^n P_{ai} \times \left(\frac{T_i}{3/8} \right)$$

Eq 2.2-1

Where:

P_{ai} = actual gross surface footage (MSF) for different thickness

T_i = actual thickness (inch) for specific production run

P_t = total normalized production at 3/8 inch

- ii. the Permittee shall limit the total hours of operation of the diesel-fired emergency generator to 400 hours of operation per consecutive 12-month period;
- iii. the Permittee shall limit the total fuel input of recycled resinated wood fuel to no more than 20 percent on a heat input basis, equivalent to 10% by weight; and
- iv. **the Permittee shall not operate more than five dryers (ID Nos. D-1 through D-5 and D-1A through D-5A), simultaneously.**

ALTERNATIVE OPERATING SCENARIOS [15A NCAC 02Q .0508(j)]

- f. The Permittee, contemporaneously with making a change from one alternate operating scenario to another while operating the dryers and RTOs, shall record in a logbook (written or electronic format) the scenario under which it is operating. [15A NCAC 02Q .0508(j)]
- i. Primary Operating Scenario is defined as follows:
 1. When all five dryers (ID Nos. D-1 through D-5) are operating and venting to atmosphere through the three propane/natural gas-fired regenerative thermal oxidizers as tested.³
 2. During testing condition #1, all five dryers (ID Nos. D-1 through D-5) and three RTOs (CD Nos. RTO-4 through RTO-6) were operating normally. Tested process rate was 47.68 tons per hour.⁴
 - ii. Alternate Operating Scenario is defined as all other combinations of dryers and RTOs operating (i.e. four dryers and two RTOs in combination as tested.⁵ During testing condition #2, dryer D-1 and RTO-5 were not operated).

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

- g. In order to ensure compliance with the avoidance limit above and ensure proper operation of the oxidizers, the Permittee shall monitor the chamber temperature of each regenerative thermal oxidizer (RTO) continuously. The Permittee shall maintain a 3-hour block average chamber temperature at or above the temperatures listed in the following table for each thermal oxidizer (ID Nos. RTO-3 through RTO-6):

³ Ibid 2

⁴ Ibid 2

⁵ Ibid 2

Control Device ID No.	Minimum Chamber Temperature ⁶ (°F)
RTO-3	1452
RTO-4	1640
RTO-5	1644
RTO-6	1639

- h. The Permittee shall record and maintain records of:
- i. the hours of operation of the oxidizers and emergency generator; and
 - ii. the recycled resinated wood fuel⁷ input to the bark burner on a heat input basis; equivalent weight %.

VOC emissions

- i. Each calendar month, the Permittee shall calculate the **VOC emissions** for the previous month and the previous 12-month period to ensure compliance with Section 2.2 B.1.a. above. Monthly VOC emissions, in tons, shall be calculated as follows:
 - i. Consistent with General Condition LL., VOC emissions shall be determined by the following equations and emission factors:

$$E_{VOC(\text{total})} = \sum E_{VOC(\text{RTO})} + \sum E_{VOC(\text{BH})} + \sum E_{VOC(\text{Misc})} + \sum E_{VOC(\text{Bypass})}$$

Eq 2.2-2

$$E_{VOC(\text{RTO})} = \left(\frac{(X_C \times t_{\text{RTO}}) + (X_{UC} \times t_{\text{WORTO}})}{2,000} \right) \times \left(\frac{P_A}{P_T} \right)$$

Eq 2.2-3

Where:

- $E_{VOC(\text{Total})}$ = the total VOC emissions from the affected sources, controlled and uncontrolled
- $E_{VOC(\text{RTO})}$ = number of tons of VOC emissions per month from sources controlled by RTOs
- X_C = pounds of VOC per hour (RTO emission rate based on emission testing [see tables 2.2-1 and 2.2-2, below], as measured on an “as carbon” basis, and adjusted using historical speciated testing data WPP1 VOC, i.e. controlled pound-per-hour emission rate.
- t_{RTO} = hours per month when oxidizer deemed "in operation", is not bypassed, and oxidizer temperature is greater than or equal to the hourly block average temperature specified in Specific Condition 2.2 B.1.f.
- X_{UC} = pounds of VOC per hour assuming no VOC control, i.e. uncontrolled pound-per-hour emission rate (measured as 97.8%⁸)
- t_{WORTO} = hours per month when oxidizer is bypassed or hourly periods when the oxidizer temperature is less than the hourly block average temperature specified in Specific Condition 2.2 B.1.g. including hourly periods of start-up, shutdown, and malfunction.
- P_A = Actual Production on a 3/8 inch basis, averaged on a monthly basis
- P_T = Tested Production on a weight basis on a 3/8 inch basis⁹

⁶ Based on stack test results. For RTO-3, test reference nos. 2014-207ST and 2014-208ST. For RTO-4 through 6, test reference nos. 2017-191ST and 2017-192ST.

⁷ Ibid 1

⁸ Ibid 2

⁹ Ibid 2. In addition, recorded dryer production rate during Test 2017-192ST for the Primary Operating Scenario (a.k.a Condition #1) was 71,917 square feet per hour (on a 3/8" basis). Recorded press production during Test 2017-191ST was 82,433 square feet per hour (on a 3/8" basis). Recorded dryer production rate

- $E_{VOC(BH)}$ = number of tons of VOC emissions per month from sources exhausted through baghouses using interim emission factors (lb/hr) as measured on an “as carbon” basis adjusted using WPP1 VOC. Adjustments for baghouses B2, B3 and B8 will be based on NCASI data submitted to DAQ on 2/25/2008 and NCASI Technical Bulletin #772. Adjustments for the remaining baghouses, baghouses other than B2, B3 and B8; will be determined using Methanol and Formaldehyde emission rates averaged for B3 and B8 from NCASI.
- $E_{VOC(Misc)}$ = number of tons of VOC emissions per month from miscellaneous sources
- $E_{VOC(Bypass)}$ = number of tons of VOC emissions per month from each source bypassing the control device, calculated on a per source basis using emission factors (lb/hr) as specified below times the hours each bypass occurred

Table 2.2-1: VOC Emission Factor – Primary Operating Scenario¹⁰:

Emission Source(s) (ID No(s).)	VOC Emission Factor	Control Device	Basis
<u>Wafer Drying Process:</u> Bark Burner (BARK1), Dryers (D-1 through D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)	7.1 lb/hr controlled (WPP1)	RTOs 4-6 outlet	Test 2017-192ST
	325.6 lb/hr uncontrolled (WPP1), 108.5 lb/hr prior to each RTO (WPP1)	Uncontrolled RTOs 4-6 inlet	
Bark Burner (BARK1) during “Idle/Standby” Mode	0.385 lb/hr as C	System Bypassed	AP-42, Table 1.6-3 Dry Wood Basis
<u>One RTO offline:</u> Bark Burner (BARK1), Dryers (D-1 through D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)	122.7 lb/hr partially controlled	RTOs 4 – 6 outlet, one RTO not in operation	Test 2017-192ST; one RTO inlet plus two RTO outlets
<u>Two RTOs offline:</u> Bark Burner (BARK1), Dryers (D-1 through D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)	224.1 lb/hr partially controlled	RTOs 4 – 6 outlet, two RTOs not in operation	Test 2017-192ST; two RTO inlets plus one RTO outlet
<u>Dryer “Bypass” Mode:</u> Dryers (D-1 through D-5, each)	65.1 lb/hr per dryer bypassed (WPP1)	Bypassed RTOs inlet	Test 2017-192ST; divided by 5 for a per dryer emission rate
OSB Presses (PV-1 and PV-2)	1.5 lb/hr controlled (WPP1)	RTO-3 outlet	Test 2017-191ST
	62.6 lb/hr uncontrolled (WPP1)	Bypassed RTO-3 inlet	
Forming and Finishing processes exhausted through baghouses: CP-001 w/ B-1 & CYC-1 CP-002 w/ B-2 CP-003 & CP-004 w/ B-3 & CYC-3	1.87 lb/hr as C 5.59 lb/hr as C 1.85 lb/hr as C	N/A	April 1998 stack test data as provided in permit application and 8/10/2007 response letter signed by LP’s Responsible Official for B-1, B-5, B-6, & B-7

during Test 2017-192ST for the Alternate Operating Scenario (a.k.a Condition #2) was 70,686 square feet per hour (on a 3/8" basis).

¹⁰ Ibid 2.

Emission Source(s) (ID No(s).)	VOC Emission Factor	Control Device	Basis
CP-005 w/ B-5 & CYC-5 CP-006 w/ B-6 & CYC-6 CP-007 w/ B-7 FuelPrep w/ B-8 & CYC-8	1.57 lb/hr as C 1.21 lb/hr as C 0.02 lb/hr as C 3.77 lb/hr as C		and NCASI Tech. Bulletin #772 Oct 1998 for B-2, B-3, & B-8
Miscellaneous Sources			
Edgeseal Operations	0.00264 lb/gal	N/A	MSDS Data provided in Application (5/2007)
Printing Operations: Logo and APA stamp	0.061 lb/gal		MSDS Data provided in Application (5/2007) & SDA Data provided via email on 6/24/2016
Re-grade roller or spray	0.00279 lb/gal		
Emergency Generator	0.000705 lb/hp-hr as CH ₄		AP-42, Table 3.4-1
TechShield® process	0.2323 lb/hr or 0.0123 lb/gal as supplied		Form B of Application; MSDS Data as provided with Add Info Request (August 2009)

Table 2.2-2: VOC Emission Factor – Alternate Operating Scenario¹¹:

Emission Source(s) (ID No(s).)	VOC Emission Factor	Control Device	Basis
Wafer Drying Process:	6.0 lb/hr controlled (WPP1)	RTOs 4 and 6	Test 2017-192ST
Bark Burner (BARK1), Dryers (D-2 through D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)	398.8 lb/hr uncontrolled (WPP1)	Uncontrolled	
	199.4 lb/hr prior to each RTO (WPP1)	RTOs 4 and 6 inlet	
<u>One RTO offline:</u>	205.4 lb/hr partially controlled	RTOs 4 and 6 outlet, one RTO not in operation	Test 2017-191ST; one RTO inlet plus one RTO outlet
Bark Burner (BARK1), Dryers (D-1 through D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)			
<u>Dryer “Bypass” Mode</u>	99.7 lb/hr per dryer bypassed (WPP1)	Bypassed RTOs inlet	Test 2017-191ST RTO inlet; divided by 4 for a per dryer emission rate
Dryers (D-2 through D-5, each)			

- ii. When the oxidizers are operated at temperatures below the specified temperatures listed in Section 2.2-B.1.a. above for the thermal oxidizers (ID Nos. RTO-3 through RTO-6) or if the temperatures are not monitored, the oxidizers shall be deemed “not in operation” and the VOC emissions shall be determined using the uncontrolled emissions rates specified in Specific Condition 2.2 B.i.i. above.
- iii. When the oxidizers are not in operation or “deemed not in operation”, the VOC emissions shall be determined using the uncontrolled emissions rates specified in Specific Condition 2.2 B.i.i. above.
- iv. Consecutive 12-month rolling VOC emissions, in tons, shall be calculated by summing the monthly emissions as determined above, for the previous 12-month period.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the monthly VOC emissions are not monitored, calculated and/or if the VOC emissions exceed the limit given in Specific Condition 2.2 B.1.a. above.

¹¹ Ibid 2.

PM and PM10 emissions

- j. Each calendar month, the Permittee shall calculate the **PM and PM10 emissions** for the previous month and the previous 12-month period to ensure compliance with Section 2.2 B.1.a. above. Monthly PM and PM10 emissions, in tons, shall be calculated as follows:
- i. Consistent with General Condition LL., PM and PM10 emissions shall be determined by the following equations and emission factors:

$$E_{PM(\text{total})} = \sum E_{PM(\text{RTO})} + \sum E_{PM(\text{BH})} + \sum E_{PM(\text{Misc})} + \sum E_{PM(\text{Bypass})} \quad \text{Eq 2.2-4}$$

$$E_{PM(\text{RTO})} = \left(\frac{(X_C \times t_{\text{RTO}}) + (X_{UC} \times t_{\text{WORTO}})}{2,000} \right) \times \left(\frac{P_A}{P_T} \right) \quad \text{Eq 2.2-5}$$

$$E_{PM(\text{BH})} = \left(\frac{(X_C \times t_{\text{BH}}) + (X_{UC} \times t_{\text{WOBH}})}{2,000} \right) \quad \text{Eq 2.2-6}$$

Where:

- $E_{PM(\text{Total})}$ = the total PM/PM10¹² emissions from the affected sources, controlled and uncontrolled
- $E_{PM(\text{RTO})}$ = number of tons of PM/PM10 emissions per month from sources controlled by RTO
- X_C = pounds of PM/PM10 per hour when controlled, based on accepted emission factors (see tables 2.2-3 and 2.2-4 below)
- t_{RTO} = hours per month when oxidizer is not bypassed and oxidizer temperature is greater than or equal to the hourly block average temperature specified in Specific Condition 2.2 B.1.f.
- t_{BH} = hours per month when emissions are routed to baghouse
- X_{uc} = pounds of PM/PM10 per hour assuming no PM/PM10 control. For press vents and dryers operating when WESP is active and the RTOs are not active, use the accepted emission factors for uncontrolled emissions (see tables 2.2-3 and 2.2-4 below). For sources normally controlled by WESP during periods when WESP was not active, divide the uncontrolled emissions by 0.20. For sources normally controlled by baghouses during periods when the baghouse was not active, divide the uncontrolled emissions by 0.001. When determining X_{uc} on a per-dryer basis, divide the uncontrolled emissions by 5 during Condition #1 and by 4 during Condition #2.¹³
- t_{WORTO} = hours per month when oxidizer is bypassed or hourly periods when the oxidizer temperature is less than the hourly block average temperature specified in Specific Condition 2.2 B.1.f. including hourly periods of start-up, shutdown, and malfunction.
- t_{WOBH} = hours per month when emissions are not routed to baghouse
- P_A = Actual Production on a 3/8 inch basis, averaged on a monthly basis
- P_T = Tested Production on a 3/8 inch basis¹⁴
- $E_{PM(\text{BH})}$ = number of tons of PM/PM10 emissions per month from sources controlled by

¹² For the purposes of equations 2.2-4, 2.2-5, and 2.2-6, it is assumed that PM=PM10.

¹³ This assumes, based on the Modernization Project (application 7300061.06A, approved with the T15 permit issued March 6, 2008), that the control efficiency of WESP is 80% and the control efficiency for baghouses is 99.9%.

¹⁴ Ibid 9.

baghouses using accepted emission factors in tables 2.2-3 and 2.2-4 (lb/hr)
 $E_{PM(Misc)}$ = number of tons of PM/PM10 emissions per month from miscellaneous sources
 $E_{PM(Bypass)}$ = number of tons of PM/PM10 emissions per month from each source bypassing the control device, calculated on a per source basis using emission factors (lb/hr) as specified below times the hours each bypass occurred

Table 2.2-3: PM/PM10 Emission Factor – Primary Operating Scenario¹⁵:

Emission Source(s) (ID No(s).)	PM/PM10 Emission Factor ¹⁶	Control Device	Basis
<u>Wafer Drying Process:</u> Bark Burner (BARK1), Rotary Strand Dryers (D-1 through D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)	6.6 lb/hr controlled	RTOs 4-6 outlet	Test 2017-192ST
	13.6 lb/hr uncontrolled by RTO	WESP#1 and WESP#2 outlet;	
	6.8 lb/hr per WESP	RTOs 4-6 inlet	
Bark Burner (BARK1) during “Idle/Standby” Mode	9.05 lb/hr PM 8.14 lb/hr PM10	Bypassed	AP-42, Table 1.6-1 Dry Wood Basis
<u>Dryer “Bypass” Mode</u> Dryers (D-1, D-2, D-3 and D-5, each)	13.6 lb/hr per dryer bypassed	Both WESPs and all RTOs bypassed	Test 2017-192ST, assuming 80% control efficiency for WESP. ¹⁷
<u>One RTO offline:</u> Bark Burner (BARK1), Dryers (D-1 through D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)	26.8 lb/hr partially controlled	RTOs 4 – 6 outlet, one RTO not in operation	Test 2017-192ST; one RTO inlet plus two RTO outlets
<u>Two RTOs offline:</u> Bark Burner (BARK1), Dryers (D-1 through D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)	33.8 lb/hr partially controlled	RTOs 4 – 6 outlet, two RTOs not in operation	Test 2017-192ST; two RTO inlets plus one RTO outlet
OSB Presses (PV-1 and PV-2)	6.6 lb/hr controlled	RTO-3 outlet	Test 2017-191ST
	14.8 lb/hr uncontrolled	RTO-3 inlet	
Forming and Finishing processes exhausted through baghouses CP-001 w/ B-1 & CYC-1 CP-002 w/ B-2 CP-003 & CP-004 w/ B-3 & CYC-3 CP-005 w/ B-5 & CYC-5 CP-006 w/ B-6 & CYC-6 CP-007 w/ B-7 FuelPrep w/ B-8 & CYC-8	1.18 lb/hr 0.58 lb/hr 0.59 lb/hr 0.13 lb/hr 1.06 lb/hr 0.02 lb/hr 0.66 lb/hr controlled	Baghouse B-1 B-2 B-3 B-5 B-6 B-7 B-8	1 st Quarter 2006 emissions calculation spreadsheet data based on exit grain loading concentrations obtained by MidSouth Engineering, design flow rates and an assumed control efficiency of 99.9% per 8/10/2007 response letter signed by LP’s Responsible Official

¹⁵ Ibid 2.¹⁶ Ibid 12. In addition, for test results from 2017-191ST and 2017-192ST, it is assumed that Total PM = Filterable PM + Condensable PM.¹⁷ Ibid 13.

Emission Source(s) (ID No(s).)	PM/PM10 Emission Factor ¹⁶	Control Device	Basis
Miscellaneous Sources			
Edgeseal Operations	0.0125 lb/gal	N/A	MSDS Data provided in Application (5/2007)
Emergency Generator	0.0007 lb/hp-hr		AP-42, Table 3.4-1

Table 2.2-4: PM/PM10 Emission Factor – Alternate Operating Scenario¹⁸:

Emission Source(s) (ID No(s).)	PM/PM10 Emission Factor	Control Device	Basis
<u>Wafer Drying Process:</u>	6.7 lb/hr controlled	RTOs 4 and 6	Test 2017-192ST
Bark Burner (BARK1), Dryers (D-2 through D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)	13.9 lb/hr uncontrolled	Uncontrolled (inlet to RTOs)	
	6.95 lb/hr prior to each RTO		
<u>One RTO offline:</u>	10.3 lb/hr partially controlled	RTOs 4 and 6 outlet, one RTO not in operation	Test 2017-191ST; one RTO inlet plus one RTO outlet
<u>Dryer “Bypass” Mode</u>	17.4 lb/hr per dryer bypassed	Both WESPs and only 1 RTO bypassed	Test 2017-192ST, assuming 80% control efficiency for WESP. ¹⁹
Dryers (D-2 through D-5)			

- ii. When the oxidizers are operated at temperatures below the specified temperatures listed in Section 2.2 B.1.g. above for the thermal oxidizers (ID Nos. RTO-3 through RTO-6) or if the temperatures are not monitored, the oxidizers shall be deemed “not in operation” and the PM/PM10 emissions shall be determined using the uncontrolled emissions rates specified in Specific Condition 2.2 B.j.i. above.
- iii. When the oxidizers are not in operation or “deemed not in operation”, the PM/PM10 emissions shall be determined using the uncontrolled emissions rates specified in Specific Condition 2.2 B.j.i. above.
- iv. When the WESPs are not in operation or not inspected, operated, and maintained according to Specific Conditions 2.1 A.1.c through f, the PM/PM10 emissions shall be determined using the uncontrolled emissions rates specified in Specific Condition 2.2 B.j.i.
- v. Consecutive 12-month rolling PM and PM10 emissions, in tons, shall be calculated by summing the monthly emissions as determined above, for the previous 12-month period.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the monthly PM and PM10 emissions are not monitored, calculated and/or if the PM and PM10 emissions exceed the limit given in Specific Condition 2.2 B.1.a. above.

CO emissions

- k. Each calendar month, the Permittee shall calculate the CO emissions for the previous month and the previous 12-month period to ensure compliance with Section 2.2 B.1.a. above. Monthly CO emissions, in tons, shall be calculated as follows:
 - i. Consistent with General Condition LL, CO emissions shall be determined by the following equations and emission factors:

¹⁸ Ibid 11.

¹⁹ Ibid 13.

$$E_{CO(\text{total})} = \sum E_{CO(\text{RTO})} + \sum E_{CO(\text{Misc})} + \sum E_{CO(\text{Bypass})} \quad \text{Eq 2.2-7}$$

$$E_{CO(\text{RTO})} = \left(\frac{(X_C \times t_{\text{RTO}}) + (X_{UC} \times t_{\text{WORTO}})}{2,000} \right) \times \left(\frac{P_A}{P_T} \right) \quad \text{Eq 2.2-8}$$

Where:

- $E_{CO(\text{Total})}$ = the total CO emissions from the affected sources
 $E_{CO(\text{RTO})}$ = number of tons of CO emissions per month from sources controlled by RTOs
 X_C = pounds of CO per hour (RTO outlet emission factors from Tables 2.2-5 and 2.2-6 below)
 t_{RTO} = hours per month when oxidizer is not bypassed and oxidizer temperature is greater than or equal to the hourly block average temperature specified in Specific Condition 2.2 B.1.g.
 X_{UC} = pounds of CO per hour when the oxidizer is bypassed or an excursion has occurred or is deemed “not in operation”
 t_{WORTO} = hours per month when oxidizer is bypassed or hourly periods when the oxidizer temperature is less than the hourly block average temperature specified in Specific Condition 2.2 B.1.g. including hourly periods of start-up, shutdown, and malfunction.
 P_A = Actual Production on a 3/8 inch basis, averaged on a monthly basis
 P_T = Tested Production on a 3/8 inch basis²⁰
 $E_{CO(\text{Bypass})}$ = number of tons of CO emissions per month from each source bypassing the control device, calculated on a per source basis using emission factors (lb/hr) as specified below times the hours each bypass occurred

Table 2.2-5: CO Emission Factor – Primary Operating Scenario²¹:

Emission Source(s) (ID No(s).)	CO Emission Factor	Control Device	Basis
<u>Wafer Drying Process</u>	17.5 lb/hr	RTOs 4-6 outlet	Test 2017-191ST
Bark Burner (BARK1), Dryers (D-1 through D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)	142.0 lb/hr	Bypassed (RTOs 4-6 inlet)	
	28.4 lb/hr per dryer	RTOs 4-6 inlet	
Bark Burner (BARK1) during “Idle/Standby” Mode	13.58 lb/hr	Bypassed	AP-42, Table 1.6-2 Dry Wood Basis
<u>One RTO offline:</u> Bark Burner (BARK1), Dryers (D-1 through D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)	59.0 lb/hr partially controlled	RTOs 4 – 6 outlet, one RTO not in operation	Test 2017-192ST; one RTO inlet plus two RTO outlets
<u>Two RTOs offline:</u> Bark Burner (BARK1), Dryers (D-1 through D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)	74.3 lb/hr partially controlled	RTOs 4 – 6 outlet, two RTOs not in operation	Test 2017-192ST; two RTO inlets plus one RTO outlet
OSB Presses (PV-1 and PV-2)	1.8 lb/hr	RTO-3 outlet	Test 2017-192ST

²⁰ Ibid 9.

²¹ Ibid 2

Emission Source(s) (ID No(s).)	CO Emission Factor	Control Device	Basis
	1.9 lb/hr	RTO-3 inlet	
Miscellaneous Sources			
Emergency Generator	0.0055 lb/hp-hr	N/A	AP-42, Table 3.4-1

Table 2.2-6: CO Emission Factor – Alternative Operating Scenario²²:

Emission Source(s) (ID No(s).)	CO Emission Factor	Control Device	Basis
<u>Wafer Drying Process</u>	37.6 lb/hr	RTOs 4 and 6	Test 2017-191ST
Bark Burner (BARK1), Dryers (D-1, D-2, D-3 and D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)	168.2 lb/hr	Bypassed (RTOs 4 and 6 inlet)	
	42.05 lb/hr per dryer	RTOs 4 and 6 inlet	
	42.05 lb/hr per dryer	RTOs 4 or 6 inlet	
<u>One RTO offline:</u> Bark Burner (BARK1), Dryers (D-1 through D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)	102.9 lb/hr partially controlled	RTOs 4 and 6 outlet, one RTO not in operation	Test 2017-191ST; one RTO inlet plus one RTO outlet

- ii. When the oxidizers are operated at temperatures below the specified temperatures listed in Section 2.2 B.1.a. above for the thermal oxidizers (ID Nos. RTO-3 through RTO-6) or if the temperatures are not monitored, the oxidizers shall be deemed “not in operation” and the CO emissions shall be determined using the uncontrolled or bypassed emissions rates specified in Specific Condition 2.2 B.k.i. above.
- iii. When the oxidizers are not in operation, bypassed or “deemed not in operation”, the CO emissions shall be determined using the uncontrolled emissions rates specified in Specific Condition 2.2 B.k.i. above.
- iv. Consecutive 12-month rolling CO emissions, in tons, shall be calculated by summing the monthly emissions as determined above, for the previous 12-month period.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the monthly CO emissions are not monitored, calculated and/or if the CO emissions exceed the limit given in Specific Condition 2.2 B.1.a. above.

NOx emissions

- 1. Each calendar month, the Permittee shall calculate the **NOx emissions** for the previous month and the previous 12-month period to ensure compliance with Section 2.2 B.1.a. above. Monthly NOx emissions, in tons, shall be calculated as follows:
 - i. Consistent with General Condition LL., NOx emissions shall be determined by the following equations and emission factors until performance testing as required by Specific Condition 2.2 B.1.c. is approved:

$$E_{NOx(total)} = \sum E_{NOx(RTO)} + \sum E_{NOx(Misc)} + \sum E_{NOx(Bypass)} \tag{Eq 2.2-9}$$

$$E_{NOx(RTO)} = \left(\frac{(X_C \times t_{RTO}) + (X_{UC} \times t_{WORTO})}{2,000} \right) \times \left(\frac{P_A}{P_T} \right) \tag{Eq 2.2-10}$$

Where:

²² Ibid 2

- $E_{NOx(Total)}$ = the total NOx emissions from the affected sources
- $E_{NOx(RTO)}$ = number of tons of NOx emissions per month from sources controlled by RTOs
- X_c = pounds of NOx per hour (RTO outlet emission factors based on Tables 2.2-7 and 2.2-8 below)
- t_{RTO} = hours per month when oxidizer is not bypassed and oxidizer temperature is greater than or equal to the hourly block average temperature specified in Specific Condition 2.2 B.1.g.
- X_{uc} = pounds of NOx per hour when the oxidizer is bypassed or an excursion has occurred or is deemed “not in operation”
- t_{WORTO} = hours per month when oxidizer is bypassed or hourly periods when the oxidizer temperature is less than the hourly block average temperature specified in Specific Condition 2.2 B.1.g. including hourly periods of start-up, shutdown, and malfunction.

- P_A = Actual Production on a 3/8 inch basis, averaged on a monthly basis
- P_T = Tested Production on a 3/8 inch basis, tons per hour²³
- $E_{NOxBypass}$ = number of tons of NOx emissions per month from each source bypassing the control device, calculated on a per source basis using emission factors (lb/hr) as specified below times the hours each bypass occurred

Table 2.2-7: NOx Emission Factor – Primary Operating Scenario²⁴:

Emission Source(s) (ID No(s).)	NOx Emission Factor	Control Device	Basis
<u>Wafer Drying Process</u>	35.2 lb/hr	RTOs 4-6 outlet	Test 2017-192ST
Bark Burner (BARK1), Dryers (D-1 through D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)	12.5 lb/hr	Bypassed	April 2006 Engineering Test Results ²⁵
Bark Burner (BARK1) during “Idle/Standby” Mode	11.09 lb/hr	Bypassed	AP-42, Table 1.6-2 Dry Wood Basis
OSB Presses (PV-1 and PV-2)	2.2 lb/hr	RTO-3 outlet	Test 2017-191ST
	82 lb/hr	RTO-3 Bypassed	1 st Quarter 2006 emissions calculation spreadsheet data ²⁶
Miscellaneous Sources			
Emergency Generator	0.024 lb/hp-hr	N/A	AP-42, Table 3.4-1

Table 2.2-8: NOx Emission Factor – Alternative Operating Scenario²⁷:

Emission Source(s) (ID No(s).)	NOx Emission Factor	Control Device	Basis
<u>Wafer Drying Process</u>	28.2 lb/hr	RTOs 4 and 6	Test 2017-191ST
Bark Burner (BARK1), Dryers	12.5 lb/hr	Bypassed	April 2006

²³ Ibid 9.

²⁴ Ibid 2

²⁵ No RTO inlet values were provided with the most recent test data; thus, the April 2006 data remains.

²⁶ No RTO-3 inlet values were provided with the most recent test data; thus, the 2006 1st Quarter emissions calculation data remains.

²⁷ Ibid 2

Emission Source(s) (ID No(s).)	NOx Emission Factor	Control Device	Basis
(D-1, D-2, D-3 and D-5), and Thermal Oil Heaters (TOH-1 and TOH-2)			Engineering Test Results ²⁸

- ii. When the oxidizers are operated at temperatures below the specified temperatures listed in Section 2.2 B.1.a. above for the thermal oxidizers (ID Nos. RTO-3 through RTO-6) or if the temperatures are not monitored, the oxidizers shall be deemed “not in operation” and the NOx emissions shall be determined using the uncontrolled or bypassed emissions rates specified in Specific Condition 2.2 B.1.i. above.
- iii. When the oxidizers are not in operation, bypassed or “deemed not in operation”, the NOx emissions shall be determined using the uncontrolled emissions rates specified in Specific Condition 2.2 B.1.i. above.
- iv. Consecutive 12-month rolling NOx emissions, in tons, shall be calculated by summing the monthly emissions as determined above, for the previous 12-month period.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the monthly NOx emissions are not monitored, calculated and/or if the NOx emissions exceed the limit given in Specific Condition 2.2 B.1.a. above.
- m. To ensure compliance with the provisions of this permit and ensure that emissions do not exceed the regulatory limits specified in Section 2.2 B.1.a. above, the Permittee shall perform periodic inspection and maintenance (I&M) on the oxidizers as recommended by the manufacturer, if any. In addition to the manufacturer’s inspection and maintenance recommendations, as a minimum, the inspections and maintenance shall include the following:
 - i. a monthly external inspection of the structural integrity of the oxidizers;
 - ii. an annual (for each 12-month period following the initial inspection) internal inspection of the oxidizers’ primary components, including the heat exchanger and valves, to ensure structural integrity; and
 - iii. an annual (for each 12-month period following the initial inspection) inspection of the burner.
The oxidizer shall be deemed not in operation and the emissions shall be determined as specified above, if the oxidizer is not inspected and maintained.
- n. The results of inspection and maintenance for the oxidizers shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on any of the oxidizers; and
 - iv. any variance from manufacturer’s recommendations, if any, and corrections made.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

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

- o. The Permittee shall record:
 - i. the monthly press production rate on a 3/8” basis and total weight basis;
 - ii. the monthly hours of operation for the diesel generator;
 - iii. the monthly amount of recycled resinated wood fuel input to the bark burner on a heat input basis or equivalent weight %;
 - iv. the monthly calculations and the total amount of VOC emissions;
 - v. the monthly calculations and the total amount of PM emissions;
 - vi. the monthly calculations and the total amount of PM-10 emissions;
 - vii. the monthly calculations and the total amount of CO emissions; and
 - viii. the monthly calculations and the total amount of NOx emissions;

²⁸ Ibid 25.

The above records shall be recorded monthly in a logbook (written or electronic format), maintained on-site and made available to officials of the Division of Air Quality (DAQ), upon request. The Permittee must keep each entry in the log and all required records on file for a minimum of five years. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not recorded monthly in a logbook (written or electronic format), kept on-site and made available to DAQ personnel upon request.

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

- p. 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 following:
 - i. the monthly press production rate for the previous 17 months;
 - ii. the monthly hours of operation for the diesel generator for the previous 17 months;
 - iii. the monthly amount of the recycled resinated wood fuel input to the bark burner on a heat input basis or equivalent weight % for the previous 17 months;
 - iv. the monthly carbon monoxide, nitrogen oxides, particulate matter, PM-10, and volatile organic compounds emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months, and
 - v. All instances of deviations from the requirements of this permit must be clearly identified.

Requirements for New Dryers (ID Nos. D-1A through D-5A) [15A NCAC 02Q .0508 (f)]

- q. i. The new dryers (ID Nos. D-1A through D-5A) will replace existing dryers (ID Nos. D-1 through D-5) corresponding to the table below:

Existing Dryer	New Dryer to Replace the Existing Dryer
Triple-pass direct fired wafer dryer (ID No. D-1)	Single-pass direct fired wafer dryer (ID No. D-1A)
Triple-pass direct fired wafer dryer (ID No. D-2)	Single-pass direct fired wafer dryer (ID No. D-2A)
Triple-pass direct fired wafer dryer (ID No. D-3)	Single-pass direct fired wafer dryer (ID No. D-3A)
Triple-pass direct fired wafer dryer (ID No. D-4)	Single-pass direct fired wafer dryer (ID No. D-4A)
Triple-pass direct fired wafer dryer (ID No. D-5)	Single-pass direct fired wafer dryer (ID No. D-5A)

Testing for New Dryers (ID Nos. D-1A through D-5A) [15A NCAC 02Q .0508 (f)]

- ii. **Once all of the new** dryers (ID Nos. D-1A through D-5A) are installed the Permittee shall perform testing to determine the emissions factors for the emissions of carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM), PM-10 and volatile organic compounds (VOC) as per scenarios outlined in the following tables under Section 2.2 B., above:
 - Table 2.2-1: VOC Emission Factor – Primary Operating Scenario
 - Table 2.2-2: VOC Emission Factor – Alternate Operating Scenario
 - Table 2.2-3: PM/PM10 Emission Factor – Primary Operating Scenario
 - Table 2.2-4: PM/PM10 Emission Factor – Alternate Operating Scenario
 - Table 2.2-5: CO Emission Factor – Primary Operating Scenario
 - Table 2.2-6: CO Emission Factor – Alternative Operating Scenario
 - Table 2.2-7: NOx Emission Factor – Primary Operating Scenario
 - Table 2.2-8: NOx Emission Factor – Alternative Operating Scenario
- iii. **The Permittee shall perform testing of the dryer system within 180 days of installation of all of the new dryers (ID Nos. D-1A through D-5A) with protocols approved by NCDAQ Stationary Source Compliance Branch (SSCB).**
 - The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above tests are not done on time or fails to do the testing without protocols approved by SSCB.
- iv. Once SSCB approves the test results, the emission factors based on the test results shall be incorporated into the permit by the Permittee by a permit application process.
- v. The above permit application to incorporate the above emission factors shall be received by the NCDAQ Permit Section within 90 days of the approval by SSCB.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if this application is not filed on time.

Emissions Reporting for the New Dryers (ID Nos. D-1A through D-5A) [15A NCAC 02Q .0508 (f)]

- vi. Till the emissions factors for the new dryers (ID Nos. D-1A through D-5A) have been incorporated into this permit the Permittee shall for each of the new dryers (ID Nos. D-1A through D-5A) that will replace existing dryers (ID Nos. D-1 through D-5) corresponding to the table above, in Section 2.2 B. 1. q. i., above, will use the emissions factors for the corresponding existing dryers (i.e., emission factors for ID No. D-1 will be used for ID No. D-1A).
- vii. The emissions of new dryers (ID Nos. D-1A through D-5A) will be calculated by multiplying emissions from the corresponding existing dryers (ID Nos. D-1 through D-5) by 1.181 (i. e., emissions from ID No. D-1A shall be calculated by multiplying emissions from ID No. D-1x1.181., an increase by 18.1%)

C. 15A NCAC 02D .0614 COMPLIANCE ASSURANCE MONITORING

1. Wafer drying process - BARK Burner (ID No. Bark1), Rotary Dryers (ID Nos. D-1 through D-5), and Thermal Oil Heaters (ID Nos. TOH-1 and TOH-2) and associated cyclones (ID Nos. PCYCD-1 through PCYCD-5)

a. Pursuant to 40 CFR 64 and 15A NCAC 02D .0614, the Permittee shall comply with the following:

b. **Background**

- i. Emission unit: wafer drying process (**ID Nos. BARK1, TOH-1 and TOH-2, and D1 through D5**)
- ii. Applicable regulations: 15A NCAC 02D .0515

Emissions limits: particulates from miscellaneous industrial process (2D .0515, particulate matter)

Control technology: cyclones (**ID Nos. PCYCD-1 through PCYCD-5**)

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

Indicator [64.6(c)(1)(i)]	Indicator No. 1
Measurement Approach [64.6(c)(1)(ii)]	Visible emissions from the cyclones outlet will be monitored daily using reference method 22-like procedures when the WESPs and RTOs (ID Nos. RTO-3 through RTO-6) are bypassed for more than twelve (12) hours
Indicator Range [64.6(c)(2)] Bypass [64.3(a)(2)] QIP threshold [64.8]	An excursion is defined as the presence of visible emissions. Excursions trigger an inspection and corrective action The QIP threshold is six excursions in a six-month reporting period.
Performance Criteria A. Data Representativeness [64.6(c)(1)(iii)] B. Verification of Operational Status [64.3(b)(1)] C. QA/QC Practices and Criteria [64.3(b)(3)] D. Monitoring frequency [64.3(b)(4)] Data collection procedure [64.3(b)(4)] Averaging period	Measurements are being made at the emission point (cyclone outlet) N/A The observer will be familiar with Method 22 and follow Method 22-like procedures A six-minute Method 22-like observation is performed daily. The visible emission observation is documented by the observer. N/A
Recordkeeping and reporting [64.9]	Keep records of: excursion reports and corrective actions, visible emissions logs. Semi-annual reports include: Investigative and corrective action report, Date, time, and duration of excursion Cause of and corrective actions to eliminate excursion, and Measures taken to prevent re-occurrence A description of the actions taken to implement a QIP (as applicable)

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

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

c. **Background**

- i. Emission unit: wafer drying process (**ID Nos. BARK1, TOH-1 and TOH-2, and D1 through D5**)
- ii. Applicable regulations: 15A NCAC 2D .0515, .0524, and 02Q .0317

Emissions limits: particulates from miscellaneous industrial process (2D .0515, particulate matter)
 NSPS Subpart Dc (2D .0524, particulate matter and visible emissions)

Control technology: wet electrostatic precipitators (**ID Nos. WESP-1 and WESP-2**) and regenerative thermal oxidizers (**ID Nos. RTO-3 through RTO-6**)

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

Indicator [64.6(c)(1)(i)]	Indicator No. 1
I. Indicator	Visible emissions
Measurement Approach	Visible emissions from the wafer drying process will be monitored continuously using a continuous opacity monitoring (COM) system on the common stack (RTO outlet).
II. Indicator Range	An excursion is defined as visible emissions in amounts greater than 12% (six-minute average). Excursions trigger an inspection, corrective action, and a reporting requirement.
QIP Threshold	The QIP threshold is six excursions in a six-month reporting period.

Indicator [64.6(c)(1)(i)]	Indicator No. 1
III. Performance Criteria	
A. Data Representativeness	Measurements are being made at the emission point (RTO outlet) of the common stack
B. Verification of Operational Status	NA
C. QA/QC Practices	The COM systems shall be calibrated, maintained and operated according to 40 CFR 60, Appendix B, Performance Specifications (PS1) and Appendix F, Quality Assurance Procedures.
D. Monitoring Frequency	Data is collected continuously with the COM system.
E. Data Collection Procedures	Data from the COM system is collected electronically and maintained on the data acquisition and handling system computer along with information on the operating status of the thermal oil heaters. Alternatively, a suitable data recorder, including an analog strip chart recorder may be used, provided the specifications in PS-1 are met.
F. Averaging Periods	Six-minute Average

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

- A. The Permittee shall submit a summary report of all monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations for the requirements of this permit must be clearly identified. At a minimum, the summary report shall include the following elements:
 - 1. summary information on the number, duration and cause (or if the cause is unknown, a statement to that effect) of excursions or exceedances, as applicable, and the corrective actions taken;
 - 2. summary information on the number, duration and cause (or if the cause is unknown, a statement to that effect) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - 3. a description of the actions taken to implement a Quality Improvement Plan (QIP) during the reporting period as specified in 40 CFR 64.8, as applicable.

2. Wood product forming and finishing operations (ID Nos. CP-001 through CP-007, CYC5, CYC9 and FUELPREP)

a. Pursuant to 40 CFR 64 and 15A NCAC 2D .0614, the Permittee shall comply with the following.

b. **Background**

- i. Emission unit: wood product forming and finishing operations (ID Nos. CP-001 through CP-007, CYC5, CYC9 and FUELPREP)
- ii. Applicable regulations: 15A NCAC 2D .0512

Emissions limits: properly designed collectors (2D .0512, particulate matter)

Control technology: pulse-jet bagfilters (ID Nos. B-1 through B-3 and B-5 through B-8)
cyclones (ID Nos. CYC1, CYC3, CYC5-1 & CYC5-2, CYC6 and CYC8)

iii. Monitoring Approach: The key elements of the monitoring approach are presented in the following table

Indicator [64.6(c)(1)(i)]	Indicator No. 1 - Pressure drop
Measurement Approach [64.6(c)(1)(ii)]	Pressure drop (ΔP) across the bagfilter is measured with a differential pressure gauge
Indicator Range [64.6(c)(2)]	An excursion is defined as a pressure drop greater than 8.0" H ₂ O or less than 0.1" H ₂ O.
QIP threshold [64.8]	Instantaneous ΔP readings outside range 3 times within a six-month period
Performance Criteria, Data Representativeness [64.6(c)(1)(iii)]	Pressure taps are located at the bagfilter inlet and outlet. The gauge has an indicator range from 0.1 to 15.0 inches of water. The actual temperature of the monitored exhaust will vary depending on seasonal changes, filter maximum operating temperature, 150 degrees F.
Verification of Operational Status [64.3(b)(1)]	N/A
QA/QC Practices and Criteria [64.3(b)(3)]	Proper operation of the pressure gauge is checked semi-annually.
Monitoring frequency [64.3(b)(4)]	ΔP is monitored continuously while the bagfilter is in operation.
Data collection procedure [64.3(b)(4)]	ΔP is manually recorded daily, at least once per shift.
Averaging period	N/A
Recordkeeping and reporting [64.9]	<p>Keep records of:</p> <p>excursion reports and corrective actions, I&M logs for ΔP monitoring and recording system, bagfilter inspection and maintenance reports</p> <p>semi-annual reports include:</p> <p>Investigative and corrective action report,</p> <p>Date, time, and duration of excursion</p> <p>Cause of and corrective actions to eliminate excursion, and</p> <p>Measures taken to prevent re-occurrence</p> <p>A description of the actions taken to implement a QIP (as applicable)</p>

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

The Permittee shall submit a summary report of all monitoring activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar

year for the preceding six-month period between January and June. All instances of deviations for the requirements of this permit must be clearly identified.

D. Facility-wide emission sources for existing Maximum Achievable Control Technology (MACT) affected sources

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous Air Pollutants (HAP)	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products MACT	15A NCAC 2D .1111 (40 CFR 63, Subpart DDDD)

1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY - National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products (Subpart DDDD)

OSB Manufacturing consisting of seven process units:

- Five (5) wafer (triple pass green rotary) dryers (ID Nos. D-1 through D-5) heated by exhaust from one bark burner (ID No. BARK1) and thermal oil heaters (ID Nos. TOH-1 and TOH-2) controlled by three propane/natural gas-fired regenerative thermal oxidizers (ID Nos. ID Nos. RTO-3 through RTO-6)
- One totally enclosed Hot (reconstituted wood product) Press (ID Nos. PV-1 and PV-2) heated indirectly by thermal oil heaters (ID Nos. TOH-1 and TOH-2) – OSB press enclosure vents controlled by one propane/natural gas-fired regenerative thermal oxidizer (ID No. RTO-3)
- Group 1 miscellaneous coating operation - Edgeseal operation (ID No. I-EO-1), Printing operation (ID No. IS-PO-1), Nail line marking (ID No. IS-N-1), White stencil painting (ID No. IS-SP-1), Paint spray booth (ID No. IS-C-1), and mark-out system (ID No. I-MO).

Applicability [40 CFR 63.2231]

- a. For the emission sources subject to “**MACT Subpart DDDD**” as indicated above and in the permitted equipment list (**ID Nos. D-1 through D-5; BARK1; TOH-1 and TOH-2 (POS only); PV-1 and PV-2; and IS-EO-1, IS-PO-1, I-MO, IS-N-1, IS-SP-1, and IS-C-1**), 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 DDDD National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products.

Definitions and Nomenclature [40 CFR 63.2292]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.2292 shall apply.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.2290]

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

Compliance Options and Operating Requirements [15A NCAC 02Q .0508(f)]

- d. For the emission sources subject to “**MACT Subpart DDDD**” as indicated above and in the permitted equipment list the Permittee shall comply with compliance options and operating requirements described in Tables 1A, 1B and 2 to 40 CFR 63 and in paragraph 40 CFR 63.2240 (c) by using the compliance options listed in paragraphs (a), (b), and (c) of 40 CFR 63.2240 for each process unit listed in Tables 1A and 1B to

40 CFR 63, Subpart DDDD and defined in 40 CFR 63.2292. [40 CFR 63.2240]

- e. The Permittee must be in compliance with the compliance options, operating requirements, and the work practice requirements of this subpart at all times, except during periods of process unit or control device startup, shutdown, and malfunction; prior to the process unit initial startup. Startup and shutdown periods must not exceed the minimum amount of time necessary for these events. [40 CFR 63.2250]
- f. The Permittee shall operate the reconstituted wood product press in an enclosure that meets the definition of a wood products enclosure in 40 CFR 63.2292 or measure the capture efficiency of the capture device for the press, according to the provisions in 40 CFR 63.2267.
- g. The Permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i). [40 CFR 63.2250(b)]
- h. The Permittee must develop a written Startup, Shutdown, and Malfunction Plan (SSMP) according to the provisions in 40 CFR 63.6(e)(3). [40 CFR 63.2250(c)]
- i. To the extent practical, startup and shutdown of emission control systems must be scheduled during times when process equipment is also shut down. [40 CFR 63.2251(e)]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the operating requirements in d. through i. are not met.

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

- j. The Permittee shall meet each work practice requirement in Table 3 to 40 CFR 63, Subpart DDDD per 40 CFR 63.2241, as applicable. [40 CFR 63.2241]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the work practice requirements in condition j. are not met.

Affected Sources Not Subject to Operating Requirements [40 CFR 63.2252]

- k. For process units not subject to the operating requirements in condition (d) through (i), the Permittee is not required to comply with the compliance options, work practice requirements, performance testing, monitoring, SSM plans, and recordkeeping or reporting requirements of 40 CFR 63, Subpart DDDD, or any other requirements in 40 CFR 63 Subpart A except for the initial notification requirements in 40 CFR 63.9(b).

Testing [15A NCAC 02D .2601]

- l. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limits given in condition d. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Monitoring and Continuous Compliance Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.2269 through 63.2271]

- m. The Permittee shall install, operate and maintain each monitoring device or system according to 40 CFR 63.2269.
- n. The Permittee shall monitor and collect data according to 40 CFR 63.2270.
- o. The Permittee shall demonstrate continuous compliance with the compliance options, operating requirements, and work practice requirements in 40 CFR 63.2240 and 63.2241 that apply according to the methods specified in Tables 7 and 8 to 40 CFR 63 Subpart DDDD according to 40 CFR 63.2271.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in conditions q. through s. are not met.

Recordkeeping Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.2282 and 63.2283]

- p. The Permittee must keep the records listed in 40 CFR 63.2282(a).
- q. The Permittee must keep the records required in Tables 7 and 8 to 40 CFR 63 Subpart DDDD to show continuous compliance with each compliance option, operating requirement, and work practice requirement that applies. [40CFR 63.2282(b)]
- r. The Permittee must kept all records in accordance to 40 CFR 63.2282(c) through 63.2282(e) that apply.

- s. The Permittee must maintain records in a form suitable and readily available for expeditious review as specified in 40 CFR 63.10(b)(1). [40 CFR 63.2283(a)]
- t. As specified in 40 CFR 63.10(b)(1), the Permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.2283(b)]
- u. The Permittee must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to 40 CFR 63.10(b)(1). The Permittee can keep the records offsite for the remaining 3 years. [40 CFR 63.2283(c)]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained per conditions p. through y.

Notification Requirements [40 CFR 63.2280]

- v. The Permittee must submit all of the notifications as required in Tables 1A, 1B, 4, 5 and 6 by the dates specified. [40 CFR 63.2280(a)]
- w. If you are required to conduct a performance test, you must submit a written notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as specified in §63.7(b)(1). [40 CFR 63.2280(c)]
- x. If you use the emissions averaging compliance option in 40 CFR 63.2240(c), you must submit an Emissions Averaging Plan to the EPA Administrator for approval no later than 1 year before the compliance date or no later than 1 year before the date you would begin using an emissions average, whichever is later. The Emissions Averaging Plan must include the information in 40 CFR 63.2280(f).
- y. The Permittee must notify the EPA Administrator within 30 days before any of the following actions are taken as specified in 40 CFR 63.2280(g):
 - i. The modification or replacement of the control system for any process unit subject to the compliance options and operating requirements listed in 40 CFR 63, Subpart DDDD or specific condition (d) above.
 - ii. The shutdown of any process unit included in the Emissions Averaging Plan.
 - iii. The change in a continuous monitoring parameter or the value or range of values of a continuous monitoring parameter for any process unit or control device.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the notification requirements in conditions v. through y. are not met.

Reporting Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.2281]

- z. The permittee shall submit a compliance report semiannually 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 [40 CFR 63.2281(b)(5)]
- aa. The compliance report must contain the information in 40 CFR 63.2281(c).
- bb. For each deviation from a compliance option or operating requirement and for each deviation from the work practice requirements in Table 8 to 40 CFR 63 Subpart DDDD that occurs at an affected source where you are not using a CMS to comply with the compliance options, operating requirements, or work practice requirements in this subpart, the compliance report must contain the information in 40 CFR 63.2281(c)(1) through (6) and (d)(1) and (2). This includes periods of startup, shutdown, and malfunction and routine control device maintenance. [40 CFR 63.2281(d)]
- cc. For each deviation from a compliance option or operating requirement occurring at an affected source where you are using a CMS to comply with the compliance options and operating requirements in 40 CFR 63 Subpart DDDD, you must include the information 40 CFR 63.2281(c)(1) through (6) and paragraphs (e)(1) through (11). This includes periods of startup, shutdown, and malfunction and routine control device maintenance. [40 CFR 63.2281(e)]
- dd. If you comply with the emissions averaging compliance option in 40 CFR 63.2240(c), you must include in your semiannual compliance report calculations based on operating data from the semiannual reporting period that demonstrate that actual mass removal equals or exceeds the required mass removal. [40 CFR 63.2281(f)]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in z. through dd. are not met.

E. Facility-wide emission sources for new MACT affected sources

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous Air Pollutants (HAP)	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products MACT	15A NCAC 02D .1111 (40 CFR 63, Subpart QQQQ)

1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Wood Building Products (Subpart QQQQ)

TechShield® Coating Operation (ID No. TS-1) consisting of:

- Adhesive roll coating operation and associated foil application
- Cleaning operations

Applicability [40 CFR 63.4681]

- a. For the emission sources subject to “**MACT Subpart QQQQ**” as indicated above and in the permitted equipment list, 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 QQQQ National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products.

Definitions and Nomenclature [40 CFR 63.4781]

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.4781 shall apply.

40 CFR Part 63 Subpart A General Provisions [40 CFR 63.4701]

- c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources, as identified in Table 4 to 40 CFR Part 63, Subpart QQQQ.

Testing [15A NCAC 02D .2601]

- d. If emissions testing is required, the testing shall be performed in accordance General Condition JJ. If the results of this test are above the limits given in condition e. and f. below, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Emission Limitations [15A NCAC 02Q .0508(b), 40 CFR 63.4690 and 63.4691]

- e. The organic HAP content of each coating used in the Subpart QQQQ affected sources shall not exceed **0.00** pounds (lbs) organic HAP per gallon (gal) solids.
- f. The thinners and cleaning materials used in the Subpart QQQQ affected sources shall contain no organic HAP.

Monitoring and Continuous Compliance Requirements [15A NCAC 02Q .0508(f), 40 CFR 63.4742]

- g. The Permittee shall meet the emission limitations of conditions e. and f. at all times for each compliance period.
- h. Organic HAP content (lbs HAP/gal solids) shall be determined using Equation 2 in 40 CFR 63.4741(d).
- i. HAP content of thinners and cleaning materials shall be determined according to 40 CFR 63.4741(a).

- j. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in 40 CFR 63.4740 is the end of a compliance period consisting of that month and the preceding 11 months. The initial compliance period begins upon startup of the Subpart QQQQ affected sources. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in condition g. through j. are not met.

Operating Limits/Work Practice Standards [40 CFR 63.4692 and 63.4693]

- k. For the above affected sources on which the Permittee uses the compliant material option or the emission rate without add-on controls option, the Permittee is not required to meet any operating limits or work practice standards.

Notifications [40 CFR 63.4710]

- l. The Permittee shall submit the notifications in 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in Section 2.2-E.1.i. through 2.2-E.1.o. below.
- m. Per 63.4710(b), the Permittee shall submit the Initial Notification required by §63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup or 120 days after May 28, 2003, whichever is later.
- n. The Permittee shall submit the Notification of Compliance Status required by §63.9(h) no later than 30 calendar days following the end of the initial compliance period described in §63.4740, §63.4750, or §63.4760 that applies to your affected source. Initial compliance period for new sources begins the date of initial startup of your affected source as specified in §63.4683 and ends the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months.
- o. The Notification of Compliance Status must contain the information specified in paragraphs (c)(1) through (9) of §63.4710 and in §63.9(h).
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the above notifications are not met.

Recordkeeping [15A NCAC 02Q .0508(f), 40 CFR 63.4730]

- p. The following records must be kept. Failure to collect and keep these records is a deviation from the applicable standard.
 - i. A copy of each notification and report that you submitted to comply with this subpart, and the documentation supporting each notification and report.
 - ii. A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner, and cleaning material and the volume fraction of coating solids for each coating. If you use information provided to you by the manufacturer or supplier of the material that was based on testing, you must keep the summary sheet of results provided to you by the manufacturer or supplier.
 - iii. For each compliance period, the following records:
 - 1. A record of the coating operations at which you used each compliance option and the time periods (beginning and ending dates and times) you used each option.
 - 2. For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 2 of 40 CFR 63.4741(d).
 - iv. A record of the name and volume of each coating, thinner, and cleaning material used during each compliance period.
 - v. A record of the mass fraction of organic HAP for each coating, thinner, and cleaning material used during each compliance period, if applicable.
 - vi. A record of the volume fraction of coating solids for each coating used during each compliance period, if applicable.
 - vii. A record of the density for each coating used during each compliance period, if applicable.
 - viii. You must keep records of the date, time, and duration of each deviation.

- q. As specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- r. You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). You may keep the records off-site for the remaining 3 years.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the recordkeeping requirements in condition p. through r. are not met.

Reporting [15A NCAC 02Q .0508(f), 40CFR 63.4720]

- s. The Permittee shall submit a summary report (semiannual compliance report) of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
- t. The semiannual compliance report must contain the following information:
 - i. Company name and address.
 - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
 - iii. Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
 - iv. Identification of the compliance option or options specified in 40 CFR 63.4691 that you used on each coating operation during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning and ending dates you used each option.
- u. If there were no deviations from the emission limitations in 40 CFR 63.4690 that apply to you, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period.
- v. If there was a deviation from the applicable emission limit in 40 CFR 63.4690, the semiannual compliance report must contain the information in paragraphs (i) through (iv).
 - i. Identification of each coating used that deviated from the emission limit, each thinner and cleaning material used that contained organic HAP, and the dates and time periods each was used.
 - ii. The calculation of the organic HAP content (using Equation 2 of 40 CFR 63.4741) for each coating identified in paragraph (i) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports).
 - iii. The determination of mass fraction of organic HAP for each coating, thinner, and cleaning material identified in paragraph (i) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports).
 - iv. A statement of the cause of each deviation.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the reporting requirements in s. through v. are not met.

2.3 - Permit Shield for Nonapplicable Requirements

The Permittee is shielded from the following nonapplicable requirements [15A NCAC 02Q .0512(a)(1)(B)].

- A. 15A NCAC 02D .0524, 40 CFR Part 60 Subpart IIII is not applicable to (ID No. ENG1) because the diesel fired emergency generator pre-dates the NSPS regulation (existing prior to July 11, 2005).
- B. 15A NCAC 02D .0614, 40 CFR Part 64 COMPLIANCE ASSURANCE MONITORING (CAM) is not applicable to the Wafer drying process - BARK Burner, TOH and Dryers controlled by five associated process cyclones, two WESPs, & two RTOs because an emissions cap that is approved under the rules of this Subchapter and Subchapter 15A NCAC 02Q and incorporated in a permit issued under 15A NCAC 02Q .0500. [02D .0614(b)(1)(E) for VOC].

SECTION 3 - GENERAL CONDITIONS (version 5.4, 07/20/2020)

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

- A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
 2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
 3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
 4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
 5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
 6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.
- B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.
- C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.
- D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:
- Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641
- All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).
- E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

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

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application;
- b. changes that modify equipment or processes; or
- c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]

- a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
- c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
- d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.

3. Off Permit Changes [15A NCAC 02Q .0523(b)]

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

- a. the change affects only insignificant activities and the activities remain insignificant after the change; or
- b. the change is not covered under any applicable requirement.

4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

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

“Excess Emissions” - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)

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

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

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

I.B. Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

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

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

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

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

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

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

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

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

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

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

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

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable

and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

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

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

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

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

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

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

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

T. **Insignificant Activities** [15A NCAC 02Q .0503]

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

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

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

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

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

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

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

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

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

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(3)]

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

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(d)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain

such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.

2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. Prevention of Accidental Releases - Section 112(r) [15A NCAC 02Q .0508(h)]

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

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

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

FF. Title IV Allowances [15A NCAC 02Q .0508(i)(1)]

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

GG. Air Pollution Emergency Episode [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. Registration of Air Pollution Sources [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. Ambient Air Quality Standards [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. General Emissions Testing and Reporting Requirements [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 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, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.

4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540]

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

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
BAE	Baseline Actual Emissions
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
CSAPR	Cross-State Air Pollution Rule
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
GHGs	Greenhouse Gases
HAP	Hazardous Air Pollutant
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NAAQS	National Ambient Air Quality Standards
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
OAH	Office of Administrative Hearings
PAE	Projected Actual Emissions
PAL	Plantwide Applicability Limitation
PM	Particulate Matter
PM_{2.5}	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
TAP	Toxic Air Pollutant
tpy	Tons Per Year
VOC	Volatile Organic Compound