



North Carolina Department of Environment and Natural Resources
Division of Air Quality

Beverly Eaves Purdue
Governor

B. Keith Overcash, P.E.
Director

Dee Freeman
Secretary

XXX xxx, 2009

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

SUBJECT: Air Quality Permit No. 03663T26
Facility ID: 3900040
CertainTeed Corporation
Oxford, Granville County
Fee Class: Title V

Dear Mr. Heilman:

In accordance with your completed Air Quality Permit Application for a Renewal of a Title V air quality permit received XXX xxx, 2009, we are forwarding herewith Air Quality Permit No. 03663T26 to CertainTeed Corporation in Oxford, North Carolina authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503 have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3 of Part I. **The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.**

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

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with **both** the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting

Permitting Section
1641 Mail Service Center, Raleigh, North Carolina 27699-1641
2728 Capital Blvd., Raleigh, North Carolina 27604
Phone: 919-715-6235 / FAX 919-733-5317 / Internet: www.ncair.org

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Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

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

This Air Quality Permit shall be effective from XXX xxx, 2009 until XXX xxx, 2013, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Gautam Patnaik at (919) 715-6246.

Sincerely yours,

Donald R. van der Vaart, Ph.D., P.E.,
Chief

Enclosure

cc: Gregg Worley, EPA Region 4
Raleigh Regional Office
Central Files

**ATTACHMENT I:
Insignificant Activities Pursuant to 15A NCAC 2Q .0503(8)**

Emission Source ID No.	Emission Source Description
IHOH1	hot oil heater No. 1
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
ISRP	propane-fired shrink wrap process
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 storage tank
IN6FO	75,000 gallon No. 6 fuel 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	two Sweco
IGUHS	granule unloading, handling, and storage
IMA4	plasticizer preheat tank
IGT	granule trans loader
IMA5	plasticizer storage tank
IMA6	plasticizer storage totes
IFWP	No. 2 fuel oil fired fire water pump, rated 175 horsepower
IRC	Electric oven for Line 8 ridge cap production
IHEAT	three electric circulation heaters
IPUMP	five 200 gpm Viking pumps
I laser8	Line 8 laser etching
IRHeater	Infrared heater

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source 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 2D .1100 “Control of Toxic Air Pollutants” or 15A NCAC 2Q .0711 “Emission Rates Requiring a Permit”.



AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
03663T26	03663T25	XXX xxx, 2009	XXX xxx, 2019

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 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, 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

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:

3900040.08E

Complete Application Date:

December 4, 2008

Primary SIC Code:

2952

Division of Air Quality,

Raleigh Regional Office

Regional Office Address:

3800 Barrett Drive

Raleigh, North Carolina, 27609

Permit issued this the xxth day of XXX, 2009

Donald R. van der Vaart, Ph.D., P.E., Chief, Air Permits Section
By Authority of the Environmental Management Commission

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ATTACHMENT

List of Acronyms

The Division of Air Quality (DAQ), the United States Environmental Protection Agency (EPA), and citizens as defined under the Federal Clean Air Act have the authority to enforce the terms, conditions, and limitations contained in the permit unless otherwise specified.

Under Title 15A NCAC 2Q, the operation of emission source(s) and associated air pollution control device(s) and appurtenances listed in this permit is based on plans, specifications, operating parameters, and other information as submitted in the Air Quality Permit Application.

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 MACT LLLLL	Blowstill No. 1	CDAFB ⁴	Natural gas/No. 2 fuel oil-fired afterburner; not greater than 20 million Btu per hour heat input
ESBS2 MACT LLLLL	Blowstill No. 2		
ESBS3 NSPS UU MACT LLLLL	Blowstill No. 3		
ESLC1 NSPS UU MACT LLLLL	Line No. 1 fiberglass mat coater	CDESP	Electrostatic Precipitator; 3,406 square feet of collecting plate area
ESLC2 NSPS UU MACT LLLLL	Line No. 2 fiberglass mat coater	-or- CDME	-or- Mist Eliminator
ESMA1	Modified asphalt batch process tank		
ESMA2	Modified asphalt mix process tank		
ESMA3 NSPS UU MACT LLLLL	Modified asphalt 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 ² MACT LLLLL	Line No. 1 sealant applicator pan		
ESSA2 ² MACT LLLLL	Line No. 2 sealant applicator pan		
ESWIP1 ² MACT LLLLL	Line No. 1 overlay inking pan		
ESMS2 ² NSPS UU MACT LLLLL	Modified sealant recirculation tank; 500 gal		

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ESHM1 MACT LLLLL	Limestone/asphalt mixer No. 1		
ESHM2 MACT LLLLL	Limestone/asphalt mixer No. 2		
**ESLA3 MACT LLLLL **ESLA4 MACT LLLLL **ESLA5 MACT LLLLL **ESLAT6 MACT LLLLL NSPS UU **ESLAT7 MACT LLLLL NSPS UU **ESSA6 MACT LLLLL **ESSEA6 MACT LLLLL NSPS UU	Laminator pan for Line No. 1 Laminator pan for Line No. 1 Laminator pan for Line No. 1 One 80 gallon laminate use tank for Line No. 1 One 140 gallon laminate use tank for Line No. 1 One sealant applicator pan for Line No. 1 One 80 gallon sealant use tank for Line No. 1	**CDFTR2	Ceco filter
**ESNLPA2	Nail paint line applicator for Line No. 1	N/A	N/A
ESFT1 MACT LLLLL ESFT2 MACT LLLLL ESFT3 MACT LLLLL ESFST1 MACT LLLLL ESFST2 MACT LLLLL ESST1 MACT LLLLL ESSDT MACT LLLLL ESLAT2 NSPS UU MACT LLLLL	No. 1 flux preheat tank No. 2 flux preheat tank No. 3 flux preheat tank No. 1 flux storage tank; 150,000 gal No. 2 flux storage tank; 150,000 gal No. 1 saturant tank; 40,000gal Sealant tank; 30,000 gal Laminating adhesive tank; 27,000 gal	CDME3 ⁴ -and- CDRTO ³ -or- CDESP -or- CDME	Mist Eliminator, followed by a -and- Regenerative Thermal Oxidizer (RTO), 5.6 million Btu per hour heat input -or- Electrostatic Precipitator; 3,406 square feet of collecting plate area -or- Mist Eliminator

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
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 ⁴ -and- CDRTO ³ -or- CDESP -or- CDME	Mist Eliminator, followed by a -and- Regenerative Thermal Oxidizer (RTO), 5.6 million Btu per hour heat input -or- Electrostatic Precipitator; 3,406 square feet of collecting plate area -or- Mist Eliminator
ESAC20 ³ NSPS UU MACT LLLLL	Line No. 3 AC-20 asphalt storage tank; 30,000 gal	CDME3 ⁴ -and- CDRTO ³	Mist Eliminator, followed by a -and- Regenerative Thermal Oxidizer (RTO), 5.6 million Btu per hour heat input
ESLC3 ³ NSPS UU MACT LLLLL	Line No. 3 fiberglass mat coater		
ESMA8 ³ NSPS UU MACT LLLLL	Line No. 3 laminate swell tank		
ESLAT3 ³ NSPS UU MACT LLLLL	Line No. 3 laminate adhesive day tank		
ESLAT4 ³ NSPS UU	Line No. 3 laminate adhesive use tank		
ESMA10 ³ NSPS UU MACT LLLLL	Line No. 3 sealant swell tank		
ESSEA3 ³ NSPS UU MACT LLLLL	Line No. 3 sealant adhesive day tank		
ESSEA4 ³ NSPS UU	Line No. 3 sealant adhesive use tank		
ESSA5 ³ NSPS UU MACT LLLLL	Line No. 3 sealant applicator		

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ESLA2 ³ NSPS UU MACT LLLLL	Line No. 3 laminating adhesive applicator		
ESHM3 ³ MACT LLLLL	Line No. 3 horizontal mixer		
ESVM3 ³ MACT LLLLL	Line No. 3 vertical mixer		
ESLA1 MACT LLLLL	Line No. 2 laminating adhesive applicator wheel	CDFTR ²	Coalescing Air Filter
ESSA3 MACT LLLLL	Line No. 2 sealant applicator gun		
ESSA4 MACT LLLLL	Line No. 2 sealant applicator pan		
Sand 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 ³	Sand truck dump and conveyor system	CDDC25 ^{3,4}	Baghouse (maximum air-to-cloth ratio, 4.0:1)
ESSS1 ³ NSPS UU	Sand silo No. 1	CDDC25 ^{3,4}	Baghouse (maximum air-to-cloth ratio, 4.0:1)
ESSS2 ³ NSPS UU	Sand silo No. 2	CDDC25 ^{3,4}	Baghouse (maximum air-to-cloth ratio, 4.0:1)
ESBSB1 ³	Line No. 1 sand transfer system	CDDC22 ^{3,4}	Baghouse (maximum air-to-cloth ratio, 1:1)
ESBSB2 ³	Line No. 2 sand transfer system	CDDC23 ^{3,4}	Baghouse (maximum air-to-cloth ratio, 1:1)
ESBSB3 ³	Line No. 3 sand transfer system	CDDC17 ^{3,4}	Baghouse (maximum air-to-cloth ratio, 1:1)
Granule and Headlap Systems			
ESHLT ³ NSPS UU	Headlap unload and transfer system	CDDC16 ⁴ -or- CDDC24 ^{3,4}	Baghouse (maximum air-to-cloth ratio, 4.9:1) Baghouse (maximum air-to-cloth ratio, 4.8:1)
ESHLS ³ NSPS UU	Two (2) headlap storage silos	CDDC24 ^{3,4}	Baghouse (maximum air-to-cloth ratio, 4.8:1)
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)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ESTSV	Talc silo	CDDC8	Baghouse (151 square feet of filter area)
Limestone Processing System			
ESLSH ³ NSPS 000	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 000	Crushing mill/product cyclone No. 1	CDDC12	Baghouse (maximum air-to-cloth ratio, 4.8:1)
ESCMH1	Natural gas/No. 2 fuel oil direct fired heater for Crushing Mill No. 1; 3.5 million Btu per hour heat input	CDDC12	Baghouse (maximum air-to-cloth ratio, 4.8:1)
ESCM2 NSPS 000	Crushing mill/product cyclone No. 2	CDDC13	Baghouse (maximum air-to-cloth ratio, 4.8:1)
ESCMH2	Natural gas/No. 2 fuel oil direct fired heater for Crushing Mill No. 2; 3.5 million Btu per hour heat input	CDDC13	Baghouse (maximum air-to-cloth ratio, 4.8:1)
ESCM3 ³ NSPS 000	Crushing mill/product cyclone No. 3	CDDC19 ³	Baghouse (maximum air-to-cloth ratio, 4.0:1)
ESCMH3	Natural gas/No. 2 fuel oil direct fired heater for Crushing Mill No. 3; 7.0 million Btu per hour heat input	CDDC19 ³	Baghouse (maximum air-to-cloth ratio, 4.0:1)
ESLSV1	Crushed limestone silo No. 1	CDDC18 ^{3,4}	Baghouse (maximum air-to-cloth ratio, 3.7:1)
ESLSV2	Crushed limestone silo No. 2	-or-	-or-
ESLSV3 ³ NSPS UU	Crushed limestone silo No. 3	CDDC7	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 ³	Line No. 3 limestone use bin	CDDC15 ^{3,4}	Baghouse (maximum air-to-cloth ratio, 3.8:1)
ESHFB ³	Line No. 3 limestone hot filler bin	CDDC15 ^{3,4}	Baghouse (maximum air-to-cloth ratio, 3.8:1)
ESLFH	Natural gas/No. 2 fuel oil 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 ³	Line No. 3 filler heater and transfer system	CDDC15 ^{3,4}	Baghouse (maximum air-to-cloth ratio, 3.8:1)
Miscellaneous Sources			
ESDML3 ³	Line No. 3 dry mat looper	CDDC14 ^{3,4}	Baghouse (maximum air-to-cloth ratio, 5.1:1)
ESBSP1	Line No. 1 surfacing/backsurfacing process	CDDC9	Baghouse (2,490 square feet of filter area)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ESBSP2	Line No. 2 surfacing/backsurfacing process	CDDC10	Baghouse (1,937 square feet of filter area)
ESBSP3 ³	Line No. 3 surfacing/backsurfacing process	CDDC14 ^{3,4}	Baghouse (maximum air-to-cloth ratio, 5.1:1)
ESCS1	Line No. 1 cooling section	N/A	N/A
ESCS2	Line No. 2 cooling section	N/A	N/A
ESCS3 ³	Line No. 3 cooling section	N/A	N/A
ESINK	Inkjet package labeling	N/A	N/A
ESINK2 ³	Line No. 3 inkjet package labeling	N/A	N/A
ESNLPA ³	Line No. 3 nail line paint applicator	N/A	N/A
Line No. 8 – Polypropylene Roofing Product Manufacturing			
L8RMH ⁵	Raw Material Handling, including conveyors, an electrical/desiccant dryer, and weigh blender	L8RMHDC ⁵	Baghouse (maximum air-to-cloth ratio, 5:1)
L8 ⁵	Extrusion Process, including ten (10) core/cap extruder pairs	N/A	N/A
Indirect-Fired Combustion Sources			
ESPH1	Natural gas/No. 2 and No. 6 fuel oil-fired flux preheater No. 1; 11.3 million Btu per hour heat input	N/A	N/A
ESPH2	Natural gas/No. 2 and No. 6 fuel oil-fired flux preheater No. 2; 11.3 million Btu per hour heat input	N/A	N/A
ESSH1	Natural gas/No. 2 and No. 6 fuel oil-fired saturant heater No. 1; 11.3 million Btu per hour heat input	N/A	N/A
ESCH3	Natural gas/No. 2 and No. 6 fuel oil-fired saturant heater No. 2; 11.3 million Btu per hour heat input	N/A	N/A
ESB1	Natural gas/No. 2 and No. 6 fuel oil-fired boiler No. 1; 16.7 million Btu per hour heat input	N/A	N/A
ESB2	Natural gas/No. 2 and No. 6 fuel oil-fired boiler No. 2; 16.7 million Btu per hour heat input	N/A	N/A
ESSCH1	Natural gas/No. 2 fuel oil-fired shingle coating heater No. 1; 4.7 million Btu per hour heat input	N/A	N/A
ESSCH2	Natural gas/No. 2 fuel oil-fired shingle coating heater No. 2; 4.7 million Btu per hour heat input	N/A	N/A
ESSCH3	Natural gas/No. 2 and No. 6 fuel oil-fired shingle coating heater No. 3; 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
ESHOH2	Natural gas/No. 2 fuel oil-fired hot oil heater No. 2; 5.0 million Btu per hour heat input	N/A	N/A
ESHOH4 ³ NSPS DC	Natural gas/No. 2 fuel oil-fired hot oil heater No. 2; 15.0 million Btu per hour heat input	N/A	N/A
*ESBLR1	Natural gas/No. 2 fuel oil-fired boiler (less than 10.0 million Btu per hour heat input)	NA	NA
Other Utility			
ESEDG ¹ MACT ZZZZ	2,500 kw diesel-fired emergency generator	N/A	N/A

¹ This emission source is listed as a minor modification per 15A NCAC 2Q .0515. The compliance certification as described in General Condition P is required. Unless otherwise notified by NC DAQ, the affected terms of this permit (excluding the permit shield as described General Condition R) for this source shall become final on **November 27, 2004**. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source under pursuant to 15A NCAC 2Q .0515(f).

² These emission sources and control device are listed as a 502(b)(10) change per 15A NCAC 2Q .0523. The permit shield described in General Condition R does not apply.

³ These emission sources and control devices are listed as a 15A NCAC 2Q .0501(c)(2) modification. The permit shield described in General Condition R does not apply.

⁴ This emission source and/or control device is listed as a minor modification per 15A NCAC 2Q .0515. The compliance certification as described in General Condition P is required. Unless otherwise notified by NC DAQ, the affected terms of this permit (excluding the permit shield as described General Condition R) for this source shall become final on **December 22, 2007**. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source under pursuant to 15A NCAC 2Q .0515(f).

⁵ These emission sources (ID No. L8RMH, and L8) and control device (ID No. L8RMHDC) is listed as a minor modification per 15A NCAC 2Q .0515. The compliance certification as described in General Condition P is required. Unless otherwise notified by NC DAQ, the affected terms of this permit (excluding the permit shield as described General Condition R) for this source shall become final on **January 12, 2008**. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source under pursuant to 15A NCAC 2Q .0515(f).

* These emission sources (ID Nos. ESFS4, ESFS5, and ESBLR1) are listed as a minor modification per 15A NCAC 2Q .0515. The compliance certification as described in General Condition P is required. Unless otherwise notified by NC DAQ, the affected terms of this permit (excluding the permit shield as described General Condition R) for this source shall become final on March 1, **2009**. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source under pursuant to 15A NCAC 2Q .0515(f).

** The three laminate application pans (ID Nos. ESLA3, ESLA4, and ESLA5), two laminate use tanks (ID Nos. ESLAT6 and ESLAT7), one laminate day tank (ID No. ESMA7), one sealant applicator pan (ID No. ESSA6), one sealant use tank (ID No. ESSEA6), one sealant day tank (ID No. ESMA9), nail paint line applicator (ID No. ESNLPA2) and Ceko air filter (ID No. CDFTR2) are listed as a minor modification per 15A NCAC 2Q .0515. The compliance certification as described in General Condition P is required. Unless otherwise notified by NC DAQ, the affected terms of this permit (excluding the permit shield as described General Condition R) for this source shall become final on May 24, 2009. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source under pursuant to 15A NCAC 2Q .0515(f).

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

- A. 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:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	Affected Sources: ESBS1 & ESBS2 Particulate emissions shall not exceed the rate prescribed by the process weight 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 lb/hr), and P = process weight (in ton/hr).	15A NCAC 2D .0515
Visible emissions	Affected Sources: ESBS1 & ESBS2 visible emissions shall not exceed 20 percent opacity	15A NCAC 2D .0521
PM	Affected Source: ESBS3 Comply with 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681	15A NCAC 2D .0524 (40 CFR 60, Subpart UU)
Visible emissions	Affected Source: ESBS3 Comply with 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681	15A NCAC 2D .0524 (40 CFR 60, Subpart UU)
HAPs	See Section 2.2 i. 1. (Multiple Emission Sources-MACT, Existing Affected Asphalt Processing Facility)	15A NCAC 2D .1111 (40 CFR 63, Subpart LLLLL)
SO ₂	See Section 2.2 ii. 1. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
NO _x	See Section 2.2 ii. 2. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
VOC	See Section 2.2 ii.3. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
TAPs	See Section 2.2 iii.(Multiple Emission Sources-Control of Toxic Air Pollutants) state-enforceable only	15A NCAC 2D .1100
TAPs	See Section 2.2 iv. 1 (Multiple Emission Sources-Toxic Pollutant Exemption rates) STATE-ENFORCEABLE ONLY	15A NCAC 2Q .0705 & 15A NCAC 2Q .0711
VOC	See Section 2.2 iv. 2. (Multiple Emission Sources-Work Practice Standards for VOC Control)	15A NCAC 2D .0958
odor	See Section 2.2 iv. 3. (Multiple Emission Sources-Odor Control requirements) STATE-ENFORCEABLE ONLY	15A NCAC 2D .1806

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from each affected source (**ID Nos. ESBS1 and ESBS2**) shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

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 02D .2601]

- 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 A. 1. a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- c. Particulate matter emissions from the emission sources shall be controlled with an afterburner (**ID No. CDAFB**). In order to assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. The inspections shall include a monthly external visual inspection of the unit's structural integrity, at a minimum. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the control device is 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 2D .0515 if these records are not maintained.

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

- e. The Permittee shall submit the results of any maintenance performed on the control device (**ID No. CDAFB**) 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 2D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from each affected source (**ID Nos. ESBS1 and ESBS2**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 02D .2601]

- 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 A.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure 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. 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 A.2.a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .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 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .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 2D .0524: NSPS FOR ASPHALT PROCESSING AND ASPHALT ROOFING MANUFACTURE (40 CFR 60, Subpart UU)

- a. The Permittee shall not allow to be discharged into the atmosphere from Blowstill No. 3 (**ID No. 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.
- b. The Permittee shall not allow to be discharged into the atmosphere from Blowstill No. 3 (**ID No. ESBS3**) exhaust gases with opacity greater than zero percent.

Testing/Monitoring/Recordkeeping/Reporting [15A NCAC 02D .2601]

- c. 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 2D .0524 if these 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 batch process tank (ID No. ESMA1);
Modified asphalt mix process tank (ID No. ESMA2);
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); 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:

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);
Laminating adhesive tank (ID No. ESLAT2);
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:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	<p>Affected Sources: ESMA1, ESMA2, 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, and ESLAT2</p> <p>Particulate emissions shall not exceed the rate prescribed by the process weight 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 lb/hr), and P = process weight (in ton/hr).</p>	15A NCAC 2D .0515
Visible emissions	<p>Affected Sources: ESMA1, ESMA2, 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</p> <p>Visible emissions shall not exceed 20 percent opacity</p>	15A NCAC 2D .0521
PM	<p>Affected Sources: Coaters (ESLC1, ESLC2, and ESLC3)</p> <p>Comply with 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681</p>	15A NCAC 2D .0524 (40 CFR 60, Subpart UU)
Visible emissions	<p>Affected Sources: Coaters (ESLC1, ESLC2, and ESLC3) Asphalt Storage Tanks (ESMA3, ESMS2, ESAC20, ESMA8, ESLAT3, ESLAT4, ESMA10, ESSEA3, ESSEA4, and ESLAT2)</p> <p>Comply with 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681</p>	15A NCAC 2D .0524 (40 CFR 60, Subpart UU)
HAPs	See Section 2.2 i. 1 (Multiple Emission Sources-MACT, Existing Affected Asphalt Processing Facility and Asphalt Roofing Manufacturing Lines.	15A NCAC 2D .1111 (40 CFR 63, Subpart LLLLL)

Regulated Pollutant	Limits/Standards	Applicable Regulation
SO ₂	See Section 2.2 ii. 1. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
NO _x	See Section 2.2 ii. 2. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
VOC	See Section 2.2 ii. 3. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
TAPs	See Section 2.2 iii.. (Multiple Emission Sources-Toxic Pollutant Exemption rates) STATE ENFORCEABLE ONLY	15A NCAC 2Q .0705 & 15A NCAC 2Q .0711
TAPs	See Section 2.2 iv. 1 (Multiple Emission Sources-Toxic Pollutant Exemption rates) STATE-ENFORCEABLE ONLY	15A NCAC 2Q .0705 & 15A NCAC 2Q .0711
VOC	See Section 2.2 iv. 2. (Multiple Emission Sources-Work Practice Standards for VOC Control)	15A NCAC 2D .0958
odor	See Section 2.2 iv. 3. (Multiple Emission Sources-Odor Control requirements) STATE ENFORCEABLE ONLY	15A NCAC 2D .1806

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from each affected source (**ID Nos. ESMA1, ESMA2, ESSEA1, ESSEA2, ESSA1, ESSA2, ESWIP1, ESFT1, ESFT2, ESFT3, ESFST1, ESFST2, ESST1, ESSDT, ESLAT2, 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.

- b. Each NSPS-affected tank vented to a control device shared with a coater (**ID Nos. ESMA3, ESMS2, ESLAT2, ESAC20, ESMA8, ESLAT3, ESLAT4, ESMA10, ESSEA3, and ESSEA4**) shall comply with the particulate matter emission standard provided in Section 2.1 B.1 a., above, *when the coater is not operating*.

Testing [15A NCAC 02D .2601]

- c. 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. & b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Inspection/Maintenance [15A NCAC 2Q .0508(f)]

- d. Particulate matter emissions from the emission sources shall be controlled as provided in the source description above. To assure 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 2D .0515 if the control devices are not inspected and maintained.
- e. 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 2D .0515 if these records are not maintained.

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

- f. 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 2D .0515 if temperature falls below the requirement provided in Section 2.2.A.1.h. of this permit.
- g. 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 2D .0515 if these records are not maintained.
- h. 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 2D .0515 if these records are not maintained.

Reporting [15A NCAC 2Q .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 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 2D .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. [15A NCAC 2D .0521 (d)]

Testing [15A NCAC 02D .2601]

- 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 2D .0521.

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

- c. To assure 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. The Permittee shall establish "normal" for the sources (ESFST3, and ESFST4) in the first 30 days following the operation of the sources. 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.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 2Q .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 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .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 2D .0524: NSPS UU - ASPHALT PROCESSING AND ASPHALT ROOFING MANUFACTURE

- a. 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.
- b. The Permittee shall limit emissions to the atmosphere from tanks sharing a control device with a coater (**ID Nos. ESMA3, ESMS2, ESLAT2, ESAC20, ESMA8, ESLAT3, ESLAT4, ESMA10, ESSEA3, and ESSEA4**) 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 by passed during this 15-minute period.

[40 CFR 60.472(c)]

Testing/Monitoring/Recordkeeping/Reporting [15A NCAC 02D .2601]

- 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 2D .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:

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	<p>Affected Sources: ESPSTS, ESGS, ESBSB1, ESBSB2, ESBSB3, ESRTC2, ESPTR2, ESTSV, ESLSV1, ESLSV2, ESLSV3, ESLUBV1, ESLUBV2, ESHFB, ESLFH, ESLFH2</p> <p>Particulate emissions shall not exceed the rate prescribed by the process weight equations:</p> <p>For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$</p> <p>For process rates greater than 30 tons per hour: $E = 55.0 \times P^{0.11} - 40$</p> <p>Where: E = allowable emission rate (in lb/hr), and P = process weight (in ton/hr).</p>	15A NCAC 2D .0515
SO ₂	<p>Affected Source: ESLFH, ESCMH1, ESCMH2, ESCMH3</p> <p>Sulfur dioxide emission shall not exceed 2.3 pounds per million Btu heat input, including contributions from raw materials</p>	15A NCAC 2D .0516
visible emissions	<p>Affected Sources: ESBSB1, ESBSB2, ESBSB3, ESRTC2, ESPTR2, ESTSV, ESLSV1, ESLSV2, ESLUBV1, ESLUBV2, ESHFB, ESLFH, ESLFH2</p> <p>Visible emissions shall not exceed 20 percent opacity</p>	15A NCAC 2D .0521
visible emissions	<p>Affected Sources: ESPSTS, ESGS, ESSTS, ESSS1, ESSS2, ESHLT, ESHLS, ESLSV3</p> <p>Visible emissions shall not exceed one percent opacity</p>	15A NCAC 2D .0524 (40 CFR 60, Subpart UU)

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	Affected Sources: ESCM1, ESCM2, ESCM3 0.022 grains/dscf -stack emission	15A NCAC 2D .0524 (40 CFR 60, Subpart 000)
visible emissions	Affected Sources: ESLSH, ESCM1, ESCM2, ESCM3 7 percent opacity - stack emission 10 percent opacity fugitive emission	15A NCAC 2D .0524 (40 CFR 60, Subpart 000)
SO ₂	Affected Source: ESLFH See Section 2.2 ii. 1. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
NO _x	Affected Source: ESLFH See Section 2.2 ii. 2 (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
VOC	Affected Source: ESLFH See Section 2.2 ii. 3. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317

1. 15A NCAC 2D .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 02D .2601]

- 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 2D .0515.

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

- c. Particulate matter emissions from the affected sources shall be controlled by fabric filtration as delineated in the equipment list. To assure 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 2D .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 2D .0515 if these records are not maintained.

Reporting [15A NCAC 2Q .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 2D .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 2D .0516]

Testing [15A NCAC 02D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ found in Section 3. 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 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f) and 15A NCAC 15A NCAC 02D .2601]

- c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from natural gas and No. 2 fuel oil combustion.

3. 15A NCAC 2D .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 2D .0521(d)]

Testing [15A NCAC 02D .2601]

- 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 2D .0521.

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

- c. To assure 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.

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 2D .0521.

Recordkeeping [15A NCAC 2Q .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 2D .0521 if these records are not

maintained.

Reporting [15A NCAC 2Q .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 2D .0524: NSPS UU - ASPHALT PROCESSING AND ASPHALT ROOFING MANUFACTURE

- a. 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 02D .2601]

- b. 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 2D .0524.

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

- c. To assure 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 2D .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 2D .0524.

Recordkeeping [15A NCAC 2Q .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 2D .0524 if these records are not maintained.

Reporting [15A NCAC 2Q .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.

5. 15A NCAC 2D .0524: NSPS OOO - NONMETALLIC MINERALS PROCESSING PLANTS

- a. 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.
- b. 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.
- c. Emissions resulting from truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is 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)]

Testing [40 CFR 60.675]

- d. An initial performance test for the crushing mill/product cyclone No. 3 (**ID No. ESCM3**) and associated baghouse (**ID No. CDDC19**) shall be conducted within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup. The particulate matter emissions shall be tested in accordance with Method 5 or Method 17 and the visible emissions shall be tested in accordance with Method 9, as provided 40 CFR 60.675(b). The Permittee shall also comply with all notification and reporting procedures provided in 40 CFR 60.8 and General Condition JJ. If the required initial test is not conducted, or if the test results indicate emissions above the limits provided in Section 2.1 C.5. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.
- e. An initial visible emissions test for fugitive emissions from the crushing mill/product cyclone No. 3 (**ID No. ESCM3**) and new rock handling conveyors (**ID No. ESLSH**) shall be conducted within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup. The test shall be performed in accordance with U.S. EPA Method 9, with additional procedures as provided in 40 CFR 60.675(c). The Permittee shall also comply with all notification and reporting procedures provided in 40 CFR 60.8 and General Condition JJ. If the required initial test is not conducted, or if the test results indicate emissions above the limits provided in Section 2.1 C.5. b., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- f. Particulate matter emissions from the affected sources shall be controlled by fabric filtration as delineated in the equipment list. To assure 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 2D .0524 if the ductwork and bagfilters are not inspected and maintained.
- g. To assure 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 2D .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 2D .0524.

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

- h. 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 2D .0524 if these records are not maintained.
- i. 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 2D .0524 if these records are not maintained.

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

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	Particulate emissions shall not exceed the rate prescribed by the process weight 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 lb/hr), and P = process weight (in ton/hr).	15A NCAC 2D .0515
Visible emissions	Visible emissions shall not exceed 20 percent opacity	15A NCAC 2D .0521
SO ₂	Affected Sources: ESCS1, ESCS2, ESCS3 See Section 2.2 ii. 1. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
VOC	Affected Sources: ESCS1, ESCS2, ESCS3 See Section 2.2 ii. 3 (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
NO _x	Affected Sources: ESCS1, ESCS2, ESCS3, ESINK, ESINK2, ESNLPA See Section 2.2 ii. 2. (Multiple Emission Sources-Work Practice Standards for VOC Control)	15A NCAC 2D .0958
odor	Affected Sources: ESCS1, ESCS2, ESCS3, ESINK, ESINK2, ESNLPA See Section 2.2 iv. 3. (Multiple Emission Sources-Odor Control requirements) STATE ENFORCEABLE ONLY	15A NCAC 2D .1806

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from each source 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 02D .2601]

- 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 2D .0515.

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

- c. Particulate matter emissions from the emission sources shall be controlled by fabric filtration as delineated in the equipment list. In order to assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer on the fabric filters. The inspections shall include a monthly external visual inspection of each unit's structural integrity and collection system, at a minimum. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the control device is 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 2D .0515 if these records are not maintained.

Reporting [15A NCAC 2Q .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 2D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from each of the mat looper (ID No. ESDML3) surfacing/backsurfacing processes (ID Nos. ESBSP1, ESBSP2, and ESBSP3), cooling sections (ID Nos. 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. [15A NCAC 2D .0521 (d)]

Testing [15A NCAC 02D .2601]

- 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 D.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure 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 D.2.a.

above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .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 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .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.

**E. Line No. 8 – Polypropylene Roofing Product Manufacturing
Raw Material Handling (ID No. L8RMH) with associated bagfilter (ID No. L8RMHDC); and,
Extrusion Process (ID No. L8)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	<p>Affected Source: L8RMH Particulate emissions shall not exceed the rate prescribed by the process weight equation:</p> $E = 4.10 \times P^{0.67}$ <p>Where: E = allowable emission rate (in lb/hr), and P = process weight (in ton/hr).</p>	15A NCAC 2D .0515
Visible emissions	<p>Affected Source: L8RMH Visible emissions shall not exceed 20 percent opacity</p>	15A NCAC 2D .0521
TAPs	<p>Affected Source: L8 See Section 2.2 iii. (Multiple Emission Sources-Control of Toxic Air Pollutants) STATE-ENFORCEABLE ONLY</p>	15A NCAC 2D .1100
TAPs	<p>Affected Source: L8 See Section 2.2 iv. 1. (Multiple Emission Sources-Toxic Pollutant Exemption rates) STATE-ENFORCEABLE ONLY</p>	15A NCAC 2Q .0705 & 15A NCAC 2Q .0711
VOC	<p>Affected Source: L8 See Section 2.2 iv. 2. (Multiple Emission Sources-Work Practice Standards for VOC Control)</p>	15A NCAC 2D .0958
Odor	<p>See Section 2.2 iv. 3. (Multiple Emission Sources-Odor Control requirements) STATE-ENFORCEABLE ONLY</p>	15A NCAC 2D .1806

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

- a. Emissions of particulate matter from the raw material handling operation (ID No. L8RMH), including the conveyors, electrical/desiccant dryer and weigh blender, shall not exceed an allowable emission rate as calculated by the following equation:

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

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 02D .2601]

- 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 E.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- c. Particulate matter emissions from the dryer and weigh blender shall be controlled by a baghouse (**ID No. L8RMHDC**). To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- i. a monthly 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 2D .0515 if the ductwork and bagfilter is 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 2D .0515 if these records are not maintained.

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

- e. The Permittee shall submit the results of any maintenance performed on the baghouse 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 2D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from the raw material handling operation (**ID No. L8RMH**) 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 02D .2601]

- 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 E.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, each month the Permittee shall observe the emission point of the raw material handling baghouse (**ID No. L8RMHDC**). The Permittee shall establish "normal" for the source in the first 30 days following initial startup. The observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the

Permittee shall either:

- i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
- ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 E.2.a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .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 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .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.

- F. **Natural gas, No. 2 and No. 6 fuel oil-fired flux preheater No. 1 (ID No. ESPH1)**
Natural gas, No. 2 and No. 6 fuel oil-fired flux preheater No. 2 (ID No. ESPH2)
Natural gas, No. 2 and No. 6 fuel oil-fired saturant heater No. 1 (ID No. ESSH1)
Natural gas, No. 2 and No. 6 fuel oil-fired saturant heater No. 2 (ID No. ESCH3)
Natural gas, No. 2 and No. 6 fuel oil-fired boiler No. 1 (ID No. ESB1)
Natural gas, No. 2 and No. 6 fuel oil-fired boiler No. 2 (ID No. ESB2)
Natural gas, No. 2 fuel oil-fired shingle coating heater No. 1 (ID No. ESSCH1)
Natural gas, No. 2 fuel oil-fired shingle coating heater No. 2 (ID No. ESSCH2)
Natural gas, No. 2 and No. 6 fuel oil-fired shingle heater No. 2 (ID No. ESSCH3)
Natural gas, No. 2 fuel oil-fired hot oil heater No. 2 (ID No. ESHOH2)
Natural gas, No. 2 fuel oil-fired hot oil heater No. 4 (ID No. ESHOH4) [NSPS Dc]

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	Particulate emissions shall not exceed 0.3236 pounds per million Btu heat input.	15A NCAC 2D .0503
SO ₂	Sulfur dioxide emission shall not exceed 2.3 pounds per million Btu heat input, including contributions from raw materials	15A NCAC 2D .0516
visible emissions	Visible emissions shall not exceed 20 percent opacity	15A NCAC 2D .0521
SO ₂	See Section 2.2 ii. 1. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
NO _x	See Section 2.2 ii. 2 (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317
VOC	See Section 2.2 ii. 3. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317

Regulated Pollutant	Limits/Standards	Applicable Regulation
SO ₂	Maximum sulfur content of fuel oil not to exceed 0.5 percent by weight (Only for heater ESHOH4)	15A NCAC 02D .0524 NSPS Dc

1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of natural gas, No. 2 and No. 6 fuel oil, that are discharged from this source into the atmosphere shall not exceed 0.3236 pounds per million Btu heat input.

Testing [15A NCAC 02D .2601]

- 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 F.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

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

- c. No monitoring, recordkeeping, or reporting is required for particulate emissions from the firing of natural gas, No. 2 and No. 6 fuel oils.

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

- a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 02D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ found in Section 3. 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 2D .0516.

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

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from natural gas and No. 2 fuel oil for these sources.
- d. The maximum sulfur content of any No. 6 fuel oil received and burned in the boiler shall not exceed 2.1 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the fuel oil exceeds this limit.
- e. To assure compliance, the Permittee shall monitor the sulfur content of the No. 6 fuel oil by using fuel oil supplier certification per shipment received. The fuel oil supplier certifications shall be retained on file, provided upon request by DAQ, and include the following information:
- i. the name of the fuel oil supplier;
 - ii. the maximum sulfur content of the fuel oil received;
 - iii. the method used to determine the maximum sulfur content of the fuel oil; and
 - iv. a certified statement signed by the responsible official that the records of fuel oil supplier certification submitted represent all of the No. 6 fuel oil fired during the period.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the oil is not monitored and recorded.

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

- f. The Permittee shall submit a summary report of the fuel oil supplier certifications 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 2D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from each of the listed indirect fired combustion 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. [15A NCAC 2D .0521 (d)]

Testing [15A NCAC 02D .2601]

- b. If emissions 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.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance during No. 6 fuel oil use, the Permittee shall observe the emission points of this source for any visible emissions above normal once per day. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three days of absent observations per semi-annual period. 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 F.3.a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

- d. No monitoring is required for combustion of natural gas or No. 2 fuel oil.

Recordkeeping [15A NCAC 2Q .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 2D .0521 if these records are not maintained.

- f. No recordkeeping is required for visible emissions from the firing of natural gas or No. 2 fuel oil.

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

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

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

- a. The Oil heater (ESHOH4) 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, including Subpart A "General Provisions." [15A NCAC 02D .0524]

Emission Limitations [15A NCAC 02D .0524]

- b. The maximum sulfur content of any fuel oil received and burned in the boiler shall not exceed 0.5 percent by weight.

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

- c. Sulfur dioxide emissions shall be monitored as follows:

- i. Distillate Oil - Fuel supplier certification shall be used to demonstrate compliance as described under 40 CFR, § 60.44c(h).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if sulfur dioxide emissions are not monitored as described above.

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

- d. 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 during each month. 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. In addition to any other reporting required by 40 CFR, 60.48c or notification requirements to the EPA, the Permittee is required to NOTIFY the DAQ in writing of the following:
 - i. a summary report , acceptable to the Regional Air Quality Supervisor, of the sulfur content of the distillate fuel oil fired, by 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 as follows:
 - (A) Distillate Oil - Fuel supplier certification shall include the following information:
 - (1) the name of the oil supplier;
 - (2) a statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in 40 CFR, 60.41c; and
 - (3) a certified statement signed by the owner or operator of an affected facility that the records of fuel supplier certification submitted represents all of the fuel fired during the semi annual period.

G. Diesel fuel-fired emergency generator (ID No. ESEDG)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
SO ₂	Sulfur dioxide emission shall not exceed 2.3 pounds per million Btu heat input, including contributions from raw materials	15A NCAC 2D .0516
Visible emissions	Visible emissions shall not exceed 20 percent opacity	15A NCAC 2D .0521
HAPs	MACT for Reciprocating Internal Combustion Engines. Notification requirement per 40 CFR 63.2280	15A NCAC 2D .1111 (40 CFR 63 Subpart ZZZZ)
SO ₂	See Section 2.2 ii. 1. (Multiple Emission Sources-PSD Major Facility Avoidance Condition)	15A NCAC 2Q .0317

1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 02D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 G.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from No. 2 fuel oil for this source.

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

- a. Visible emissions from the listed emergency generator shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute

average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

Testing [15A NCAC 02D .2601]

- b. If emissions 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 G.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. No monitoring, recordkeeping, or reporting is required for combustion of No. 2 fuel oil.

3. 15A NCAC 2D .1111: Maximum Achievable Control Technology (MACT) – 40 CFR Part 63 Subpart ZZZZ (Reciprocating Internal Combustion Engines)

- a. For the reciprocating internal combustion engine (**ID No. ESEDG**), the Permittee shall comply with all applicable provisions, including the Initial Notification Requirements per 40 CFR 63.6645(d), contained in Environmental Management Commission Standard 15A NCAC 2D .1111 “Maximum Achievable Control Technology” (MACT) as promulgated in 40 CFR Part 63 Subpart ZZZZ.

H. Natural gas/No. 2 fuel oil-fired boilers (less than 10.0 million Btu per hour heat input, ID No. ESBLR1)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.295 pounds per million Btu heat input	15A NCAC 02D .0503
SO ₂	Sulfur dioxide emission shall not exceed 2.3 pounds per million Btu heat input, including contributions from raw materials	15A NCAC 2D .0516
Visible emissions	Visible emissions shall not exceed 20 percent opacity	15A NCAC 2D .0521

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

- a. Emissions of particulate matter from the combustion of list subject fuels, that are discharged from this source into the atmosphere shall not exceed 0.295 pounds per million Btu heat input. [15A NCAC 02D .0503(a)]

Testing [15A NCAC 02D .2601]

- 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 H. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

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

- d. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas and No. 2 oil in this source.

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

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

Testing [15A NCAC 02D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02D .2601 and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 H.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

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

- d. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas/ /No. 2 fuel oil in this source.

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

- a. Visible emissions from this boiler (ID No. EESBLR1) 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 02D .2601]

- b. If emissions 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 H 3 a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- d. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas//No. 2 fuel oil in this source.

- I. **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 sealant applicator pan (ID No. ESSA6)
One 80 gallon sealant use tank (ID No. ESSEA6)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM	Affected Sources: Tanks (ID Nos. ESLAT6, ESLAT7, and ESSEA6). Particulate emissions shall not exceed the rate prescribed by the process weight equations: For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$	15A NCAC 2D .0515
Visible emissions	Affected Sources: Pans (ID Nos. ESLA3, ESLA4, ESLA5, and ESSA6) Visible emissions shall not exceed 20 percent opacity	15A NCAC 2D .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 2D .0524 (40 CFR 60, Subpart UU)
HAPs	See Section 2.2 i. 1.(Multiple Emission Sources-MACT, Existing Affected Asphalt Processing Facility and Asphalt Roofing Manufacturing Lines.	15A NCAC 2D .1111 (40 CFR 63, Subpart LLLLL)
TAPs	See Section 2.2 iv. 1. (Multiple Emission Sources-Toxic Pollutant Exemption rates) STATE ENFORCEABLE ONLY	15A NCAC 2Q .0705 & 15A NCAC 2Q .0711
VOC	See Section 2.2 iv. 2. (Multiple Emission Sources-Work Practice Standards for VOC Control)	15A NCAC 2D .0958
odor	See Section 2.2 iv. 3. (Multiple Emission Sources-Odor Control requirements) STATE ENFORCEABLE ONLY	15A NCAC 2D .1806

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

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

For process rates up to 30 tons per hour:

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

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 02D .2601]

- 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 I.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Inspection/Maintenance Monitoring/Recordkeeping Reporting [15A NCAC 2Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required

2. 15A NCAC 2D .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. [15A NCAC 2D .0521 (d)]

Testing [15A NCAC 02D .2601]

- 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 I.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure 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 sourcer in accordance with 15A NCAC 02D .2601 (Method 9) for 12 minutes is below the limit given in Section 2.1 I.2.a. above.
- If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 2Q .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 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .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 2D .0524: NSPS UU - Asphalt Processing and Asphalt Roofing Manufacture

- a. The Permittee comply with the emissions limits for the tanks (**ID Nos. ESLAT6, ESLAT7, and ESSEA6**) by complying with the emissions limit specified in Section 2.2.A.1. of this permit. [40 CFR 63.8681]

Testing/Monitoring/Recordkeeping/Reporting [15A NCAC 02D .2601]

- b. 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 2D .0524 if these requirements of Section 2.2.A.i., of this permit are not met.

J. 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:

Regulated Pollutant	Limits/Standards	Applicable Regulation
TAPs	See Section 2.2 iv. 1. (Multiple Emission Sources-Toxic Pollutant Exemption rates) STATE ENFORCEABLE ONLY	15A NCAC 2Q .0705 & 15A NCAC 2Q .0711
VOC	See Section 2.2 iv. 2.. (Multiple Emission Sources-Work Practice Standards for VOC Control)	15A NCAC 2D .0958
odor	See Section 2.2 iv. 3.. (Multiple Emission Sources-Odor Control requirements) STATE ENFORCEABLE ONLY	15A NCAC 2D .1806

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

- i. MACT 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)
 - Laminating adhesive tank (ID No. ESLAT2)
- 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 (“New”)

- 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 sealant applicator pan (ID No. ESSA6)
 - One 80 gallon sealant use tank (ID No. ESSEA6)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
HAPs	NESHAP for Asphalt Processing and Asphalt Roofing Manufacturing	15A NCAC 2D .1111 (40 CFR 63, Subpart LLLLL)

1. **15A NCAC 2D .1111: Maximum Achievable Control Technology (MACT)**
40 CFR Part 63 Subpart LLLLL (Asphalt Processing and Asphalt Roofing Manufacturing)
 - a. The Permittee shall comply with all applicable requirements of 15A NCAC 2D .1111 “Maximum Achievable Control Technology” and 40 CFR Part 63, Subpart LLLLL, “NESHAP for Asphalt Processing and Asphalt Roofing Manufacturing.”
 - i. Upon 60 days of the completion of the stack tests for sources (ID Nos. ESLA3, ESLA4, ESLA5, and ESSA6) the Permittee shall submit a permit application to establish operating limits for CDFTR2.

Emissions Standards [40 CFR 63.8684(a), 40 CFR 63.8685(a)]

- 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 except during periods of startup, shutdown, and malfunction.
 - 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 except during periods of startup, shutdown, and malfunction.
 - 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, ESLAT2, 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 particulate mater (PM) emissions to no greater than 0.08 lb/ton of asphalt shingle produced except during periods of startup, shutdown, and malfunction.
 - 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 (lamine applicator) (**ID No. ESWIP1**);
 - v. Group 2 storage tanks (**ID Nos. ESMA3, ESSEA1, ESSEA2, and ESMS2**); and,
 - vi. Group 2 storage tanks (**ID Nos. ESFT1, ESFT2, ESFT3, ESFST1, ESFST2, ESCT1, ESCT2, ESCT3, ESCT4, ESST1, ESSDT, ESLAT2, 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 particulate mater (PM) emissions to no greater than 0.08 lb/ton of asphalt shingle produced except during periods of startup, shutdown, and malfunction.
 - 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 except during periods of startup, shutdown, and malfunction:
 - 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 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.
- h.
 - i. When used to control emissions from any Group 2 storage tanks (ID Nos. ESLAT6, ESLAT7, and ESSEA6), visible emissions from the Ceko 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 Ceko 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), 40 CFR 63.8685(a)]

- i. Except during periods of startup, shutdown, and malfunction, the Permittee shall maintain the 3-hour average combustion temperature of the afterburner (**ID No. CDAFB**) at or above **1,565 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.1.1.b. above.
- j. Except during periods of startup, shutdown, and malfunction, 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.1.1.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 except during periods of startup, shutdown, and malfunction:
 - i. 3-hour average inlet gas temperature at or below **113.3 degrees Fahrenheit**, or the value established during the most recent test that demonstrated compliance with the emission standard; and,
 - ii. 3-hour average pressure drop across of the device at or below **0.9 inches of H₂O**, or the value established during the most recent test that demonstrated compliance with the emission standard.
- 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 except during periods of startup, shutdown, and malfunction:
 - i. 3-hour average inlet gas temperature at or below **124.2 degrees Fahrenheit**, or the value established during the most recent test that demonstrated compliance with the emission stand; and,
 - ii. 3-hour average pressure drop across of the device at or below **19.6 inches of H₂O**, or the value established during the most recent test that demonstrated compliance with the emission stand.

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 except during periods of startup, shutdown, and malfunction:
 - i. 3-hour average inlet gas temperature at or below **118.7 degrees Fahrenheit**, or the value established during the most recent test that demonstrated compliance with the emission stand; and,
 - ii. 3-hour average pressure drop across of the device at or below **13.2 inches of H₂O**, or the value established during the most recent test that demonstrated compliance with the emission stand.

Testing [40 CFR 63.8686-8687]

- n. i. If any 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 2.2.A.1.b. through h. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111.
- ii. The Permittee must conduct performance tests within 180 days of start up of sources (ID Nos. ESLA3, ESLA4, ESLA5, and ESSA6) and according to the requirements of 40 CFR 63.7(a)(2). [40 CFR 63.8686(c)]

Monitoring/Recordkeeping [40 CFR 63.8688]

- o. 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 2D .1111.
- p. 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 2D .1111.
- q. 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 §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. [40 CFR 63.8688(a)(1)-(2), 40 CFR 63.8690]

Site-Specific Monitoring Plan [40 CFR 63.8685(d)]

- r. The Permittee shall develop and implement a written, site-specific monitoring plan for each monitoring system required above, including the content specified in of §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 §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 § 63.8(d); and,
 - vi. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 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 2D .1111.
- s. 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 2D .1111.

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

- t. 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 2D .1111 if the required performance evaluation is not conducted.
- u. 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, 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 2D .1111.

- v. The Permittee shall perform regular inspections and maintenance of each required continuous pressure monitor for **ID Nos. CDESP, CDME, 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 2D .1111.

Startups, Shutdowns, and Malfunctions [40 CFR 63.8685(b)-(c), 40 CFR 63.8691(d)]

- w. At all times, including periods of startup, shutdown, and malfunction, the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, the Permittee shall reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the Permittee to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the Permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved.
- x. Deviations that occur during a period of startup, shutdown, or malfunction are not violations if the Permittee demonstrates that the affected source(s) was(were) operating in accordance with Section 2.2.A.1.v. [40 CFR 63.6(e)(1)] of this permit. The DAQ will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations according to the provisions in 40 CFR 63.6(e).
- y. The Permittee shall develop a written startup, shutdown, and malfunction (SSM) plan in accordance with §63.6(e)(3). Retain a copy of the current SSM plan on-site and make the plan available to the DAQ upon request. If the SSM plan is not made available to DAQ, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111.

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

vi. For each SSM event during the reporting period for which the Permittee took actions consistent with the SSM plan, including the information in §63.10(d)(5)(i).

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 affect.

**ii. 15A NCAC 2Q .0317 AVOIDANCE CONDITIONS
for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION
and 15A NCAC 2D .0531: SOURCES IN NONATTAINMENT AREAS**

1. Sulfur Dioxide PSD Avoidance Limits

- a. In order to avoid the applicability of 15A NCAC 2D .0530, the Permittee shall limit SO₂ emissions as follows:
- i. Total SO₂ emissions from blowstills, coaters, 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 250 tpy; and,
 - ii. Total SO₂ emissions from coaters and 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 250 tpy.

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

Source ID No.	SO ₂ Emission Factor [EF]	Fraction of Emissions Dedicated to Each Emissions Source Limit [D _{L1,1,2} = Emissions Dedicated to Limit in Section 2.2. B. 1. a. i.] [D _{L1,3} = Emissions Dedicated to Limit in Section 2.2. B. 1. a. ii.]
ESBS1, ESBS2, ESBS3	0.86 lb/ton asphalt	D _{L1,1,2} = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D _{L1,3} = (L3 Coating Usage) / (Total Coating Usage)
ESLC1, ESLC2	0.08 lb/ton asphalt	D _{L1,1,2} = 1 D _{L1,3} = 0
ESLC3	0.08 lb/ton asphalt	D _{L1,1,2} = 0 D _{L1,3} = 1
CDRTO	No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D _{L1,1,2} = 0 D _{L1,3} = 1
CDAFB	No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D _{L1,1,2} = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D _{L1,3} = (L3 Coating Usage) / (Total Coating Usage)
ESPH1, ESPH2	No. 6 Fuel Oil: 157-S lb/Mgal No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D _{L1,1,2} = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D _{L1,3} = (L3 Coating Usage) / (Total Coating Usage)
ESSH1, ESCH3	No. 6 Fuel Oil: 157-S lb/Mgal No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D _{L1,1,2} = 1 D _{L1,3} = 0
ESB1, ESB2	No. 6 Fuel Oil: 157-S lb/Mgal No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D _{L1,1,2} = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D _{L1,3} = (L3 Coating Usage) / (Total Coating Usage)
ESSCH1, ESSCH2	No. 6 Fuel Oil: 157-S lb/Mgal No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D _{L1,1,2} = 1 D _{L1,3} = 0
ESSCH3	No. 6 Fuel Oil: 157-S lb/Mgal No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D _{L1,1,2} = 0 D _{L1,3} = 1
ESHOH2	No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D _{L1,1,2} = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D _{L1,3} = (L3 Coating Usage) / (Total Coating Usage)
ESHOH4	No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D _{L1,1,2} = 0 D _{L1,3} = 1
ESCMH1, ESCMH2	No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D _{L1,1,2} = [(L1 Coating Usage) + (L2 Coating Usage)] / (Total Coating Usage) D _{L1,3} = (L3 Coating Usage) / (Total Coating Usage)
ESCMH3	No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D _{L1,1,2} = 0 D _{L1,3} = 1
ESLFH	No. 2 Fuel Oil: 142-S lb/Mgal Natural Gas: 0.6 lb/MMscf	D _{L1,1,2} = 1 D _{L1,3} = 0

S = Sulfur content of fuel oil in percent by weight (% by wt.)

Mgal = 1,000 gallons

MMscf = million standard cubic feet

Testing [15A NCAC 02D .2601]

- 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 2Q .0508(f)]

- c. To demonstrate compliance with the SO₂ limits 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);
 - iv. the quantity and type of fuel consumed at each of the affected combustion devices (**ID Nos. CDAFB, CDRTO, ESPH1, ESPH2, ESSH1, ESCH3, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, 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;
 - v. the sulfur content of No. 2 fuel oil, low-sulfur No. 6 fuel oil, and high-sulfur No. 6 fuel oil consumed (in % by wt).

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 2D .0530 if the records are not maintained.

- d. The sulfur content of fuel oils shall be determined from fuel supplier certifications of the supplier tankage. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if records of the fuel supplier certifications are not maintained.
- e. Each month the Permittee shall determine the amount of SO₂ emitted to the atmosphere and contributing to the emission limitations provided in Section 2.2 B. 1. a. i. and ii. during the previous calendar month using Eqn. 1 and Eqn 2:

Eqn. 1:

$$E_{SO_2} = \frac{\sum_{\substack{(ESBS1, ESBS2, ESBS3 \\ ESLC1, ESLC2)}} EF_{ID} * Throughput * D_{L1,L2} + \sum_{\substack{(CDAFB, ESPH1, ESPH2, ESSH1, ESSH2, ESB1, ESB2, \\ ESSCH1, ESSCH2, ESHOH2, ESCMH1, ESCMH2, ESLFH)}} EF_{ID} * FuelUsage * D_{L1,L2}}{2,000 \text{ lb/ton}}$$

Eqn. 2:

$$E_{SO_2} = \frac{\sum_{\substack{(ESBS1, ESBS2, \\ ESBS3, ESLC3)}} EF_{ID} * Throughput * D_{L3} + \sum_{\substack{(CDAFB, CDRTO, ESPH1, ESPH2, ESB1, ESB2, \\ ESSCH1, ESHOH2, ESCM1, ESCM2, ESCM3, ESHOH4)}} EF_{ID} * FuelUsage * D_{L3}}{2,000 \text{ lb/ton}}$$

where:

- E_{SO2} = Sulfur dioxide emissions (ton/month);
- EF_{ID} = SO₂ 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 2D .0530 if the records are not maintained.

- f. Each month the Permittee shall calculate the total SO₂ emissions from the affected sources for the previous consecutive 12-month period. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the records are not maintained or if the 12-month rolling SO₂ emissions are in exceedance of the limits given in Section 2.2 B.1.a. i. or ii., above.

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

- g. 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 SO₂ emissions totals for each 12-month period for the previous 17 months.
- h. 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).

2. Nitrogen Oxide Nonattainment New Source Review Avoidance Limits

- a. In order to avoid the applicability of 15A NCAC 2D .0531, 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 _{L1,1,2} = 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	0.06 lb/ton asphalt	$D_{L1,1,2} = [(L1 \text{ Coating Usage}) + (L2 \text{ Coating Usage})] / (\text{Total Coating Usage})$ $D_{L3} = (L3 \text{ Coating Usage}) / (\text{Total Coating Usage})$
CDRTO	No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	$D_{L1,1,2} = 0$ $D_{L3} = 1$
CDAFB	No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	$D_{L1,1,2} = [(L1 \text{ Coating Usage}) + (L2 \text{ Coating Usage})] / (\text{Total Coating Usage})$ $D_{L3} = (L3 \text{ Coating Usage}) / (\text{Total Coating Usage})$
ESPH1, ESPH2	No. 6 Fuel Oil: 55 lb/Mgal No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	$D_{L1,1,2} = [(L1 \text{ Coating Usage}) + (L2 \text{ Coating Usage})] / (\text{Total Coating Usage})$ $D_{L3} = (L3 \text{ Coating Usage}) / (\text{Total Coating Usage})$
ESSH1, ESCH3	No. 6 Fuel Oil: 55 lb/Mgal No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	$D_{L1,1,2} = 1$ $D_{L3} = 0$
ESB1, ESB2	No. 6 Fuel Oil: 55 lb/Mgal No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	$D_{L1,1,2} = [(L1 \text{ Coating Usage}) + (L2 \text{ Coating Usage})] / (\text{Total Coating Usage})$ $D_{L3} = (L3 \text{ Coating Usage}) / (\text{Total Coating Usage})$
ESSCH1, ESSCH2	No. 6 Fuel Oil: 55 lb/Mgal No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	$D_{L1,1,2} = 1$ $D_{L3} = 0$
ESSCH3	No. 6 Fuel Oil: 55 lb/Mgal No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	$D_{L1,1,2} = 0$ $D_{L3} = 1$
ESHOH2	No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	$D_{L1,1,2} = [(L1 \text{ Coating Usage}) + (L2 \text{ Coating Usage})] / (\text{Total Coating Usage})$ $D_{L3} = (L3 \text{ Coating Usage}) / (\text{Total Coating Usage})$

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. 2. a. i.] [D _{L3} = Emissions Dedicated to Limit in Section 2.2. B. 2. a. ii.]
ESHOH4	No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D _{L1,L2} = 0 D _{L3} = 1
ESCMH1, ESCMH2	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)
ESCMH3	No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D _{L1,L2} = 0 D _{L3} = 1
ESLFH	No. 2 Fuel Oil: 20 lb/Mgal Natural Gas: 100 lb/MMscf	D _{L1,L2} = 1 D _{L3} = 0

Mgal = 1,000 gallons

MMscf = million standard cubic feet

Testing [15A NCAC 02D .2601]

- 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 2Q .0508(f)]

- c. To demonstrate compliance with the NO_x limit provided in Section 2.2 B.2. 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, ESSH1, ESCH3, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, 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 2D .0531 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:

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

Eqn. 4:

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

where:

- E_{NO_x} = 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.2. 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.2. 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 2D .0531 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 2D .0531 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 2Q .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.
- 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. Volatile Organic Compound Nonattainment New Source Review Avoidance Limits

- a. In order to avoid the applicability of 15A NCAC 2D .0531, 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. 3. a. i.] [D_{L3} = Emissions Dedicated to Limit in Section 2.2. B. 3. a. ii.]
ESBS1, ESBS2, ESBS3	0.41 lb/ton asphalt	$D_{L1,L2} = [(L1 \text{ Coating Usage}) + (L2 \text{ Coating Usage})] / (\text{Total Coating Usage})$ $D_{L3} = (L3 \text{ Coating Usage}) / (\text{Total Coating Usage})$
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)	$D_{L1,L2} = 1$ $D_{L3} = 0$

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. 3. a. i.] [D _{L3} = Emissions Dedicated to Limit in Section 2.2. B. 3. a. ii.]
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
CDRTO	No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	D _{L1,L2} = 0 D _{L3} = 1
CDAFB	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)
ESPH1, ESPH2	No. 6 Fuel Oil: 1.13 lb/Mgal 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)
ESSH1, ESCH3	No. 6 Fuel Oil: 1.13 lb/Mgal No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	D _{L1,L2} = 1 D _{L3} = 0
ESB1, ESB2	No. 6 Fuel Oil: 1.13 lb/Mgal 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	No. 6 Fuel Oil: 1.13 lb/Mgal No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	D _{L1,L2} = 1 D _{L3} = 0
ESSCH3	No. 6 Fuel Oil: 1.13 lb/Mgal No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	D _{L1,L2} = 0 D _{L3} = 1
ESHO2	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)
ESHO4	No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	D _{L1,L2} = 0 D _{L3} = 1
ESCMH1, ESCMH2	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)
ESCMH3	No. 2 Fuel Oil: 0.34 lb/Mgal Natural Gas: 5.5 lb/MMscf	D _{L1,L2} = 0 D _{L3} = 1
ESLFH	No. 2 Fuel Oil: 0.34 lb/Mgal 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 02D .2601]

- 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.3. a. i. or ii., above.

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

- c. To demonstrate compliance with the VOC limit provided in Section 2.2 B.3. 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,**

- iii. **ESLC2**) (in tons/month);
- iv. the amount of coating asphalt applied at the coaters on Roofing Line No. 3 (**ID No. ESLC3**) (in tons/month);
- v. the quantity and VOC content of each type of coating used at the printing operations (**ID Nos. ESINK, ESINK2, and ESNLPA**);
- vi. 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,
- vii. the quantity and type of fuel consumed at each of the affected combustion devices (**ID Nos. CDAFB, CDRTO, ESPH1, ESPH2, ESSH1, ESCH3, ESB1, ESB2, ESSCH1, ESSCH2, ESSCH3, 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 2D .0531 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:

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

Eqn. 6:

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

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.3. 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.3. 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 2D .0531 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 2D .0531 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. 3. a. i. or ii., above.

Reporting [15A NCAC 2Q .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.
- 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).

STATE-ENFORCEABLE ONLY

iii. 15A NCAC 2D .1100: TOXIC AIR POLLUTANT EMISSIONS LIMITATIONS

- a. Pursuant to 15A NCAC 2D .1100 "Control of Toxic Air Pollutants," and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

Toxic Air Pollutant	Emission Limits
Arsenic and Inorganic Arsenic Compounds ⁽¹⁾	18.4 lb/yr
Benzene ⁽²⁾	4,021 lb/yr
1,3-Butadiene ⁽²⁾	4,329 lb/yr
Cadmium and Compounds ⁽¹⁾	458 lb/yr
Chlorine ⁽¹⁾	125 lb/hr 519 lb/day
Formaldehyde ^{(2), (3)}	33.57 lb/hr
Hydrogen Chloride ⁽²⁾	89.58 lb/hr
Nickel ⁽¹⁾	82.6.58 lb/hr
Vinyl Chloride ⁽¹⁾	31,600 lb/yr

⁽¹⁾ Affected sources: ESBS1, ESBS2, ESBS3, ESLA3, ESLA4, ESLA5), ESLAT6, ESLAT7, ESSA6, ESSEA6, and ESNLPA2

⁽²⁾ 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, ESLAT2, 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

⁽³⁾ Affected source: L8, ESLA3, ESLA4, ESLA5), ESLAT6, ESLAT7, ESSA6, 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.

IV. Facility-Wide

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1. 15A NCAC 2Q .0705: EXISTING FACILITIES AND SIC CALLS and 15A NCAC 2Q .0711: TOXIC AIR POLLUTANT EMISSIONS LIMITATION REQUIREMENT

- a. As of the last update on **April 19, 2005**, emissions of toxic air pollutants have been demonstrated on a facility-wide basis (excluding those sources exempt under 15A NCAC 2Q .0702 "Exemptions") that each of the toxic air pollutants (TAPs) emitted from all sources at the facility are either below its respective toxic permit emission rates (TPER) listed in 15A NCAC 2Q .0711 - "Emission Rates Requiring a Permit" or the TAPs are in compliance with 15A NCAC 2D .1100 "Control of Toxic Air Pollutants" as described elsewhere in Section 2.2.C. of this permit.
- b. The facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions of any TAP listed in 15A NCAC 2Q .0711 or in this permit from all sources at the facility (excluding those sources exempt under 15A NCAC 2Q .0702 "Exemptions"), including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TPER listed in 15A NCAC 2Q .0711 without first obtaining an air permit to construct or operate.
- c. PRIOR to exceeding any of the TPERs listed in 15A NCAC 2Q .0711, the Permittee shall be responsible for

obtaining an air permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D .1100 "Control of Toxic Air Pollutants".

- d. The Permittee shall maintain at the facility records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A NCAC 2Q .0711.
- e. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required pursuant to 15A NCAC 2Q .0711 and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

Pollutant	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Acetaldehyde				6.8
Acetic Acid				0.96
Acrolein				0.02
Methyl Ethyl Ketone		78		22.4
Benzo(a)pyrene	2.2			
Beryllium	0.28			
Chloroform	290			
Di(2-ethylhexyl)phthalate		0.63		
n-Hexane		23		
Manganese and compounds		0.63		
Methyl chloroform		250		64
Methylene chloride	1,600		0.39	
Phenol			0.24	
Toluene		98		14.4
Xylene		57		16.4

2. 15A NCAC 2D .0958: WORK PRACTICES FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS

- a. Pursuant to 15A NCAC 2D .0958, for all sources that use volatile organic compounds (VOC) as solvents, carriers, material processing media, or industrial chemical reactants, or in similar uses that mix, blend, or manufacture volatile organic compounds, or emit volatile organic compounds as a product of chemical reactions, and whose emissions of VOC are greater than 15 pounds per day; the Permittee shall:
 - i. store all material, including waste material, containing volatile organic compounds in tanks or in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,
 - ii. clean up spills of volatile organic compounds as soon as possible following proper safety procedures,
 - iii. store wipe rags containing volatile organic compounds in closed containers,
 - iv. not clean sponges, fabric, wood, paper products, and other absorbent materials with volatile organic compounds,
 - v. transfer solvents containing volatile organic compounds used to clean supply lines and other coating equipment into closable containers and close such containers immediately after each use, or transfer such solvents to closed tanks, or to a treatment facility regulated under section 402 of the Clean Water Act,
 - vi. clean mixing, blending, and manufacturing vats and containers containing volatile organic compounds by adding cleaning solvent and close the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be transferred into a closed container, a closed tank or a treatment facility regulated under section 402 of the Clean Water Act. [15A NCAC 2D .0958(c)]
- b. When cleaning parts with a solvent containing a volatile organic compound, the Permittee shall:
 - i. flush parts in the freeboard area,

- ii. take precautions to reduce the pooling of solvent on and in the parts,
- iii. tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,
- iv. not fill cleaning machines above the fill line,
- v. not agitate solvent to the point of causing splashing. [15A NCAC 2D .0958(d)]

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

- c. To assure compliance with paragraphs a and b above, the Permittee shall, at a minimum, perform a visual inspection once per month of all operations and processes utilizing volatile organic compounds. The inspections shall be conducted during normal operations. If the required inspections are not conducted the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0958.

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

- d. The results of the inspections 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 inspection; and
 - ii. the results of each inspection noting whether or not noncompliant conditions were observed.
 If the required records are not maintained the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0958.

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

- e. The Permittee shall submit a summary report of the observations by 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.

STATE-ENFORCEABLE ONLY

3. 15A NCAC 2D .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 2D .0614: Compliance Assurance Monitoring (40 CFR 64)

- a. The Permittee must ensure that PM₁₀ emitted from the sources ESBS1, ESBS2, ESBS3, ESHM1, ESHM3, and ESLC3 are controlled by the afterburner (CDAFB), electrostatic precipitator (CDESP), mist eliminator (CDME), and regenerative thermal oxidizer (CDRTO) by monitoring the following operating parameter:
 - 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 i. 1. o., of this permit.	Pressure is indicated by a continuous monitoring systems (CMS) as per requirements of 2.2 i. 1. k.. ii, of this permit for (CDESP) and as per requirements of 2.2 i. 1. l.. ii, of this permit for (CDME)
Indicator Range	An excursion is defined as a 3-hour	An excursion is defined as a 3-hour

[64.6(c)(2)]	block average value of: 1) at or above 1,565 degrees Fahrenheit for (ID No. CDAFB) and 2) at or above 1,590 degrees Fahrenheit for (ID No. CDRTO), as per requirements of 2.2 i. 1. o., of this permit.	block average value of: 1) at or below 0.9 inches of H ₂ O for (CDESP) and 1) at or below 19.6 inches of H ₂ O for (CDME) as per requirements of 2.2 i. 1. k. And 2.2 i. 1. l., of this permit.
Quality Improvement Plan (QIP) Threshold [64.8]	Six excursion, as defined above, within any 6-month period.	Six excursion, 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 i. 1. r., of this permit.	The CMS are calibrated as per the requirements of 2.2 i. 1. p., of this permit
Monitoring Frequency [64.3(b)(4)]	Temperature is monitored every 15 minutes as per the requirements of 2.2 i. 1. q., of this permit while control devices are in operation.	Pressure is monitored every 15 minutes as per the requirements of 2.2 i. 1. q., of this permit while control devices are in operation.

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

- b. 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 2D .0614 if these records are not retained.
- e. Semi annual compliance reports must cover the semiannual reporting period from January 1 through June 30 and the semiannual reporting period from July 1 through December 31. Each compliance report must be postmarked or delivered no later than July 30 or January 30, whichever date is the first date following the end of the semiannual reporting period. The compliance report must contain the following information:
 - i. Company name and address,
 - ii. a statement by a responsible official with that official’s name, title, and signature, certifying the accuracy of the content of the report,
 - iii. the date of report and beginning and ending dates of the reporting period,
 - iv. a statement that there were no excursion outside of the allowable operating parameter limits during the reporting period (as applicable), and that no continuous parametric monitoring system (CPMS) was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted. Or for each exceedance of an allowable operating parameter that occurs, the compliance report must contain:
 - (a) the total operating time of the source during the reporting period,
 - (b) information on the number, duration, and cause of exceedances (including unknown cause), if applicable, and the corrective action taken and
 - (c) information on the number, duration, and cause for COMS downtime incidents, if applicable, other than downtime associated with zero and span and other daily calibration checks,

SECTION 3 - GENERAL CONDITIONS

This section describes terms and conditions applicable to this Title V facility. All references to the “permit” in this section apply only to Part I of the permit.

- A. **General Provisions** [NCGS 143-215 and 15A NCAC 2Q .0508(i)(16)]
 - 1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 2D and 2Q.
 - 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 2Q .0507(k) and .0508(i)(9)(B)]

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

C. **Severability Clause** [15A NCAC 2Q .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 2Q .0507(e) and 2Q .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

E. **Duty to Comply** [15A NCAC 2Q .0508(i)(2)]

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

F. **Circumvention** - STATE ENFORCEABLE ONLY

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

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 2Q .0514]

The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 2Q .0514.

2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 2Q .0524 and 2Q .0505]

The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 2Q.0524 and 2Q .0505.

3. Minor Permit Modifications [15A NCAC 2Q .0515]

The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 2Q

.0515.

4. Significant Permit Modifications [15A NCAC 2Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 2Q .0516.
5. Reopening for Cause [15A NCAC 2Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 2Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Section 502(b)(10) Changes [15A NCAC 2Q .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.
2. Off Permit Changes [15A NCAC 2Q .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.
3. Emissions Trading [15A NCAC 2Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 2D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 2Q .0523(c).

I.A. **Reporting Requirements for Excess Emissions and Permit Deviations**

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

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 2D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 2Q .0700. (*Note: Definitions of excess emissions under 2D .1110 and 2D .1111 shall apply where defined by rule.*)

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

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 2D .0524), NESHAPS (15A NCAC 2D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 2D .0535 as follows:
 - a. Pursuant to 15A NCAC 2D .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 2D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 2Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:

- a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 2D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B. Other Requirements under 15A NCAC 2D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 2D .0535, including 15A NCAC 2D .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 2D .0535(c)(1) through (7).
2. 15A NCAC 2D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

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

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

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

K. Permit Renewal [15A NCAC 2Q .0508(e) and 2Q .0513(b)]

This permit is issued for a fixed term of five years for facilities subject to Title IV requirements and for a term not to exceed five years in the case of all other facilities. This permit shall expire at the end of its term. Permit expiration

terminates the facility's right to operate unless a complete renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 2Q .0512(b)(1), this permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of this permit shall remain in effect until the renewal permit has been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 2Q .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 2Q .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 2Q .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 2Q .0508(f) and 2Q .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 2Q .0508(n)]

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

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

Q. **Certification by Responsible Official** [15A NCAC 2Q .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 2Q .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 2Q .0523.
 4. A permit shield does not extend to minor permit modifications made under 15A NCAC 2Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 2Q .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 2Q .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 2Q .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 2Q .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 2Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 2Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environment and Natural Resources. 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 2Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 2Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 2Q .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 2Q .0107 and 2Q. 0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 2Q .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 2Q .0107.
- Z. **Construction and Operation Permits** [15A NCAC 2Q .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 2Q .0100 and .0300.
- AA. **Standard Application Form and Required Information** [15A NCAC 2Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 2Q .0505 and .0507.
- BB. **Financial Responsibility and Compliance History** [15A NCAC 2Q .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 2Q .0501(e)]
 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 2Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.
- EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) - FEDERALLY-ENFORCEABLE ONLY**
Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.
- FF. **Title IV Allowances** [15A NCAC 2Q .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 2D .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 2D .0300.
- HH. **Registration of Air Pollution Sources** [15A NCAC 2D .0200]
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 2D .0202(b).

II. Ambient Air Quality Standards [15A NCAC 2D .0501(e)]

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 2D .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 2Q .0508(i)(16)]

If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ in support of a permit application, the Permittee shall perform such testing in accordance with the appropriate EPA reference method(s) as approved by the DAQ and follow the procedures outlined below. The Permittee must request **in writing** and receive approval from the DAQ for an alternate test method or procedure.

1. The Permittee shall submit a completed Protocol Submittal Form to the DAQ Regional Supervisor at least 45 days prior to the scheduled test date. A copy of the Protocol Submittal Form may be obtained from the Regional Supervisor.
2. The Permittee shall notify the Regional Supervisor of the specific test dates at least 15 days prior to testing in order to afford the DAQ the opportunity to have an observer on-site during the sampling program.
3. During all sampling periods, the Permittee shall operate the emission source(s) under maximum normal operating conditions or alternative operating conditions as deemed appropriate by the Regional Supervisor or his delegate.
4. The Permittee shall submit **two** copies of the test report to the DAQ. The test report shall contain at a minimum the following information:
 - a. a certification of the test results by sampling team leader and facility representative;
 - b. a summary of emissions results and text detailing the objectives of the testing program, the applicable state and federal regulations, and conclusions about the testing and compliance status of the emission source(s);
 - c. a detailed description of the tested emission source(s) and sampling location(s) process flow diagrams, engineering drawings, and sampling location schematics should be included as necessary;
 - d. all field, analytical, and calibration data necessary to verify that the testing was performed as specified in the applicable test methods;
 - e. example calculations for at least one test run using equations in the applicable test methods and all test results including intermediate parameter calculations; and
 - f. documentation of facility operating conditions during all testing periods and an explanation relating these operating conditions to maximum normal operation. If necessary, provide historical process data to verify maximum normal operation.
5. The testing requirement(s) shall be considered satisfied only upon written approval of the test results by the DAQ.
6. The DAQ will review emission test results with respect exclusively to the specified testing objectives as proposed by the Permittee and approved by the DAQ. The use of the test results beyond the stated objectives remains subject to the approval of the DAQ.

KK. Reopening for Cause [15A NCAC 2Q .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 2Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 2Q .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 2Q .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 2Q .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. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. **Fugitive Dust Control Requirement** [15A NCAC 2D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 2D .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 2D .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.
1. For modifications made pursuant to 15A NCAC 2Q .0501(c)(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 2Q .0501(d)(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 2Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth St., Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

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

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
CAA	Clean Air Act
DAQ	Division of Air Quality
DENR	Department of Environment and Natural Resources
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound