ROY COOPER
Governor
ELIZABETH S. BISER
Secretary
MICHAEL ABRACZINSKAS
Director

NORTH CAROLINA
Environmental Quality

TBD

Mr. Mark Heilman
Plant Manager
CertainTeed Corporation
200 CertainTeed Road
Oxford, North Carolina 27565

SUBJECT: Air Quality Permit No. 03663T33
Facility ID: 3900040
CertainTeed Corporation
Oxford, NC
Granville County
Fee Class: Title V
PSD Class: Minor

Dear Mr. Heilman:

In accordance with your completed Air Quality Permit Application for renewal of your Title V permit, we are forwarding herewith Air Quality Permit No. 03663T33 authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been identified as such in the permit. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 4. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

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

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

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to 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.

Granville County has not triggered increment tracking under PSD for any pollutants, so no tracking is required.

This Air Quality Permit shall be effective from TBD until TBD+5 years. This Air Quality Permit 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 Russell Braswell at 919-707-8731 or russell.braswell@deq.nc.gov.

Sincerely yours,

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

Enclosure

cc: Brad Akers, EPA Region 4 (Permit and Review)
Laserfiche (3900040)

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 03361T32:*

Page No.	Section	Description of Changes
Throughout	Throughout	• Updated dates and permit numbers. • Fixed/updated formatting. Formatting changes are for clarity and conformity with DAQ's other Title V permits, and are not intended to affect the Permittee's compliance requirements. • Removed references to an SO_2 limit under 02Q .0317. That limit had previously been removed from the permit, but some errant references remained.

4-11	1	• Updated description of ESFT3 as requested in the 2019 502(b)(10) notification.
		• Updated description of the following baghouses to include the filter area:
		  ○ CDDC25
		  ○ CDDC22
		  ○ CDDC23
		  ○ CDDC17
		  ○ CDDC16
		  ○ CDDC24
		  ○ CDDC12
		  ○ CDDC13
		  ○ CDDC19
		  ○ CDDC18
		  ○ CDDC15
		• Removed Line 8 sources as requested in renewal application:
		  ○ L8RMH
		  ○ L8
		  ○ L8PG
		• Removed source ESBLR1 because it was never constructed.
		• Removed all references to 02D .1109.
		• Removed references to previous minor modifications.

12	2.1 A.1 (new)	• Added specific condition for 02D .0515 because NSPS Subpart UU does not allow for exemption under 02D .0515(a). • Renumbered following conditions.
n/a	2.1 B.1.b (former)	• Removed exemption for sources subject to NSPS Subpart UU because that rule does not allow for exemption under 02D .0515(a).
n/a	2.1 E (former)	• Removed all requirements from this section because Line 8 has been removed from the permit. • Marked this section as "RESERVED".
28-32	2.1 E (new)	• Renumbered this Section. • Removed all references to 02D .1109 and Section 112(j). • Combined all specific conditions for 02D .1111 (MACT Subpart DDDDD) into a single condition. This change is intended to reduce repetition and streamline the permit because the requirements under the MACT are broadly the same for units of all sizes at this facility.
n/a	2.1 H (former)	• Removed all requirements from this section because the source ESBLR1 was never constructed and has been removed from the permit. • Removed this section because it no longer has any emission sources.

Page No.	Section	Description of Changes
33	2.1 F.1 (formerly 2.1 I.1)	• Noted that compliance with 02D .0515 is demonstrated by complying with MACT Subpart LLLLL.
36	2.1 G (formerly 2.1 J)	• Renumbered this section.
37	2.2	• Renumbered this section to match DAQ's standard format.
37-42	2.2 A.1	• Updated MACT Subpart LLLLL requirements to reflect recent rule changes: o Removed exemption for periods of SSM. o Added pressure drop ranges for PM control devices. o Noted that pressure drop ranges can be established using manufacturer specifications. o Added periodic testing requirement. o Added requirement to operate with good work practices.
43	2.2 B	• Renumbered this section to match DAQ's standard format.
43-48	2.2 B.1, 2.2 B.2, 2.2 B.3	• Added requirement that reports must clearly identify deviations.
43-48	2.2 B.1, 2.2 B.2	• Changed these conditions to be avoidance of PSD instead of NA NSR. Granville County is not a nonattainment area, and the anti-backsliding provisions of 02D .0531(e) do not apply because CertainTeed was never a major stationary source for NA NSR.
49	2.2 C.1 (new)	• Noted date of most recent modeling demonstration.
n/a	2.2 vi.1 (former)	• Removed specific condition for 02D .0958 because that rule no longer applies to this facility.
50	2.3	• Noted the applicable that triggered CAM. • Updated CAM plan parameters based on MACT Subpart LLLLL updates. The CAM plan now specifies the pressure drop range to match MACT Subpart LLLLL. • Updated CAM plan reporting to more closely match 40 CFR 64.9.
52	3.	• Removed the following sources as requested in the renewal application: o ISRP o IRC o Ilaser8 • Noted that IN2FO can store used oil. • Noted that IN6FO cannot store No. 6 fuel, but can store used oil. • Noted that I-ESFST-burners is subject to MACT Subpart DDDDD.
53	4.	• Updated General Conditions to v7.0.

* 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.	Effective Date	Expiration Date
03663T33	03663T32	TBD	TBD+5 years

Note: Per General Condition K, a permit application for the renewal of this Title V permit shall be submitted no later than TBD+5 years – 6 months.

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: **CertainTeed Corporation**
Facility ID: **3900040**
Primary SIC Code: **2952**
NAICS Code: **324122**

Facility Site Location: **200 CertainTeed Road**
City, County, State, Zip: **Oxford, Granville County, North Carolina, 27565**
Mailing Address: **200 CertainTeed Road**
City, State, Zip: **Oxford, Granville County, North Carolina, 27565**

Application Number: **3900040.20A (3900040.19A consolidated)**
Complete Application Date: **September 2, 2020**

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

Permit issued this the TBD.

_____
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	Continuous Opacity Monitoring System
CSAPR	Cross-State Air Pollution Rate
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
QIP	Quality Improvement Plan
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
ESBS1 **NSPS UU** **MACT LLLLL**	Blowstill No. 1	CDAFB	Natural gas-fired afterburner; not greater than 25 million Btu per hour heat input
ESBS2 **NSPS UU** **MACT LLLLL**	Blowstill No. 2		
ESBS3 **NSPS UU** **MACT LLLLL**	Blowstill No. 3		

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ESLC1 **NSPS UU** **MACT LLLLL**	Line No. 1 fiberglass mat coater	CDESP	Electrostatic Precipitator; 3,406 square feet of collecting plate area
		-or-	-or-
ESLC2 **NSPS UU** **MACT LLLLL**	Line No. 2 fiberglass mat coater	CDME	Mist Eliminator
ESMA1	Modified asphalt or sealant batch process tank		
ESMA2	Modified asphalt or sealant mix process tank		
ESMA3 **NSPS UU** **MACT LLLLL**	Modified asphalt or sealant recirculation tank; 900 gal		
ESSEA1 **MACT LLLLL**	Sealant day tank No. 1; 1,600gal		
ESSEA2 **MACT LLLLL**	Sealant day tank No. 2; 1,600 gal		
ESSA1 **MACT LLLLL**	Line No. 1 sealant applicator pan		
ESSA2 **MACT LLLLL**	Line No. 2 sealant applicator pan		
ESWIP1 **MACT LLLLL**	Line No. 1 overlay inking pan		
ESMS2 **NSPS UU** **MACT LLLLL**	Modified sealant recirculation tank; 500 gal		
ESHM1 **MACT LLLLL**	Limestone/asphalt mixer No. 1		
ESHM2 **MACT LLLLL**	Limestone/asphalt mixer No. 2		

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ESLA3 **MACT LLLLL**	Laminator pan for Line No. 1	CDFTR2	Ceco filter
ESLA4 **MACT LLLLL**	Laminator pan for Line No. 1		
ESLA5 **MACT LLLLL**	Laminator pan for Line No. 1		
ESLAT6 **MACT LLLLL** **NSPS UU**	One 80 gallon laminate use tank for Line No. 1		
ESLAT7 **MACT LLLLL** **NSPS UU**	One 140 gallon laminate use tank for Line No. 1		
ESMA7 **MACT LLLLL** **NSPS UU**	One 800 gallon laminate day tank for Line No. 1		
ESSA6 **MACT LLLLL**	One sealant applicator pan for Line No. 1		
ESSEA6 **MACT LLLLL** **NSPS UU**	One 80 gallon sealant use tank for Line No. 1		
ESMA9 **MACT LLLLL** **NSPS UU**	One 800 gallon sealant day tank for Line No. 1		
ESNLPA2	Nail paint line applicator for Line No. 1	N/A	N/A

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ESMA5 **MACT LLLLL**	Plasticizer or asphalt storage tank (14,000 gallons capacity)	CDME3 -and- CDRTO	Mist Eliminator, followed by a -and- Regenerative Thermal Oxidizer (RTO), 5.6 million Btu per hour heat input
ESFT1 **MACT LLLLL**	No. 1 flux preheat tank	-or-	-or-
ESFT2 **MACT LLLLL**	No. 2 flux preheat tank	CDESP	Electrostatic Precipitator; 3,406 square feet of collecting plate area
ESFT3 **MACT LLLLL**	No. 3 flux preheat tank / oil/water mixture tank	-or-	-or-
ESFST1 **MACT LLLLL**	No. 1 flux storage tank; 150,000 gal	CDME	Mist Eliminator
ESFST2 **MACT LLLLL**	No. 2 flux storage tank; 150,000 gal		
ESST1 **MACT LLLLL**	No. 1 saturant tank; 40,000gal		
ESSDT **MACT LLLLL**	Sealant tank; 30,000 gal		
ESCT1 **MACT LLLLL**	Coating tank No. 1; 30,000 gal		
ESCT2 **MACT LLLLL**	Coating tank No. 2; 30,000 gal		
ESCT3 **MACT LLLLL**	Coating tank No. 3; 30,000 gal		
ESCT4 **MACT LLLLL**	Coating tank No. 4; 40,000 gal		
ESFST3 and ESFST4 **NSPS UU** **MACT LLLLL**	Two asphalt flux storage tanks (1,000,000 gallons capacity each)	CDME3 -and- CDRTO	Mist Eliminator, followed by a -and- Regenerative Thermal Oxidizer (RTO), 5.6 million Btu per hour heat input
		-or-	-or-
		CDESP	Electrostatic Precipitator; 3,406 square feet of collecting plate area
		-or-	-or-
		CDME	Mist Eliminator

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ESAC20 **NSPS UU** **MACT LLLLL**	Line No. 3 AC-20 asphalt storage tank; 30,000 gal	CDME3 -and- CDRTO	Mist Eliminator, followed by a -and- Regenerative Thermal Oxidizer (RTO), 5.6 million Btu per hour heat input
ESLC3 **NSPS UU** **MACT LLLLL**	Line No. 3 fiberglass mat coater		
ESMA8 **NSPS UU** **MACT LLLLL**	Line No. 3 laminate swell tank		
ESLAT3 **NSPS UU** **MACT LLLLL**	Line No. 3 laminate adhesive day tank		
ESLAT4 **NSPS UU**	Line No. 3 laminate adhesive use tank		
ESMA10 **NSPS UU** **MACT LLLLL**	Line No. 3 sealant swell tank		
ESSEA3 **NSPS UU** **MACT LLLLL**	Line No. 3 sealant adhesive day tank		
ESSEA4 **NSPS UU**	Line No. 3 sealant adhesive use tank		
ESSA5 **NSPS UU** **MACT LLLLL**	Line No. 3 sealant applicator		
ESLA2 **NSPS UU** **MACT LLLLL**	Line No. 3 laminating adhesive applicator		
ESHM3 **MACT LLLLL**	Line No. 3 horizontal mixer		
ESVM3 **MACT LLLLL**	Line No. 3 vertical mixer		
ESLA1 **MACT LLLLL**	Line No. 2 laminating adhesive applicator wheel	CDFTR	Coalescing Air Filter
ESSA3 **MACT LLLLL**	Line No. 2 sealant applicator gun		
ESSA4 **MACT LLLLL**	Line No. 2 sealant applicator pan		

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-HLS Handling System			
ESPSTS **NSPS UU**	Pneumatic sand transfer system	CDDC11	Baghouse (200 square feet of filter area)
ESGS **NSPS UU**	Storage silo	CDDC11	Baghouse (200 square feet of filter area)
ESSTS **NSPS UU**	Sand truck dump and conveyor system	CDDC25	Baghouse (3,220 square feet of filter area)
ESSS1 **NSPS UU**	Sand silo No. 1	CDDC25	Baghouse (3,220 square feet of filter area)
ESSS2 **NSPS UU**	Sand silo No. 2	CDDC25	Baghouse (3,220 square feet of filter area)
ESBSB1	Line No. 1 sand transfer system	CDDC22	Baghouse (291 square feet of filter area)
ESBSB2	Line No. 2 sand transfer system	CDDC23	Baghouse (291 square feet of filter area)
ESBSB3	Line No. 3 sand transfer system	CDDC17	Baghouse (291 square feet of filter area)
Granule and Headlap Systems			
ESHLT **NSPS UU**	Headlap unload and transfer system	CDDC16 -or- CDDC24	Baghouse (3,220 square feet of filter area) Baghouse (1,030 square feet of filter area)
ESHLS **NSPS UU**	Two (2) headlap storage silos	CDDC24	Baghouse (1,030 square feet of filter area)
Talc Handling System			
ESRTC2	Reclaim talc collector	CDDC6	Baghouse (193 square feet of filter area)
ESPTR2	Pneumatic talc receiver No. 2	CDDC4	Baghouse (64 square feet of filter area)
ESTSV	Talc silo	CDDC8	Baghouse (151 square feet of filter area)
Limestone Processing System			
ESLSH **NSPS OOO**	Railcar/truck dump pit, Vibrating conveyor, Bucket elevator, Belt conveyor, Rock silo No. 1, and Rock silo No. 2	N/A	N/A
ESCM1 **NSPS OOO**	Crushing mill/product cyclone No. 1	CDDC12	Baghouse (2,220 square feet of filter area)
ESCMH1	Natural gas direct fired heater for Crushing Mill No. 1; 3.5 million Btu per hour heat input	CDDC12	Baghouse (2,220 square feet of filter area)
ESCM2 **NSPS OOO**	Crushing mill/product cyclone No. 2	CDDC13	Baghouse (2,220 square feet of filter area)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ESCMH2	Natural gas direct fired heater for Crushing Mill No. 2; 3.5 million Btu per hour heat input	CDDC13	Baghouse (2,220 square feet of filter area)
ESCM3 **NSPS OOO**	Crushing mill/product cyclone No. 3	CDDC19	Baghouse (2,908 square feet of filter area)
ESCMH3	Natural gas direct fired heater for Crushing Mill No. 3; 7.0 million Btu per hour heat input	CDDC19	Baghouse (2,908 square feet of filter area)
ESLSV1 ESLSV2 ESLSV3 **NSPS UU**	Crushed limestone silo No. 1 Crushed limestone silo No. 2 Crushed limestone silo No. 3	CDDC18 -or- CDDC7	Baghouse (828 square feet of filter area) -or- Baghouse (670 square feet of filter area)
ESLUBV1	Line No. 1/Line No. 2 limestone use bin	CDDC2	Baghouse (193 square feet of filter area)
ESLUBV2	Line No. 3 limestone use bin	CDDC15	Baghouse (828 square feet of filter area)
ESHFB	Line No. 3 limestone hot filler bin	CDDC15	Baghouse (828 square feet of filter area)
ESLFH	Natural gas direct fired limestone filler heater; 8.7 million Btu per hour heat input with 48 inch product collection cyclone	CDDC1	Baghouse (2,000 square feet of filter area)
ESLFH2	Line No. 3 filler heater and transfer system	CDDC15	Baghouse (828 square feet of filter area)
Miscellaneous Sources			
ESDML3	Line No. 3 dry mat looper	CDDC14	Baghouse (5,882 square feet of filter area)
ESBSP1	Line No. 1 surfacing/backsurfacing process	CDDC9	Baghouse (2,490 square feet of filter area)
ESBSP2	Line No. 2 surfacing/backsurfacing process	CDDC10	Baghouse (1,937 square feet of filter area)
ESBSP	Line No. 3 surfacing/backsurfacing process	CDDC14	Baghouse (5,882 square feet of filter area)
ESCS1	Line No. 1 cooling section	N/A	N/A
ESCS2	Line No. 2 cooling section	N/A	N/A
ESCS3	Line No. 3 cooling section	N/A	N/A
ESINK	Inkjet package labeling	N/A	N/A
ESINK2	Line No. 3 inkjet package labeling	N/A	N/A
ESNLPA	Line No. 3 nail line paint applicator	N/A	N/A
Indirect-Fired Combustion Sources			
ESPH1 **MACT DDDDD**	Natural gas-fired flux preheater No. 1; 11.3 million Btu per hour heat input	N/A	N/A
ESPH2 **MACT DDDDD**	Natural gas-fired flux preheater No. 2; 11.3 million Btu per hour heat input	N/A	N/A

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ESB1 **MACT DDDDD**	Natural gas and No. 2 fuel oil-fired boiler No. 1; 16.7 million Btu per hour heat input	N/A	N/A
ESB2 **MACT DDDDD**	Natural gas and No. 2 fuel oil-fired boiler No. 2; 16.7 million Btu per hour heat input	N/A	N/A
ESSCH1 **MACT DDDDD**	Natural gas-fired shingle coating heater No. 1; 4.7 million Btu per hour heat input	N/A	N/A
ESSCH2 **MACT DDDDD**	Natural gas-fired shingle coating heater No. 2; 4.7 million Btu per hour heat input	N/A	N/A
ESSCH3 **MACT DDDDD**	Natural gas-fired shingle coating heater No. 3; 3.75 million Btu per hour heat input	N/A	N/A
ESSCH4 **MACT DDDDD**	Natural gas-fired shingle coating heater No. 4; 4.3 million Btu per hour heat input	N/A	N/A
ESHOH2 **MACT DDDDD**	Natural gas-fired hot oil heater No. 2; 5.0 million Btu per hour heat input	N/A	N/A
ESHOH4 **NSPS Dc** **MACT DDDDD**	Natural gas-fired hot oil heater No. 4; 15.0 million Btu per hour heat input	N/A	N/A
ESHOH1 **MACT DDDDD**	Natural gas-fired hot oil heater No.1 (2.1 million Btu per hour heat input)	N/A	N/A

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

A. Afterburner (ID No. CDAFB) on:
Blowstill No. 1 (ID No. ESBS1);
Blowstill No. 2 (ID No. ESBS2); and,
Blowstill No. 3 (ID No. ESBS3).

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times P^{0.67}$ for $P \leq 30$ tons per hour, or $E = 55 \times P^{0.11} - 40$ for $P > 30$ tons per hour Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Particulate Matter	Comply with 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681	15A NCAC 02D .0524 (40 CFR 60, Subpart UU)
Visible Emissions	Comply with 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681	15A NCAC 02D .0524 (40 CFR 60, Subpart UU)
Hazardous Air Pollutants	**See Section 2.2 A.1**	15A NCAC 02D .1111 (40 CFR 63, Subpart LLLLL)
Nitrogen oxides	100 tpy for Lines 1 and 2 and blowstills and combustion sources installed prior to 2005 100 tpy for Line 3 and blowstills and combustion sources installed prior to 2005 that support Line 3 **See Section 2.2 B.1**	15A NCAC 02Q .0317 (PSD Avoidance)
Volatile Organic Compounds	92 tpy for blowstills supporting for Lines 1 and 2 99 tpy for blowstills supporting Line 3 **See Section 2.2 B.2**	15A NCAC 02Q .0317 (PSD Avoidance)
PM_{10}	250 tpy, facility-wide. **See Section 2.2 B.3**	15A NCAC 02Q .0317 (PSD Avoidance)
Benzene	Facility-wide emission limit **See Section 2.2 C.1** **(State-enforceable only)**	15A NCAC 02D .1100
Odor	**See Section 2.2 C.2** **(State-enforceable only)**	15A NCAC 02D .1806
PM_{10}	Comply with CAM plan **See Section 2.3**	15A NCAC 02D .0614

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

a. Emissions of particulate matter from each affected source **(ID Nos. ESBS1, ESBS2, and ESBS3)** shall not exceed an allowable emission rate as calculated by the following equations:

For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$
For process rates greater than 30 tons per hour: $E = 55.0 \times P^{0.11} - 40$

Where: E = allowable emission rate in pounds per hour, and
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 an emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a and b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

f. For these sources (**ID Nos. ESBS1, ESBS2, and ESBS3),** the Permittee shall demonstrate compliance with 15A NCAC 02D .0515 by complying with the monitoring, recordkeeping, and reporting requirements of MACT Subpart LLLLL in Section 2.2 A.1, below. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the requirements of Section 2.2 A.1 of this permit are not met.

2. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. 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" as promulgated in 40 CFR Part 60, Subpart UU "Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture," including Subpart A "General Provisions."

Emission Limitations [40 CFR 60.472(b)]

b. The Permittee shall not allow to be discharged into the atmosphere from Blowstill No. 1, 2, and 3 **(ID Nos. ESBS1, ESBS2, and ESBS3)**:
   i. Particulate matter in excess of 0.67 kg/Mg (1.3 lb/ton) of asphalt charged to the still when a catalyst is added to the still; and
   ii. Particulate matter in excess of 0.60 kg/Mg (1.2 lb/ton) of asphalt charged to the still during blowing without a catalyst.

c. The Permittee shall not allow to be discharged into the atmosphere from Blowstill No. 1, 2, and 3 **(ID Nos. ESBS1, ESBS2, and ESBS3)** exhaust gases with opacity greater than zero percent.

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

d. Pursuant to 40 CFR 63.8681, blowstills that are subject to 40 CFR 60, Subpart UU *and* 40 CFR 63, Subpart LLLLL (Asphalt Roofing MACT) are only required to comply with the provisions of the MACT. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the requirements of Section 2.2 A.1 of this permit are not met.

B. Electrostatic Precipitator (ID No. CDESP) -OR- Mist Eliminator (ID No. CDME) on:
Line No. 1 fiberglass mat coater (ID No. ESLC1);
Line No. 2 fiberglass mat coater (ID No. ESLC2);
Modified asphalt or sealant batch process tank (ID No. ESMA1);
Modified asphalt or sealant mix process tank (ID No. ESMA2);
Modified asphalt or sealant recirculation tank (ID No. ESMA3);
Sealant day tank No. 1 (ID No. ESSEA1);
Sealant day tank No. 2 (ID No. ESSEA2);
Line No. 1 sealant applicator pan (ID No. ESSA1);
Line No. 2 sealant applicator pan (ID No. ESSA2);
Line No. 1 overlay inking pan (ID No. ESWIP1);
Modified sealant recirculation tank (ID No. ESMS2);
Limestone/asphalt mixer No. 1 (ID No. ESHM1); and,
Limestone/asphalt mixer No. 2 (ID No. ESHM2).

Mist Eliminator (ID No. CDME3) followed by a Regenerative Thermal Oxidizer (CDRTO) -OR- Electrostatic Precipitator (ID No. CDESP) -OR- Mist Eliminator (ID No. CDME) on:
Plasticizer or Asphalt storage tank (ID No. ESMA5)
No. 1 flux preheat tank (ID No. ESFT1);
No. 2 flux preheat tank (ID No. ESFT2);
No. 3 flux preheat tank (ID No. ESFT3);
Flux storage tank No. 1 (ID No. ESFST1);
Flux storage tank No. 2 (ID No. ESFST2);
No. 1 saturant tank (ID No. ESST1);
Sealant tank (ID No. ESSDT);
Coating tank No. 1 (ID No. ESCT1);
Coating tank No. 2 (ID No. ESCT2);
Coating tank No. 3 (ID No. ESCT3); and,
Coating tank No. 4 (ID No. ESCT4).
Two asphalt flux storage tanks (ID Nos. ESFST3 and ESFST4)

Mist Eliminator (ID No. CDME3) followed by a Regenerative Thermal Oxidizer (CDRTO) on:
Line No. 3 AC-20 asphalt tank (ID No. ESAC20);
Line No. 3 fiberglass mat coater (ID No. ESLC3);
Line No. 3 laminate swell tank (ID No. ESMA8);
Line No. 3 laminate adhesive day tank (ID No. ESLAT3);
Line No. 3 laminate adhesive use tank (ID No. ESLAT4);
Line No. 3 sealant swell tank (ID No. ESMA10);
Line No. 3 sealant adhesive day tank (ID No. ESSEA3);
Line No. 3 sealant adhesive use tank (ID No. ESSEA4);
Line No. 3 sealant applicator (ID No. ESSA5);
Line No. 3 laminating adhesive applicator (ESLA2);
Line No. 3 horizontal mixer (ID No. ESHM3); and,
Line No. 3 vertical mixer (ID No. ESVM3).

Coalescing Air Filter (ID No. CDFTR) on:
Line No. 2 laminating adhesive applicator wheel (ID No. ESLA1);
Line No. 2 sealant applicator gun (ID No. ESSA3); and,

Line No. 2 sealant applicator pan (ID No. ESSA4).

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	**Affected Sources: ESMA1, ESMA2, ESMA5, ESSEA1, ESSEA2, ESSA1, ESSA2, ESWIP1, ESFT1, ESFT2, ESFT3, ESFST1, ESFST2, ESST1, ESSDT, ESCT1, ESCT2, ESCT3, ESCT4, ESHM3, ESVM3, ESLA1, ESSA3, ESSA4, ESHM1, ESHM2, ESSA5, and ESLA2** $E = 4.10 \times P^{0.67}$ for $P \leq 30$ tons per hour, or $E = 55 \times P^{0.11} - 40$ for $P > 30$ tons per hour Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible Emissions	**Affected Sources: ESMA1, ESMA2, ESMA5, ESSEA1, ESSEA2, ESSA1, ESSA2, ESWIP1, ESFT1, ESFT2, ESFT3, ESFST1, ESFST2, ESST1, ESSDT, ESCT1, ESCT2, ESCT3, ESCT4, ESHM3, ESVM3, ESLA1, ESSA3, ESSA4, ESHM1, ESHM2, ESSA5, ESLA2, ESFST3 and ESFST4** Visible emissions shall not exceed 20 percent opacity	15A NCAC 02D .0521
Particulate Matter	**Affected Sources:** **Coaters (ESLC1, ESLC2, and ESLC3)** Comply with 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681	15A NCAC 02D .0524 (40 CFR 60, Subpart UU)
Visible Emissions	**Affected Sources:** **Coaters (ESLC1, ESLC2, and ESLC3)** **Asphalt Storage Tanks (ESMA3, ESMS2, ESAC20, ESMA8, ESLAT3, ESLAT4, ESMA10, ESSEA3, and ESSEA4)** Comply with 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681	15A NCAC 02D .0524 (40 CFR 60, Subpart UU)
Hazardous Air Pollutants	**See Section 2.2 A.1**.	15A NCAC 02D .1111 (40 CFR 63, Subpart LLLLL)
Nitrogen Oxides	100 tpy for Lines 1 and 2 and blowstills and combustion sources installed prior to 2005. 100 tpy for Line 3 and blowstills and combustion sources installed prior to 2005 that support Line 3 **See Section 2.2 B.1**	15A NCAC 02Q .0317 (PSD Avoidance)
Volatile Organic Compounds	92 tpy for sources and combustion sources installed prior to 2005 supporting for Lines 1 and 2 99 tpy for sources and combustion sources installed prior to 2005 supporting Line 3 **See Section 2.2 B.2**	15A NCAC 02Q .0317 (PSD Avoidance)
PM_{10}	250 tpy, facility-wide. **See Section 2.2 B.3**	15A NCAC 02Q .0317 (PSD Avoidance)
Benzene	Facility-wide emission limit **See Section 2.2 C.1** **(State-enforceable only)**	15A NCAC 02D .1100
Odor	**See Section 2.2 C.2** **(State-enforceable only)**	15A NCAC 02D .1806

Pollutant	Limits/Standards	Applicable Regulation
PM_{10}	**Affected Sources:** **ID Nos. ESHM1, ESHM3, and ESLC3** Comply with CAM plan **See Section 2.3**	15A NCAC 02D .0614

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

a. Emissions of particulate matter from each affected source **(ID Nos. ESMA1, ESMA2, ESMA5, ESSEA1, ESSEA2, ESSA1, ESSA2, ESWIP1, ESFT1, ESFT2, ESFT3, ESFST1, ESFST2, ESST1, ESSDT, ESCT1, ESCT2, ESCT3, ESCT4, ESHM3, ESVM3, ESLA1, ESSA3, ESSA4, ESHM1, ESHM2, ESSA5, ESLA2, ESFST3 and ESFST4)** shall not exceed an allowable emission rate as calculated by the following equations:

For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$
For process rates greater than 30 tons per hour: $E = 55.0 \times P^{0.11} - 40$

Where: E = allowable emission rate in pounds per hour, and
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 an emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Inspection/Maintenance [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from the emission sources shall be controlled as provided in the source description above. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer recommendations, the Permittee shall conduct a monthly visual inspection of the system ductwork and material collection devices for potential leaks. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the control devices are not inspected and maintained.

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

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

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

e. The Permittee shall monitor and record the temperature in the combustion chamber of the regenerative thermal oxidizer **(ID No. CDRTO)** in accordance with Section 2.2 A.1 of this permit. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if temperature falls below the requirement provided in Section 2.2 A.1.h of this permit.

f. The Permittee shall check the three energy supply indicator lights for each of the 24 electrical sections of the electrostatic precipitator **(ID No. CDESP)** weekly to ensure power supply. The Permittee shall maintain the following records on file:
   i. the date and time of indicator light check;
   ii. any indicator light that was out or blinking and the identification of the section; and
   iii. any corrective actions taken to correct the blinking or unlit indicator light.

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

g. The Permittee shall determine the maximum pressure drop across the mist eliminator **(ID No. CDME)** to ensure optimum control of particulate matter. This maximum pressure drop shall be monitored and recorded weekly. The Permittee shall maintain the following records on file:

i. identification of the maximum value for pressure drop across the mist eliminator;
ii. explanation of how the limit for this parameter was determined; and
iii. explanation of the methods and instruments used to measure and monitor this parameter, as well as the relative accuracy and precision of these methods and instruments.

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 control devices within 30 days of a written request by the DAQ.
i. The Permittee shall submit a summary report of periods of malfunction, periods when the 3-hour average temperature in the RTO combustion chamber is lower than the required minimum temperature **(ID No. CDRTO)**, the ESP indicator lights are blinking or out **(ID No. CDESP)**, and/or periods when the pressure drop across the mist eliminator **(ID No. CDME)** is recorded above its maximum allowable pressure drop. The summary report shall be 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 each of the affected sources 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 an emission testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

c. To ensure compliance, each week the Permittee shall observe the emission points of these sources for any visible emissions above normal (**ID Nos. CDESP, CDME, CDRTO, CDFTR, ESFST3, and ESFST4**). The observation must be made for each week of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.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 and/or if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

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

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

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

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

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

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. 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" as promulgated in 40 CFR Part 60, Subpart UU "Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture," including Subpart A "General Provisions."

b. The Permittee shall limit emissions to the atmosphere from the coaters **(ID Nos. ESLC1, ESLC2, and ESLC3)** to no greater than the following:
   i. particulate matter in excess of 0.04 kg/Mg (0.08 lb/ton) of asphalt shingle produced; and
   ii. exhaust gases with an opacity of 20 percent.

c. The Permittee shall limit emissions to the atmosphere from tanks sharing a control device with a coater (**ID Nos. ESMA3, ESMS2, ESAC20, ESMA8, ESLAT3, ESLAT4, ESMA10, ESSEA3, ESSEA4, ESFST3 and ESFST4**) to no greater than the following:
   i. particulate matter in excess of 0.04 kg/Mg (0.08 lb/ton) of asphalt shingle produced *during periods when the coaters are in operation*; and,
   ii. exhaust gases with an opacity of 20 percent *during periods when the coaters are in operation*; and,
   iii. exhaust gases with an opacity of zero percent *during periods when the coaters are not in operation,* except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blow for clearing. The control device shall not be bypassed during this 15-minute period.

   [40 CFR 60.472(c)]

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

d. Pursuant to 40 CFR 63.8681, coaters and asphalt storage tanks that are subject to 40 CFR 60, Subpart UU *and* 40 CFR 63, Subpart LLLLL (Asphalt Roofing MACT) are only required to comply with the provisions of the MACT. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these requirements of Section 2.2 A.1 of this permit are not met.

C. SAND, HEADLAP/GRANULE, TALC, AND LIMESTONE HANDLING SYSTEMS:

Pneumatic sand transfer system (ID No. ESPSTS) and storage silo (ID No. ESGS) with fabric filter (ID No. CDDC11)
Sand truck dump and conveyor system (ID No. ESSTS) with fabric filter (ID No. CDDC25)
Sand Silo No. 1 (ID No. ESSS1) with fabric filter (ID No. CDDC25)
Sand Silo No. 2 (ID No. ESSS2) with fabric filter (ID No. CDDC25)
Line No. 1 sand transfer system (ID No. ESBSB1) with fabric filter (ID No. CDDC22)
Line No. 2 sand transfer system (ID No. ESBSB2) with fabric filter (ID No. CDDC23)
Line No. 3 sand transfer system (ID No. ESBSB3) with fabric filter (ID No. CDDC17)

Headlap Unload and Transfer System (ID No. ESHLT) with two fabric filters (ID Nos. CDDC16 and CDDC24)
Two (2) Headlap Storage Silos (ID No. ESHLS) with fabric filter (ID No. CDDC24)

Reclaim talc collector (ID No. ESRTC2) with fabric filter (ID No. CDDC6)
Reclaim talc receiver No. 2 (ID No. ESPTR2) with fabric filter (ID No. CDDC4)
Talc silo (ID No. ESTSV) with fabric filter (ID No. CDDC8)

Railcar/truck dump pit vibrating conveyor bucket elevator belt conveyor hopper rock silos No. 1 and No. 2 (ID No. ESLSH)
Crushing mill/product cyclone No. 1 (ID No. ESCM1) with a 3.5 MMBtu/hr-rated fossil fuel fired heater (ID No. ESCMH1) with fabric filter (ID No. CDDC12)
Crushing mill/product cyclone No. 2 (ID No. ESCM2) with a 3.5 MMBtu/hr-rated fossil fuel fired heater (ID No. ESCMH2) with fabric filter (ID No. CDDC13)
Crushing mill/product cyclone No. 3 (ID No. ESCM3) with a 7.0 MMBtu/hr-rated fossil fuel-fired heater (ID No. ESCMH3) with fabric filter (ID No. CDDC19)
Crushed limestone silos No. 1 and No. 2 (ID Nos. ESLSV1 and ESLSV2) with fabric filter (ID No. CDDC18 -or- CDDC7)
Crushed limestone silo No. 3 (ID No. ESLSV3) with fabric filter (ID No. CDDC18 -or- CDDC7)
Line No. 1/Line No. 2 Limestone use bin (ID No. ESLUBV1) with fabric filter (ID No. CDDC2)
Line No. 3 Limestone use bin (ID No. ESLUBV2) with fabric filter (ID No. CDDC15)
Line No. 3 Limestone Hot Filler Bin (ID No. ESHFB) with fabric filter (ID No. CDDC15)
Fossil fuel fired limestone filler preheater/product cyclone No. 1 (ID No. ESLFH) with fabric filter (ID No. CDDC1)
Line No. 3 Filler Heater and Transfer System (ID No. ESLFH2) with fabric filter (ID No. CDDC15)

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	**Affected Sources: ESPSTS, ESGS, ESBSB1, ESBSB2, ESBSB3, ESRTC2, ESPTR2, ESTSV, ESLSV1, ESLSV2, ESLSV3, ESLUBV1, ESLUBV2, ESHFB, ESLFH, ESLFH2** $E = 4.10 \times P^{0.67}$ for $P \leq 30$ tons per hour, or $E = 55 \times P^{0.11} - 40$ for $P > 30$ tons per hour Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515

Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	**Affected Source: ESLFH, ESCMH1, ESCMH2, ESCMH3** Sulfur dioxide emission shall not exceed 2.3 pounds per million Btu heat input, including contributions from raw materials	15A NCAC 02D .0516
Visible Emissions	**Affected Sources: ESBSB1, ESBSB2, ESBSB3, ESRTC2, ESPTR2, ESTSV, ESLSV1, ESLSV2, ESLUBV1, ESLUBV2, ESHFB, ESLFH, ESLFH2** Visible emissions shall not exceed 20 percent opacity	15A NCAC 02D .0521
Visible Emissions	**Affected Sources: ESPSTS, ESGS, ESSTS, ESSS1, ESSS2, ESHLT, ESHLS, ESLSV3** Visible emissions shall not exceed one percent opacity	15A NCAC 02D .0524 (40 CFR 60, Subpart UU)
Particulate Matter	**Affected Sources: ESCM1, ESCM2, ESCM3** 0.022 grains/dscf -stack emission	15A NCAC 02D .0524 (40 CFR 60, Subpart OOO)
Visible Emissions	**Affected Sources: ESLSH, ESCM1, ESCM2, ESCM3** 7 percent opacity - stack emission 10 percent opacity fugitive emission	15A NCAC 02D .0524 (40 CFR 60, Subpart OOO)
Nitrogen Oxides	**Affected Source: ESLFH** 100 tpy for Lines 1 and 2 and blowstills and combustion sources installed prior to 2005. 100 tpy for Line 3 and blowstills and combustion sources installed prior to 2005 that support Line 3 **See Section 2.2 B.1**	15A NCAC 02Q .0317 (PSD Avoidance)
Volatile Organic Compounds	**Affected Source: ESLFH** 92 tpy for sources and combustion sources installed prior to 2005 supporting for Lines 1 and 2 99 tpy for sources and combustion sources installed prior to 2005 supporting Line 3 **See Section 2.2 B.2**	15A NCAC 02Q .0317 (PSD Avoidance)
PM_{10}	250 tpy, facility-wide. **See Section 2.2 B.3**	15A NCAC 02Q .0317 (PSD Avoidance)
Benzene	Facility-wide emission limit **See Section 2.2 C.1** **(State-enforceable only)**	15A NCAC 02D .1100
Odor	**See Section 2.2 C.2** **(State-enforceable only)**	15A NCAC 02D .1806

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

a. Emissions of particulate matter from each affected source **(ID No. ESPSTS, ESGS, ESBSB1, ESBSB2, ESBSB3, ESRTC2, ESPTR2, ESTSV, ESLSV1, ESLSV2, ESLSV3, ESLUBV1, ESLUBV2, ESHFB, ESLFH, ESLFH2)** shall not exceed an allowable emission rate as calculated by the following equations:

For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$
For process rates greater than 30 tons per hour: $E = 55.0 \times P^{0.11} - 40$

Where: E = allowable emission rate in pounds per hour, and
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 test is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

c. Particulate matter emissions from the affected sources shall be controlled by fabric filtration as delineated in the equipment list. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. once per week, observe the magnehelic pressure gauge and record the pressure drop across the baghouses to ensure integrity of the bagfilters; and,
   ii. conduct a monthly visual inspection of the system ductwork and material collection unit for leaks.

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

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the control devices; and
   iv. any variance from manufacturers 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)]

e. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.

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

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

a. Emissions of sulfur dioxide from the affected sources **(ID No. ESLFH, ESCMH1, ESCMH2, and ESCMH3)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

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

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

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

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from natural gas combustion in these sources **(ID No. ESLFH, ESCMH1, ESCMH2, and ESCMH3)**.

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

a. Visible emissions from each of the affected sources **(ID Nos. ESBSB1, ESBSB2, ESBSB3, ESRTC2, ESPTR2, ESTSV, ESLSV1, ESLSV2, ESLUBV1, ESLUBV2, ESHFB, ESLFH, and ESLFH2)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

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

b. If an emission testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

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

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

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

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

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

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

4. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. 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" as promulgated in 40 CFR Part 60, Subpart UU "Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture," including Subpart A "General Provisions."

b. The Permittee shall not allow to be discharged into the atmosphere exhaust gases with an opacity greater than one percent from the affected sources **(ID Nos. ESPSTS, ESGS, ESSTS, ESSS1, ESSS2, ESHLT, ESHLS, and ESLSV3)**. [40 CFR 60.472(c) and (d)]

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

c. If an emission testing is required, the testing shall be performed in accordance with 40 CFR 60.474 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.4.a or b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

d. To ensure compliance, once per month the Permittee shall observe the emission points of these sources for any visible emissions above normal. 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 .0501(c)(8) is below the limit given in Section 2.1 C.4. 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 .0524.

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

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

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

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

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

5. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. 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" as promulgated in 40 CFR Part 60, Subpart OOO "Standards of Performance for Nonmetallic Mineral Processing Plants," including Subpart A "General Provisions."
b. The Permittee shall not allow to be discharged into the atmosphere from the stack of any affected source **(ID Nos. ESCM1, ESCM2, and ESCM3)** which:
   i. contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); or,
   ii. exhibit greater than 7 percent opacity.
c. The Permittee shall not allow fugitive emissions to be discharged into the atmosphere from any affected source **(ID Nos. ESLSH, ESCM1, ESCM2, and ESCM3)** that exhibit greater than 10 percent opacity.
d. Emissions resulting from truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher are exempt from the emissions limitations provided in Section 2.1 C.5. a and b above, as provided in 40 CFR 60.672(d). [40 CFR 60.672(a), (b), and (d)]

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

e. Particulate matter emissions from the affected sources shall be controlled by fabric filtration as delineated in the equipment list. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. once per week, observe the magnehelic pressure gauge and record the pressure drop across the baghouses to ensure integrity of the bagfilters; and,
   ii. conduct a monthly visual inspection of the system ductwork and material collection unit for leaks.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the ductwork and bagfilters are not inspected and maintained.
f. To ensure compliance, once a week the Permittee shall observe the emission points of these sources for any visible emissions above normal. 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 .0501(c)(8) is below the limit given in Section 2.1 C.5.a or b 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 .0524.

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

g. The results of the visible emissions 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 .0524 if these records are not maintained.

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

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

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

i. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.
j. The Permittee shall submit a summary report of the visible emissions observations and monitoring activities for fabric filters and collection systems 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. Line No. 3 dry mat looper (ID No. ESDML3) with fabric filter (ID No. CDDC14)
Line No. 1 surfacing/backsurfacing process (ID No. ESBSP1) with fabric filter (ID No. CDDC9)
Line No. 2 surfacing/backsurfacing process (ID No. ESBSP2) with fabric filter (ID No. CDDC10)
Line No. 3 surfacing/backsurfacing process (ID No. ESBSP3) with fabric filter (ID No. CDDC14)
Line No. 1 cooling section (ID No. ESCS1)
Line No. 2 cooling section (ID No. ESCS2)
Line No. 3 cooling section (ID No. ESCS3)
Line Nos. 1 & 2 inkjet package labeling (ID No. ESINK)
Line No. 3 inkjet package labeling (ID No. ESINK2)
Line No. 3 nail line paint applicator (ID No. ESNLPA)

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	**Affected Sources: ESDML3, ESBSP1, ESBSP2, ESBSP3, ESCS1, ESCS2, ESCS3** $E = 4.10 \times P^{0.67}$ for $P \leq 30$ tons per hour, or $E = 55 \times P^{0.11} - 40$ for $P > 30$ tons per hour Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible Emissions	**Affected Sources: ESDML3, ESBSP1, ESBSP2, ESBSP3, ESCS1, ESCS2, ESCS3** Visible emissions shall not exceed 20 percent opacity	15A NCAC 02D .0521
Nitrogen Oxides	**Affected Sources: ESCS1, ESCS2, ESCS3** 100 tpy for Lines 1 and 2 and blowstills and combustion sources installed prior to 2005. 100 tpy for Line 3 and blowstills and combustion sources installed prior to 2005 that support Line 3 **See Section 2.2 B.1**	15A NCAC 02Q .0317 (PSD Avoidance)
Volatile Organic Compounds	**Affected Sources: ESCS1, ESCS2, ESCS3** 92 tpy for sources and combustion sources installed prior to 2005 supporting for Lines 1 and 2 99 tpy for sources and combustion sources installed prior to 2005 supporting Line 3 **See Section 2.2 B.2**	15A NCAC 02Q .0317 (PSD Avoidance)
PM_{10}	250 tpy, facility-wide. **See Section 2.2 B.3**	15A NCAC 02Q .0317 (PSD Avoidance)
Benzene	Facility-wide emission limit **See Section 2.2 C.1** **State-enforceable only**	15A NCAC 02D .1100
Odor	**Affected Sources: ESCS1, ESCS2, ESCS3, ESINK, ESINK2, ESNLPA** **See Section 2.2 C.2** **(State-enforceable only)**	15A NCAC 02D .1806

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

a. Emissions of particulate matter from these sources **(ID Nos. ESDML3, ESBSP1, ESBSP2, ESBSP3, ESCS1, ESCS2, and ESCS3)** shall not exceed an allowable emission rate as calculated by the following equations:

$E = 4.10 \times P^{0.67}$ (for process rates up 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, and
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 an emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

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

d. No reporting is required for particulate emissions from these sources **(ID Nos. ESCS1, ESCS2, and ESCS3)**.

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

e. Particulate matter emissions from these sources **(ID Nos. ESDML3, ESBSP1, ESBSP2, and ESBSP3)** shall be controlled by the bagfilters **(ID Nos. CDDC9, CDDC10, and CDDC14)**. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

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

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

f. 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 maintenance performed on any control device; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

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

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

g. The Permittee shall submit the results of any maintenance performed on the control devices within 30 days of a written request by the DAQ.

h. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Sections 2.1 D.1.e and f 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. ESDML3, ESBSP1, ESBSP2, ESBSP3, ESCS1, ESCS2, and ESCS3)** 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 an emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.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 week the Permittee shall observe the emission points of these sources **(ID Nos. ESDML3, ESBSP1, ESBSP2, ESBSP3, ESCS1, ESCS2, and ESCS3)** for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. 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 .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 D.2.a above.

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

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

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 D.2.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

E. The following boilers and heaters:

Natural gas-fired flux preheater No. 1 (ID No. ESPH1)
Natural gas-fired flux preheater No. 2 (ID No. ESPH2)
Natural gas, No. 2 fuel oil-fired boiler No. 1 (ID No. ESB1)
Natural gas, No. 2 fuel oil-fired boiler No. 2 (ID No. ESB2)
Natural gas-fired shingle coating heater No. 1 (ID No. ESSCH1)
Natural gas-fired shingle coating heater No. 2 (ID No. ESSCH2)
Natural gas-fired shingle coating heater No. 3 (ID No. ESSCH3)
Natural gas-fired shingle coating heater No. 4 (ID No. ESSCH4)
Natural gas-fired hot oil heater No. 2 (ID No. ESHOH2)
Natural gas-fired hot oil heater No. 4 (ID No. ESHOH4) [NSPS Dc]
Natural gas-fired hot oil heater No. 1 (ID No. ESHOH1)

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	Particulate emissions shall not exceed 0.32 pounds per million Btu heat input.	15A NCAC 02D .0503
Sulfur Dioxide	Sulfur dioxide emission shall not exceed 2.3 pounds per million Btu heat input, including contributions from raw materials	15A NCAC 02D .0516
Visible Emissions	Visible emissions shall not exceed 20 percent opacity	15A NCAC 02D .0521
Nitrogen Oxides	100 tpy for Lines 1 and 2 and blowstills and combustion sources installed prior to 2005. 100 tpy for Line 3 and blowstills and combustion sources installed prior to 2005 that support Line 3 **See Section 2.2 B.1**	15A NCAC 02Q .0317 (PSD Avoidance)
Volatile Organic Compounds	92 tpy for sources and combustion sources installed prior to 2005 supporting for Lines 1 and 2 99 tpy for sources and combustion sources installed prior to 2005 supporting Line 3 **See Section 2.2 B.2**	15A NCAC 02Q .0317 (PSD Avoidance)
PM_{10}	250 tpy, facility-wide. **See Section 2.2 B.3**	15A NCAC 02Q .0317 (PSD Avoidance)
n/a	**(ID No. ESHOH4 only)** Keep records of fuel usage	15A NCAC 02D .0524 (40 CFR Part 60, Subpart Dc)
Hazardous Air Pollutants	Maximum Achievable Control Technology	15A NCAC 02D .1111 (40 CFR Part 63, Subpart DDDDD)
Odor	**See Section 2.2 C.2** **(State-enforceable only)**	15A NCAC 02D .1806

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

a. i. Emissions of particulate matter from the combustion of natural gas and No. 2 fuel oil that are discharged from these sources **(ID Nos. ESPH1, ESPH2, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, ESSCH4, ESHOH2, ESHOH4)** into the atmosphere shall not exceed 0.32 pounds per million Btu heat input.

ii. Emissions of particulate matter from the combustion of natural gas that are discharged from **(ID No. ESHOH1)** into the atmosphere shall not exceed 0.29 pounds per million Btu heat input.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. 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 .0503.

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

c. No monitoring, recordkeeping, or reporting is required for particulate emissions from the firing of natural gas and No. 2 fuel oil in these sources **(ID Nos. ESPH1, ESPH2, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, ESSCH4, ESHOH1, ESHOH2, and ESHOH4)**.

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

a. Emissions of sulfur dioxide from these sources **(ID Nos. ESPH1, ESPH2, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, ESSCH4, ESHOH1, ESHOH2, and ESHOH4)**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 General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting0 [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from combustion of natural gas and No. 2 fuel oil for these sources **(ID Nos. ESPH1, ESPH2, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, ESSCH4, ESHOH1, ESHOH2, and ESHOH4)**.

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

a. Visible emissions from these sources **(ID Nos. ESPH1, ESPH2, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, ESSCH4, ESHOH1, ESHOH2, and ESHOH4)** 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.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

c. No monitoring/recordkeeping/reporting is required for combustion of natural gas or No. 2 fuel oil in these sources **(ID Nos. ESPH1, ESPH2, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, ESSCH4, ESHOH1, ESHOH2, and ESHOH4)**.

4. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. 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 Part 60 Subpart Dc "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," including Subpart A "General Provisions."

Recordkeeping [15A NCAC 2Q .0508(f)]

b. In addition to any other recordkeeping required by 40 CFR 60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel fired in this heater **(ID No. ESHOH4)**

during each month. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained. [40 CFR 60.48c(g)(2)]

5. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

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

a. For these combustion sources (**ID Nos. ESPH1, ESPH2, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, ESSCH4, ESHOH1, ESHOH2, and ESHOH4**) (*i.e., sources designed to burn gas 1 fuels (with oil during curtailment), not equipped with oxygen trim*), 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 Part 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."

Definitions and Nomenclature

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

Operating Restriction [15A NCAC 02Q .0508(b)]

c. The Permittee shall only burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year, and during periods of gas curtailment or gas supply interruptions of any duration.

40 CFR Part 63 Subpart A General Provisions

d. 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. [40 CFR 63.7565]

Compliance Date [40 CFR 63.7495]

e. The Permittee shall comply with the applicable requirements:
   i. For new or reconstructed sources, upon startup of the source.
   ii. For existing sources, the Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019. [40 CFR 63.7510(e), 63.56(b)] *These requirements have been met.*

Notifications [40 CFR 63.7545]

f. The following notification requirements apply:
   i. For existing sources, the Permittee shall submit a Notification of Compliance Status. The notification shall be signed by a responsible official and submitted by July 19, 2019. [40 CFR 64.7545(e). 63.7530(e) and (f)] *This requirement has been met.*
   ii. As specified in 40 CFR 63.9(b)(4) and (5), the Permittee shall submit an Initial Notification to the DAQ not later than 15 days after the actual date of startup of the affected source. [40 CFR 63.7545(c)]
   iii. The Permittee shall submit a notification of intent to fire an alternative fuel (i.e., fuel oil) within 48 hours of the declaration of each period of natural gas curtailment or supply interruption. The notification shall include the information in 40 CFR 63.7545(f). [40 CFR 63.7545(f)]

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if this notification requirement is not met.

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

g. The following work practice standards apply:
   i. For each sources, the Permittee shall conduct a tune-up of the boiler according to the schedule below:
      (A) For sources with capacities less than 5 million Btu per hour, the tune-up shall be conducted every five years.
      (B) For sources with capacities between 5 and 10 million Btu per hour, the tune-up shall be conducted every two years.
      (C) For sources with capacities greater than 10 million Btu per hour, the tune-up shall be conducted every year.
      [40 CFR 63.7500(a), 63.7540(a)(10), (11), and (12)]
   ii. The tune-up shall be conducted while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up as specified below.

(A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown. For boilers with capacities less than 5 million Btu per hour, the Permittee may also perform the burner inspection during the next unscheduled unit shutdown, but the burner must be inspected at least once every 72 months.
(B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
(C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown).
(D) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject.
(E) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
[40 CFR 63.7500(a), 63.7540(a)(10), (11), and (12)]

iii. For new or reconstructed sources, the initial tune-up must be conducted within the following time periods following the initial startup of the source:
(A) 61 months for boilers with heat input capacities less than 5 million Btu per hour;
(B) 25 months for boilers with heat input capacities between 5 and 10 million Btu per hour; and
(C) 13 months for boilers with heat input capacities greater than 10 million Btu per hour.
[40 CFR 63.7515(d)]

iv. Each subsequent tune-up shall be conducted no more than the below time periods following the previous tune-up:
(A) 61 months for boilers with heat input capacities less than 5 million Btu per hour;
(B) 25 months for boilers with heat input capacities between 5 and 10 million Btu per hour; and
(C) 13 months for boilers with heat input capacities greater than 10 million Btu per hour.
[40 CFR 63.7515(d)]

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

vi. At all times, the Permittee shall 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(f)]

h. 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)]

i. The following recordkeeping requirements apply. 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 DAQ, 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 Section 2.2 B.1.g through h.
iv. keep the following records, pursuant to 15A NCAC 02Q .0508(f) and 40 CFR 63.7555(h):
(A) types of fuels combusted during periods of gas curtailment, gas supply interruption, periodic testing maintenance and operator training;
(B) date and duration of periods of gas curtailment and gas supply interruption; and
(C) date and duration of periods of testing, maintenance and operator training while combusting liquid fuel.
v. keep:
(A) records in a form suitable and readily available for expeditious review;
(B) each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
(C) each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.
[40 CFR 63.7560, 63.10(b)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these recordkeeping requirements are not met or if the records show an exceedance of the operating restriction given in Section 2.2 B.1.c above.

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

j. The following reporting requirements apply:
i. The Permittee shall submit compliance reports to the DAQ based on the following schedule:
(A) a five-year basis for boilers with heat input capacities less than 5 million Btu per hour;
(B) a two-year basis for boilers with heat input capacities between 5 and 10 million Btu per hour; and
(C) an annual basis for boilers with heat input capacities greater than 10 million Btu per hour.
The report shall cover the period from January 1 to December 31 for each covered year. The Permittee shall submit the report postmarked on or before January 30 for the preceding reporting period. [40 CFR 63.7550(a) and (b)]
ii. The compliance report shall 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/). The Permittee shall use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, the Permittee shall 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, the Permittee shall submit the report to the EPA Administrator at the appropriate address listed in 40 CFR 63.13. The Permittee shall 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 shall 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) date of the most recent tune-up for each unit required according to Section 2.2 B.1.g. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown; 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 Part 63, Subpart DDDDD]

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

F. Ceco air filter (ID No. CDFTR2) controlling emissions from:
Three laminate application pans (ID Nos. ESLA3, ESLA4, and ESLA5)
One 80 gallon laminate use tank (ID No. ESLAT6)
One 140 gallon laminate use tank (ID No. ESLAT7)
One 800 gallon laminate day tank (ID No. ESMA7)
One sealant applicator pan (ID No. ESSA6)
One 80 gallon sealant use tank (ID No. ESSEA6)
One 800 gallon sealant day tank (ID No. ESMA9)

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	**Affected Sources: Tanks (ID Nos. ESLAT6, ESLAT7, ESMA7, ESMA9, and ESSEA6).** $E = 4.10 \times P^{0.67}$ for $P \leq 30$ tons per hour, or $E = 55 \times P^{0.11} - 40$ for $P > 30$ tons per hour Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible Emissions	**Affected Sources: Pans (ID Nos. ESLA3, ESLA4, ESLA5, and ESSA6)** Visible emissions shall not exceed 20 percent opacity	15A NCAC 02D .0521
Visible Emissions	**Affected Sources: Tanks (ID Nos. ESLAT6, ESLAT7, and ESSEA6)** Comply with 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681	15A NCAC 02D .0524 (40 CFR 60, Subpart UU)
Hazardous Air Pollutants	**See Section 2.2 A.1**	15A NCAC 02D .1111 (40 CFR 63, Subpart LLLLL)
PM_{10}	250 tpy, facility-wide. **See Section 2.2 B.3**	15A NCAC 02Q .0317 (PSD Avoidance)
Benzene	Facility-wide emission limit **See Section 2.2 C.1** **(State-enforceable only)**	15A NCAC 02D .1100
Odor	**See Section 2.2 C.2** **(State-enforceable only)**	15A NCAC 02D .1806

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

a. Emissions of particulate matter from each affected source **(ID Nos. ESLAT6, ESLAT7, ESMA7, ESMA9, and ESSEA6)** shall not exceed an allowable emission rate as calculated by the following equations:

For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$
For process rates greater than 30 tons per hour: $E = 55.0 \times P^{0.11} - 40$

Where:
E = allowable emission rate in pounds per hour, and
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 an emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

c. For these sources **(ID Nos. ESLAT6, ESLAT7, ESMA7, ESMA9, and ESSEA6)**, the Permittee shall demonstrate compliance with 15A NCAC 02D .0515 by complying with the monitoring, recordkeeping, and reporting requirements of MACT Subpart LLLLL in Section 2.2 A.1, below. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the requirements of Section 2.2 A.1 of this permit are not met.

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

a. Visible emissions from each of the affected sources **(ID Nos. ESLA3, ESLA4, ESLA5, and ESSA6)** 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 an emission testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

c. To ensure compliance, each week the Permittee shall observe the emission points of these sources for any visible emissions above normal. The observation must be made for each week of the calendar year period to ensure compliance with this requirement. The Permittee shall establish "normal" for the sources (**ID Nos ESLA3, ESLA4, ESLA5, and ESSA6**) in the first 30 days following the start up of the sources. 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 sources in accordance with 15A NCAC 02D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 F.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 and/or if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

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

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

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

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

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

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. 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" as promulgated in 40 CFR Part 60, Subpart UU "Standards

of Performance for Asphalt Processing and Asphalt Roofing Manufacture," including Subpart A "General Provisions."

b. The Permittee shall comply with the emissions limits for the tanks **(ID Nos. ESLAT6, ESLAT7, ESMA7, ESMA9, and ESSEA6)** by complying with the emissions limit specified in Section 2.2 A.1, below. [40 CFR 63.8681]

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

c. Pursuant to 40 CFR 63.8681, coaters and asphalt storage tanks that are subject to 40 CFR 60, Subpart UU *and* 40 CFR 63, Subpart LLLLL (Asphalt Roofing MACT) are only required to comply with the provisions of the MACT. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these requirements of Section 2.2 A.1 of this permit are not met.

G. Nail paint line applicator for Line No. 1 (ID No. ESNLPA2)

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

Pollutant	Limits/Standards	Applicable Regulation
PM_{10}	250 tpy, facility-wide. **See Section 2.2 B.3**	15A NCAC 02Q .0317 (PSD Avoidance)
odor	**See Section 2.2 C.2** **(State-enforceable only)**	15A NCAC 02D .1806

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

A. MACT Subpart LLLLL-Affected Sources, as follows:

Asphalt Processing Facility ("Existing")

Afterburner (ID No. CDAFB) on:

Blowstill No. 1 (ID No. ESBS1)
Blowstill No. 2 (ID No. ESBS2)
Blowstill No. 3 (ID No. ESBS3)

Mist Eliminator (ID No. CDME3) and Regenerative Thermal Oxidizer (ID No. CDRTO) -OR- Electrostatic Precipitator (ID No. CDESP) -OR- Mist Eliminator (ID No. CDME) on:

No. 1 flux preheat tank (ID No. ESFT1)
No. 2 flux preheat tank (ID No. ESFT2)
No. 3 flux preheat tank (ID No. ESFT3)
Flux Storage Tank No. 1 (ID No. ESFST1)
Flux Storage Tank No. 2 (ID No. ESFST2)
Coating tank No. 1 (ID No. ESCT1)
Coating tank No. 2 (ID No. ESCT2)
Coating tank No. 3 (ID No. ESCT3)
Coating tank No. 4 (ID No. ESCT4)
Two asphalt flux storage tanks (ID Nos. ESFST3 and ESFST4)

Roofing Line No. 1 and Roofing Line No. 2 ("Existing")

Electrostatic Precipitator (ID No. CDESP) -OR- Mist Eliminator (ID No. CDME) on:

Line No. 1 fiberglass mat coater (ID No. ESLC1)
Line No. 2 fiberglass mat coater (ID No. ESLC2)
Modified asphalt recirculation tank (ID No. ESMA3)
Sealant day tank No. 1 (ID No. ESSEA1)
Sealant day tank No. 2 (ID No. ESSEA2)
Line No. 1 sealant applicator pan (ID No. ESSA1)
Line No. 2 sealant applicator pan (ID No. ESSA2)
Line No. 1 overlay inking pan (ID No. ESWIP1)
Modified sealant recirculation tank (ID No. ESMS2)
Limestone/asphalt mixer No. 1 (ID No. ESHM1)
Limestone/asphalt mixer No. 2 (ID No. ESHM2)

Mist Eliminator (ID No. CDME3) and Regenerative Thermal Oxidizer (ID No. CDRTO) -OR- Electrostatic Precipitator (ID No. CDESP) -OR- Mist Eliminator (ID No. CDME) on:

No. 1 saturant tank (ID No. ESST1)
Sealant tank (ID No. ESSDT)

Coalescing Air Filter (ID No. CDFTR) on:

Line No. 2 laminating adhesive applicator wheel (ID No. ESLA1)
Line No. 2 sealant applicator gun (ID No. ESSA3)
Line No. 2 sealant applicator pan (ID No. ESSA4)

Roofing Line No. 3 ("New")

Mist Eliminator (ID No. CDME3) and Regenerative Thermal Oxidizer (ID No. CDRTO) on:

Line No. 3 AC-20 asphalt tank (ID No. ESAC20)
Line No. 3 fiberglass mat coater (ID No. ESLC3)
Line No. 3 laminate swell tank (ID No. ESMA8)
Line No. 3 laminate adhesive day tank (ID No. ESLAT3)
Line No. 3 sealant swell tank (ID No. ESMA10)
Line No. 3 sealant adhesive day tank (ID No. ESSEA3)
Line No. 3 sealant applicator (ID No. ESSA5)

Line No. 3 laminating adhesive applicator (ESLA2)
Line No. 3 horizontal mixer (ID No. ESHM3)
Line No. 3 vertical mixer (ID No. ESVM3)

Roofing Line No. 1 ("Existing")
Ceco air filter (ID No. CDFTR2) controlling emissions from:
Three laminate application pans (ID Nos. ESLA3, ESLA4, and ESLA5)
One 80 gallon laminate use tank (ID No. ESLAT6)
One 140 gallon laminate use tank (ID No. ESLAT7)
One 800 gallon laminate day tank (ID No. ESMA7)
One sealant applicator pan (ID No. ESSA6)
One 80 gallon sealant use tank (ID No. ESSEA6)
One 800 gallon sealant day tank (ID No. ESMA9)

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	NESHAP for Asphalt Processing and Asphalt Roofing Manufacturing	15A NCAC 02D .1111 (40 CFR 63, Subpart LLLLL)

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

a. The Permittee shall comply with all applicable requirements of 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) and 40 CFR Part 63, Subpart LLLLL, "National Emission Standards for Hazardous Air Pollutants: Asphalt Processing and Asphalt Roofing Manufacturing."

Emissions Standards [40 CFR 63.8684(a) and Table 1 to Subpart LLLLL]

b. The Permittee shall use the afterburner **(ID No. CDAFB)** to control emissions from the affected sources listed below. The control device shall achieve a combustion efficiency of at least 99.5 percent.
   i. Blowstill Nos. 1, 2, and 3 **(ID Nos. ESBS1, ESBS2, and ESBS3)**.

c. The Permittee shall use the regenerative thermal oxidizer **(ID No. CDRTO)** to control emissions from the affected sources listed below. The control device shall achieve a combustion efficiency of at least 99.5 percent.
   i. Line No. 3 coater **(ID No. ESLC3)**;
   ii. Line No. 3 coating mixers **(ID Nos. ESHM3 and ESVM3)**;
   iii. Line No. 3 sealant applicator **(ID No. ESSA5)**;
   iv. Line No. 3 laminating adhesive applicator **(ID No. ESLA2)**;
   v. Group 2 storage tanks **(ID Nos. ESAC20, ESMA8, ESMA10, ESLAT3 and ESSEA3)**; and,
   vi. Group 2 storage tanks **(ID Nos. ESFT1, ESFT2, ESFT3, ESFST1, ESFST2, ESCT1, ESCT2, ESCT3, ESCT4, ESST1, ESSDT, ESFST3 and ESFST4)** (alternatively, these tanks may be controlled as provided in Section 2.2 A.1.d.vi below)

d. The Permittee shall use the electrostatic precipitator **(ID No. CDESP)** or mist eliminator **(ID No. CDME)** to control emissions from the affected sources listed below. The control device shall limit PM emissions to no greater than 0.08 lb/ton of asphalt shingle produced.
   i. Line Nos. 1 and 2 coaters **(ID Nos. ESLC1 and ESLC2)**;
   ii. Line Nos. 1 and 2 coating mixers **(ID Nos. ESHM1 and ESHM2)**;
   iii. Line Nos. 1 and 2 sealant applicators **(ID Nos. ESSA1 and ESSA2)**;
   iv. Line No. 1 overlay inking pan (laminate applicator) **(ID No. ESWIP1)**;
   v. Group 2 storage tanks **(ID Nos. ESMA3, ESMA5, ESSEA1, ESSEA2, and ESMS2)**; and,
   vi. Group 2 storage tanks **(ID Nos. ESFT1, ESFT2, ESFT3, ESFST1, ESFST2, ESCT1, ESCT2, ESCT3, ESCT4, ESST1, ESSDT, ESFST3 and ESFST4)** (alternatively, these tanks may be controlled as provided in Section 2.2 A.1.c.vi above).

   The particulate standard does NOT apply to the Group 2 storage tanks listed in v. and vi. above. However, the Group 2 storage tanks are affected by the visible emission standard provided in Section 2.2 A.1.g below.

e. The coalescing air filter **(ID No. CDFTR)** to control emissions from the affected sources listed below. The control device shall limit PM emissions to no greater than 0.08 lb/ton of asphalt shingle produced.
   i. Line No. 2 sealant applicators **(ID Nos. ESSA3 and ESSA4)**; and,

ii. Line No. 2 laminate applicator **(ID No. ESLA1)**.

f. When used to control emissions from the Line No. 1 or Line No. 2 coater **(ID No. ESLC1 and ESLC2)**, emissions from the electrostatic precipitator **(ID No. CDESP)** and/or mist eliminator **(ID No. CDME)** shall be limited as follows:
   i. Visible emissions from the control device shall not exceed 20 percent opacity; and,
   ii. Visible emissions from the capture system shall not exceed 20 percent opacity for any period of consecutive valid observations totaling 60 minutes.

g. When used to control emissions from any Group 2 storage tank, visible emissions from the electrostatic precipitator **(ID No. CDESP)**, mist eliminator **(ID No. CDME)**, and/or coalescing air filter **(ID No. CDFTR)** shall be limited to no greater than 0 percent opacity. The opacity limit may be exceeded for one consecutive 15-minute period in any 24-hour period when the storage tank transfer lines are being cleared. During this 15-minute period, the control device must not be bypassed.

h. i. When used to control emissions from any Group 2 storage tanks (**ID Nos. ESLAT6, ESLAT7, ESMA7, ESMA9, and ESSEA6**), visible emissions from the Ceco air filter (**ID No. CDFTR2**) shall be limited to no greater than 0 percent opacity except during periods of startup, shutdown, and malfunction. The opacity limit may be exceeded for one consecutive 15-minute period in any 24-hour period when the storage tank transfer lines are being cleared. During this 15-minute period, the control device must not be bypassed.
   ii. When used to control emissions from three laminate application pans (**ID Nos. ESLA3, ESLA4, and ESLA5**) and the one sealant applicator pan (**ID No. ESSA6**), particulate matter emissions from the Ceco air filter (**ID No. CDFTR2**) shall be limited to no greater than 0.08 lb/ton of asphalt shingle produced except during periods of startup, shutdown, and malfunction.

Operating Limits [40 CFR 63.8684(b) and Table 2 to Subpart LLLLL]

i. The Permittee shall maintain the 3-hour average combustion temperature of the afterburner **(ID No. CDAFB)** at or above 1,463 degrees Fahrenheit, or at or above the temperature established during the most recent test that demonstrated compliance with the emission standard, whenever the control device is being used to control emissions as provided in Section 2.2 A.1.b above.

j. The Permittee shall maintain the 3-hour average combustion temperature of the regenerative thermal oxidizer **(ID No. CDRTO)** at or above 1,590 degrees, or the value established during the most recent test that demonstrated compliance with the emission standard, whenever the control device is being used to control emissions as provided in Section 2.2 A.1.c above.

k. If the electrostatic precipitator **(ID No. CDESP)** is being used to comply with any of the emission standards provided above, the Permittee shall maintain the following:
   i. 3-hour average inlet gas temperature at or below 113.3 degrees Fahrenheit, or the temperature value established during the most recent test that demonstrated compliance with the emission standard (plus 20% as allowed by Table 3 to Subpart LLLLL); and,
   ii. (A) 3-hour average pressure drop across of the device at or above 0.1 and at or below 0.9 inches of H_2O, or the value established during the most recent test that demonstrated compliance with the emission standard.
   (B) As an alternative to the pressure drop established during the most recent test, the Permittee may establish any of the operating limits for pressure drop range (i.e., a minimum and a maximum pressure drop) across the control device using manufacturers' specifications. [40 CFR 63.8689(d)]

l. If the mist eliminator **(ID No. CDME)** is being used to comply with any of the emission standards provided above, the Permittee shall maintain the following:
   i. 3-hour average inlet gas temperature at or below 124.2 degrees Fahrenheit, or the temperature value established during the most recent test that demonstrated compliance with the emission standard (plus 20% as allowed by Table 3 to Subpart LLLLL); and,
   ii. (A) 3-hour average pressure drop across of the device at or above 1.0 and at or below 19.6 inches of H_2O, or the value established during the most recent test that demonstrated compliance with the emission standard.
   (B) As an alternative to the pressure drop established during the most recent test, the Permittee may establish any of the operating limits for pressure drop range (i.e., a minimum and a maximum pressure drop) across the control device using manufacturers' specifications. [40 CFR 63.8689(d)]

   The 3-hour averages shall be based on periods during which the affected emissions sources are in operation.

m. If the coalescing air filter **(ID No. CDFTR)** is being used to comply with any of the emission standards provided above, the Permittee shall maintain the following:

i. 3-hour average inlet gas temperature at or below 118.7 degrees Fahrenheit, or the temperature value established during the most recent test that demonstrated compliance with the emission standard (plus 20% as allowed by Table 3 to Subpart LLLLL); and,

ii. (A) 3-hour average pressure drop across of the device at or above 1.0 and at or below 13.2 inches of H_2O, or the value established during the most recent test that demonstrated compliance with the emission standard.

(B) As an alternative to the pressure drop established during the most recent test, the Permittee may establish any of the operating limits for pressure drop range (i.e., a minimum and a maximum pressure drop) across the control device using manufacturers' specifications. [40 CFR 63.8689(d)]

n. If the Ceco filter **(ID No. CDFTR2)** is being used to comply with any of the emission standards provided above, the Permittee shall maintain the following:

i. 3-hour average inlet gas temperature at or below 103.4 degrees Fahrenheit, or the temperature value established during the most recent test that demonstrated compliance with the emission standard (plus 20% as allowed by Table 3 to Subpart LLLLL); and,

ii. (A) 3-hour average pressure drop across of the device at or above 1.0 and at or below 10.4 inches of H2O, or the value established during the most recent test that demonstrated compliance with the emission standard.

(B) As an alternative to the pressure drop established during the most recent test, the Permittee may establish any of the operating limits for pressure drop range (i.e., a minimum and a maximum pressure drop) across the control device using manufacturers' specifications. [40 CFR 63.8689(d)]

Testing [15A NCAC 02Q .0508(f); 40 CFR 63.8686, 8687, and 8691]

o. i. If any emissions testing is required, the testing shall be performed as required in 40 CFR 63.8687 and in accordance with General Condition JJ.

ii. For each control device used to comply with the emission standards in Sections 2.2 A.1.b through 2.2 A.1.h, above, the Permittee shall conduct periodic performance testing.

A. The subsequent periodic performance tests must be conducted no later than 60 months thereafter following the previous performance test, unless an alternative date is approved by DAQ.

B. If an affected source is not operating on the dates the periodic performance test is required to be conducted, the Permittee is not required to restart that source for the sole purpose of complying with periodic testing requirements. Instead, upon restart of the affected source, the Permittee shall conduct the first periodic performance test within 60 days of achieving normal operating conditions but no later than 180 days from startup, unless an alternative date is approved by DAQ.

C. Periodic testing shall be performed using the applicable procedures specified in 40 CFR 63.8687 and Table 4 to Subpart LLLLL in order to demonstrate compliance with the emission limits in Sections 2.2 A.1.b through 2.2 A.1.h, above, and in order to confirm or reestablish the operating limits in Sections 2.2 A.1.i through n, above.

iii. If the results of any required test are above the limit given in Section 2.2 A.1.b through h above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f); 40 CFR 63.8688]

p. The Permittee shall install, operate, and maintain continuous monitoring systems (CMS) to measure and record the combustion chamber temperature at the afterburner **(ID No. CDAFB)** and the regenerative thermal oxidizer **(ID No. CDRTO)**, as follows:

i. The monitors shall be located in a position that provides a representative temperature.

ii. The temperature sensors must have a minimum measurement sensitivity of 2.8 °C or 1.0 percent of the temperature value, whichever is larger.

iii. If a chart recorder is used, it must have a sensitivity in the minor division of at least 20 °F.

The CMS must be operated and maintained according to the site-specific monitoring plan. If the CMS are not installed, operated, or maintained, or if the combustion chamber temperature falls below the requirement provided in Section 2.2.A.1.i or j above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

q. The Permittee shall install, operate, and maintain continuous monitoring systems (CMS) to measure and record both the inlet gas temperature and the pressure drop across the electrostatic precipitator **(ID No. CDESP)**, mist eliminator **(ID No. CDME)**, and coalescing air filter **(ID No. CDFTR)**:

i. The temperature monitors shall meet the following requirements:

A. The monitor shall be located in a position that provides a representative temperature.

B. The temperature sensor must have a minimum measurement sensitivity of 2.8 °C or 1.0 percent of the temperature value, whichever is larger.
C. If a chart recorder is used, it must have a sensitivity in the minor division of at least 20 °F.

ii. The pressure monitors shall meet the following requirements:
A. Locate the pressure sensor(s) in, or as close as possible, to a position that provides a representative measurement of the pressure.
B. Use a gauge with a minimum measurement sensitivity of 0.12 kiloPascals or a transducer with a minimum measurement sensitivity of 5 percent of the pressure range.

The CMS must be operated and maintained according to the site-specific monitoring plan. If the CMS is not installed, operated, or maintained, or if the inlet gas temperature or pressure drop across the control device exceed the maximum values provided in Section 2.2.A.1. k, l, or m, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

r. The following requirements apply to each continuous monitoring system (CMS) required above:
i. The CMS must complete a minimum of one cycle of operation for each successive 15-minute period.
ii. To determine the 3-hour average, the Permittee must:
A. Have a minimum of four successive cycles of operation to have a valid hour of data.
B. Have valid data from at least three of four equally spaced data values for that hour from a CMS that is not out-of-control according to the site-specific monitoring plan.
C. Determine the 3-hour average of all recorded readings for each operating day, except as stated in 40 CFR 63.8690(c). At least two of the three hourly averages for that period using only hourly average values must be based on valid data (i.e., not from out-of-control periods).
iii. Data must be monitored and collected in accordance with 40 CFR 63.8690.
The Permittee shall be deemed in non-compliance with 15A NCAC 2D .1111 if the above requirements are not met.

Site-Specific Monitoring Plan [40 CFR 63.8685(d), 40 CFR 63.8688(g),(h)]

s. The Permittee shall develop and implement a written, site-specific monitoring plan for each monitoring system required above, including the content specified in 40 CFR 63.8688(g)-(h), as follows:
i. A description of the installation of each continuous monitoring system (CMS) sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
ii. Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;
iii. Performance evaluation procedures and acceptance criteria (e.g., calibrations);
iv. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);
v. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); and,
vi. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

Each CMS shall be in continuous operation in accordance with the monitoring plan upon startup. If the monitoring plan is not developed or the CMS is not operated and maintained according to the plan, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

t. Retain a copy of the current site-specific monitoring plan on-site and make the plan available to the DAQ upon request. If the monitoring plan is not made available to DAQ, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

CMS Inspection/Maintenance [40 CFR 63.8688(a)(3), (b), (c), and (i)]

u. The Permittee must conduct a performance evaluation of each continuous monitoring system (CMS) in accordance with the site-specific monitoring plan required in Section 2.2.A.1.r above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the required performance evaluation is not conducted.

v. The following requirements apply to the continuous temperature monitors measuring the combustion chamber temperature **ID Nos. CDRTO and CDAFB** and the inlet gas temperatures for **ID Nos. CDESP, CDME, CDFTR2 and CDFTR**:
i. Perform an accuracy check using one of the following procedures at least semiannually or following an operating parameter deviation:

A. According to the procedures in the manufacturer's documentation;
B. By comparing the sensor output to redundant sensor output;
C. By comparing the sensor output to the output from a calibrated temperature measurement device; or,
D. By comparing the sensor output to the output from a temperature simulator.

ii. Conduct accuracy checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

iii. At least quarterly or following an operating parameter deviation, perform visual inspections of components if redundant sensors are not used.

Record the results of each inspection, calibration, and validation check of the CMS. If the required checks are not conducted or the results of the checks are not recorded, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

w. The Permittee shall perform regular inspections and maintenance of each required continuous pressure monitor for **ID Nos. CDESP, CDME, CDFTR2 and CDFTR**, including, at a minimum, the following:

i. Check pressure tap pluggage daily.

ii. Perform an accuracy check at least quarterly or following an operating parameter deviation:
A. According to the procedures in the manufacturer's documentation; or
B. By comparing the sensor output to redundant sensor output.

iii. Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

iv. At least monthly or following an operating parameter deviation, perform a leak check of all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

v. At least quarterly or following an operating parameter deviation, perform visible inspections on all components if redundant sensors are not used.

Record the results of each inspection, calibration, and validation check of the CMS. If the required checks are not conducted or the results of the checks are not recorded, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

General Requirements [40 CFR 63.8685(a),(b)]

x. The Permittee shall be in compliance with the emission limitations (including operating limits) in Sections 2.2 A.1.b through 2.2 A.1.h at all times, except during periods of nonoperation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which 40 CFR Part 63 Subpart LLLLL applies.

y. At all times, the Permittee shall 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. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements 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 affected source.

Reporting [15A NCAC 02Q .0508(f); 40 CFR 63.8693]

z. The Permittee shall submit semiannual compliance reports to DAQ 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 MACT compliance reports shall include the following information:

i. Company name and address;

ii. Responsible Official certification;

iii. Beginning and ending dates of the reporting period;

iv. For each deviation during the reporting period from any emission limit, operating limit, or visible emission/opacity limit, the report must contain the information in 40 CFR 63.8693(c);

v. For each period during which any continuous monitoring system (CMS) was out-of-control as specified in 40 CFR 63.8(c)(7), the report must contain the information in 40 CFR 63.8693(d); and,

vi. Each instance in which the Permittee did not meet each operating limit in Table 5 to Subpart LLLLL, except during periods of nonoperation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which Subpart LLLLL applies. [40 CFR 63.8691(b)]

If there were no deviations, SSM events, or out-of-control periods at any CMS during the reporting period, the compliance report shall include a statement to that effect.

B. Sources subject to PSD Avoidance

1. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION (Nitrogen Oxide Avoidance Limits)

a. In order to avoid the applicability of 15A NCAC 02D .0530, the Permittee shall limit NO_x emissions as follows:
   i. Total NO_x emissions from blowstills and combustion sources installed prior to April 2005 when used to support production on Roofing Lines No. 1 (L1) and No. 2 (L2) shall not exceed 100 tpy; and,
   ii. Total NO_x emissions from combustion sources installed as part of the Roofing Line No. 3 (L3) installation *and* from blowstills and combustion sources installed prior to April 2005 when used to support production on L3 shall not exceed 100 tpy.

Sources affected by the above emissions limitations are listed in the table below:

Source ID No.	NO_x Emission Factor [EF]	Fraction of Emissions Dedicated to Each Emissions Source Limit [$D_{L1,L2}$ = Emissions Dedicated to Limit in Section 2.2 B.1.a.i] [D_{L3} = Emissions Dedicated to Limit in Section 2.2 B.1.a.ii]
ESBS1, ESBS2, ESBS3	0.06 lb/ton asphalt	$D_{L1,L2}$ = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D_{L3} = (L3 Coating Usage) / (Total Coating Usage)
CDRTO	Natural Gas: 100 lb/MMscf	$D_{L1,L2}$ = 0 D_{L3} = 1
CDAFB	Natural Gas: 100 lb/MMscf	$D_{L1,L2}$ = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D_{L3} = (L3 Coating Usage) / (Total Coating Usage)
ESPH1, ESPH2	Natural Gas: 100 lb/MMscf	$D_{L1,L2}$ = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D_{L3} = (L3 Coating Usage) / (Total Coating Usage)
ESB1, ESB2	No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	$D_{L1,L2}$ = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D_{L3} = (L3 Coating Usage) / (Total Coating Usage)
ESSCH1, ESSCH2	Natural Gas: 100 lb/MMscf	$D_{L1,L2}$ = 1 D_{L3} = 0
ESSCH4	Natural Gas: 100 lb/MMscf	$D_{L1,L2}$ = 1 D_{L3} = 0
ESSCH3	Natural Gas: 100 lb/MMscf	$D_{L1,L2}$ = 0 D_{L3} = 1
ESHOH2	Natural Gas: 100 lb/MMscf	$D_{L1,L2}$ = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D_{L3} = (L3 Coating Usage) / (Total Coating Usage)
ESHOH4	Natural Gas: 100 lb/MMscf	$D_{L1,L2}$ = 0 D_{L3} = 1
ESCMH1, ESCMH2	Natural Gas: 100 lb/MMscf	$D_{L1,L2}$ = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D_{L3} = (L3 Coating Usage) / (Total Coating Usage)
ESCMH3	Natural Gas: 100 lb/MMscf	$D_{L1,L2}$ = 0 D_{L3} = 1
ESLFH	Natural Gas: 100 lb/MMscf	$D_{L1,L2}$ = 1 D_{L3} = 0

Mgal = 1,000 gallons

MMscf = million standard cubic feet

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

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test show emissions greater than the emission factors shown in the table above, the Permittee shall

apply for a permit modification to amend the factors used in determining compliance with the limit given in Section 2.2 B.1.a.i or ii above.

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

c. To demonstrate compliance with the NO_x limit provided in Section 2.2 B.1.a.i and ii, the Permittee shall keep monthly records of the following:
   i. the amount asphalt processed in the blowstills **(ID Nos. ESBS1, ESBS2, and ESBS3)** (in tons/month);
   ii. the amount of coating asphalt applied at the coaters on Roofing Lines No. 1 and No. 2 **(ID Nos. ESLC1, ESLC2)** (in tons/month);
   iii. the amount of coating asphalt applied at the coater on Roofing Line No. 3 **(ID No. ESLC3)** (in tons/month); and,
   iv. the quantity and type of fuel consumed at each of the affected combustion devices **(ID Nos. CDAFB, CDRTO, ESPH1, ESPH2, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, ESSCH4, ESHOH2, ESHOH4, ESCMH1, ESCMH2, ESCMH3, and ESLFH)** (in gallons/month or scf/month). The Permittee may allocate facility-wide fuel usage to the affected combustion sources based on the maximum firing capacity of each unit.

   The Permittee shall maintain a logbook (written or in electronic format) that contains the monthly records as provided above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the records are not maintained.

d. Each month the Permittee shall determine the amount of NO_x emitted to the atmosphere from the affected sources during the previous calendar month using Eqn. 3 and Eqn. 4:

Eqn. 3:

$$E_{NOx} = \frac{\sum_{(ESBS1, ESBS2, ESBS3)} EF_{ID} * Throughput * D_{L1,L2} + \sum_{\substack{(CDAFB, ESPH1, ESPH2, ESSH1, ESSH2, ESB1, ESB2,\\ ESSCH1, ESSCH2, ESHOH2, ESCMH1, ESCMH2, ESLFH)}} EF_{ID} * FuelUsage * D_{L1,L2}}{2{,}000\, lb/ton}$$

Eqn. 4:

$$E_{NOx} = \frac{\sum_{(ESBS1, ESBS2, ESBS3)} EF_{ID} * Throughput * D_{L3} + \sum_{\substack{(CDAFB, CDRTO, ESPH1, ESPH2, ESB1, ESB2,\\ ESSCH3, ESHOH2, ESCM1, ESCM2, ESCMH3, ESHOH4)}} EF_{ID} * FuelUsage * D_{L3}}{2{,}000\, lb/ton}$$

where:

E_{NOx} = NO_x emissions (ton/month);
EF_{ID} = NO_x emission factor for the Source ID No. (as provided in table);
$D_{L1,L2}$ = Fraction of emissions from the Source ID No. contributing to the emission limit provided in Section 2.2 B.1.a.i (as provided in table); and,
D_{L3} = Fraction of emissions from the Source ID No. contributing to the emission limit provided in Section 2.2 B.1.a.ii (as provided in table).

The Permittee shall maintain a logbook (written or in electronic format) that contains the monthly records of the emissions calculations as provided above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the records are not maintained.

e. Each month the Permittee shall calculate the total NO_x emissions from the affected sources for the previous consecutive 12-month period. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the records are not maintained or if the 12-month rolling NO_x emissions are in exceedance of the limit given in Section 2.2 B.2.a.i or ii above.

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

f. The Permittee shall submit a semiannual summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall include NO_x emissions totals for each 12-month period for the previous 17 months. All instances of deviations from the requirements of this permit must be clearly identified.

g. The Permittee shall submit an application for a permit modification each time an emission factor, as provided in Section 2.2 B.1.d, is revised. Factors provided in U.S. EPA's AP-42 shall be excluded from this requirement (i.e., no permit modification is required for U.S. EPA AP-42 updates).

2. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION (Volatile Organic Compound Avoidance Limits)

a. In order to avoid the applicability of 15A NCAC 02D .0530, the Permittee shall limit VOC emissions as follows:
   i. Total VOC emissions from blowstills, horizontal mix tanks, coaters, cooling sections, coating tanks, and combustion sources installed prior to April 2005 when used to support production on Roofing Lines No. 1 (L1) and No. 2 (L2) shall not exceed 92 tpy; and,
   ii. Total VOC emissions from the horizontal and vertical mix tanks, coater, cooling section, and combustion sources installed as part of the Roofing Line No. 3 (L3) installation *and* blowstills, coating tanks, and combustion sources installed prior to April 2005 when used to support production on L3 shall not exceed 99 tpy.

Sources affected by the above emissions limitations are listed in the table below:

Source ID No.	VOC Emission Factor [EF]	Fraction of Emissions Dedicated to Each Emissions Source Limit [$D_{L1,L2}$ = Emissions Dedicated to Limit in Section 2.2 B.2.a.i] [D_{L3} = Emissions Dedicated to Limit in Section 2.2 B.2.a.ii]
ESBS1, ESBS2, ESBS3	0.41 lb/ton asphalt	$D_{L1,L2}$ = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D_{L3} = (L3 Coating Usage) / (Total Coating Usage)
ESHM1, ESHM2	w/ CDESP: 0. 278 lb/ton asphalt w/ CDME: 0.278 lb/ton asphalt	$D_{L1,L2}$ = 1 D_{L3} = 0
ESHM3	0.039 lb/ton asphalt	$D_{L1,L2}$ = 0 D_{L3} = 1
ESVM3	0.007 lb/ton asphalt	$D_{L1,L2}$ = 0 D_{L3} = 1
ESLC1, ESLC2	w/ CDESP: 0.208 lb/ton asphalt w/ CDME: 0.208 lb/ton asphalt	$D_{L1,L2}$ = 1 D_{L3} = 0
ESLC3	0.029 lb/ton asphalt	$D_{L1,L2}$ = 0 D_{L3} = 1
ESCS1, ESCS2	0.023 lb/ton asphalt	$D_{L1,L2}$ = 1 D_{L3} = 0
ESCS3	0.023 lb/ton asphalt	$D_{L1,L2}$ = 0 D_{L3} = 1
ESINK	N/A *(VOC Usage)*	$D_{L1,L2}$ = 1 D_{L3} = 0
ESINK2	N/A *(VOC Usage)*	$D_{L1,L2}$ = 0 D_{L3} = 1
ESNLPA	N/A *(VOC Usage)*	$D_{L1,L2}$ = 0 D_{L3} = 1
ESCT1, ESCT2, ESCT3	w/ CDESP: 0.265 lb/ton asphalt w/ CDME: 0.265 lb/ton asphalt w/ CDRTO: 0.037 lb/ton asphalt	$D_{L1,L2}$ = 1 D_{L3} = 0
ESCT4	w/ CDESP: 0.265 lb/ton asphalt w/ CDME: 0.265 lb/ton asphalt w/ CDRTO: 0.037 lb/ton asphalt	$D_{L1,L2}$ = 0 D_{L3} = 1

Source ID No.	VOC Emission Factor [EF]	Fraction of Emissions Dedicated to Each Emissions Source Limit [$D_{L1,L2}$ = Emissions Dedicated to Limit in Section 2.2 B.2.a.i] [D_{L3} = Emissions Dedicated to Limit in Section 2.2 B.2.a.ii]
CDRTO	Natural Gas: 5.5 lb/MMscf	$D_{L1,L2}$ = 0 D_{L3} = 1
CDAFB	Natural Gas: 5.5 lb/MMscf	$D_{L1,L2}$ = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D_{L3} = (L3 Coating Usage) / (Total Coating Usage)
ESPH1, ESPH2	Natural Gas: 5.5 lb/MMscf	$D_{L1,L2}$ = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D_{L3} = (L3 Coating Usage) / (Total Coating Usage)
ESB1, ESB2	No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	$D_{L1,L2}$ = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D_{L3} = (L3 Coating Usage) / (Total Coating Usage)
ESSCH1, ESSCH2	Natural Gas: 5.5 lb/MMscf	$D_{L1,L2}$ = 1 D_{L3} = 0
ESSCH3	Natural Gas: 5.5 lb/MMscf	$D_{L1,L2}$ = 0 D_{L3} = 1
ESSCH4	Natural Gas: 5.5 lb/MMscf	$D_{L1,L2}$ = 1 D_{L3} = 0
ESHOH2	Natural Gas: 5.5 lb/MMscf	$D_{L1,L2}$ = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D_{L3} = (L3 Coating Usage) / (Total Coating Usage)
ESHOH4	Natural Gas: 5.5 lb/MMscf	$D_{L1,L2}$ = 0 D_{L3} = 1
ESCMH1, ESCMH2	Natural Gas: 5.5 lb/MMscf	$D_{L1,L2}$ = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D_{L3} = (L3 Coating Usage) / (Total Coating Usage)
ESCMH3	Natural Gas: 5.5 lb/MMscf	$D_{L1,L2}$ = 0 D_{L3} = 1
ESLFH	Natural Gas: 5.5 lb/MMscf	$D_{L1,L2}$ = 1 D_{L3} = 0

Mgal = 1,000 gallons
MMscf = million standard cubic feet

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

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test show emissions greater than the emission factors shown in the table above, the Permittee shall apply for a permit modification to amend the factors used in determining compliance with the limit given in Section 2.2 B.2.a.i or ii above.

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

c. To demonstrate compliance with the VOC limit provided in Section 2.2 B.2.a.i or ii the Permittee shall keep monthly records of the following:
   i. the amount asphalt processed in the blowstills **(ID Nos. ESBS1, ESBS2, and ESBS3)** (in tons/month);
   ii. the amount of coating asphalt applied at the coaters on Roofing Lines No. 1 and No. 2 **(ID Nos. ESLC1, ESLC2)** (in tons/month);
   iii. the amount of coating asphalt applied at the coaters on Roofing Line No. 3 **(ID No. ESLC3)** (in tons/month);
   iv. the quantity and VOC content of each type of coating used at the printing operations **(ID Nos. ESINK, ESINK2, and ESNLPA)**;
   v. the period (i.e., start-time and stop time) that each of the Roofing Line No. 1 and No. 2 control devices **(ID Nos. CDRTO, CDESP, and CDME)** was used, and the corresponding coating asphalt throughputs at each of the three roofing lines during the period; and,
   vi. the quantity and type of fuel consumed at each of the affected combustion devices **(ID Nos. CDAFB, CDRTO, ESPH1, ESPH2, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, ESSCH4, ESHOH2, ESHOH4, ESCMH1,**

ESCMH2, ESCMH3, and ESLFH) (in gallons/month or scf/month). The Permittee may allocate facility-wide fuel usage to the affected combustion sources based on the maximum firing capacity of each unit.

The Permittee shall maintain a logbook (written or in electronic format) that contains the monthly records as provided above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D. 0530 if the records are not maintained.

d. Each month the Permittee shall determine the amount of VOC emitted to the atmosphere from the affected sources during the previous calendar month using Eqn. 5 and Eqn. 6:

Eqn. 5:

$$E_{VOC} = \frac{\sum_{(ESBS1, ESBS2, ESBS3, ESHM1, ESHM2, ESLC1, ESLC2, ESCS1, ESCS2, ESCT1, ESCT2, ESCT3)} EF_{ID} * Throughput * D_{L1,L2} + \sum_{(CDAFB, ESPH1, ESPH2, ESSH1, ESSH2, ESB1, ESB2, ESSCH1, ESSCH2, ESHOH2, ESCMH1, ESCMH2, ESLFH)} EF_{ID} * FuelUsage * D_{L1,L2} + \sum_{(ESINK)} Q_i * \frac{C_i}{100}}{2{,}000\, lb/ton}$$

Eqn. 6:

$$E_{VOC} = \frac{\sum_{(ESBS1, ESBS2, ESBS3, ESHM3, ESVM3, ESLC3, ESCS3, ESCT4)} EF_{ID} * Throughput * D_{L3} + \sum_{(CDAFB, CDRTO, ESPH1, ESPH2, ESB1, ESB2, ESSCH3, ESHOH2, ESCM1, ESCM2, ESCMH3, ESHOH4)} EF_{ID} * FuelUsage * D_{L3} + \sum_{(ESINK2, ESNLPA)} Q_i * \frac{C_i}{100}}{2{,}000\, lb/ton}$$

where:

E_{VOC} = VOC emissions (ton/month);
EF_{ID} = VOC emission factor for the Source ID No. (as provided in table);
$D_{L1,L2}$ = Fraction of emissions from the Source ID No. contributing to the emission limit provided in Section 2.2 B.2.a.i (as provided in table);
D_{L3} = Fraction of emissions from the Source ID No. contributing to the emission limit provided in Section 2.2 B.2.a.ii (as provided in table);
Q_i = Quantity of coating (*i*) consumed at the affected printing operation(s) (in gal/month); and,
C_i = VOC content of the coating (*i*) (in % by weight).

The Permittee shall maintain a logbook (written or in electronic format) that contains the monthly records of the emissions calculations as provided above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the records are not maintained.

e. Each month the Permittee shall calculate the total VOC emissions from the affected sources for the previous consecutive 12-month period. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the records are not maintained or if the 12-month rolling VOC emissions are in exceedance of the limit given in Section 2.2 B.2.a.i or ii above.

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

f. The Permittee shall submit a semiannual summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall include VOC emissions totals for each 12-month period for the previous 17 months. All instances of deviations from the requirements of this permit must be clearly identified.

g. The Permittee shall submit an application for a permit modification each time an emission factor, as provided in the table above, is revised. Factors provided in U.S. EPA's AP-42 shall be excluded from this requirement (i.e., no permit modification is required for U.S. EPA AP-42 updates).

3. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS
for 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

PM_{10} PSD Avoidance Limits

a. In order to avoid the applicability of 15A NCAC 02D .0530, the Permittee shall limit PM_{10} emissions from the entire facility to less than 250 tons per year based on a 12-month rolling average.

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

b. To ensure compliance with the above limit the Permittee shall keep monthly records of the total asphalt processed through the three blowstills (**ESBS1 through ESBS3**). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the asphalt processed through the three blowstills are not recorded or if the 12-month rolling total asphalt processed from the three blowstills (**ESBS1 through ESBS3**) is greater than 350,000 tons per year.

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

c. The Permittee shall submit a semiannual 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 total asphalt processed from the three blowstills (**ESBS1 through ESBS3**) for the previous 17 months.
   ii. All instances of deviations from the requirements of this permit must be clearly identified.

C. Facility-wide

State-enforceable only

1. 15A NCAC 02D .1100: TOXIC AIR POLLUTANT EMISSIONS LIMITATIONS

a. The Permittee has submitted a toxic air pollutant dispersion modeling analysis dated June 19, 2008 for the facility's toxic air pollutant emissions as listed in the above table. The modeling analysis was reviewed and approved by the AQAB on July 1, 2008. Placement of the emission sources, configuration of the emission points, and operation of the sources shall be in accordance with the submitted dispersion modeling analysis and should reflect any changes from the original analysis submittal as outlined in the AQAB review memo.

Toxic Air Pollutant	Emission Limits
Benzene*	4,021 lb/yr

* Affected sources: ESBS1, ESBS2, ESBS3, ESHM1, ESHM2, ESMA1, ESMA3, ESMA2, ESLC1, ESLC2, ESSEA2, ESMS2, ESSA1, ESSA2, ESWIP1, ESSEA1, ESCT1, ESCT2, ESCT3, ESCT4, ESFST1, ESFST2, ESFT1, ESFT2, ESFT3, ESST1, ESSDT, ESCS1, ESCS2, ESLA1, ESSA3, ESSA4, ESHM3, ESVM3, ESLC3, ESLA2, ESLAT3, ESLAT4, ESSA6, ESSEA3, ESSEA4, ESAC20, ESMA8, ESMA10, ESFST3, ESFST4, ESLA3, ESLA4, ESLA5), ESLAT6, ESLAT7, ESSA5, ESSEA6, and ESNLPA2

b. The Permittee shall demonstrate compliance with the above limitations as follows:
   i. No monitoring, recordkeeping, or reporting is required for uncontrolled emission sources **(ID Nos. ESCS1, ESCS2, ESCS3, and L8)**.
   ii. For all other affected emission sources, the Permittee shall comply with the applicable standards, monitoring, and recordkeeping requirements provided in Section 2.2 A.1 of this permit.

State-enforceable only

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

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

2.3 - Compliance Assurance Monitoring

1. 15A NCAC 02D .0614: COMPLIANCNCE ASSURANCE MONITORING

a. To assure compliance with 15A NCAC 02D .0515 and 15A NCAC 02D .0524 (40 CFR Part 60 Subpart UU), the Permittee must ensure that PM_{10} emitted from these sources **(ID Nos. ESBS1, ESBS2, ESBS3, ESHM1, ESHM3, and ESLC3)** are controlled by the afterburner (**ID No. CDAFB**), electrostatic precipitator (**ID No. CDESP**), mist eliminator (**ID No. CDME**), and regenerative thermal oxidizer (**ID No. CDRTO**) by monitoring the following operating parameters:

i. Combustion temperature for the afterburner (CDAFB) and regenerative thermal oxidizer (CDRTO) and

ii. Pressure drop for the electrostatic precipitator (CDESP) and mist eliminator (CDME).

Monitoring Approach

b. The key element of the monitoring approach are presented in the following table:

Indicator [64.6(c)(1)(i)]	**Combustion temperature for CDAFB and CDRTO**	**Pressure Drop for CDESP and CDME**
Measurement Approach [64.6(c)(1)(ii)]	Temperatures is indicated by a continuous monitoring systems (CMS) as per requirements of 2.2 A.1 of this permit.	Temperature and Pressure are indicated by a continuous monitoring systems (CMS) as per requirements of 2.2 A.1.k of this permit for (CDESP) and as per requirements of 2.2 A.1.lof this permit for (CDME)
Indicator Range [64.6(c)(2)]	An excursion is defined as a 30-minute sustained value of: 1) below 1,463 degrees Fahrenheit for (ID No. CDAFB) and 2) below 1,590 degrees Fahrenheit for (ID No. CDRTO), as per requirements of 2.2 A.1 of this permit. An alarm will sound prior to reaching an excursion level. Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as a 1-hour sustained value of: 1) below 0.1 or above 0.9 inches of H_2O for (CDESP) and 1) below 1.0 or above 19.6 inches of H_2O for (CDME) as per requirements of 2.2 A.1.k and 2.2 A.1.l of this permit. An alarm will sound prior to reaching an excursion level. Excursions trigger an inspection, corrective action, and a reporting requirement.
Quality Improvement Plan (QIP) Threshold [64.8]	Six excursions, as defined above, within any 6-month period.	Six excursions, as defined above, within any 6-month period.
QA/QC Practices and Criteria [64.3(b)(3)]	The CMS are calibrated as per the requirements of 2.2 A.1 of this permit.	The CMS are calibrated as per the requirements of 2.2 A.1 of this permit
Monitoring Frequency [64.3(b)(4)]	Temperature is monitored every 15 minutes as per the requirements of 2.2 A.1 of this permit while control devices are in operation.	Temperature and Pressure are monitored every 15 minutes as per the requirements of 2.2 A.1 of this permit while control devices are in operation.

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

c. The Permittee must retain records of recorded CMS data, each excursion report, and each corrective action taken. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0614 if these records are not retained.

d. The permittee shall comply with the recordkeeping requirements of 40 CFR 64.9 (b) and submit a summary report of the monitoring and recordkeeping activities 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.

SECTION 3 - INSIGNIFICANT ACTIVITES PER 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description[1,2]
IMSMT	modified sealant mix tank, controlled by an electrostatic precipitator (CDESP) or mist eliminator (CDME) – control devices operated in parallel
IDELF	dry end loading of fiberglass
I2PW	two parts washers
IGU	glue usage
IGML	Grand Manor off-line laminator
IIL	Independence off-line laminator
IAL	Accessory off-line laminator
IV	portable vacuum
IN2FO	75,000 gallon No. 2 fuel oil / used oil storage tank
IN6FO	75,000 gallon used oil storage tank
IFCT	ferric chloride tank
I2N2FO	two small diesel fuel tanks
IK	small kerosene tank
I2BA	two bulk adhesive tanks for off-line laminators
I2S	five Sweco
IGUHS	granule unloading, handling, and storage
IMA4	plasticizer preheat tank
IGT	granule trans loader
IMA6	plasticizer storage totes
IFWP	No. 2 fuel oil fired fire water pump, rated 175 horsepower
IHEAT	three electric circulation heaters
IPUMP	five 200 gpm Viking pumps
IRHeater	Infrared heater
I-ESFST-burners **(MACT DDDDD)**	Two natural gas-fired burners (less than 10 MMBtu/hr, each) for tanks (ESFST3 and ESFST4).

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

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

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

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

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application(s) and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

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

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

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

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

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

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

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

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

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

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

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

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

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

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

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

J. **RESERVED**

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

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

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]
It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]
1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508(l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all terms and conditions in the permit (including emissions limitations, standards, or work practices), except for conditions identified as being State-enforceable Only. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:
1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent;
4. the method(s) used for determining the compliance status of the source during the certification period;
5. each deviation and take it into account in the compliance certification; and
6. as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (CAM) occurred.

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

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

d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.

3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

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

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

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

1. A permit shall be reopened and revised under the following circumstances:
    a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
    b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
    c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
    d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.

4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

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

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

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

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

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