ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
MICHAEL ABRACZINSKAS
Director

NORTH CAROLINA
Environmental Quality

Enter Calendar Date

James Waddell
Plant Manager
Louisiana-Pacific Corporation - Roxboro
10475 Boston Road
Roxboro, North Carolina 27573

SUBJECT: Air Quality Permit No. 07760T25
Facility ID: 7300061
Louisiana-Pacific Corporation - Roxboro
Roxboro, Person County
Fee Class: Title V
PSD Class: Major

Dear Mr. Waddell:

In accordance with your completed Air Quality Permit Application for a renewal of your Title V permit received September 2, 2020, we are forwarding herewith Air Quality Permit No. 07760T25 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 such in the permit. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 4. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

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

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

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

143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

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 PM_{10} and SO_2. However, this permit renewal does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from ***(Enter Permit Issuance Date)*** until ***(Enter Permit Expiration Date)***, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Eric L. Crump, P.E. at (919) 707-8470 or eric.crump@ncdenr.gov.

Sincerely yours,

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

Enclosure

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

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

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

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

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

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

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

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

* * *

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

Summary of Changes to Permit

The following changes were made to Air Permit No. 07760T24*:

Page No.	Section	Description of Changes
Cover and throughout	---	• Updated all dates and permit revision numbers • Changed all citations of 15A NCAC 2D to 15A NCAC 02D • Changed all citations of 15A NCAC 2Q to 15A NCAC 02Q • Removed "§" symbol wherever it occurred throughout permit • Changed "PM10" and "PM-10" wherever they occur to "PM_{10}" • Replaced "Special Condition" with "Section" whenever it occurs before a reference to a permit condition • Changed each instance of "3/8 inch" to "3/8-inch" • Changed "regenerative thermal oxidizer", "oxidizer" and "thermal oxidizer" to "RTO" after the first occurrence in the permit language • Removed unnecessary hyphens and periods from permit section citations in the permit language • Removed each mention of five triple pass direct fired wafer dryers (ID Nos. D-1 through D-5), which have since been replaced by five single pass direct fired wafer dryers (ID Nos. D-1A through D-5A)
Cover page	---	• Added NAICS code for facility • Added due date for renewal of permit
2	Table of Contents	• Changed Section 3 from "General Conditions" to "Insignificant Activities per 15A NCAC 02Q .0503(8)" • Added Section 4, General Conditions
3	List of Acronyms	Moved list from end of permit to page following Table of Contents
Insignificant Activities List	Attachment	Moved list to Section 3 of the permit
5	1	Removed CYC5 from description of source ID No. CP-005, and added it as an additional control device for source CP-005 in the control device ID No. and description columns
6	2.1 A	Updated summary table of limits and standards to current format
7	2.1 A.1 2.1 A.1.c	Updated section to reflect the most current stipulations for 15A NCAC 02D .0515 Defined the acronym RTO to mean "regenerative thermal oxidizer"
8	2.1 A.2	Updated section to reflect the most current stipulations for 15A NCAC 02D .0516
9	2.1 A.3.a 2.1 A.3.b, c, e	Changed "TOH" to "thermal oil heaters"; deleted NCAC citation in brackets Updated section to reflect the most current stipulations for 15A NCAC 02D .0521

Page No.	Section	Description of Changes
10	2.1 A.4.b, c	Added the appropriate references from 40 CFR 60 Subpart Dc
	2.1 A.4.f	Deleted the phrase "or notification requirements to the EPA"
	2.1 A.4.f.ii	Added reference to Sections 2.1 A.4.d through f
	2.1 A.5.b	Modified to reference written plan requirements listed in 15A NCAC 02D .0535(d)
	2.1 A.5.b.iv	Changed facsimile notification requirement to email requirement
11	2.1 A.6	• Removed "a." preceding sentence in this section • Deleted the word "alternate"
	2.1 A.7	Updated section to reflect the most current stipulations for 15A NCAC 02D .0503
	2.1 A.8	Updated section to reflect the most current stipulations for 15A NCAC 02D .0503
	2.1 A.9	This section is no longer "Reserved"; it now contains 02D .0524 (NSPS Dc) requirements for alternate operating scenario (recordkeeping and reporting requirements)
12	2.1 A.10	Updated section to reflect the most current stipulations for 15A NCAC 02D .1111, 40 CFR Part 63, Subpart DDDDD
14	2.1 B	Updated summary table of limits and standards to current format
	2.1 B.1	Updated section to reflect the most current stipulations for 15A NCAC 02D .0512
15	2.1 B.2	Updated section to reflect the most current stipulations for 15A NCAC 02D .0516
	2.1 B.3	Updated section to reflect the most current stipulations for 15A NCAC 0D2 .0521
16	2.1 C	• Revised listing of wood product forming and finishing operations so that each group process is listed with its associated control devices • Updated summary table of limits and standards to current format • Added control device CYC5 to list of controls for "Mat reject and flying saw system . . ."
17	2.1 C.1.b	Added control device CYC5 to list of cyclones
	2.1 C.1.e	Updated section to reflect the most current stipulations for 15A NCAC 02D .0512
	2.1 C.2	Updated section to reflect the most current stipulations for 15A NCAC 02D .0521
18	2.1 D	Updated summary table of limits and standards to current format

Page No.	Section	Description of Changes
19	2.1 D.1.b	Combined subparagraph i into paragraph b
	2.1 D.1.d	Updated section to reflect the most current stipulations for 15A NCAC 02D .0512
	2.1 D.2	Updated section to reflect the most current stipulations for 15A NCAC 02D .0521
	2.1 E	Updated summary table of limits and standards to current format
20	2.1 E.1, 2	Updated sections to reflect the most current stipulations for 15A NCAC 02 .0516 and .0521
	2.1 E.3	Updated section to reflect the most current stipulation for 15A NCAC 02D .1111, 40 CFR Part 63, Subpart ZZZZ
21	2.2 A	Updated summary table of limits and standards to current format
	2.2 A.1	• Updated section to reflect the most current stipulations for 15A NCAC 02 .1100 • Changed "elemental AS" to "elemental As" in toxics limits table
22	2.2 A.2	Updated section to reflect the most current stipulations for 15A NCAC 02D .0711
23	2.2 A.3	• Deleted "Requirement: Odor Requirements" from section heading • Removed subparagraph "a." but retained permit stipulation
	2.2 B	Updated summary table of limits and standards to current format
24	2.2 B.1.a	Deleted "this regulation"; inserted "each" after the words "250 tons"
	2.2 B.1.c	Changed "thermal oxidizers to "RTOs"
	2.2 B.1.c.i	• Changed "oxidizers" to "RTO". • Revised to require next test for the RTOs to be conducted by September 15, 2022. • Added allowance for DAQ to approve a test date differing from that required by the permit.
	2.2 B.1.e.i	• Defined the acronym "MSF" in definition of the variable P_{ai} to mean "thousand square feet" • Edited definitions of the variables T_i and P_t for clarity
	2.2 B.1.e.iv	Deleted this paragraph (requirement to not operate more than five dryers simultaneously)
26-27	Table 2.2-1	• Spelled out LP (Louisiana-Pacific), Tech (Technical), and first occurrence of SDS (safety data sheet) • Acronym "SDA" corrected to "Safety Data Sheet" • For edgeseal operations printing operations, and TechShield® process, changed basis of VOC emission factors to "Material SDS or manufacturers formulation data provided with each shipment of each ingredient"
29-30	Table 2.2-3	Spelled out LP (Louisiana-Pacific),
31	2.2 B.1.k.i	Added definition of the variable $E_{CO(Misc)}$

Page No.	Section	Description of Changes
33	2.2 B.1.l.i	Added definition of the variable $E_{NOx(Misc)}$
34	2.2 B.1.o.iv	Added "and the SDS or manufacturers formulation data provided with each shipment of each ingredient used to calculate VOC emissions"
35	2.2 B.1.q 2.2 B.1.r 2.2 B.1.r.ii	Eliminated subparagraph i; retained permit language in paragraph q Created new paragraph r; relocated former subparagraphs q.ii through q.v to paragraph r as subparagraphs r.i through r.iv • Changed deadline for dryer system testing from "within 180 days of installation" to "September 15, 2022, unless another date is approved by NCDAQ" • Changed "without" in second sentence to "with"
36	2.2 B.1.s, t 2.2 C	Redesignated last two subparagraphs as new paragraphs s and t Updated section to reflect the most current format and stipulations for 15A NCAC 02D .0614
38	2.2 C.2.c.iii	Added control device CYC5 to list of cyclones
39	2.2 D	Updated section to reflect the most current format and stipulations for 15A NCAC 02D .1111, including CEDRI reporting requirements
41	2.2 D.1.o.iii-iv 2.2 D.1.q	Changed "EPA Administrator" to "NCDAQ" Added CEDRI reporting requirements
42	2.2 E.1	Updated section to reflect the most current format and stipulations for 15A NCAC 02D .1111
46	3	Moved list of insignificant activities to Section 3, which includes the following changes: • Redesignating/renumbering five former organic liquid storage tanks as resin storage tanks (new ID Nos. IS-RESINTK-1 through IS-RESINTK-6) • Added new emergency generators ID Nos. IS-GEN-1 and IS-GEN-2
48-56	4	Updated General Conditions to Version 6.0 dated January 7, 2022

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

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

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
07760T25	07760T24	XXXX	XXXX

NOTE: Per General Condition K, a permit application for the renewal of this Title V permit shall be submitted no later than ***[enter date six months prior to expiration date]***.

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**
Primary SIC Code:	**2493**
Primary NAICS:	**321219**
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**
Division of Air Quality, Regional Office Address:	**Raleigh Regional Office** **3800 Barrett Drive** **Raleigh, North Carolina, 27609**

Permit issued this the XX day of XXXXX, 2022

_____

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

Table of Contents

List of Acronyms

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

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

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

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
BARK1 **MACT DDDD**	**Wafer Drying Process** 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 single-pass direct fired wafer dryers[2] (ID Nos. D-1A through D-5A[3])	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)
TOH-1 TOH-2 **NSPS Dc; MACT DDDD**	*Primary Operating Scenario (POS)* 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	PCYCD-1 through PCYCD-5, WESP-1 and WESP-2, and RTO-4 through 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)
TOH-1 TOH-2 **NSPS Dc; MACT DDDDD**	*Alternate Operating Scenario (AOS)* 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	N/A	N/A
CYC9	Saw trim recovery (screen) cyclone (84 inches in diameter) exhausting to CP-003	N/A	N/A
	Fuel Prep System		
CP-003 and CP-004	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)
FUEL PREP	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
	OSB forming process		
CP-002	blender and forming bin aspiration systems	B-2	One bagfilter (2,219 square feet of filter area)
CP-005	mat reject and flying saw system	B-5, and/or CYC5-2 (wet); or CYC5-1 (dry) and/or CYC5	One bagfilter (5,235 square feet of filter area) and/or two bypass cyclones (120 inches in diameter), and or one bypass cyclone (144 inches in diameter)
	OSB board processing operation		
PV-1 and PV-2 **MACT DDDD**	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**	TechShield® Coating Operation consisting of: Adhesive roll coating operation and associated sheathing application; Cleaning operations	N/A	N/A
	Finishing process		
CP-001	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 ZZZZ**[4]	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 May 2, 2022 each dryer and associated process cyclone has an inlet airflow design of 62,000 ACFM (310,000 ACFM total). Per email dated March 17, 2016, 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] Per 40 CFR 63.6590(a)(1)(i), 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 40 CFR Part 63, Subpart ZZZZ or of subpart A of this part. No initial notification is necessary.

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:

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:

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter (PM)	***AOS - firing natural gas only*** 0.35 pounds per million Btu heat input **(ID Nos. TOH-1 and TOH-2**)	15A NCAC 02D .0503
	$E=4.10(P)^{0.67}$ for process weight ≤ 30 tons/hour, OR $E=55.0(P)^{0.11} - 40$ for process weight > 30 tons/hour Where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Particulate matter	***POS - firing wood fuel and/or recycled resinated wood fuel and/or natural gas*** 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
	POS - firing wood fuel and/or recycled resinated wood fuel and/or natural gas 20 percent opacity **(ID Nos. TOH-1 and TOH-2)**	15A NCAC 02D .0524 (40 CFR 60, Subpart Dc)
Carbon monoxide	**See Section 2.2-B** Less than 250 tons per year facility-wide	15A NCAC 02Q .0317 for 15A NCAC 02D .0530
Nitrogen oxides		
Particulate matter		
PM_{10}		

Pollutant	Limits/Standards	Applicable Regulation
Volatile organic compounds		
Volatile Organic Compounds	**See Section 2.3-B** Compliance assurance monitoring (CAM)	15A NCAC 02Q .0317 for 15A NCAC 02D .0614(b)(1)(E)
Toxic Air Pollutants	**State-enforceable only** **See Section 2.2 A.1**	15A NCAC 02D .1100
	State Enforceable Only **See Section 2.2 A.2**	15A NCAC 02Q .0711
Hazardous Air Pollutants	**See Section 2.2-D** 40 CFR 63, Subpart DDDD	15A NCAC 02D .1111
	AOS - firing natural gas only 40 CFR 63, Subpart DDDDD **(ID Nos. TOH-1 and TOH-2**)	15A NCAC 02D .1111
Odors	**State-enforceable only** Odorous Emissions must be controlled	15A NCAC 02D .1806

POS - Primary Operating Scenario, AOS - Alternative Operating Scenario

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)**, and five wafer dryers **(ID Nos. D-1A through D-5A)** shall not exceed an allowable emission rate as calculated by the following equation:

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

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

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

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)**, and five 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 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 WESPs 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 WESPs 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 (ºF), or the exit gas temperature is greater than **180** ºF.
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 WESPs 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 given in Section(s) 2.1 A.1.c through g above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

a. Emissions of sulfur dioxide from the bark burner **(ID No. BARK1)**, five wafer dryers (**ID Nos. D-1A through D-5A**), thermal oil heaters **(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.

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

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

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

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas, propane, bark/wood (dry and wet) fuel, or recycled resinated wood fuel in the bark burner **(ID No. BARK1)**, five wafer dryers (**ID Nos. D-1A through D-5A**), thermal oil heaters **(ID Nos. TOH-1 and TOH-2)**, and RTOs **(ID Nos. RTO-4 through RTO-6)**.

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

a. Visible emissions from the bark burner **(ID No. BARK1)**, and five 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.

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:
   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 .2610 (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:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

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

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

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section(s) 2.1 A.3.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS for PRIMARY OPERATING SCENARIO [15A NCAC 02Q .0508(j)]

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. [40 CFR 60.43c(b)]

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. [40 CFR 60.43c(c)]
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, 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 given in Section(s) 2.1 A.4.d through f above 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 the items listed in 15A NCAC 02D .0535(d).
   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 email 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)]

The Permittee, contemporaneously with making a change from one 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 SCENARIO [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.

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 the thermal oil heaters **(ID Nos. TOH-1 and TOH-2)**.

8. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS for ALTERNATIVE OPERATING SCENARIO [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.

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 the thermal oil heaters **(ID Nos. TOH-1 and TOH-2)**.

9. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS for ALTERNATIVE OPERATING SCENARIO [15A NCAC 02Q .0508(j)]

a. For the thermal oil heaters **(ID Nos. TOH-1 and TOH-2)**, the Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 “New Source Performance Standards (NSPS)” as promulgated in 40 CFR 60 Subpart Dc “Standards of Performance for Small Industrial-Commercial-Institutional

Steam Generating Units," including Subpart A "General Provisions."

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

b. The Permittee shall record and maintain records of the amounts of each fuel fired during each month. [40 CFR 60.48c(g)(2)] These records shall be maintained by the Permittee for a period of two years following the date of such record. [40 CFR 60.48c(i)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these recordkeeping requirements are not met.

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

c. The Permittee shall submit a notification of the actual date of initial startup of the boiler to the Regional Supervisor, DAQ, postmarked within 15 days after such date. [40 CFR 60.7, 60.48c(a)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if this notification requirement is not met.

10. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY for ALTERNATIVE OPERATING SCENARIO [15A NCAC 02Q .0508(j)]

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

a. For the thermal oil heaters **(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," including Subpart A "General Provisions."

Definitions and Nomenclature [40 CFR 63.7575]

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

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

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 DDDDD.

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

d. The Permittee completed the initial tune up on May 15, 2019, and the one-time energy assessment on October 17, 2018, both before the due date of May 20, 2019.

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

e. The Permittee submitted a Notification of Compliance Status dated July 15, 2019, . The notification was signed by a responsible official and submitted by July 19, 2019.

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

f. The following work practice standards apply:
   i. The Permittee shall conduct a tune-up of the thermal oil heaters **(ID Nos. TOH-1 and TOH-2)** annually as specified below:
      (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown;
      (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
      (C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown);
      (D) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject; and
      (E) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

      [40 CFR 63.7500(a) and (e), 63.7540(a)(10)]
   ii. Each annual tune-up shall be conducted no more than 13 months after the previous tune-up. [40 CFR 63.7515(d)]

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

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

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these work practice requirements are not met.

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

g. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. [40 CFR 63.7500(a)(1), Table 3 to 40 CFR Part 63 Subpart DDDDD. This requirement has been met.

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

h. The Permittee shall:

i. keep a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or 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 at high fire or typical operating load, before and after the tune-up of the source;
(B) a description of any corrective actions taken as a part of the tune-up; and
(C) the type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
[40 CFR 63.7540(a)(10)(vi)]

iii. keep the associated records for Sections 2.1 A.10.f through g.

iv. keep each record:
(A) in a form suitable and readily available for expeditious review;
(B) for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
(C) 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 these recordkeeping requirements are not met.

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

i. The following reporting requirements apply:

i. The Permittee shall submit compliance reports to the DAQ on an annual basis. Annual reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance report postmarked on or before January 30 for the preceding reporting period. [40 CFR 63.7550(a) and (b)]

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

iii. The compliance report must contain the following information:
(A) company name and address;
(B) process unit information, emissions limitations, and operating parameter limitations;
(C) date of report and beginning and ending dates of the reporting period;

(D) include the date of the most recent tune-up for each unit required according to **Section 2.1 A.10.f**. Include the date of the most recent burner inspection; and
(E) statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
[40 CFR 63.7550(a) and (c), Table 9 to 40 CFR 63 Subpart DDDDD]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these reporting requirements 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:

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	Adequate ductwork and properly designed collectors	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
Hazardous Air Pollutants	**See Section 2.2 D** 40 CFR 63, Subpart DDDD - National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products Manufacture	15A NCAC 02D .1111
Carbon monoxide	**See Section 2.2 B** Less than 250 tons per year facility-wide	15A NCAC 02Q .0317 PSD Avoidance
Nitrogen oxides		
Particulate matter		
PM_{10}		
Volatile organic compounds		
Odors	**State-enforceable only** **See Section 2.2 A.4** - Odorous emissions must be controlled	15A NCAC 02D .1806
Toxic air pollutants	**State-enforceable only** **See Section 2.2 A.1**	15A NCAC 02D .1100
	State-enforceable only **See Section 2.2 A.2**	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 **(ID Nos. PV-1 and PV-2)** 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 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 given in Section(s) 2.1 B.1.b and c above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

a. Emissions of sulfur dioxide from the press enclosure vents **(ID Nos. PV-1 and PV-2)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ 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 these sources **(ID Nos. PV-1 and PV-2)**.

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.

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 .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.3.a above.

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

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 monitoring and recordkeeping activities given in Sections 2.1 B.3.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

- **Sawtrim and finishing line clean-up (ID No. CP-001), controlled by bagfilter (ID No. B-1) and/or bypass cyclone (ID No. CYC1)**
- **Blender and forming bin aspiration systems (ID No. CP-002), controlled by bagfilter (ID No. B-2)**
- **Raw fuel bin transfer and loading system (ID Nos. CP-003, CYC9 and CP-004), controlled by bagfilter (ID No. B-3) and/or bypass cyclone (ID No. CYC3)**
- **Mat reject and flying saw system (ID No. CP-005 and CYC5), controlled by bagfilter (ID No. B-5) and/or wet bypass cyclone (ID No. CYC5-2) or dry bypass cyclone (ID No. CYC5-1) or bypass cyclone (ID No. CYC5)**
- **Tongue and groove and sanderdust aspiration system (ID No. CP-006), controlled by bagfilter (ID No. B-6) and/or bypass cyclone (ID No. CYC6)**
- **Sanderdust bin transfer and loading system (ID No. CP-007), controlled by bagfilter (ID No. B-7) , and**
- **Metering bin transfer and loading system (ID No. FUELPREP), controlled by bagfilter (ID No. B-8) and/or bypass cyclone (ID No. CYC8))**

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	Adequate ductwork and properly designed collectors	15A NCAC 02D .0512
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Particulate matter	**See Section 2.2 B** Less than 250 tons per year facility-wide	15A NCAC 02Q .0317 for 15A NCAC 02D .0530
PM_{10}		
PM_{10}	**See Section 2.2 C** 40 CFR Part 64, Compliance Assurance Monitoring	15A NCAC 02D .0614
Toxic air pollutants	**State-enforceable only** See Section 2.2 A.1	15A NCAC 02D .1100
	State Enforceable Only See Section 2.2 A.2	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, 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 given in Sections 2.1 C.1.b and c above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

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

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

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

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

c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources 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 .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.2.a above.

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

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 monitoring and recordkeeping activities given in Section(s) 2.1 C.1.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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:

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	Adequate ductwork and properly designed collectors	15A NCAC 02D .0512
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Particulate matter	**See Section 2.2-B** Less than 250 tons per year facility-wide	15A NCAC 02Q .0317 PSD Avoidance
PM_{10}		
Volatile Organic Compounds		
Hazardous Air Pollutants	**See Section 2.2-E** 40 CFR Part 63, Subpart QQQQ: National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products	15A NCAC 02D .1111
Odors	**State-enforceable only** **See Section 2.2 A.4**	15A NCAC 02D .1806
Toxic air pollutants	**State-enforceable only** **See Section 2.2 A.1**	15A NCAC 02D .1100
	State Enforceable Only **See Section 2.2 A.2**	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 an 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 given in Section(s) 2.1 D.1.b and c above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

a. Visible emissions from 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.

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 given in Section(s) 2.1 D.1.b through d above. 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:

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	40 CFR Part 63, Subpart ZZZZ - National Emission Standards For Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	15A NCAC 02D .1111

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

a. Emissions of sulfur dioxide from this source **(ID No. ENG-1)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ 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 **(ID No. ENG-1)**.

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.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .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 02D .1111, MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.6585, 63.6590(a)(1)(i)]

a. For this emergency generator **(ID Nos. ENG-1)** (existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions), 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 ZZZZ "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines," including Subpart A "General Provisions."

Stationary RICE Subject to Limited Requirements [40 CFR 63.6590(b)]

b. Pursuant to 40 CFR 63.6590(b)(3)(iii), emergency generator **(ID Nos. ENG-1)** does not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements.

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:

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:

Pollutant	Limits/Standards	Applicable Regulation
Toxic Air Pollutants	**State Enforceable Only** Toxic air pollutant emissions shall not exceed rates which cause established ambient levels to be exceeded	15A NCAC 02D .1100
	State Enforceable Only Toxic air pollutant emissions shall not exceed the rates listed in 02Q .0711 unless ambient standards are not exceeded	15A NCAC 02Q .0711
Odors	**State Enforceable Only** Odorous emissions must be controlled	15A NCAC 02D .1806

State Enforceable Only

1. TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING REQUIREMENT

a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved applications (application Nos. 7300061.04A and 7300061.09B), for air toxic compliance demonstrations (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 and 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
RTO-4 through RTO-6 (combined) RTO-3 CP-002 CP-003 and CP-004 CP-005 PF Tanks[I] 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

EMISSION SOURCE(S)	TOXIC AIR POLLUTANT(S)	EMISSION LIMIT(S)
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[I]	Phenol (108-95-2)	2.06 lbs/hr 17.3 lbs/hr 0.79 lbs/hr 0.018 lbs/hr 3.18 lbs/hr

[I] Insignificant activities

b. 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.
c. For compliance purposes, within 30 days after each calendar year quarter,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 shall be reported to the Regional Supervisor, DAQ.

State Enforceable Only

2. 15A NCAC 02Q .0711: EMISSION RATES REQUIRING A PERMIT

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

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

Pollutant (CAS Number)	TPERs Limitations			
	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
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 Enforceable Only

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

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

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:

Pollutant	Limits/Standards	Applicable Regulation
Carbon monoxide (CO)	Less than 250 tons per year	15A NCAC 02Q .0317 PSD Avoidance
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 15A NCAC 02D .0530(g), facility-wide emission sources shall discharge into the atmosphere less than 250 tons each 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 RTOs **(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. The next test for the RTOs shall be conducted by September 15, 2022. Periodic testing of the RTOs shall be conducted within 60 months after the previous test[1], unless another date is approved by the DAQ. If the results of this test are above the limits given in Sections 2.2 B.1.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.

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 in thousand square feet (MSF) for different thickness
T_i= actual thickness in inches for specific production run
P_t= total normalized production in MSF on a 3/8-inch basis

   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; and
   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;

[1] 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.

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:
      (A) When all five dryers **(ID Nos. D-1A through D-5A)** are operating and venting to atmosphere through the three propane/natural gas-fired RTOs as tested.[2]
      (B) During testing condition #1, all five dryers **(ID Nos. D-1A through D-5A)** and three RTOs **(ID Nos. RTO-4 through RTO-6)** were operating normally. Tested process rate was 47.68 tons per hour.[3]
   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.[4] During testing condition #2, dryer No. D-1 and RTO No. 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 RTOs, the Permittee shall monitor the chamber temperature of each 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 RTO **(ID Nos. RTO-3 through RTO-6):**

Control Device ID No.	Minimum Chamber Temperature[5] (°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 RTOs and emergency generator; and
   ii. the recycled resinated wood fuel[6] 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:

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

Eq 2.2-2

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

Eq 2.2-3

Where:

$E_{\mathrm{VOC(Total)}}$ = the total VOC emissions from the affected sources, controlled and uncontrolled

$E_{\mathrm{VOC(RTO)}}$ = number of tons of VOC emissions per month from sources controlled by RTOs

[2] Ibid 1
[3] Ibid 1
[4] Ibid 1
[5] 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.
[6] Ibid 1

Xc = 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 RTO deemed "in operation", is not bypassed, and RTO temperature is greater than or equal to the hourly block average temperature specified in Section 2.2 B.1.f.

Xuc = pounds of VOC per hour assuming no VOC control, i.e. uncontrolled pound-per-hour emission rate (measured as 97.8%[7])

t_{WORTO} = hours per month when RTO is bypassed or hourly periods when the RTO temperature is less than the hourly block average temperature specified in Section 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 basis[8]

$E_{VOC(BH)}$ = 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 National Council for Air and Stream Improvement (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 Scenario[9]:*

Emission Source(s) (ID No(s).)	VOC Emission Factor	Control Device	Basis
Wafer Drying Process: Bark Burner (BARK1), Dryers (D-1A through D-5A), 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),	Uncontrolled RTOs 4 - 6 inlet	
	108.5 lb/hr prior to each RTO (WPP1)		
Bark Burner (BARK1) during "Idle/Standby" Mode	0.385 lb/hr as C	System Bypassed	AP-42, Table 1.6-3 Dry Wood Basis
One RTO offline: Bark Burner (BARK1), Dryers (D-1A through D-5A), 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
Two RTOs offline: Bark Burner (BARK1), Dryers (D-1A through D-5A), 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

[7] Ibid 1

[8] Ibid 1. 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 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).

[9] Ibid 1.

Emission Source(s) (ID No(s).)	VOC Emission Factor	Control Device	Basis
Dryer "Bypass" Mode: Dryers (D-1A through D-5A, 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 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	 1.87 lb/hr as C 5.59 lb/hr as C 1.85 lb/hr as C 1.57 lb/hr as C 1.21 lb/hr as C 0.02 lb/hr as C 3.77 lb/hr as C	N/A	April 1998 stack test data as provided in permit application and 8/10/2007 response letter signed by Louisiana-Pacific's Responsible Official for B-1, B-5, B-6, & B-7 and NCASI Technical Bulletin #772 Oct 1998 for B-2, B-3, & B-8
Miscellaneous Sources			
Edgeseal Operations	lb/gal identified in SDS or manufacturers' formulation data	N/A	Material safety data sheet (SDS) or manufacturers formulation data provided with each shipment of each ingredient
Printing Operations: Logo and APA stamp Re-grade roller or spray	lb/gal identified in SDS or manufacturers' formulation data		Material SDS or manufacturers formulation data provided with each shipment of each ingredient
Emergency Generator	0.000705 lb/hp-hr as CH_4		AP-42, Table 3.4-1
TechShield® process	lb/gal identified in SDS or manufacturers' formulation data		Material SDS or manufacturers formulation data provided with each shipment of each ingredient

Table 2.2-2: VOC Emission Factor – *Alternate Operating Scenario[10]:*

Emission Source(s) (ID No(s).)	VOC Emission Factor	Control Device	Basis
Wafer Drying Process: Bark Burner (BARK1), Dryers (D-2 through D-5A), and Thermal Oil Heaters (TOH-1 and TOH-2)	6.0 lb/hr controlled (WPP1)	RTOs 4 and 6	Test 2017-192ST
	398.8 lb/hr uncontrolled (WPP1)	Uncontrolled	
	199.4 lb/hr prior to each RTO (WPP1)	RTOs 4 and 6 inlet	

[10] Ibid 1.

Emission Source(s) (ID No(s).)	VOC Emission Factor	Control Device	Basis
<u>One RTO offline:</u> Bark Burner (BARK1), Dryers (D-1A through D-5A), and Thermal Oil Heaters (TOH-1 and TOH-2	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
<u>Dryer "Bypass" Mode</u> <u>Dryers (D-2A through D-5A, each)</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

ii. When the RTOs are operated at temperatures below the specified temperatures listed in Section 2.2 B.1.a above for the RTOs **(ID Nos. RTO-3 through RTO-6)** or if the temperatures are not monitored, the RTOs shall be deemed "not in operation" and the VOC emissions shall be determined using the uncontrolled emissions rates specified in Section 2.2 B.i.i above.
iii. When the RTOs are not in operation or "deemed not in operation", the VOC emissions shall be determined using the uncontrolled emissions rates specified in Section 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 Section 2.2 B.1.a above.

<u>PM and PM_{10} emissions</u>

j. Each calendar month, the Permittee shall calculate the **<u>PM and PM_{10} emissions</u>** for the previous month and the previous 12-month period to ensure compliance with Section 2.2 B.1.a above. Monthly PM and PM_{10} emissions, in tons, shall be calculated as follows:
i. Consistent with General Condition LL, PM and PM_{10} emissions shall be determined by the following equations and emission factors:

$$E_{\mathrm{PM(total)}} = \sum E_{\mathrm{PM(RTO)}} + \sum E_{\mathrm{PM(BH)}} + \sum E_{\mathrm{PM(Misc)}} + \sum E_{\mathrm{PM(Bypass)}}$$

Eq 2.2-4

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

Eq 2.2-5

$$E_{\mathrm{PM(BH)}} = \left(\frac{(X_C \times t_{\mathrm{BH}}) + (X_{UC} \times t_{\mathrm{WOBH}})}{2{,}000}\right)$$

Eq 2.2-6

Where:

$E_{PM(Total)}$ = the total PM/PM_{10}[11] emissions from the affected sources, controlled and uncontrolled
$E_{PM(RTO)}$ = number of tons of PM/PM_{10} emissions per month from sources controlled by RTO
Xc = pounds of PM/PM_{10} 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 RTO is not bypassed and RTO temperature is greater than or equal to the hourly block average temperature specified in Section 2.2 B.1.f.
t_{BH} = hours per month when emissions are routed to baghouse

Xuc = pounds of PM/PM_{10} per hour assuming no PM/PM_{10} 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

[11] For the purposes of equations 2.2-4, 2.2-5, and 2.2-6, it is assumed that PM = PM_{10}.

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 Xuc on a per-dryer basis, divide the uncontrolled emissions by 5 during Condition #1 and by 4 during Condition #2.[12]

t_{WORTO} = hours per month when RTO is bypassed or hourly periods when the RTO temperature is less than the hourly block average temperature specified in Section 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 basis[13]

$E_{PM(BH)}$ = number of tons of PM/PM_{10} emissions per month from sources controlled by baghouses using accepted emission factors in tables 2.2-3 and 2.2-4 (lb/hr)
$E_{PM(Misc)}$ = number of tons of PM/PM_{10} emissions per month from miscellaneous sources
$E_{PM(Bypass)}$ = number of tons of PM/PM_{10} 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/PM_{10} Emission Factor – *Primary Operating Scenario[14]:*

Emission Source(s) (ID No(s).)	PM/PM_{10} Emission Factor[15]	Control Device	Basis
Wafer Drying Process: Bark Burner (BARK1), Rotary Strand Dryers (D-1A through D-5A), 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; RTOs 4-6 inlet	
	6.8 lb/hr per WESP		
Bark Burner (BARK1) during "Idle/Standby" Mode	9.05 lb/hr PM 8.14 lb/hr PM_{10}	Bypassed	AP-42, Table 1.6-1 Dry Wood Basis
Dryer "Bypass" Mode Dryers (D-1A, D-2A, D-3A and D-5A, each)	13.6 lb/hr per dryer bypassed	Both WESPs and all RTOs bypassed	Test 2017-192ST, assuming 80% control efficiency for WESP.[16]
One RTO offline: Bark Burner (BARK1), Dryers (D-1A through D-5A), 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
Two RTOs offline: Bark Burner (BARK1), Dryers (D-1A through D-5A), 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

[12] 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%.
[13] Ibid 8.
[14] Ibid 1.
[15] Ibid 11. In addition, for test results from 2017-191ST and 2017-192ST, it is assumed that Total PM = Filterable PM + Condensible PM.
[16] Ibid 12.

Emission Source(s) (ID No(s).)	PM/PM$_{10}$ Emission Factor[15]	Control Device	Basis
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	1st 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 Louisiana Pacific's Responsible Official
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/PM$_{10}$ Emission Factor – *Alternate Operating Scenario*[17]*:*

Emission Source(s) (ID No(s).)	PM/PM$_{10}$ Emission Factor	Control Device	Basis
Wafer Drying Process: Bark Burner (BARK1), Dryers (D-2 through D-5A), and Thermal Oil Heaters (TOH-1 and TOH-2)	6.7 lb/hr controlled	RTOs 4 and 6	Test 2017-192ST
	13.9 lb/hr uncontrolled	Uncontrolled (inlet to RTOs)	
	6.95 lb/hr prior to each RTO		
One RTO offline: Bark Burner (BARK1), Dryers (D-1A through D-5A), and Thermal Oil Heaters (TOH-1 and TOH-2	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
Dryer "Bypass" Mode Dryers (D-2A through D-5A)	17.4 lb/hr per dryer bypassed	Both WESPs and only 1 RTO bypassed	Test 2017-192ST, assuming 80% control efficiency for WESP.[18]

ii. When the RTOs are operated at temperatures below the specified temperatures listed in Section 2.2 B.1.g above for the RTOs **(ID Nos. RTO-3 through RTO-6)** or if the temperatures are not monitored, the RTOs shall be deemed "not in operation" and the PM/PM$_{10}$ emissions shall be determined using the uncontrolled emissions rates specified in Section 2.2 B.j.i above.

iii. When the RTOs are not in operation or "deemed not in operation", the PM/PM$_{10}$ emissions shall be determined using the uncontrolled emissions rates specified in Section 2.2 B.j.i above.

iv. When the WESPs are not in operation or not inspected, operated, and maintained according to Sections 2.1 A.1.c through f, the PM/PM$_{10}$ emissions shall be determined using the uncontrolled emissions rates specified in Section 2.2 B.j.i.

v. Consecutive 12-month rolling PM and PM$_{10}$ emissions, in tons, shall be calculated by summing the monthly

[17] Ibid 10.
[18] Ibid 12.

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 PM and PM_{10} emissions are not monitored, calculated and/or if the PM and PM_{10} emissions exceed the limit given in Section 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:

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

Eq 2.2-7

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

Eq 2.2-8

Where:

$E_{CO(Total)}$ = the total CO emissions from the affected sources

$E_{CO(RTO)}$ = number of tons of CO emissions per month from sources controlled by RTOs

Xc = 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 RTO is not bypassed and RTO temperature is greater than or equal to the hourly block average temperature specified in Section 2.2 B.1.g.

Xuc = pounds of CO per hour when the RTO is bypassed or an excursion has occurred or is deemed "not in operation"

t_{WORTO} = hours per month when RTO is bypassed or hourly periods when the RTO temperature is less than the hourly block average temperature specified in Section 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[19]

$E_{CO(Misc)}$ = number of tons of CO emissions per month from miscellaneous sources

$E_{CO(Bypass)}$ = 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 Scenario[20]:*

Emission Source(s) (ID No(s).)	CO Emission Factor	Control Device	Basis
Wafer Drying Process Bark Burner (BARK1), Dryers (D-1A through D-5A), and Thermal Oil Heaters (TOH-1 and TOH-2)	17.5 lb/hr	RTOs 4-6 outlet	Test 2017-191ST
	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

[19] Ibid 8.
[20] Ibid 1

Emission Source(s) (ID No(s).)	CO Emission Factor	Control Device	Basis
<u>One RTO offline:</u> Bark Burner (BARK1), Dryers (D-1A through D-5A), 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-1A through D-5A), 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
	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 Scenario*[21]*:*

Emission Source(s) (ID No(s).)	CO Emission Factor	Control Device	Basis
<u>Wafer Drying Process</u> Bark Burner (BARK1), Dryers (D-1A, D-2A, D-3A and D-5A), and Thermal Oil Heaters (TOH-1 and TOH-2)	37.6 lb/hr	RTOs 4 and 6	Test 2017-191ST
	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-1A through D-5A), 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 RTOs are operated at temperatures below the specified temperatures listed in Section 2.2 B.1.a. above for the RTOs **(ID Nos. RTO-3 through RTO-6)** or if the temperatures are not monitored, the RTOs shall be deemed "not in operation" and the CO emissions shall be determined using the uncontrolled or bypassed emissions rates specified in Section 2.2 B.k.i above.

iii. When the RTOs are not in operation, bypassed or "deemed not in operation", the CO emissions shall be determined using the uncontrolled emissions rates specified in Section 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 Section 2.2 B.1.a above.

<u>NOx emissions</u>

l. Each calendar month, the Permittee shall calculate the **<u>NOx emissions</u>** 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:

[21] Ibid 1

i. Consistent with General Condition LL., NOx emissions shall be determined by the following equations and emission factors until performance testing as required by Section 2.2 B.1.c is approved:

$$E_{\mathrm{NOx(total)}} = \sum E_{\mathrm{NOx(RTO)}} + \sum E_{\mathrm{NOx(Misc)}} + \sum E_{\mathrm{NOx(Bypass)}}$$

Eq 2.2-9

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

Eq 2.2-10

Where:

$E_{Nox(Total)}$ = the total NOx emissions from the affected sources
$E_{NOx(RTO)}$ = number of tons of NOx emissions per month from sources controlled by RTOs
Xc = 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 RTO is not bypassed and RTO temperature is greater than or equal to the hourly block average temperature specified in Section 2.2 B.1.g.
Xuc = pounds of NOx per hour when the RTO is bypassed or an excursion has occurred or is deemed "not in operation"
t_{WORTO} = hours per month when RTO is bypassed or hourly periods when the RTO temperature is less than the hourly block average temperature specified in Section 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 hour[22]
$E_{NOx\ (Misc)}$ = number of tons of NOx emissions per month from miscellaneous sources
$E_{NOxBypass}$= 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 Scenario[23]:*

Emission Source(s) (ID No(s).)	NOx Emission Factor	Control Device	Basis
Wafer Drying Process Bark Burner (BARK1), Dryers (D-1A through D-5A), and Thermal Oil Heaters (TOH-1 and TOH-2)	35.2 lb/hr	RTOs 4-6 outlet	Test 2017-192ST
	12.5 lb/hr	Bypassed	April 2006 Engineering Test Results[24]
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	1st Quarter 2006 emissions calculation spreadsheet data[25]
Miscellaneous Sources			
Emergency Generator	0.024 lb/hp-hr	N/A	AP-42, Table 3.4-1

[22] Ibid 8.
[23] Ibid 1
[24] No RTO inlet values were provided with the most recent test data; thus, the April 2006 data remains.
[25] No RTO-3 inlet values were provided with the most recent test data; thus, the 2006 1st Quarter emissions calculation data remains.

Table 2.2-8: NOx Emission Factor – *Alternative Operating Scenario*[26]:

Emission Source(s) (ID No(s).)	NOx Emission Factor	Control Device	Basis
Wafer Drying Process	28.2 lb/hr	RTOs 4 and 6	Test 2017-191ST
Bark Burner (BARK1), Dryers (D-1A, D-2A, D-3A and D-5A), and Thermal Oil Heaters (TOH-1 and TOH-2)	12.5 lb/hr	Bypassed	April 2006 Engineering Test Results[27]

ii. When the RTOs are operated at temperatures below the specified temperatures listed in Section 2.2 B.1.a above for the **RTOs (ID Nos. RTO-3 through RTO-6)** or if the temperatures are not monitored, the RTOs shall be deemed "not in operation" and the NOx emissions shall be determined using the uncontrolled or bypassed emissions rates specified in Section 2.2 B.l.i above.
iii. When the RTOs are not in operation, bypassed or "deemed not in operation", the NOx emissions shall be determined using the uncontrolled emissions rates specified in Section 2.2 B.l.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 Section 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 RTOs 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 RTOs;
   ii. an annual (for each 12-month period following the initial inspection) internal inspection of the RTOs' 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 RTO shall be deemed not in operation and the emissions shall be determined as specified above, if the RTO is not inspected and maintained.
n. The results of inspection and maintenance for the RTOs 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 RTOs; 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-inch 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, and the SDS or manufacturers formulation data provided with each shipment of each ingredient used to calculate 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.

[26] Ibid 1
[27] Ibid 24.

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. The new dryers **(ID Nos. D-1A through D-5A)** replaced 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)]

r. Testing for the new dryers shall be conducted as follows:
   i. 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/PM_{10} Emission Factor – Primary Operating Scenario
      Table 2.2-4: PM/PM_{10} 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
   ii. **The Permittee shall perform testing of the dryer system (ID Nos. D-1A through D-5A) by September 15, 2022, unless another date is approved by NCDAQ, 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.
   iii. Once SSCB approves the test results, the emission factors based on the test results shall be incorporated into the permit by the Permittee through the permit application process.
   iv. 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)]

s. Until 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 in Section 2.2 B. 1.q above, use the emissions factors established for the corresponding existing dryers (i.e., emission factors for ID No. D-1 will be used for ID No. D-1A).

t. 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 (e.g., emissions from dryer ID No. D-1A shall be calculated by multiplying emissions from dryer ID No. D-1 × 1.181, an increase of 18.1%)

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

1. Wafer drying process with associated cyclones , WESPS and RTOs

a. For the BARK burner **(ID No. Bark1)**, rotary dryers **(ID Nos. D-1A through D-5A)**, thermal oil heaters **(ID Nos. TOH-1 and TOH-2)**, with associated cyclones **(ID Nos. PCYCD-1 through PCYCD-5)**, WESPs **(ID Nos. WESP-1 and WESP-2)**, and RTOs **(ID Nos. RTO-3 through RTO-6)**, the Permittee shall comply with 40 CFR Part 64 pursuant to 15A NCAC 02D .0614 to ensure that the wafer drying process shall comply with the emission limits of 15A NCAC02D .0515:

Background

b. Emission units: wafer drying process **(ID Nos. BARK1, TOH-1 and TOH-2, and D1 through D5)**

c. **Applicable Regulations, Emission Limit, and Monitoring Requirements**

i. Applicable Regulation: 15A NCAC 02D .0515

ii. Emissions Limits: Particulate matter emissions shall not exceed the following limits

$E = 4.10 \times P^{0.67}$ for process rates $\leq$ 30 tons per hour, or
$E = 55.0 \times P^{0.11} - 40$ for process rates > 30 tons per hour

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

iii. Control Technology: cyclones **(ID Nos. PCYCD-1 through PCYCD-5),** WESPs **(ID Nos. WESP-1 and WESP-2)**, and RTOs **(ID Nos. RTO-4 through RTO-6)**

Monitoring Approach

d. 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.

Measure	Indicator No. 1	Indicator No. 2
I. Indicator	Visible emissions	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), when the WESPs and RTOs are **NOT** bypassed.	Visible emissions from the wafer drying process will be monitored using Reference Method 22-like procedures at the cyclone outlet (bypass abort stack) whenever the WESPs and/or RTOs are bypassed for more than six (6) minutes.

Measure	Indicator No. 1	Indicator No. 2
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.	An excursion is defined as visible emissions. Excursions trigger an inspection, corrective action, and a reporting requirement.
QIP Threshold	The QIP threshold is six excursions in a six-month reporting period.	NA
III. Performance Criteria		
A. Data Representativeness	Measurements are being made at the emission point (RTO outlet) of the common stack.	Measurements are being made at the emission point (cyclones outlet – bypass abort stack).
B. Verification of Operational Status	NA	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.	The observer will be familiar with Method 22 and follow Method 22-like procedures.
D. Monitoring Frequency	Data is collected continuously with the COM system.	A six-minute Method 22-like observation is performed whenever the WESPs and/or RTOs are bypassed for more than six (6) minutes.
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.	The number and duration of bypass events, and the visible emission observation is documented by the observer.
F. Averaging Periods	Six-minute Average	NA

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

e. The Permittee shall comply with the recordkeeping requirements of 40 CFR 64.9(b) and submit a summary report of the monitoring and recordkeeping activities given in Section 2.2 C.1.d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The reports shall comply with the reporting requirements of 40 CFR 64.9(a) and include, at a minimum, the following information, as applicable:
   i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
   ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
   iii A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8.

Upon completion of a QIP, the Permittee shall include, in the next summary report, documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

2. Wood product forming and finishing operations

a. For the sawtrim and finishing line clean-up operation **(ID No. CP-001)**, saw trim recovery (screen) cyclone **(ID No. CYC9)**, blender and forming bin aspiration systems **(ID No. CP-002)**, raw fuel bin transfer and loading system **(ID Nos. CP-003 and CP-004)**, mat reject and flying saw system **(ID No. CP-005)** with bypass cyclone **(ID No. CYC5)**, tongue and groove and sanderdust aspiration system **(ID No. CP-006)**, sanderdust bin transfer and loading system **(ID No. CP-007)**, and the metering bin transfer and loading system **(ID No. FUELPREP)**, the Permittee shall comply with 40 CFR Part 64 pursuant to 15A NCAC 02D .0614 to ensure that the wood product forming and finishing operations comply with the emission limits of 15A NCAC 02D .0512.

Background

b. Emission unit: wood product forming and finishing operations (**ID Nos. CP-001 through CP-007, CYC5, CYC9 and FUELPREP**)

c. **Applicable Regulations, Emission Limits, and Monitoring Requirements**

i. Applicable regulations: 15A NCAC 02D .0512

ii. Emissions limits: properly designed collectors (02D .0512, particulate matter)

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

Monitoring Approach

d. The key elements of the monitoring approach are presented in the following table.

Measure	Indicator
I. Indicator	Pressure drop (ΔP) across the bagfilter
Measurement Approach	ΔP is measured with a differential pressure gauge
II. Indicator Range	An excursion is defined as a pressure drop greater than 8.0 inches H_2O or less than 0.1 inches H_2O.
QIP threshold	Instantaneous ΔP readings outside range 3 times within a six-month period
III. Performance Criteria	
A. Data Representativeness	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.
B. Verification of Operational Status	N/A
C. QA/QC Practices and Criteria	Proper operation of the pressure gauge is checked semi-annually.
D. Monitoring frequency	ΔP is monitored continuously while the bagfilter is in operation.
E. Data collection procedure	ΔP is manually recorded daily, at least once per shift.

Measure	Indicator
F. Averaging period	N/A

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

e. The Permittee shall comply with the recordkeeping requirements of 40 CFR 64.9(b) and submit a summary report of the monitoring and recordkeeping activities given in Section 2.2 C.3.d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The reports shall comply with the reporting requirements of 40 CFR 64.9(a) and include, at a minimum, the following information, as applicable:
   i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
   ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
   iii A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the Permittee shall include, in the next summary report, documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

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:

Pollutant	Limits/Standards	Applicable Regulation
Hazardous Air Pollutants (HAP)	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products	15A NCAC 02D .1111 (40 CFR 63, Subpart DDDD)

1. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY - National Emission Standards for Hazardous Air Pollutants: 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-1A through D-5A) 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 RTOs (ID Nos. RTO-3 through RTO-6)**

- **Two OSB press enclosure vents (ID Nos. PV-1 and PV-2) from one totally enclosed hot reinconstituted wood product press board processing operation heated indirectly by thermal oil heaters (ID Nos. TOH-1 and TOH-2) – controlled by one propane/natural gas-fired RTO (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. The OSB manufacturing process units shall comply with all requirements of 15A NCAC 02D .1111 "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart DDDD, **"**National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products", including Subpart A, "General Provisions.".

Definitions and Nomenclature

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

General Provisions

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 40 CFR Part 63, 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 Subpart DDDD 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)]

j. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the operating requirements in Sections 2.2 D.1.d through i above are not met.

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

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

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

l. For process units not subject to the operating requirements in Sections 2.2 D.1.d through i above, the Permittee is not required to comply with the compliance options, work practice requirements, performance testing, monitoring, SSMP, 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]

m. 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 Section 2.2 D.1.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:
   i. install, operate and maintain each monitoring device or system according to 40 CFR 63.2269.
   ii. monitor and collect data according to 40 CFR 63.2270.
   iii. 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 these requirements are not met.

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

n. The Permittee shall:
   i. keep the records listed in 40 CFR 63.2282(a).

ii. 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. [40 CFR 63.2282(b)]
iii. keep all records in accordance to 40 CFR 63.2282(c) through 63.2282(e) that apply.
iv. 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)]
v. as specified in 40 CFR 63.10(b)(1), keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.2283(b)]
vi. 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 subparagraphs i through vi above.

Notification Requirements [40 CFR 63.2280]

o. The Permittee is subject to the following notification requirements.
i. The Permittee shall submit all of the notifications as required in 40 CFR Parts 63.7(b) and (c); 63.8(e), (f)(4) and (f)(6); 63.9 (b) through (e), (g) and (h) by the dates specified. [40 CFR 63.2280(a)]
ii. When required to conduct a performance test, the Permittee shall 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)]
iii. Before using the emissions averaging compliance option in 40 CFR 63.2240(c), the Permittee shall submit an Emissions Averaging Plan to NCDAQ 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).
iv. The Permittee shall notify NCDAQ within 30 days before any of the following actions are taken as specified in 40 CFR 63.2280(g):
(A) 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 Section 2.2 D.1.d above.
(B) The shutdown of any process unit included in the Emissions Averaging Plan.
(C) 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 these notification requirements are not met.

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

p. 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)]
i. The compliance report must contain the information in 40 CFR 63.2281(c).
ii. 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 the Permittee is not using a CMS to comply with the compliance options, operating requirements, or work practice requirements in this subpart, the compliance report shall 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)]
iii. For each deviation from a compliance option or operating requirement occurring at an affected source where the Permittee is using a CMS to comply with the compliance options and operating requirements in 40 CFR 63 Subpart DDDD, the compliance resport shall include the information in 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)]
iv. If complying with the emissions averaging compliance option in 40 CFR 63.2240(c), the Permittee must include in the 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)]

q. The Permittee shall submit semiannual compliance reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The EPA will make all the information submitted through CEDRI available to the public without further notice. Do not use CEDRI to submit information claimed as confidential business information (CBI).

Anything submitted using CEDRI cannot later be claimed to be CBI. Should the Permittee wish to assert a CBI claim, follow the instructions provided in 40 CFR 63.2281(h). For semiannual compliance reports required in this section and Table 9 (row 1) to 40 CFR Part 63, Subpart DDDD, use the appropriate electronic report template on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*) for Subpart DDDD once the reporting template has been available on the CEDRI website for 1 year. The date report templates become available will be listed on the CEDRI website. If the reporting form for the semiannual compliance report specific to Subpart DDDD is not available in CEDRI at the time that the report is due, submit the report to the Administrator at the appropriate addresses listed in 40 CFR 63.13. The Permittee must begin submitting all subsequent reports via CEDRI in the first full reporting period after the report template for this subpart has been available in CEDRI for 1 year. [40 CFR 63.2281(h)]
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these reporting requirements 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:

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. The TechShield® coating operation **(ID No. TS-1)** shall comply with all requirements of 15A NCAC 02D .1111 "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart QQQQ **"**National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products" including Subpart A "General Provisions."

Definitions and Nomenclature

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

General Provisions

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 of 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 Section 2.2 E.1.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 grams (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 Section 2.2 E.1.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. Mass fraction of organic HAP 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 Sections 2.2 E.1.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 40 CFR 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.l through 2.2-E.1.o below.

m. Per 63.4710(b), the Permittee submitted the Initial Notification required by §63.9(b) for a new or reconstructed affected source on August 27, 2010 no later than 120 days after initial startup or 120 days after May 28, 2003, whichever is later.

n. The Permittee submitted the Notification of Compliance Status required by §63.9(h) on August 1, 2010, no later than 30 calendar days following the end of the initial compliance period described in §63.4740, §63.4750, or §63.4760

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

o. The Permittee shall keep the following records:
   i. A copy of each notification and report 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. When using information provided by the manufacturer or supplier of the material(s) based on testing, the Permittee shall keep the summary sheet(s) of results provided by the manufacturer or supplier.
   iii. For each compliance period, the following records:
      (A) the coating operations at which each compliance option was used and the time periods (beginning and ending dates and times) each option was used.
      (B) For the compliant material option, the calculation of the organic HAP content for each coating, using Equation 2 of 40 CFR 63.4741(d).
   iv. the name and volume of each coating, thinner, and cleaning material used during each compliance period.
   v. the mass fraction of organic HAP for each coating, thinner, and cleaning material used during each compliance period, if applicable.
   vi. the volume fraction of coating solids for each coating used during each compliance period, if applicable.
   vii. the density for each coating used during each compliance period, if applicable.
   viii. the date, time, and duration of each deviation.

p. As specified in 40 CFR 63.10(b)(1), the Permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

q. The Permittee shall 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 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 Section 2.2 E.1.o through q are not met.

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

r. 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.

s. 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 used on each coating operation during the reporting period. If switching between compliance options occurred during the reporting period, the Permittee shall report the beginning and ending dates each option was used.

t. If there were no deviations from the emission limitations in 40 CFR 63.4690, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period.
u. If a deviation from the applicable emission limit in 40 CFR 63.4690 occurred, the semiannual compliance report must contain the following information:
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. The Permittee does 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. The Permittee does 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 Section 2.2 E.1.r through u 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 - INSIGNIFICANT ACTIVITIES PER 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description[1,2]
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[28] (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
IS-BS-1	bench scale grinding
IS-W-3	welder
IS-UO-1	used oil tank
IS-W-1	wax tanks

[28] Applicability Determination 2760 received by DAQ on December 29, 2015. DAQ responded via email on same day that no permit application was necessary.

Emission Source ID No.	Emission Source Description[1,2]
IS-DF-1 **MACT ZZZZ**	diesel fire pump (275 bhp)
IS-RESINTK-1 & IS-RESINTK-2	two resin storage tanks (12,000 gallon capacity each)
IS-RESINTK-3 & IS-RESINTK-4	two resin storage tanks (30,000 gallon capacity each)
IS-RESINTK-5 & IS-RESINTK-6	two resin storage tanks (15,000 gallon capacity each)
I-MO **MACT DDDD**	mark-out system at the TechShield line (Group 1 miscellaneous coating operations)
IS-GEN-1 & IS-GEN-2	two liquid propane gas-fired emergency generators (17.4 horsepower each)

[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.”

SECTION 4 - GENERAL CONDITIONS (version 6.0, 01/07/2022)

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

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application(s) and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

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

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

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

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

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

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

H. **Changes Not Requiring Permit Modifications**
1. Reporting Requirements [15A NCAC 02Q .0508(f)]
   Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.
   If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.
2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
   a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
   b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
      i. the changes are not a modification under Title I of the Federal Clean Air Act;
      ii. the changes do not cause the allowable emissions under the permit to be exceeded;
      iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
      iv. the Permittee shall attach the notice to the relevant permit.
   c. The written notification shall include:
      i. a description of the change;
      ii. the date on which the change will occur;
      iii. any change in emissions; and
      iv. any permit term or condition that is no longer applicable as a result of the change.
   d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
   The Permittee may make changes in the operation or emissions without revising the permit if:
   a. the change affects only insignificant activities and the activities remain insignificant after the change; or
   b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
   To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

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

1. "Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*
2. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
3. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
   a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
      i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
         - name and location of the facility;
         - nature and cause of the malfunction or breakdown;
         - time when the malfunction or breakdown is first observed;
         - expected duration; and
         - estimated rate of emissions;
      ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
      iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

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

1. "Permit Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.
2. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) quarterly by notifying the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.C **Other Requirements under 15A NCAC 02D .0535**

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

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

J. **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 Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA Compliance and Emissions Data Reporting Interface, CEDRI) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all terms and conditions in the permit (ncluding emissions limitations, standards, or work practices), except for conditions identified as being State-enforceable Only. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:
1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent;
4. the method(s) used for determining the compliance status of the source during the certification period;
5. each deviation and take it into account in the compliance certification

6. as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (CAM) occurred.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]
A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]
1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
   c. the applicable requirements under Title IV; or
   d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]
The Director may terminate, modify, or revoke and reissue this permit if:
1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]
Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]
This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]
1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
   d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

   Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

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

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

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

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

BB. **Financial Responsibility and Compliance History [**15A NCAC 02Q .0507(d)(3)]
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(d)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

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

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

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

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

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

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

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

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

1. A permit shall be reopened and revised under the following circumstances:
    a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
    b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;

c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]
The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

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

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

NN. **Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]
1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (Air Permitting Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA Compliance and Emissions Data Reporting Interface (CEDRI),) in writing at least seven days before the change is made.
    a. The written notification shall include:
        i. a description of the change at the facility;
        ii. the date on which the change will occur;
        iii. any change in emissions; and
        iv. any permit term or condition that is no longer applicable as a result of the change.
    b. In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]
For permits modifications subject to 45-day review by the federal EPA, EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-

making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.