ROY COOPER Governor ELIZABETH S. BISER Secretary MICHAEL ABRACZINSKAS Director



XXX xx, 2022

Mr. Vergil Norrod Plant Manager Bridgestone Americas Tire Operations, LLC P.O. Box 1139 Wilson, North Carolina 27893-1139

SUBJECT: Air Quality Permit No. 01660T74 Facility ID: 9800043 Bridgestone Americas Tire Operations, LLC Wilson Wilson County Fee Class: Title V PSD Class: Major

Dear Mr. Burke:

In accordance with your completed Air Quality Permit Applications for a Renewal application (9800043.21A), a TV-Sign-501(b)(2) Part II (9800043.19A), and 502(b)(10) applications (9800043.18B, .20B, .23A and .23B) of your Title V permit, we are forwarding Air Quality Permit No. 01660T74 to Bridgestone Americas Tire Operations, LLC, 3001 Firestone Parkway NE, Wilson, 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(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 4. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

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

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

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to existing emission source(s) and air pollution control device(s) described in this



North Carolina Department of Environmental Quality | Division of Air Quality 217 West Jones Street | 1641 Mail Service Center | Raleigh, North Carolina 27699-1641 919.707.8400 Mr. Burke Xx/xx/2022 Page 2

permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled

the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Wilson County has triggered increment tracking under PSD for  $PM_{10}$ ,  $SO_2$  and  $NO_x$ . However, this permit renewal does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from XX/xx/2023 and shall expire on the earlier of XX/xx/2028 or the renewal of Permit No. 01660T73 has been issued or denied. This Air Quality Permit is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Gautam Patnaik P.E., at (919) 707-8735 or gautam.patnaik@ncdern.gov.

Sincerely yours,

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

Enclosure
c: Brad Akers Air Permit Section Chief, EPA Region 4 (permit and review) Laserfiche Connie Horne (cover letter only)

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

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

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

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

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

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

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

\* \* \*

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

## Summary of Changes to Permit

Page No.	Section	Description of Changes	
Page 1	Cover letter	Added revised cover page, updated letterhead, changed Permit revision number and date	
Page 3	Cover letter	Added page containing "Notice Regarding The Right to Contest A Division Of Air Quality Permit".	
Page 4	Cover letter	Revised the Summary Of "Changes To The Permits" table.	
Cover Page	Permit	Changed Permit number	
C		Changed "Replaces Permit" number	
		Revised effective date of Permit	
		Revised application numbers	
		Revised complete applications date	
2	Table of	Changed Insignificant Activities list to Section 3 of the permit and the	
	Contents	General Conditions as Section 4 of the permit	
3	List of	Added list of acronyms	
-	Acronyms		
5	Permitted	Removed (SW-3) side wall cementing operation	
5	source table	Added (SW 4 and SW 5) side well comparting a substitute	
3	Permitted source table	Added (SW-4 and SW-5) side wall cementing operations	
5	Permitted	Corrected TUC-3 to TU-3 "one extrusion line"	
5	source table	Corrected 10C-5 to 10-5° one extrusion line	
5	Permitted	Added (TU-5) one extrusion line	
5	source table	Added (10-5) one extrusion line	
5	Permitted	Removed No. 6 fuel oil as fuel from Two boilers UA-1 and UA-2	
5	source table	Temoved 1.0. 0 fuel on us fuel from 1 we concess off 1 and off 2	
6	Permitted	Removed diesel engine driven air compressors (ACDD-1 through ACDD-5)	
-	source table	······································	
6	Permitted	Removed two No. 6 fuel oil storage tanks (ES-11 and ES-12)	
	source table		
9	2.1 A.2.c	Remove establish "normal" for the source (ID Nos. SI-1 through SI-6)	
12	2.1 B.2.c	Remove establish "normal" for the source (ID Nos. TM-1 and RM-5)	
22	2.1 F.2.e	Establish semi-annual reporting requirement for green tire doping operations (ID No. GT-10)	
25	2.1 G	Add rubber mill RM-12	
25	2.1 H	Remove No. 6 fuel oil from boilers (ID Nos. UA-1 and UA-2)	
26	2.1 H.2.d and e	Remove No. 6 fuel oil monitoring from boilers (ID Nos. UA-1 and UA-2)	
27	2.1 H.3.c	Remove opacity monitoring due to firing of No. 6 fuel oil monitoring from boilers (ID Nos. UA-1 and UA-2)	
30	2.1 I.	Remove five diesel engine driven air compressors (ID Nos. ACDD-1 through ACDD-5)	
32	2.1 I.4	Update existing stationary RICE located at an area source of HAP emissions	
		for diesel engine driven peak shaving generators (ID Nos. EGDD-1 and EGDD-2, and EGDD-3 through EGDD-5)	
34	2.1 I.4.i. ii	Place holder language "This initial testing was done on $9/16/2014$ and $9/17/2014$ " – Note - The site was given a one-year extension on this date.	
36	2.1 I.5	Removed MACT language for diesel engine driven air compressor (ID Nos. ACDD-3)	
41	2.1 J.4	Incorporated NSPS avoidance for temporary, back-up natural gas/No. 2 fuel oil-fired boiler (ID No. UA-T1)	

The following changes were made to Air Permit No. 01660T73\*

43	2.1 J.6	Incorporated MACT avoidance for temporary, back-up natural gas/No. 2 fuel oil-fired boiler (ID No. UA-T1)
47	2.1 L.1	Incorporate NSPS standards for side wall cementing operation (ID Nos. SW- 4 and SW-5)
48	2.1 L.2	Incorporate PM standard only for side wall cementing operation (ID No. SW-5)
49	2.1 L.3	Incorporate opacity standard only for side wall cementing operation (ID No. SW-5)
50	2.1 M.1	Incorporate PM standard for new extrusion line (ID No. TU-5)
51	2.1 M.2	Incorporate Opacity standard for new extrusion line (ID No. TU-5)
58 through 61	2.2 A.4	Updated new toxics emission limits for the entire facility
64	2.4 A.4	Updated Actuals PAL VOC emissions limits for TU-3, TU-4, TU-5, SW-4, and SW-5
71	SECTION 3	Insignificant activities per 15A NCAC 02Q .0503(8)
72 through 80	SECTION 4	GENERAL CONDITIONS – Updated

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



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

# AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
01660T74	01660T73	Xx/xx/2023	Xx/xx/2028

NOTE: Per General Condition K, a permit application for the renewal of this Title V permit shall be submitted no later than XX/xx/2027*[enter date six months prior to expiration date]*.

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

<b>Permittee:</b> Facility ID:	<b>Bridgestone Americas Tire Operations, LLC</b> 9800043
Primary SIC Code:	3011
NAICS Code:	326211
Facility Site Location:	3001 Firestone Parkway, NE
City, County, State, Zip:	Wilson, Wilson County, North Carolina 27893
Mailing Address:	P.O. Box 1139
City, State, Zip:	Wilson, North Carolina 27893-1139
Application Numbers:	9800043.21A, 9800043.18B, 9800043.19A, 9800043.20B, 9800043.23A and 9800043.23B
<b>Complete Application Date:</b>	November 22, 2021, October 17, 2018, January 14, 2019, August 6,
	2020, December 29, 2022, and January 19, 2023, respectively
Division of Air Quality:	Raleigh Regional Office
<b>Regional Office Address:</b>	1628 Mail Service Center, Raleigh, North Carolina 27699-1628

Permit issued this the xxth day of XXX, 2023

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

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#### SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

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- 2.2 Multiple Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.3 Permit Shield for Nonapplicable Requirements
- 2.4 Actuals PAL Permit Requirements
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- SECTION 3: INSIGNIFICANT ACTIVITIES PER 15A NCAC 02Q .0503(8)
- SECTION 4: GENERAL PERMIT CONDITIONS

#### List of Acronyms

AOS	Alternative Operating Scenario
BACT	Alternative Operating Scenario Best Available Control Technology
BAE	Baseline Actual Emissions
BAL Btu	British thermal unit
CAA	Clean Air Act
CAA CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CEDRI	Compliance and Emissions Data Reporting Interface
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
CSAPR	Cross-State Air Pollution Rule
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
GHGs	Greenhouse Gases
НАР	Hazardous Air Pollutant
LAER	Lowest Achievable Emission Rate
МАСТ	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOx	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
OAH	Office of Administrative Hearings
PAE	Projected Actual Emissions
PAL	Plantwide Applicability Limitation
PM	Particulate Matter
PM <sub>2.5</sub>	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
PM10	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
ТАР	Toxic Air Pollutant
tpy VOC	Tons Per Year Valatila Organia Compound
VOC	Volatile Organic Compound

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

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

Emission Source		Illution control devices and appurtenances:	
ID No.	Emission Source Description	Device ID No.	Control Device Description <sup>(1)</sup>
RCS-1	Chemical bin loading	DC-5	Fabric filter (480 square feet of filter area)
CW-1	Manual dry chemical weighing system from chemical bins	DC-6	Fabric filter (500 square feet of filter area)
RCS-2	Pigment bin loading and automated weighing system	DC-3	Fabric filter (480 square feet of filter area)
BU-1	Carbon black railcar and truck receiving and storage silo	DC-11	Fabric filter (250 square feet of filter area)
BT-1	Carbon black transfer from storage silo to transfer systems BT-2 and BT-4	DC-8	Fabric filter (250 square feet of filter area)
BT-2	Carbon black transfer from BT-1 to Banbury 622 mixer	DC-2	Fabric filter (17,600 square feet of filter area)
BC-2 BD-2	Banbury 622 charging Banbury 622 discharging		
BT-4	Carbon black transfer from BT-1 to Banbury 624 mixer	N-1	Cartridge filter (17,600 square feet of filter area)
BC-4 BD-4	Banbury 624 charging Banbury 624 discharging		
BC-4FM BD-4FM	Banbury 624 remix and final mix charging Banbury 624 remix and final mix discharging	N-2	Cartridge filter (14,464 square feet of filter area)
BC-1 BD-1	Banbury 621 charging Banbury 621 final mix discharging area	N-14	Fabric filter (17,600 square feet of filter area)
RMC-1 to RMC-9, RMT-11	Ten rubber mills	NA	NA
RMT-6 to RMT-10	Five rubber mills with associated material recovery	NA	NA
RMT-1 to RMT-3	Three rubber mills associated with the 10- inch tuber line (ID No. UT-1)	NA	NA
RMC-10	Rubber mill	NA	NA
RMC-11	Rubber mill	NA	NA
RM-2	Banbury 621 slab dip tank and cooling	NA	NA
RM-3	Banbury 622 slab dip tank and cooling	NA	NA
BC-3	Banbury 273 charging	DC-9	Fabric filter (1,300 square feet of filter area)
BD-3	Banbury 273 discharging	NA	NA
RM-6	Banbury 273 rubber mixing and slab cooling system	NA	NA
RMT1 through RMT3, RMT6 through RMT11, RMC1 through RMC11 and RM-12	21 rubber mills	NA	NA
CAL-1	One three-roll calendar and one four-roll calendar	NA	NA
C-3	One four-roll calendar	NA	NA
BCO-1 NSPS BBB	No. 1 bead cementing operation	NA	NA
BCO-2	No. 2 bead cementing operation	NA	NA

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description <sup>(1)</sup>
UT-1	No. 1 extrusion line undertread cementing	NA	NA
	utilizing an intermittent spray/wipe		
	application method and associated thread		
UT-2 NSPS BBB	marking equipment No. 4 extrusion line undertread cementing	NA	NA
UT-3 NSPS BBB	No. 5 extrusion line undertread cementing	NA	NA
GT-10 NSPS BBB	Green tire doping operations	N-9	One baffled settling chamber (475
	Green the doping operations	11.7	cubic feet)
SW-4 and SW-5	Side wall cementing operations	NA	NA
NSPS BBB			
TU-1	Six extrusion lines	NA	NA
TU-2	One extrusion line	NA	NA
TU-3	One extrusion line	NA	NA
TU-4	One extrusion line	NA	NA
TU-5	One extrusion line	NA	NA
GT-11 through GT- 22 (NSPS BBB)	Green tire dopers No. 11 through No. 22	NA	NA
GT-23 and GT-24 NSPS BBB	Green tire dopers No. 23 and No. 24	NA	NA
CA-1 through CA-4	Four curing areas	NA	NA
PB-1 through PB-7	Seven minor-buff spray paint booths equipped with dry filters	NA	NA
GA-1	Sidewall and tread grinding area	NA	NA
PW-1	Miscellaneous solvent usage	NA	NA
TA-1	Tire assembly area	NA	NA
FI-1	Final inspection area	NA	NA
RCM-1	One rubber cement mixing system	NA	NA
ST-1 through ST-4	Four 10,000 gallon solvent storage tanks	NA	NA
UA-1	Two natural gas/No. 2 fuel oil fuel oil-	NA	NA
UA-2	fired boilers (121 million Btu per hour		
GACT JJJJJJ	maximum heat input capacity, each)		
UA-T1	Temporary, back-up natural gas/No. 2	NA	NA
	fuel oil-fired boiler(s) with a maximum		
	permitted heat input rating of no greater		
EGDD-1and EGDD-	than 100 million Btu per hour, total Two diesel-fired peak shaving generators	CD-1,	Two Ovidation Catalysts
2	(15.7 million Btu maximum heat input	CD-1, CD-2	Two Oxidation Catalysts
PSD BACT; GACT	and 1600 kW output, 2300 Hp output,	CD-2	
ZZZZ	each)		
ES-4.5 and ES-4.6	Two diesel-fired emergency fire pump	NA	NA
GACT ZZZZ;	engine (175 Hp output)		
NSPS IIII			
ES-1.1 and ES-1.2	Two aromatic oil storage tanks (15,000 gallon capacity, each)	NA	NA
ES-2.1 and ES-2.2	Two napthenic oil storage tanks (15,000 gallon capacity each)	NA	NA
ES-3	One paraffin wax storage tank (15,000 gallon capacity)	NA	NA
ES-5	Banbury 624 slab dip ventilation system	NA	NA
ES-6	Spiral layer splicing operation	NA	NA
ES-7	One fuel oil storage tank (6,000 gallon	NA	NA
	capacity)		

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description <sup>(1)</sup>
ES-8	One gasoline storage tank (1,000 gallon capacity)	NA	NA
ES-10	One triplex sidewall extrusion line	NA	NA
ES-13	One resin oil storage tank (15,000 gallon capacity)	NA	NA
TM-1	Tandem mixer	DC-12	fabric filter (14,500 square feet of filter area)
RM-5	Tandem mixer slab cooling and handling	NA	NA
SI-1 to SI-6	Six silos	FR-1 to FR-6	Filter receivers (1,016 square feet of filter area, each)
EGDD-3 GACT ZZZZ	diesel-fired peak shaving generator (2,145 kilowatts)	CD-3	Catalytic Oxidizer
EGDD-4	diesel-fired peak shaving generator (2,145	CD-4	Catalytic Oxidizer
GACT ZZZZ	kilowatts)		-
EGDD-5	diesel-fired peak shaving generator (2,145	CD-5	Catalytic Oxidizer
GACT ZZZZ	kilowatts)		

<sup>(1)</sup> Baghouse total fabric filter areas are nominal.
 <sup>(2)</sup> The thermal oxidizer may be used to control VOC emissions as an alternative compliance option of NSPS Subpart BBB.

## **SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS**

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

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

- A. Chemical bin loading (ID No. RCS-1) with associated fabric filter (ID No. DC-5) Manual chemical weighing system (ID No. CW-1) with associated fabric filter (ID No. DC-6)
  - Pigment bin loading and automated weighing system (ID No. RCS-2) with associated fabric filter (ID No. DC-3)
  - Carbon black rail car and truck receiving and storage silo (ID No. BU-1) with associated fabric filter (ID No. DC-11)
  - Carbon black transfer from storage silo to transfer systems BT-2 and BT-4 (ID No. BT-1) with associated fabric filter (ID No. DC-8)
  - Carbon black transfer from BT-1 to Banbury 622 mixer (ID No. BT-2) with associated fabric filter (ID No. DC-2)
  - Six silos (SI-1 to SI-6) associated with fabric filter (FR-1 to FR-6) each of these filter only control emissions from each associated silo.

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

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	For process rates up to 30 tons per hour:	15A NCAC 2D .0515
	$E = 4.10 \text{ x } P^{0.67}$	
	For process rates greater than 30 tons per hour:	
	$E = 55.0 \text{ x } P^{0.11} - 40$	
	Where: $E =$ allowable emission rate in pounds per hour	
	P = process weight in tons per hour	
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Odors	State-enforceable only	15A NCAC 2D .1806
	See Section 2.2 A.2	
Toxic air pollutants	State-enforceable only	15A NCAC 2Q .0711
	See Section 2.2 A.3	
Toxic air pollutants	State-enforceable only	15A NCAC 2D .1100
	See Section 2.2 A.4	
Hazardous air	See Section 2.2 A.5	15A NCAC 2Q .0317
pollutants		(MACT Avoidance)
Volatile organic	See Section 2.5 A.	15A NCAC 2D .0530
compounds		

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

a. Emissions of particulate matter from these sources (ID Nos. RCS-1, CW-1, RCS-2, BU-1, BT-1, BT-2, and SI-1 through SI-6) shall not exceed an allowable emission rate as calculated by the following equations:

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

Where: E = allowable emission rate in pounds per hour

P =process weight in tons per hour

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

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- c. Particulate emissions from these sources (ID Nos. RCS-1, CW-1, RCS-2, BU-1, BT-1, and BT-2 and SI-1 through SI-6) shall be controlled by twelve fabric filters (ID Nos. DC-5, DC-6, DC-3, DC-11, DC-8, DC-2 and FR-1 through FR-6) as described above. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer'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 fabric filters for leaks, and
  - ii. an annual (for each 12-month period following the initial inspection) internal inspection of each fabric filter for structural integrity and fabric filter condition.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and fabric filters are not inspected and maintained.

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

The Permittee shall be deemed in noncompliance with 15A NCAC 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 any control device within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 A.1.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified..

#### 2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISIONS

a. Visible emissions from these sources (ID Nos. RCS-1, CW-1, RCS-2, BU-1, BT-1, and BT-2, SI-1 through SI-6) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

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

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

- c. To ensure compliance, once a month, the Permittee shall observe the emission points of these sources (ID Nos. RCS-1, CW-1, RCS-2, BU-1, BT-1, and BT-2 and SI-1 through SI-6) during source operation for any visible emissions above normal. The observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the

monitoring period and record the action taken as provided in the recordkeeping requirements below, or

ii. demonstration that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (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.

- 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 monitoring and recordkeeping activities given in Sections 2.1 A.2.c and d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

#### B. Banbury 273 rubber mixing and slab cooling (ID No. RM-6)

Banbury 273 charging (ID No. BC-3) with associated fabric filter (ID No. DC-9) Banbury 273 discharging (ID No. BD-3)

- Banbury 621 slab dip tank and cooling (ID No. RM-2)
- Banbury 621 charging (ID No. BC-1) with associated fabric filter (ID No. N-14)
- Banbury 621 final mix discharging area (ID No. BD-1) with associated fabric filter (ID No. N-14)
- Banbury 622 slab dip tank and cooling (ID No. RM-3)
- Banbury 622 charging (ID No. BC-2) with associated fabric filter (ID No. DC-2)
- Banbury 622 discharging (ID No. BD-2) with associated fabric filter (ID No. DC-2)
- Banbury 624 rubber mixing and slab forming (ID No. RM-4)
- Carbon black transfer from BT-1 to Banbury 624 mixer (ID No. BT-4), Banbury 624 master batch charging (ID No. BC-4), and Banbury 624 master batch discharging (ID No. BD-4) with associated cartridge filter (ID No. N-1)
- Banbury 624 remix and final mix charging (ID No. BC-4FM) and Banbury 624 remix and final mix discharging (ID No. BD-4FM) with associated cartridge filter (ID No. N-2)
- Seven minor-buff spray paint booths (ID Nos. PB-1 through PB-7)
- Tandem mixer (ID No. TM-1) with associated fabric filter (DC-12)
- Tandem Mixer slab cooling and handling (RM-5)

The following table provides a summary of limits and standards for the emissio	n source(s) described above:
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Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	For process rates up to 30 tons per hour:	15A NCAC 2D .0515
	$E = 4.10 \text{ x } P^{0.67}$	
	For process rates greater than 30 tons per hour:	
	$E = 55.0 \text{ x } P^{0.11} - 40$	
	Where: $E =$ allowable emission rate in pounds per hour	
	P = process weight in tons per hour	
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Odors	State-enforceable only	15A NCAC 2D .1806
	See Section 2.2 A.2	
Toxic air pollutants	State-enforceable only	15A NCAC 2Q .0711
	See Section 2.2 A.3	

Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	State-enforceable only	15A NCAC 2D .1100
	See Section 2.2 A.4	
Hazardous air	See Section 2.2 A.5	15A NCAC 2Q .0317
pollutants		(MACT Avoidance)
Volatile organic	See Section 2.4 A.	15A NCAC 2D .0530
compounds		

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

a. Emissions of particulate matter from these sources (ID Nos. BC-1 through BC-4, BC-4FM, BD-1 through BD-4, BD-4FM, BT-4, RM-2, RM-3, RM-6, PB-1 through PB-7, TM-1 and RM-5) shall not exceed an allowable emission rate as calculated by the following equations:

For process rates up to 30 tons per hour:  $E = 4.10 \text{ x } P^{0.67}$ 

For process rates greater than 30 tons per hour:

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

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

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

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

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

- c. Particulate matter emissions from these sources (ID Nos. BC-1 through BC-4, BC-4FM, BD-1, BD-2, BD-4, BD-4FM, BT-4, and TM-1) shall be controlled by three fabric filters (ID Nos. DC-9, N-14, and DC-2), two cartridge filters (ID Nos. N-1 and N-2) and a fabric filters (DC-12) as described above. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance requirement shall include the following:
  - i. a monthly visual inspection of the system ductwork, fabric filters, and cartridge filters for leaks, and
  - ii. an annual (for each 12-month period following the initial inspection) internal inspection of each fabric filter and cartridge filter for structural integrity and filter condition.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork, fabric filters, and cartridge filters are not inspected and maintained.

- d. Particulate matter emissions from these sources (**ID Nos. PB-1 through PB-7**) shall be controlled by spray booth filters. To ensure compliance, the Permittee shall perform inspections and maintenance. as a minimum, the inspection and maintenance program shall include an annual (for each 12-month period following the initial inspection) inspection of the associated ductwork for structural integrity and the spray booth filters for condition. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and filters are not inspected and maintained.
- e. For these sources (**ID** Nos. BD-3, **RM-2**, **RM-3**, **RM-6**, and **TM-1**), the Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formula above can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.
- f. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) onsite and made available to an authorized representative upon request. The logbook shall record the following for each control device:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection;

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- iii. the results of an maintenance performed on any control device; and
- iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

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

- g. No reporting is required for particulate matter emissions from these sources (ID Nos. BD-3, RM-2, RM-3, RM-6, TM-1 and RM-5).
- h. The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.
- i. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 B.1.c through f above postmarked on or before January 30 of each calendar year for the preceding sixmonth period between July and December and July 30 of each calendar year for the preceding sixmonth 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 EMISIONS

a. Visible emissions from these sources (ID Nos. BC-1 through BC-4, BC-4FM, BD-1 through BD-4, BD-4FM, BT-4, RM-2, RM-3, RM-6, and PB-1 through PB-7, TM-1 and RM-5) 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 2Q .0508(f)]

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

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

- c. To ensure compliance, once a month, the Permittee shall observe the emission points of these sources (ID Nos. BC-1 through BC-4, BC-4FM, BD-1 through BD-4, BD-4FM, BT-4, RM-2, RM-3, RM-6, and PB-1 through PB-7, TM-1 and RM-5) during source operation for any visible emissions above normal. 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. demonstration that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (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.

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

## C. No. 1 bead cementing operation (ID No. BCO-1)

Pollutant	Limits/Standards	Applicable Regulation
Volatile organic	New Source Performance Standards for the Rubber	15A NCAC 2D .0524
compounds	Tire Manufacturing Industry	(40 CFR 60, Subpart
-	No more than 5 grams of VOC per bead cemented for	BBB)
	each month [40 CFR 60.542(a)(4)]	
Odors	State-enforceable only	15A NCAC 2D .1806
	See Section 2.2 A.2	
Toxic air pollutants	State-enforceable only	15A NCAC 2Q .0711
	See Section 2.2 A.3	
Toxic air pollutants	State-enforceable only	15A NCAC 2D .1100
	See Section 2.2 A.4	
Hazardous air pollutants	See Section 2.2 A.5	15A NCAC 2Q .0317
		(MACT Avoidance)
Volatile organic	See Section 2.4 A.	15A NCAC 2D .0530
compounds		

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

#### 1. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. Emissions of volatile organic compounds from this source (**ID No. BCO-1**) shall be less than 5 grams per bead cemented on a monthly basis. [40 CFR 60.542(a)(4)]

#### Monitoring/Recordkeeping [40 CFR 60.543(e)]

- b. The Permittee shall use the following procedure to determine compliance with the VOC emission per bead limit specified in Section 2.1 C.1.a above, by the end of each month for the previous month.
  - i. Determine the density and weight fraction of VOC (including dilution VOC) of each cement from its formulation or by analysis of the cement using EPA reference Method 24.
  - ii. Calculate the total mass of VOC used at the affected facility for the month (Mo) as specified below:
    - A. For each affected facility for which cement is delivered in batch or via a distribution system that serves only the affected facility:

$$M_o = \sum_{i=1}^{a} Lc_i Dc_i Wo_i$$

Where:

a = the number of different cements used during the month that are delivered in batch or via a distribution system that serves only a single affected facility

- $Lc_i = the volume of cement "i" used for a month in liters$
- $Dc_i$  = the density of cement "i" in grams per liter
- Wo<sub>i</sub> = weight fraction of VOC in cement "i"
- Mo = total mass of VOC used at an affect facility for a month in grams
- B. For each affected facility for which cement is delivered via a common distribution system that also serves other affected or existing facilities:
  - (1) Calculate the total mass of VOC used for all of the facilities served by the common distribution system for the month (M):

$$M = \sum_{i=1}^{b} Lc_i Dc_i Wo_i$$

Where:

b = equals the number of different cements or green tire sprays used during the month that are delivered via a common distribution system that also serves other affected or existing facilities.

 $Lc_i =$  the volume of cement "i" used for a month in liters

 $Dc_i$  = the density of cement "i" in grams per liter

Wo<sub>i</sub> = weight fraction of VOC in cement "i"

M = total mass of VOC used for a month by all facilities served by a common cement distribution system

- (2) Determine the fraction (Fo) of M used at the affected facility by comparing the production records and process specifications for the material cemented at the affected facility for the month to the production records and process specifications for the material cemented at all other facilities served by the common distribution system for the month or by another procedure acceptable to the DAQ.
- (3) Calculate the total monthly mass of VOC used at the affected facility for the month (Mo): Mo = MFo
- iii. Determine the number of beads cemented at the affected facility during the month (Bo) using production records (Bo equals the number of beads that receive an application of cement for the month).
- iv. Calculate the mass of VOC used per bead cemented at the affected facility for the month (Gb): Gb = Mo/Bo

The Permittee shall be deemed in non-compliance with 15 NCAC 2D .0524 if the required determinations are not completed and documented, or if the mass of VOC used per bead (Gb) exceeds the limit in Section 2.1 C.1.a above.

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

c. The Permittee shall submit a summary report of any exceedances of the mass of VOC emitted per bead cemented (Gb) emission limit which includes the mass of VOC used (Mo) and the number of beads cemented (Bo). The 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.

## D. No. 4 extrusion line undertread cementing (ID No. UT-2)

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

Pollutant	Limits/Standards	Applicable Regulation
Volatile organic	New Source Performance Standards for the Rubber	15A NCAC 2D .0524
compounds	Tire Manufacturing Industry	(40 CFR 60, Subpart
-	Maintain total (uncontrolled) VOC use less than or	BBB)
	equal to the levels specified below, depending upon the	
	duration of the compliance period:	
	3,870 kg (8,531 lb) of VOC per 28 days,	
	4,010 kg (8,846 lb) of VOC per 29 days,	
	4,150 kg (9,149 lb) of VOC per 30 days,	
	4,280 kg (9,436 lb) of VOC per 31 days, or	
	4,840 kg (10,670 lb) of VOC per 35 days.	
	[40 CFR 60.542(a)(1)(ii)]	
Volatile organic	BACT Limitation - VOC emissions shall not exceed	15A NCAC 2D .0530
compounds	636 pounds per day and 56.6 tons per consecutive 12-	
	month period	
Odors	State-enforceable only	15A NCAC 2D .1806
	See Section 2.2 A.2	
Toxic air pollutants	State-enforceable only	15A NCAC 2Q .0711
	See Section 2.2 A.3	
Toxic air pollutants	State-enforceable only	15A NCAC 2D .1100
	See Section 2.2 A.4	
Hazardous air pollutants	See Section 2.2 A.5	15A NCAC 2Q .0317
		(MACT Avoidance)
Volatile organic	volatile organic compound (VOC) emissions from this	15A NCAC 2D .0530
compounds	source (ID No. UT-2) shall not exceed 636 pounds per	
	day and 56.6 tons per consecutive 12- month period.	

#### 1. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. The Permittee shall maintain total (uncontrolled) VOC use less than or equal to the levels specified below for this source (ID No. UT-2):
  - i. 3,870 kg (8,531 lb) of VOC per 28 days,
  - ii. 4010 kg (8,846 lb) of VOC per 29 days,
  - iii. 4,150 kg (9,149 lb) of VOC per 30 days,
  - iv. 4,280 kg (9,436 lb) of VOC per 31 days, or
  - v. 4,840 kg (10,670 lb) of VOC per 35 days depending upon the duration of the compliance period. [40 CFR 60.542(a)(1)(ii)]

#### Monitoring/Recordkeeping [40 CFR 60.543(e)]

- b. The Permittee shall use the following procedure to determine compliance with the VOC emission limit specified in 2.1 D.1.a above by the end of each month for the previous month.
  - i. Determine the density and weight fraction of VOC (including dilution VOC) of each cement from its formulation or by analysis of the cement using EPA reference Method 24.
  - ii. Calculate the total mass of VOC used at the affected facility for the month (Mo) as specified below:
    - A. For each affected facility for which cement is delivered in batch or via a distribution system that serves only the affected facility:

$$Mo = \sum_{i=1}^{a} Lc_i \quad Dc_i \quad Wo_i$$

Where:

a = the number of different cements used during the month that are delivered in batch or via a distribution system that serves only a single affected facility

 $Lc_i =$  the volume of cement "i" used for a month in liters

Dc<sub>i</sub> = the density of cement "i" in grams per liter

Wo<sub>i</sub> = weight fraction of VOC in cement "i"

Mo = total mass of VOC used at an affect facility for a month in grams

- B. For each affected facility for which cement is delivered via a common distribution system that also serves other affected or existing facilities:
  - (1) Calculate the total mass of VOC used for all of the facilities served by the common distribution system for the month (M):

$$M = \sum_{i=1}^{b} Lc_i Dc_i Wo_i$$

Where:

b = equals the number of different cements or green tire sprays used during the month that are delivered via a common distribution system that also serves other affected or existing facilities.

 $Lc_i =$  the volume of cement "i" used for a month in liters

 $Dc_i =$  the density of cement "i" in grams per liter

Wo<sub>i</sub> = weight fraction of VOC in cement "i"

M = total mass of VOC used for a month by all facilities served by a common cement distribution system

- (2) Determine the fraction (Fo) of M used at the affected facility by comparing the production records and process specifications for the material cemented at the affected facility for the month to the production records and process specifications for the material cemented at all other facilities served by the common distribution system for the month or by another procedure acceptable to the DAQ.
- (3) Calculate the total monthly mass of VOC used at the affected facility for the month (Mo): Mo = MFo

iii. Determine the time duration of the monthly time period (Td).

The Permittee shall be deemed in non-compliance with 15 NCAC 2D .0524 if the required determinations are not completed and documented, or if emissions exceed the limit(s) in Section 2.1 D.1.a of this permit.

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

c. The Permittee shall submit a summary report of any exceedances of the mass of VOC used (Mo) for each monthly time period and the corresponding number of days in the respective time period. Reports 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 .0530: PREVENTION OF SIGNIFICANT DETERIORATION

 a. To comply with the best available control technology determination pursuant to 15A NCAC 2D .0530, "Prevention of Significant Deterioration," volatile organic compound (VOC) emissions from this source (ID No. UT-2) shall not exceed 636 pounds per day and 56.6 tons per consecutive 12- month period.

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

b. Daily VOC emissions shall be determined by multiplying the total amount of each type of VOC containing material used in this source (ID No. UT-2) each day by the VOC content of the material minus any material reclaimed or shipped offsite for reclamation or disposal. These calculations and the total daily amounts of VOC emissions shall be recorded in an emissions logbook (written or electronic format) for each month no later than the third day of the following month. In addition, the Permittee shall make available to officials of the Division of Air Quality, upon request, copies of the emissions log. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the VOC emissions exceed the limit in 2.1.D.2.a above.

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

- c. 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. The report shall contain the following:
  - i. The maximum daily VOC emissions for each of the previous 17 months. The daily emissions must be calculated for each of the 12-month periods over the previous 17 months; and
  - ii. The monthly VOC emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.

## E. No. 5 extrusion line undertread cementing (ID No. UT-3)

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

Pollutant	Limits/Standards	Applicable Regulation
Volatile organic		15A NCAC 2D .0524
compounds	New Source Performance Standards for the Rubber	(40 CFR 60, Subpart
-	Tire Manufacturing Industry	BBB)
	Maintain total (uncontrolled) VOC use less than or	, , , , , , , , , , , , , , , , , , ,
	equal to the levels specified below, depending upon the	
	duration of the compliance period:	
	3,870 kg (8,531 lb) of VOC per 28 days,	
	4,010 kg (8,846 lb) of VOC per 29 days,	
	4,150 kg (9,149 lb) of VOC per 30 days,	
	4,280 kg (9,436 lb) of VOC per 31 days, or	
	4,840 kg (10,670 lb) of VOC per 35 days.	
	[40 CFR 60.542(a)(1)(ii)]	
Odors	State-enforceable only	15A NCAC 2D .1806
	See Section 2.2 A.2	
Toxic air pollutants	State-enforceable only	15A NCAC 2Q .0711
	See Section 2.2 A.3	
Toxic air pollutants	State-enforceable only	15A NCAC 2D .1100
_	See Section 2.2 A.4	
Hazardous air pollutants	See Section 2.2 A.5	15A NCAC 2Q .0317
		(MACT Avoidance)
Volatile organic	See Section 2.4 A.	15A NCAC 2D .0530
compounds		

#### 1. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. The Permittee shall maintain total (uncontrolled) VOC use less than or equal to the levels specified below for this source (ID No. UT-3):
  - i. 3,870 kg (8,531 lb) of VOC per 28 days,
  - ii. 4,010 kg (8,846 lb) of VOC per 29 days,
  - iii. 4,150 kg (9,149 lb) of VOC per 30 days,
  - iv. 4,280 kg (9,436 lb) of VOC per 31 days, or
  - v. 4,840 kg (10,670 lb) of VOC per 35 days depending upon the duration of the compliance period.
  - [40 CFR 60.542(a)(1)(ii)]

#### Monitoring/Recordkeeping [40 CFR 60.543(e)]

- b. The Permittee shall use the following procedure to determine compliance with the VOC emission limit specified in 2.1 E.1.a above.
  - i. Determine the density and weight fraction of VOC (including dilution VOC) of each cement from its formulation or by analysis of the cement using EPA reference method 24.
  - ii. Calculate the total mass of VOC used at the affected facility for the month (Mo) by the end of each month for the previous month as specified below:
    - A. For each affected facility for which cement is delivered in batch or via a distribution system that serves only the affected facility:

$$Mo = \sum_{i=1}^{a} Lc_i Dc_i Wo_i$$

Where:

- a = the number of different cements used during the month that are delivered in batch or via a distribution system that serves only a single affected facility
- $Lc_i =$  the volume of cement "i" used for a month in liters
- $Dc_i$  = the density of cement "i" in grams per liter

Wo<sub>i</sub> = weight fraction of VOC in cement "i"

Mo = total mass of VOC used at an affected facility for a month in grams

- B. For each affected facility for which cement is delivered via a common distribution system that also serves other affected or existing facilities:
  - (1) Calculate the total mass of VOC used for all of the facilities served by the common distribution system for the month (M):

$$M = \sum_{i=1}^{b} Lc_i Dc_i Wo_i$$

Where:

b = equals the number of different cements or green tire sprays used during the month that are delivered via a common distribution system that also serves other affected or existing facilities.

 $Lc_i = the volume of cement "i" used for a month in liters$ 

 $Dc_i =$  the density of cement "i" in grams per liter

Wo<sub>i</sub> = weight fraction of VOC in cement "i"

- M = total mass of VOC used for a month by all facilities served by a common cement distribution system
- (2) Determine the fraction (Fo) of M used at the affected facility by comparing the production records and process specifications for the material cemented at the affected facility for the month to the production records and process specifications for the material cemented at all other facilities served by the common distribution system for the month or by another procedure acceptable to the DAQ.
- (3) Calculate the total monthly mass of VOC used at the affected facility for the month (Mo): Mo = MFo.

iii. Determine the time duration of the monthly time period (Td).

The Permittee shall be deemed in non-compliance with 15 NCAC 2D .0524 if the required determinations are not completed and documented, or if emissions exceed the limit(s) in Section 2.1 E.1.a of this permit.

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

c. The Permittee shall submit a summary report of any exceedances of the mass of VOC used (Mo) for each monthly time period and the corresponding number of days in the respective time period. The 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.

## F. One green tire doping operations (ID No. GT-10)

he following table provides a summary of limits and standards for the emission source(s) described above:		
Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	For process rates up to 30 tons per hour: $\overline{P}_{1} = \frac{1}{2} \frac{1}{2}$	15A NCAC 2D .0515
	$E = 4.10 \text{ x } P^{0.67}$	
	For process rates greater than 30 tons per hour:	
	$E = 55.0 \text{ x } P^{0.11} - 40$	
	Where: $E =$ allowable emission rate in pounds per hour	
	P = process weight in tons per hour	
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Volatile organic	New Source Performance Standards for the Rubber Tire	15A NCAC 2D .0524
compounds	Manufacturing Industry	(40 CFR 60, Subpart
_	Inside spray - 1.2 grams of VOC per tire, monthly average	BBB)
	Outside spray - 9.3 grams per tire, monthly average	
	[60.542(a)(5)]	
Odors	State-enforceable only	15A NCAC 2D .1806
	See Section 2.2 A.2	
Toxic air pollutants	State-enforceable only	15A NCAC 2Q .0711
_	See Section 2.2 A.3	
Toxic air pollutants	State-enforceable only	15A NCAC 2D .1100
	See Section 2.2 A.4	
Hazardous air	See Section 2.2 A.5	15A NCAC 2Q .0317
pollutants		(MACT Avoidance)
Volatile organic	See Section 2.4 A.	15A NCAC 2D .0530
compounds		

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

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

a. Emissions of particulate matter from this source (ID No. GT-10) shall not exceed an allowable emission rate as calculated by the following equations:

For process rates up to 30 tons per hour:  $E = 4.10 \text{ x P}^{0.67}$ For process rates greater than 30 tons per hour:

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

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 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

#### Monitoring/Record keeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from this source (ID No. GT-10).

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

a. Visible emissions from this source (ID No. GT-10) 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 2Q .0508(f)]

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

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

- c. To ensure compliance, once every three months, the Permittee shall observe the emission point of this source (ID No. GT-10) during source operation for any visible emissions above normal. The quarterly observation must be made for each three-month period of the calendar year to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 F.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.

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

#### 3. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart BBB, including Subpart A "General Provisions."
- b. The Permittee shall maintain total (uncontrolled) VOC use less than or equal to the levels specified below for this source (ID No. GT-10):
  - i. inside spray 1.2 grams of VOC per tire, monthly average; and
  - ii. outside spray 9.3 grams per tire, monthly average. [40 CFR 60.542(a)(5)]

#### Monitoring/Recordkeeping [40 CFR 60.545(f)]

c. The Permittee shall maintain formulation data or EPA reference Method 24 analysis data demonstrating that the green tire spray contains less than 1.0 percent by weight VOC. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained or, the formulation data or EPA reference Method 24 analysis data indicate that the green tire spray contains equal or more than 1.0 percent by weight of VOC.

Reporting [40 CFR 60.543(b)(4), 40 CFR 60.546(j), and 15A NCAC 2Q .0508(f)]

- d. The Permittee shall submit to the DAQ within 60 days initially and annually thereafter, formulation data or EPA reference Method 24 analysis data demonstrating that the green tire spray contains less than 1.0 percent by weight VOC.
- e. If the spray material formulation changes before the end of the 12-month period, formulation data or Method 24 analysis of the new spray shall be conducted to determine the VOC content of the spray and reported within 30 days of the change to the DAQ.

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- f. The Permittee shall comply with all applicable notification requirements in 40 CFR 60.7.
- g. 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.

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G. 21 rubber mills (ID Nos. RMT1 through RMT3, RMT6 through RMT11, RMC1 through RMC11 and RM-12)
Three roll calenders and one four roll calender (ID No. CAL-1)
One four roll calender (ID No. C-3)
No. 2 bead cementing operation (ID No. BCO-2)
No. 1 extrusion line undertread cementing operation (ID No. UT-1)
Six extrusion lines (ID No. TU-1)
One extrusion line (ID No. TU-2)
Four curing areas (ID Nos. CA-1, CA-2, CA-3 and CA-4)
Sidewall and tread grinding (ID No. GA-1)
Miscellaneous solvent usage (ID No. PW-1)
Tire Assembly (ID No. TA-1)
Final inspection (ID No. RCM-1)
Rubber Cement mixing (ID No. RCM-1)
Four solvent storage tanks (ID Nos. ST-1 through ST-4)

Pollutant	Limits/Standards	Applicable Regulation
Odors	State-enforceable only	15A NCAC 2D .1806
	See Section 2.2 A.2	
Toxic air pollutants	State-enforceable only	15A NCAC 2Q .0711
	See Section 2.2 A.3	
Toxic air pollutants	State-enforceable only	15A NCAC 2D .1100
	See Section 2.2 A.4	
Hazardous air	See Section 2.2 A.5	15A NCAC 2Q .0317
pollutants		(MACT Avoidance)
Volatile organic	See Section 2.4 A.	15A NCAC 2D .0530
compounds		

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

#### H. Two natural gas/No. 2 fuel oil oil-fired boilers (ID Nos. UA-1 and UA-2)

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

Pollutant	Limits/Standards	Applicable Regulation
Odors	State-enforceable only	15A NCAC 2D .1806
	See Section 2.2 A.2	
Toxic air pollutants	State-enforceable only	15A NCAC 2Q .0711
	See Section 2.2 A.3	
Toxic air pollutants	State-enforceable only	15A NCAC 2D .1100
	See Section 2.2 A.4	
Hazardous air	See Section 2.2 A.5	15A NCAC 2Q .0317
pollutants		(MACT Avoidance)
Volatile organic compounds	See Section 2.4 A.	15A NCAC 2D .0530

#### 1. 15ANCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas, No. 2 fuel oil that are discharged from these sources (**ID Nos. UA-1 and UA-2**) into the atmosphere shall not exceed 0.262 pounds per million Btu heat input.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H.1.a above, the Permittee shall be deemed in

noncompliance with 15A NCAC 2D .0503.

#### Monitoring/Record keeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas, No. 2 in these sources (ID Nos. UA-1 and UA-2).

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

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

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

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

#### Monitoring/Record keeping [15A NCAC 2Q .0508(f) and 15A NCAC 2D .0501(c)(4)(A)]

c. No monitoring/recordkeeping is required for sulfur dioxide emissions from the firing of natural gas and No. 2 fuel oil in these sources (ID Nos. UA-1 and UA-2).

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

d. No reporting is required for monitoring sulfur content from the firing of natural gas and No. 2 fuel oil in these sources (ID Nos. UA-1 and UA-2).

#### 3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources (**ID** Nos. UA-1 and UA-2) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

#### <u>Testing</u> [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 H.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

c. No monitoring/recordkeeping is required for visible emissions from the firing of natural gas and No. 2 fuel oil in these sources (ID Nos. UA-1 and UA-2).

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

d. No reporting is required for visible emissions from the firing of natural gas and No. 2 fuel oil in these sources (ID Nos. UA-1 and UA-2).

#### 4. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.11193, 63.11194(a)(1) and(b), 63.11200(c)]

a. For these sources (ID Nos. UA-1 and UA-2) (*i.e.*, existing boilers in the oil subcategory with no oxygen trim system), the Permittee shall comply with all applicable provisions, including the notification, testing, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" as promulgated in 40 CFR 63 Subpart JJJJJJ "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers" including Subpart A "General Provisions." [Note - These boilers do not have oxygen trim system, 63.11200(c) – pertains to Oil subcategory]

#### **Definitions and Nomenclature**

b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.11237 shall apply.

#### General Provisions [40 CFR 63.11235]

c. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart JJJJJJ. [40 CFR 63.11235]

#### **Compliance Dates**

d. The Permittee shall achieve compliance with the initial tune up requirement no later than March 21, 2014. This action was completed on January 2014. [40 CFR 63.11196(a)(1) and 63.11210(c)]

#### **Notifications**

The Permittee shall submit a Notification of Compliance Status. The notification shall be signed by a responsible official and submitted by July 19, 2014. This action was completed July 2014, before July 19, 2014 [40 CFR 63.11225]

#### General Compliance Requirements [15A NCAC 02Q .0508(b)]

f. At all times the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these general compliance requirements are not met. [40 CFR 63.11205(a)]

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

- g. The Permittee shall conduct an initial tune-up of the boiler and subsequent tune-ups every two years.
  - i. Each two-year tune-up shall be conducted no more than 25 months after the previous tune-up.
    - ii. The Permittee shall conduct the tune-ups while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.
    - iii. The tune-ups shall be conducted according to the following procedures:
      - (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may delay the burner inspection until the next scheduled unit shutdown but the Permittee must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection.
      - (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
      - (C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The Permittee may delay the inspection until the next scheduled unit shutdown, but the Permittee must inspect each system controlling the air-to-fuel ratio at least once every 72 months. Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection.
    - (D) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.
    - (E) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
    - (F) If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 days of startup.

[40 CFR 63.11201(b), Table 2 to 40 CFR 63 Subpart 6J, 40 CFR 63.11223(a), (b)] The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.

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

h. The Permittee shall conduct a one-time energy assessment performed by a qualified energy assessor. [40 CFR 63.11201(b), Table 2 to 40 CFR Subpart JJJJJJ]. This action was completed October 12, 2012.

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

- i. The following recordkeeping requirements apply. The Permittee shall:
  - i. as required in 40 CFR 63.10(b)(2)(xiv), keep a copy of each notification and report that was submitted to comply with GACT JJJJJJ and all documentation supporting any Notification of Compliance Status that was submitted. [40 CFR 63.11225(c)(1)]
  - ii. keep records to document conformance with the performance tune-ups. The records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. [40 CFR 63.11225(c)(2)(i)]
  - iii. keep a copy of the energy assessment report. [40 CFR 63.11225(c)(2)(iii)]
  - iv. keep records of the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment. [40 CFR 63.11225(c)(4)]
  - v. keep records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in <u>Section 2.1 H.4. e f</u>, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation. [40 CFR 63.11225(c)(5)]
  - vi. maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (A) through (C) below:
    - (A) the concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;
    - (B) a description of any corrective actions taken as a part of the tune-up of the boiler; and
    - (C) the type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
    - [40 CFR 63.11223(b)(6)]
  - vii. keep:
    - (A) records in a form suitable and readily available for expeditious review;
    - (B) each record for 5 years following the date of each recorded action; and
    - (C) each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The Permittee may keep the records off site for the remaining 3 years.
    - [40 CFR 63.11225(d)]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if these recordkeeping requirements are not met.

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

j. The annual compliance certification reporting requirements of 40 CFR 63.11225(b) shall be met by complying with General Condition P of Section 4 of this permit.

I. Two diesel engine driven peak shaving generators (ID Nos. EGDD-1 and EGDD-2) Three diesel-fired peak shaving generators, 2,145 kilowatts each (ID Nos. EGDD-3 through EGDD-5)

Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	40 percent opacity for sources (ID Nos. EGDD-1, EGDD-2,)	15A NCAC 2D .0521
Visible emissions	20 percent opacity Applicable only for air compressor (ID	15A NCAC 2D .0521
	Nos. ACDD-3 and EGDD-3 through EGDD-5)	
Nitrogen oxides	PSD BACT Limitation – Nitrogen oxide emissions shall be	15A NCAC 2D .0530
	less than 75.72 tons per consecutive 12-month period for	
	sources (ID Nos. EGDD-1, and EGDD-2)	
Hazardous air	National Emission Standards for Hazardous Air Pollutants	15A NCAC 2D .1111
pollutants	for Stationary Reciprocating Internal Combustion Engines	(40 CFR 63, Subpart
		ZZZZ)
Toxic air pollutants	State-enforceable only	15A NCAC 2Q .0711
	See Section 2.2 A.3	
Toxic air pollutants	State-enforceable only	15A NCAC 2D .1100
	See Section 2.2 A.4	
Hazardous air	See Section 2.2 A.5	15A NCAC 2Q .0317
pollutants		(MACT Avoidance)
Volatile organic	See Section 2.4 A.	15A NCAC 2D .0530
compounds		

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

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

a. Emissions of sulfur dioxide from these sources (**ID Nos. EGDD-1, EGDD-2, and EGDD-3 through EGDD-5**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 I.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/reporting is required for sulfur dioxide emissions from the combustion of diesel fuel in these sources (ID Nos. EGDD-1, EGDD-2, and EGDD-3 through EGDD-5).

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

i. a. Visible emissions from these sources (ID Nos. EGDD-1 and EGDD-2) shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 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 90 percent opacity.

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

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

#### Monitoring/Record keeping/Reporting [15A NCAC 2Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of diesel fuel in these sources (ID Nos. EGDD-1 and EGDD-2).
- ii. a. Visible emissions from this source (ID Nos. EGDD-3 through EGDD-5), 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 2Q .0508(f)]

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

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

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of diesel fuel in this source (ID Nos. EGDD-3 through EGDD-5).

#### 3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

 a. To comply with the best available control technology (BACT) determination pursuant to 15A NCAC 2D .0530, "Prevention of Significant Deterioration," nitrogen dioxide emissions from these sources (ID Nos. EGDD-1 and and EGDD-2) shall comply with the following BACT Limits:

PSD Affected Source	BACT Limit
Diesel-driven generator (ID No. EGDD-1)	43.76 lbs NOx/hour
Diesel-driven generator (ID No. EGDD-2)	43.76 lbs NOx/hour

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

- b. In order to ensure compliance with limit above, the facility is limited to the following operational conditions:
  - i. The Permittee shall limit operation of these sources (ID Nos. EGDD-1 and EGDD-2) to 1500 hours total per consecutive twelve-month period.

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

c. The Permittee shall record the total monthly hours of operation for these sources (ID Nos. EGDD-1 and EGDD-2). Tons of NOx per month shall be calculated using the following equation for these sources (ID Nos. EGDD-1 and EGDD-2) by the end of each month for the previous month:

43.76 
$$\frac{lbs \ NOx}{hour} \times A \ \frac{hours}{month} \times \frac{1.0 \ ton}{2000 \ lbs} = B \ \frac{tons \ NOx}{month}$$

Where:

A = the number of hours per month total for the two diesel engine driven generators.

B = the number of tons of NOx per month total for the two diesel engine driven generators.

Tons of NOx per month shall be calculated using the following equation for these sources (ID Nos. for these sources (ID Nos. EGDD-1 and EGDD-2):

7.80 
$$\frac{lbs \ NOx}{hour} \times C \ \frac{hours}{month} \times \frac{1.0 \ ton}{2000 \ lbs} = D \ \frac{tons \ NOx}{month}$$

Where:

C = the number of hours per month total for the five diesel engine driven compressors.

D = the number of tons of NOx per month total for the five diesel engine driven compressors.

These calculations shall be recorded in an emissions logbook (electronic or written) for each month. In addition, the Permittee shall make available to officials of the Division of Air Quality, upon request, copies of the emissions log. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the nitrogen dioxide emissions exceed a limit in Section 2.1.I.3.a above.

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

- d. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
  - i. The monthly nitrogen oxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
  - ii. The monthly total hours of operation for the generators and for the compressors for the previous 17 months.

#### 4. 15A NCAC 2D .1111: "Maximum Achievable Control Technology

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

a. For these engines (ID Nos. EGDD-1, EGDD-2 and EGDD-3 through EGDD-5) (existing stationary RICE located at an area source of HAP emissions), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, "Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines," and Subpart A "General Provisions."

#### **Definitions and Nomenclature**

b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.6675 shall apply.

#### Compliance Date [[15A NCAC 02Q .0508(f)]

c. The Permittee shall comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. [40 CFR 63.6595(a)(1)] DEQ granted one-year extension for Initial performance testing. DAQ resolved issues and initial performance testing completed on March 11, 2015.<sup>1</sup>

#### General Provisions [40 CFR 63.6665]

d. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart ZZZZ

#### Notifications [15A NCAC 02Q .0508(f)

- e. The Permittee shall:
  - i. submit all of the notifications in the following regulations that apply by the dates specified:
    - (A) 40 CFR 63.7(b) [performance testing] and (c) [quality assurance program];
    - (B) 40 CFR 63.8(e) [*performance evaluation of CPMS*], (f)(4) and (f)(6) [*alternative monitoring methods*]; and
    - (C) 40 CFR 63.9(b) through (e), and (g) and (h) [*initial notifications*].
    - [40 CFR 63.6645(a)]
  - ii. submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). [40 CFR 63.6645(g)]
  - iii. for each performance test, submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR 63.9(h)(2)(ii) and 63.10(d)(2). [40 CFR 63.6630(c), 40 CFR 63.6645(h)]

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

#### General Compliance Requirements [15A NCAC 2Q .0508(b)]

- f. The permittee shall:
  - i. be in compliance with the emission limitations, operating limitations and other requirements that apply at all times. [40 CFR 63.6605(a)]
  - ii. operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further

<sup>&</sup>lt;sup>1</sup>See review for application # 9800043.21A

efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

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

#### Fuel Requirements [15A NCAC 2Q .0508(b)]

- g. The Permittee shall use diesel fuel in the engine with:
  - i. a maximum sulfur content of 15 ppm; and
  - ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.
  - [40 CFR 63.6604(a)]

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

#### Emissions and Operating Limitations [15A NCAC 2Q .0508(b)]

- h. The following emissions and operating limitations apply:
  - i. The Permittee shall, using an oxidation catalyst:
    - (A) limit the concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent  $O_2$ ; or (B) Reduce CO emissions by 70 percent or more.
    - [40 CFR 63.6603(a), Tables 2b and 2d of 40 CFR 63 Subpart ZZZZ]
  - ii. Except during periods of start-up, the Permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. [40 CFR 63.6603(a), Table 2b of 40 CFR 63 Subpart ZZZZ]
  - iii. Except during periods of start-up, the Permittee shall maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the most recent performance test. [40 CFR 63.6603(a), Table 2b of 40 CFR 63 Subpart ZZZZ]
  - iv. During periods of startup of the IC engine, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 40 CFR 63.6625(h), Table 2d of 40 CFR 63 Subpart ZZZZ]
  - v. If the engine(s) is not equipped with a closed crankcase ventilation system, the Permittee shall comply with either subparagraph (A)or (B). Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements.
    - (A) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or
    - (B) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.
       [40 CFR 63.6625(g)]

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

#### Testing Requirements [15A NCAC 2Q .0508(b)]

- i. The following testing requirements apply:
  - i. The Permittee shall conduct initial and subsequent performance tests to demonstrate compliance with the limitations in Sections 2.1 I.4.h . [40 CFR 63.6620(a)]
  - ii. The Permittee shall conduct the initial performance test by October 30, 2013 and according to 40 CFR 63 Subpart ZZZZ Tables 4 and 5 and the provisions in 40 CFR 63.7(a)(2). [40 CFR 63.6612(a)] *This initial testing was done on 9/16/2014 and 9/17/2014"*. [Note -the site was given a one-year extension on this date.]
  - iii. The Permittee shall conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first. [40 CFR 63.6615, Table 3 of 40 CFR 63 Subpart ZZZZ 3]
  - iv. Each performance test shall be conducted according to the requirements of 40 CFR 63 Subpart ZZZZ Table 4. If a non-operational stationary RICE is subject to performance testing, the Permittee does not need to start up the engine solely to conduct the performance test. The Permittee can conduct the performance test when the engine is started up again. [40 CFR 63.6620(a), (b)]

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

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

- j. The following monitoring requirements apply:
  - i. The Permittee shall install, operate, and maintain continuous parameter monitoring systems (CPMS) to monitor the catalyst inlet temperature for each catalyst and reduce the temperature data to 4- hour rolling averages. The Permittee shall maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature in Section 2.1 I.4.h.ii [ 40 CFR 63.6625(b), 63.6640(a), Tables 5 and 6 to 40 CFR 63 Subpart ZZZZ]
  - ii. The Permittee shall measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the performance test per Section 2.1 I.4.h.iii [Tables 5 and 6 to 40 CFR 63 Subpart ZZZZ, 40 CFR 63.6640(a)]
  - iii. The Permittee shall install, operate, and maintain each CPMS according to the requirements in paragraphs (A) through (F):
    - (A) The Permittee shall prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of 40 CFR 63.6625 and in 40 CFR 63.8(d).
    - (B) The Permittee shall install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan.
    - (C) The CPMS must collect data at least once every 15 minutes (see also 40 CFR 63.6635).
    - (D) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
    - (E) The Permittee shall conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually.
    - (F) The Permittee shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan.
    - [40 CFR 63.6625(b)]
  - iv. The Permittee shall monitor and collect data as follows:
    - (A) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the Permittee shall monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
    - (B) The Permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The Permittee shall, however, use all the valid data collected during all other periods.
    - [40 CFR 63.6635]

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

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

- k. The following recordkeeping requirements apply:
  - i. The Permittee shall keep records of the following monitoring data:
    - (A) catalyst(s) inlet temperature data including the 4-hour rolling averages; and
    - (B) the monthly measurements of the pressure drop across the catalyst(s).
    - [40 CFR 63.6655(d)]
  - ii. The Permittee shall keep the following:
    - (A) a copy of each notification and report that was submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).
    - (B) records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
    - (C) records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
    - (D) records of all required maintenance performed on the air pollution control and monitoring equipment.
    - (E) records of actions taken during periods of malfunction to minimize emissions in accordance with

Section 2.1 I.4.f.ii including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)]

- iii. For each inlet catalyst temperature CPMS, the Permittee shall keep the following records:
  - (A) records described in 40 CFR 63.10(b)(2)(vi) through (xi).
    - (B) previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).
  - (C) requests for alternatives to the relative accuracy test for CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.
  - [40 CFR 63.6655(b)]
- iv. The Permittee shall keep fuel records demonstrating all fuel burned meets the requirements of Section 2.1 I.4. g above.
- iv. The Permittee shall keep each record in a form suitable and readily accessible for expeditious review in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660]

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

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

- 1. The following reporting requirements apply:
  - i. The permittee shall submit a compliance report semiannually postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit must be clearly identified. [40 CFR 63.6650(a),(b)(5) and 40 CFR 63.6650(f)]
  - ii. The compliance report must contain:
    - (A) Company name and address;
    - (B) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report; and
    - (C) Date of report and beginning and ending dates of the reporting period.
    - (D) If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with Section 2.1 I.4.f.ii (i.e., 40 CFR 63.6605(b)) including actions taken to correct a malfunction.
    - (E) If there are no instances of noncompliance from any emission or operating limitations that apply, a statement that there were no instances of noncompliance from the emission or operating limitations during the reporting period.
    - (F) If there were no periods during which the CPMS was out-of-control, as specified in 40 CFR63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.
    - [40 CFR 63.6650(c)]
  - iii. For each instance of noncompliance from an emission or operating limitation that occurs for the stationary RICE where the Permittee is <u>not using a CMS</u> to comply with the emission or operating limitations, the compliance report must contain the information in Sections 2.1 I.4.1.ii (A) through (D) and the following information:
    - (A) The total operating time of the stationary RICE at which the instance of noncompliance occurred during the reporting period.
    - (B) Information on the number, duration, and cause of instances of noncompliance (including unknown cause, if applicable), as applicable, and the corrective action taken.[40 CFR 63.6650(d)]
  - iv. For each instance of noncompliance from an emission or operating limitation occurring for a stationary RICE where the Permittee **is using a CMS** to comply with the emission and operating limitations in this subpart, the Permittee shall include information in Sections 2.1 I.4.1.ii (A) through (D) and the following information:
    - (A) The date and time that each malfunction started and stopped.
    - (B) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level
checks.

- (C) The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8).
- (D) The date and time that each instance of noncompliance started and stopped, and whether each instance of noncompliance occurred during a period of malfunction or during another period.
- (E) A summary of the total duration of the instances of noncompliance during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
- (F) A breakdown of the total duration of the instances of noncompliance during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
- (G) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
- (H) An identification of each parameter and pollutant that was monitored at the stationary RICE.
- (I) A brief description of the stationary RICE.
- (J) A brief description of the CMS.
- (K) The date of the latest CMS certification or audit.
- (L) A description of any changes in CMS, processes, or controls since the last reporting period. [40 CFR 63.6650(e)]

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

#### 5. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. i) In order to avoid applicability of 15A NCAC 02D .0530(g), these sources (ID Nos. EGDD-3, EGDD-4 and EGDD-5) shall discharge into the atmosphere less than 40 tons of NO<sub>x</sub> emissions per consecutive 12-month period and
  - ii) the total combined hours of operation of these sources (ID Nos. EGDD-3, EGDD-4 and EGDD-5) shall not exceed 2,100 hours per consecutive 12-month period

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

b. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 I.5.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. The Permittee shall keep **monthly** records in a logbook (written or electronic format) of the hours of operations of the three diesel-fired peak shaving generators, 2,145 kilowatts each (ID Nos. EGDD-3, EGDD-4 and EGDD-5).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the hours of operation of the three diesel-fired peak shaving generators are not monitored.

**d.** The Permittee shall Calculate monthly and recorded in a logbook (written or electronic format), to record the monthly hours of operation from these sources (**ID Nos. EGDD-3, EGDD-4 and EGDD-5**). The Permittee shall use the latest AP-42 emissions factors to determine the monthly NO<sub>x</sub> emissions based on the monthly hours of operation and the maximum kilowatt rating of these sources (**ID Nos. EGDD-3, EGDD-4 and EGDD-5**).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these calculations are not made, or records are not kept or the  $NO_x$  emissions exceed the limit in Section 2.1 I.5.a.i above.

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

- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section(s) 2.1 I. 7. C., and d., above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
  - i. The monthly NOx emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months and
  - ii. The monthly total combined hours of operation of these sources (ID Nos. EGDD-3, EGDD-4 and EGDD-

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5) for the previous 17 months.

# J. Temporary, back-up natural gas/No. 2 fuel oil-fired boiler with a maximum permitted heat input rating of no greater than 100 million Btu per hour, total (ID No. UA-T1)

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.242 pounds per million Btu heat input	15A NCAC 2D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D. 0516
Visible emissions	20 percent opacity	15A NCAC 2D. 0521
Sulfur dioxide	New Source Performance Standards for Small Industrial-	15A NCAC 2D. 0524
	Commercial-Institutional Steam Generating Units	(40 CFR 60, Subpart Dc)
	0.5 percent sulfur content fuel oil	
Visible emissions	New Source Performance Standards for Small Industrial-	15A NCAC 2D. 0524
(boilers 30 million Btu	Commercial-Institutional Steam Generating Units	(40 CFR 60, Subpart Dc)
per hour heat input	20 percent opacity	
firing fuel oil)		
PM	Less than 25 tons per consecutive 12-month period	15A NCAC 2Q .0317 of
$PM_{10}$	Less than 15 tons per consecutive 12-month period	2D .0530 (PSD
$SO_2$	Less than 40 tons per consecutive 12-month period	Avoidance)
СО	Less than 100 tons per consecutive 12-month period	
NOx	Less than 40 tons per consecutive 12-month period	
Toxic air pollutants	State-enforceable only	15A NCAC 2Q .0711
	See Section 2.2 A.3	
Toxic air pollutants	State-enforceable only	15A NCAC 2D .1100
	See Section 2.2 A.4	
Criteria pollutants	See Section 2.1 J.4	15A NCAC 2Q .0317
		(NSPS Avoidance)
Hazardous air	See Section 2.1 J.6	15A NCAC 2Q .0317
pollutants		(MACT Avoidance)
Volatile organic	See Section 2.1 J.5	15A NCAC 2D .0530
compounds		

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

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

a. Emissions of particulate matter from the combustion of natural gas and No. 2 fuel oil, that are discharged from this sources (**ID No. UA-T1**) into the atmosphere shall not exceed 0.242 pounds per million Btu heat input.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 J.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

#### Monitoring/Record keeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of No.2 fuel oil or natural gas in this source(s) (ID No. UA-T1).

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

a. Emissions of sulfur dioxide from this sources (**ID No. UA-T1**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 J.2.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/reporting is required for sulfur dioxide emissions from the firing of No.2 fuel oil or natural gas in this source(s) (ID No. UA-T1).

#### 3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from any non-NSPS affected boiler, any natural gas-fired boiler, or any fuel oil-fired boiler with a maximum heat capacity less than 30 million Btu per hour (ID No. UA-T1) 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 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 J.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

#### Monitoring/Record keeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of No. 2 fuel oil or natural gas in this source (**ID No. UA-T1**).

#### 4. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. In order to avoid the applicability of Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," the Permittee shall operate the emission source (**ID No. UA-T1**) as a temporary boiler as defined in 40 CFR 60.41c. If the emission source (**ID No. UA-T1**) has a maximum design heat input capacity less than 10 MMBtu per hour, these requirements in Section 2.1 J.4. do not apply. [40 CFR 60.40c(i)]
- b. Temporary boiler means a steam generating unit that combusts natural gas or distillate oil with a potential SO<sub>2</sub> emissions rate no greater than 26 ng/J (0.060 lb/MMBtu), and the unit is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A steam generating unit is not a temporary boiler if any one of the following conditions exists:
  - i. The equipment is attached to a foundation.
  - ii The steam generating unit or a replacement remains at a location **for more than 180 consecutive days**. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.
  - iii. The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.
  - iv. The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition.
  - [40 CFR 60.41c]

c.

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

- The Permittee shall maintain, and make available upon request, the following records:
- i. the first, last and total number of days the boiler is on site for each consecutive time period the boiler is brought on site;
- ii. the function of the boiler for each consecutive time period; and
- iii. if distillate oil is combusted, the sulfur content or maximum sulfur content of the oil.

The records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02Q .0317 if these recordkeeping requirements are not met or the boiler does not meet the definition of a temporary boiler as defined in Section 2.1 J.6.b above.

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

- d. The Permittee shall submit the following written notifications to the Regional Supervisor for any Subpart Dc affected temporary, back-up boiler (ID No. UA-T1):
  - i. An <u>initial notification</u> of the date of actual initial startup of the source(s) within 15 days of such date [40 CFR 60.7(a)(3)];
  - ii. An <u>opacity observation notification</u> indicating the anticipated date that the Permittee will be conducting the Method 9 opacity observation, as required in Section 2.1 J.4.e above, at least 30 days prior to such date [40 CFR 60.7(a)(6), 40 CFR 60.8(d)]; and
- i. In addition to any other reporting required by 40 CFR 60.48c or notification requirements to the EPA, the Permittee is required to provide a semiannual summary report, acceptable to the Regional Air Quality Supervisor, of the sulfur content of the distillate fuel oil fired, 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 summary report shall include the following information:
  - i. Fuel supplier certification(s) for distillate fuel oil, as provided in Section 2.1 J.4.c above;
  - ii. A Certified statement signed by the owner or operator that the records of fuel supplier certification(s) submitted represents all of the fuel fired at the affected source(s) (ID No. UA-T1) during the semiannual period; and
  - iii. All instances of deviations from the requirements of this permit must be clearly identified.

#### 5. 15A NCAC 2Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. To avoid applicability of 15A NCAC 2D .0530, "Prevention of Significant Deterioration," as requested by the Permittee, criteria pollutant emissions from this source (**ID No. UA-T1**) shall be less than the following per consecutive 12-month period.

Pollutant	Emission Limit (tons)
Particulate (TSP)	25
PM10	15
Sulfur dioxide	40
Carbon monoxide	100
Nitrogen oxides	40

b. This source(s) (**ID Nos. UA-T1**) shall be limited to an annual No. 2 fuel oil usage and/or natural gas usage based on the fuel sulfur content as follows:

$$\sum_{i=1}^{12} \sum_{j=1}^{n} \frac{\left(\mathcal{Q}_{j} \times 142 \times S_{j}\right)}{2000} + \sum_{i=1}^{12} \frac{\left(\mathcal{Q}_{n} \times 0.6\right)}{2000} (40 \text{ tons})$$

Where:

- i = a month in a consecutive 12-month period
- Qj = the thousands of gallons of No. 2 fuel oil combusted with Sj sulfur content for month i
- $Q_n$  = the million cubic feet of natural gas combusted for month i
- $S_j =$  sulfur content in percent by weight for No. 2 fuel oil j
- i = denotes all No. 2 fuel oil with the same sulfur content
- n = denotes the number of No. 2 fuel oils combusted with different sulfur content
- $SO_2$  AP-42 factor, Supplement E (No. 2 fuel oil) = 142 lbs  $SO_2/1000$  gallons
- SO<sub>2</sub> AP-42 factor, Supplement D (natural gas) = 0.6 lbs SO<sub>2</sub>/million cubic feet
- c. This source(s) (**ID Nos. UA-T1**) shall be limited to an annual No. 2 fuel usage and/or natural gas usage based on the nitrogen dioxide emissions as follows:

$$\sum_{i=1}^{12} \frac{\left(Q_{j} \times 20\right)}{2000} + \sum_{i=1}^{12} \frac{\left(Q_{n} \times 100\right)}{2000} \quad (40 \text{ tons})$$

Where:

i = a month in a consecutive 12-month period Qj = the thousands of gallons of No. 2 fuel oil combusted for month i  $Q_n$  = the million cubic feet of natural gas combusted for month i NO<sub>x</sub> AP-42 factor, Supplement E (No. 2 fuel oil) = 20 lbs NO<sub>x</sub>/1000 gallons NO<sub>x</sub> AP-42 factor, Supplement D (natural gas) = 100 lbs NO<sub>x</sub>/million cubic feet

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

- d. To ensure enforceability of the sulfur dioxide limit, calculation of sulfur dioxide emissions per month shall be made by the end of each month for the previous month. SO<sub>2</sub> emissions shall be determined in accordance with Section 2.1 J.5.b above. The calculations of the total monthly SO<sub>2</sub> emissions, total gallons of No. 2 fuel oil combusted, total cubic feet of natural gas combusted, and each corresponding vendor sulfur content certification (No. 2 fuel oil) must be recorded in a monthly emissions logbook (written or electronic format).
- e. To ensure enforceability of the nitrogen dioxide limit, calculation of nitrogen dioxide emissions shall be made for each month. NO<sub>x</sub> emissions shall be determined in accordance with Section 2.1 J.5.c above. The calculations of the total monthly NO<sub>x</sub> emissions, total gallons of No. 2 fuel oil combusted, and total cubic feet of natural gas combusted, must be recorded in a monthly emissions logbook (written or electronic format).
- f. In addition, the Permittee shall make available to officials of the Division of Air Quality, upon request, copies of the monthly emissions logbook. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not retained or if any criteria pollutant emissions exceed a limit in Section 2.1 J.5.a above.

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

- g. 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. The report shall contain the following:
  - i. The monthly sulfur dioxide and nitrogen oxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
  - ii. The monthly quantities of natural gas and No. 2 fuel oil consumed for the previous 17 months; and
  - iii. The average sulfur content of the No. 2 fuel oil.
- h. Within 10 working days after the installation of any source(s) (**ID No. UA-T1**), the Permittee shall notify in <u>WRITING</u> the Air Quality Regional Supervisor, Division of Air Quality, Raleigh Region of the installation. Such notice shall specify the size of the temporary boiler(s), it's(their) date(s) of manufacture.

#### 6. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .1111: MAXIMUM AVAILABLE CONTROL TECHNOLOGY

(The following is an regulations apply to avoidance condition for MACT Subpart JJJJJJ temporary boilers at minor facilities)

- a. In order to avoid the applicability of Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Available Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart JJJJJJ "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers," the Permittee shall operate the emission source (ID No. UA-T1) as a temporary boiler as defined in 40 CFR 63.11237. [40 CFR 63.11195]
- b. Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A boiler is not a temporary boiler if any one of the following conditions exists:
  - i. The equipment is attached to a foundation.
  - ii. The boiler or a replacement remains at a location within the facility and performs the same or similar function for more than 12 consecutive months, unless the regulatory agency approves an extension. An extension may be granted by the regulating agency upon petition by the owner or operator of a unit

specifying the basis for such a request. Any temporary boiler that replaces a temporary boiler at a location within the facility and performs the same or similar function will be included in calculating the consecutive time period unless there is a gap in operation of 12 months or more.

- iii. The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.
- iv. The equipment is moved from one location to another within the facility but continues to perform the same or similar function and serve the same electricity, steam, and/or hot water system in an attempt to circumvent the residence time requirements of this definition.

[40 CFR 63.11237]

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

- c. The Permittee shall maintain, and make available upon request, the following records:
  - i. the first, last and total number of days the boiler is on site for each consecutive time period the boiler is brought on site and;
  - ii. the function of the boiler for each consecutive time period.

The records shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02Q .0317 if these recordkeeping requirements are not met or the boiler does not meet the definition of a temporary boiler in Section 2.1 J.6.b above.

# K. Green tire dopers Nos. 11 through 22 (ID Nos. GT-11 through GT-22) and green tire dopers No. 23 and No. 24 (ID Nos. GT-23 and GT-24)

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

Pollutant	Limits/Standards	Applicable Regulation
Volatile organic	New Source Performance Standards for the Rubber Tire	15A NCAC 2D .0524
compounds	Manufacturing Industry	(40 CFR 60, Subpart
	Inside spray - 1.2 grams of VOC per tire, monthly average	BBB)
	Outside spray - 9.3 grams per tire, monthly average	
	[40 CFR § 60.542(a)(7)]	
Odors	State-enforceable only	15A NCAC 2D .1806
	See Section 2.2 A.2	
Toxic air pollutants	(ID No. GT-11 only)	15A NCAC 2Q .0711
	State-enforceable only	
	See Section 2.2 A.3	
Toxic air pollutants	(ID No. GT-11 only)	15A NCAC 2D .1100
	State-enforceable only	
	See Section 2.2 A.4	
Hazardous air	See Section 2.2 A.5	15A NCAC 2Q .0317
pollutants		(MACT Avoidance)
Volatile organic	See Section 2.4 A.	15A NCAC 2D .0530
compounds		

#### 1. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. The Permittee shall maintain total (uncontrolled) VOC use less than or equal to the levels specified below for these sources (ID Nos. GT-11 through GT-22 and GT-23 and GT-24):
  - i. Inside spray 1.2 grams of VOC per tire, monthly average.
  - ii. Outside spray 9.3 grams of VOC per tire, monthly average.
  - [40 CFR § 60.542(a)(7)]

#### Monitoring/Recordkeeping [40 CFR 60.545(f) and 15A NCAC 2Q .0508(f)]

- b. The Permittee shall maintain formulation data or EPA reference Method 24 analysis data demonstrating that the green tire sprays contain less than 1.0 percent by weight of VOC. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained or, the formulation data or EPA reference Method 24 analysis data indicate that the green tire sprays contain equal or more than 1.0 percent by weight of VOC.
- c. The Permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60.7. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

#### Reporting [40 CFR 60.543(b)(4), 40 CFR 60.546(j), and 15A NCAC 2Q .0508(f)]

- d. In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to <u>NOTIFY</u> the Regional Supervisor, DAQ, in <u>WRITING</u>, of the date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) of an affected facility (ID Nos. GT-17 through GT-22 and GT-23 and GT-24) is commenced, postmarked no later than 30 days after such date; and the actual date of initial start-up of an affected facility (ID Nos. GT-17 through GT-22 and GT-24), postmarked within 15 days after such date.
- e. The Permittee shall submit to the DAQ within 60 days initially and annually thereafter, formulation data or EPA reference method 24 analysis data demonstrating that the green tire sprays contain less than 1.0 percent by weight VOC.
- f. If the spray material formulation changes before the end of the 12-month period, formulation data or Method 24 analysis of the new spray shall be conducted to determine the VOC content of the spray and reported within 30 days of the change to the DAQ.
- g. 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.

### L. Side wall cementing operation (ID Nos. SW-4 and SW-5)

The following table provides a summar	a of limits and standards fo	r the omission source	(a) described aboves
The following table provides a summar	y of minus and standards to	i the emission source	s) described above.

<b>Regulated Pollutant</b>	Limits/Standards	Applicable Regulation
Volatile organic	New Source Performance Standards for the Rubber Tire	15A NCAC 2D .0524
compounds	Manufacturing Industry	(40 CFR 60, Subpart
	Maintain total (uncontrolled) VOC use less than or equal to	BBB)
	the levels specified below, depending upon	
	the duration of the compliance period:	
	3,220 kg (7,099 lb) of VOC per 28 days,	
	3,340 kg (7,363 lb) of VOC per 29 days,	
	3,450 kg (7,606 lb) of VOC per 30 days,	
	3,570 kg 7,870 lb) of VOC per 31 days, or	
	4,030 kg (8,885 lb) of VOC per 35 days.	
	[40 CFR 60.542(a)(2)(ii)]	
Particulate matter	For process rates up to 30 tons per hour:	15A NCAC 2D .0515
	$E = 4.10 \text{ x } P^{0.67}$	
	For process rates greater than 30 tons per hour:	
	$E = 55.0 \text{ x } P^{0.11} - 40$	
	Where: $E =$ allowable emission rate in pounds per hour	
	P = process weight in tons per hour	
	See Section 2.1 L.2 only for (ID No. SW-5)	
Visible emissions	20 percent opacity	15A NCAC 2D .0521
	See Section 2.1 L.3 only for (ID No. SW-5)	
Odors	State-enforceable only	15A NCAC 2D .1806
	See Section 2.2 A.2	
Toxic air pollutants	State-enforceable only	15A NCAC 2Q .0711
	See Section 2.2 A.3	
Toxic air pollutants	State-enforceable only	15A NCAC 2D .1100
	See Section 2.2 A.4	
Hazardous air	See Section 2.2 A.5	15A NCAC 2Q .0317
pollutants		(MACT Avoidance)
Volatile organic	See Section 2.4 A.	15A NCAC 2D .0530
compounds		

#### 1. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. The Permittee shall maintain total (uncontrolled) VOC use less than or equal to the levels specified below for these sources (ID Nos. SW-4 and SW-5):
  - i. 3,220 kg (7,099 lb) of VOC per 28 days,
  - ii. 3,340 kg (7,363 lb) of VOC per 29 days,
  - iii. 3,450 kg (7,606 lb) of VOC per 30 days,
  - iv. 3,570 kg (7,870 lb) of VOC per 31 days, or

v. 4,030 kg (8,885 lb) of VOC per 35 days depending upon the duration of the compliance period. [40 CFR 60.542(a)(2)(ii)]

#### Monitoring/Recordkeeping [40 CFR 60.543(c)]

- b. The Permittee shall use the following procedure to determine compliance with the VOC emission limit specified in Section 2.1 L.1.a above.
  - i. Determine the density and weight fraction of VOC (including dilution VOC) of each type of cement from its formulation or by analysis of the cement using EPA reference method 24.
  - ii. Calculate the total mass of VOC used at the affected facility for the month (Mo) as specified below by the end of each month for the previous month.
    - A. For each affected facility for which cement is delivered in batch or via a distribution system that serves only the affected facility:

$$M_o = \sum_{i=1}^{a} Lc_i Dc_i Wo_i$$

Where:

a = the number of different cements used during the month that are delivered in batch or via a distribution system that serves only a single affected facility

 $Lc_i =$  the volume of cement "i" used for a month in liters

 $Dc_i$  = the density of cement "i" in grams per liter

Wo<sub>i</sub> = weight fraction of VOC in cement "i"

Mo = total mass of VOC used at an affect facility for a month in grams

- B. For each affected facility for which cement is delivered via a common distribution system that also serves other affected or existing facilities:
  - (1) Calculate the total mass of VOC used for all of the facilities served by the common distribution system for the month (M):

$$M = \sum_{i=1}^{b} Lc_i Dc_i Wo_i$$

Where:

b = equals the number of different cements or green tire sprays used during the month that are delivered via a common distribution system that also serves other affected or existing facilities.

 $Lc_i = the volume of cement "i" used for a month in liters.$ 

 $Dc_i =$  the density of cement "i" in grams per liter.

Wo<sub>i</sub> = weight fraction of VOC in cement "i".

M = total mass of VOC used for a month by all facilities served by a common cement distribution system.

- (2) Determine the fraction (Fo) of M used at the affected facility by comparing the production records and process specifications for the material cemented at the affected facility for the month to the production records and process specifications for the material cemented at all other facilities served by the common distribution system for the month or by another procedure acceptable to the DAQ.
- (3) Calculate the total monthly mass of VOC used at the affected facility for the month (Mo): Mo = MFo

iii. Determine the time duration of the monthly time period (Td).

The Permittee shall be deemed in non-compliance with 15 NCAC 2D .0524 if the required determinations are not completed and documented, or if emissions exceed the limit(s) in Section 2.1 L.1.a above.

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

c. The Permittee shall submit a summary report of any exceedance of the mass of VOC used (Mo) for each monthly time period and the corresponding number of days in the respective time period. The report shall be postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

#### 2. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from this source (ID No. SW-5) shall not exceed an allowable emission rate as calculated by the following equation:

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

Where E = allowable emission rate in pounds per hour

P =process weight in tons per hour

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

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

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 L.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.
  - Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]
- c. The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above, can be derived and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.

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

a. Visible emissions from this source (**ID No. SW-5**) 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.

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

c. No monitoring/recordkeeping/reporting is required for visible emissions from this source (ID No. SW-5).

#### M. Three extrusion line (ID Nos. TU-3, TU-4, and TU-5)

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	For process rates up to 30 tons per hour: $E = 4.10 \text{ x P}^{0.67}$	15A NCAC 2D .0515
	For process rates greater than 30 tons per hour: $E = 55.0 \text{ x P}^{0.11} - 40$	
	Where: $E =$ allowable emission rate in pounds per hour P = process weight in tons per hour	
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Odors	State-enforceable only See Section 2.2 A.2	15A NCAC 2D .1806
Toxic air pollutants	State-enforceable only See Section 2.2 A.3	15A NCAC 2Q .0711
Toxic air pollutants	State-enforceable only See Section 2.2 A.4	15A NCAC 2D .1100
Hazardous air pollutants	See Section 2.2 A.5	15A NCAC 2Q .0317 (MACT Avoidance)
Volatile organic compounds	See Section 2.4 A.	15A NCAC 2D .0530

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

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

a. Emissions of particulate matter from this source (ID Nos. TU-3, TU-4, and TU-5) shall not exceed an allowable emission rate as calculated by the following equations:

For process rates up to 30 tons per hour:

 $E = 4.10 \text{ x } P^{0.67}$ 

For process rates greater than 30 tons per hour:

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

Where: E = allowable emission rate in pounds per hour

P =process weight in tons per hour

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

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 M.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

#### Monitoring/Record keeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from this source (ID Nos. TU-3, TU-4, and TU-5).

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

a. Visible emissions from this source (**ID Nos. TU-3, TU-4, and TU-5**) 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 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

#### Monitoring/Record keeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from this source (TU-3, TU-4, and TU-5).

#### N. Two diesel-fired emergency fire pump engines (ID Nos. ES-4.5 and ES-4.6)

Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Hazardous air	(ID No. ES-4.5 and ES-4.6)	15A NCAC 2D .1111
pollutants	National Emission Standards for Hazardous Air Pollutants	(40 CFR 63, Subpart
	for Reciprocating Internal Combustion Engines	ZZZZ)
	-Per 40 CFR 63.6590(c)(6), compliance with MACT is	
	achieved by compliance with NSPS (40 CFR 60, Subpart	15A NCAC 2D .0524
	IIII)	(40 CFR 60, Subpart IIII)
Toxic air pollutants	State-enforceable only	15A NCAC 2Q .0711
	See Section 2.2 A.3	
Toxic air pollutants	State-enforceable only	15A NCAC 2D .1100
	See Section 2.2 A.4	
Hazardous air	See Section 2.2 A.5	15A NCAC 2Q .0317
pollutants		(MACT Avoidance)
Volatile organic	See Section 2.4 A.	15A NCAC 2D .0530
compounds		

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

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

a. Emissions of sulfur dioxide from these sources (ID No. ES-4.5 and ES-4.6) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 N.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/reporting is required for sulfur dioxide emissions from the firing of diesel fuel in these sources (ID No. ES-4.5 and ES-4.6).

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

a. Visible emissions from these sources (**ID No. ES-4.5 and ES-4.6**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

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

#### Monitoring/Record keeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of diesel fuel in in these sources (ID No. ES-4.5 and ES-4.6).

#### 3. 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.6585, 63.6590(a)(2)(iii)]

a. For these sources (ID No. ES-4.5 and ES-4.6) (new stationary RICE located at an area source of HAP

*emissions*) the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63 Subpart ZZZZ "National Emission Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

#### Stationary RICE subject to Regulations under 40 CFR Part 60 [15A NCAC 02Q. 0508(b)]

b. Pursuant to 40 CFR 63.6590(c)(1), these sources (ID No. ES-4.5 and ES-4.6) shall meet the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A by meeting the requirements of 40 CFR 60 Subpart IIII. No further requirements apply for these engines under 40 CFR 63 Subpart ZZZZ and Subpart A.

If the requirements in condition b. are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111.

#### 4. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS

#### Applicability [15A NCAC 02Q .0508(b), 40 CFR 60.4200(a)(2)(ii)]

a. For these <u>fire pump</u> engines (**ID** No. ES-4.5 and ES-4.6), the Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," including Subpart A "General Provisions."

#### **Definitions and Nomenclature**

b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 60.4219 shall apply.

#### General Provisions [15A NCAC 02Q .0508(b)]

c. The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 8 of 40 CFR 60 Subpart IIII. [40 CFR 60.4218]

#### Emission Standards [15A NCAC 02Q .0508(b]

d. The Permittee shall comply with the emission standards in Table 4 of NSPS Subpart IIII for all pollutants, for the same model year and maximum engine power for this engine. [40 CFR 60.4205(c) – Fire pump citation]

#### Fuel Requirements [15A NCAC 02Q .0508(b)]

- e. The Permittee shall use diesel fuel in the engine that meets the requirements of 40 CFR 1090.305 including: i. a maximum sulfur content of 15 ppm; and
  - ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.
  - [40 CFR 60.4207(b)]

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

f. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in **Sections 2.1 N.4.d and e** above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

- g. The engine has the following monitoring requirements:
  - i. The engines shall be equipped with a non-resettable hour meter prior to startup. [40 CFR 60.4209(a)]
  - ii. The engine, if equipped with a diesel particulate filter, must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these monitoring requirements are not met.

#### Compliance Requirements [15A NCAC 02Q .0508(b)]

- h. The Permittee shall:
  - i. operate and maintain the <u>engines and control devices</u> according to the manufacturer's emission relatedwritten instructions over the entire life of the engine;
  - ii. change only those emission-related settings that are permitted by the manufacturer; and
  - iii. meet the requirements of 40 CFR 89, 94 and/or 1068 as applicable.
  - [40 CFR 60.4206 and 40 CFR 60.4211(a)]
- i. The Permittee shall comply with the emission standards in Section 2.1 N.4.d by purchasing an engine certified to the emission standards in Section 2.1 N.4.d. The engine shall be installed and configured according to the manufacturer's specifications. [40 CFR 60.4211(c)]
- j. In order for the engine to be considered an emergency stationary internal combustion engine (ICE) as defined in **Section 2.1 N.4.b**, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited.
  - i. There is no time limit on the use of emergency stationary ICE in emergency situations.
  - ii. The Permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraph (A) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (iii) below counts as part of the 100 hours per calendar year allowed by this paragraph (ii).
    - (A) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
  - iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (ii) above. Except as provided in paragraph (A) below, the 50 hours per calendar year for non- emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
    - (A) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
      - (1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
      - (2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
      - (3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
      - (4) The power is provided only to the facility itself or to support the local transmission and distribution system.
      - (5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

#### [40 CFR 60.4211(f)]

k. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the requirements in Sections 2.1 N.4.h through j are not met.

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

- 1. The following records shall be maintained:
  - i. The results of inspection and maintenance made pursuant to **Section 2.1 N.\$.h** 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:
    - (A) the date and time of each recorded action;
    - (B) the results of each inspection;

- (C) the results of any maintenance performed on the engine;
- (D) any variance from manufacturer's recommendations, if any, and corrections made;
- (E) the hours of operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time [40 CFR 60.4214(b)];
- (F) if a PM filter is used, records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached [40 CFR 60.4214(c)]; and
- ii. documentation from the manufacturer that the engine is certified to meet the emission standards in Section 2.1 N.4.d and
- iii. records showing the fuel combusted meets the requirements in Section 2.1 N.4.e.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these recordkeeping requirements are not met.

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

- m. The Permittee shall meet the following reporting requirements:
  - i. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit shall be clearly identified.
  - ii. If the Permittee owns or operates an emergency stationary compression ignition ICE with a maximum engine power more than 100 HP that operates for the purposes specified in Section 2.1 N.4.j.iii(A), the Permittee shall submit an annual report according to the requirements at 40 CFR 60.4214(d). This report must be submitted to the Regional Supervisor and directly to the EPA pursuant to 40 CFR60.4214(d)(3). [40 CFR60.4214(d)]

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

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

Pollutant	Limits/Standards	Applicable Regulation
Odors	State-enforceable Only	15A NCAC 2D .1806
	Odorous emissions must be controlled	
Toxic air polluants	State-enforceable Only	15A NCAC 2Q .0711
	Facility wide emissions limits for toxic air pollutant	
	emission rates	
Toxic air polluants	State-enforceable Only	15A NCAC 2D .1100
	Individual source emission limits for compliance with toxic	
	air pollutant acceptable ambient levels	
Hazardous air	Less than 10 tons per year of any HAP, and	15A NCAC 2Q .0317
pollutants	Less than 25 tons per year of a combination of HAPs	(MACT Avoidance)

#### A. Facility-wide affected sources

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

#### 1. Reserved

#### State-enforceable only

#### 2. 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.

#### State-enforceable only

- 3. 15A NCAC 2Q .0711: EMISSION RATES REQUIRING A PERMIT The Permittee has made a demonstration that facility-wide actual emissions of the below listed toxic air pollutants (TAPs) do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 2Q .0711. The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility, including fugitive emissions, will not exceed TPERs listed in 15A NCAC 2Q .0711.
  - a. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
  - b. PRIOR to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D.1100 "Control of Toxic Air Pollutants".
  - c. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

	TPERs Limitations			
Pollutant (CAS Number)	Carcinogens (lb/year)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hour)	Acute Irritants (lb/hour)
Acetaldehyde (75-07-0)				6.8
Acrolein (107-02-8)				0.02
Acrylonitrile (107-13-1)		0.4	0.22	
Aniline (62-53-3)			0.25	
Benzo(a)pyrene 50-32-8	2.2			

	TPERs Limitations			
Pollutant (CAS Number)	Carcinogens (lb/year)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hour)	Acute Irritants (lb/hour)
Carbon tetrachloride	460			
(56-23-5)	0.005(			
Chromium IV compounds Cresol	0.0056		0.56	
(1319-77-3)			0.50	
Dichlorodifluoromethane (75-71-8)		5200		
1,4-Dioxane (123-91-1)		12		
Ethyl acetate (141-78-6)			36	
Ethylene dichloride (107-06-02)	260			
Ethylene Oxide (75-21-8)	1.8			
Fluorides		0.34	0.064	
Formaldehyde (50-00-0)				0.04
Hexane isomers				92
n-Hexane (110-54-3)		23		
Manganese compounds		0.63		
Mercury Compounds		0.013		
Methyl chloroform (71-55-6)		250		64
Methyl ethyl ketone (78-93-3)		78		22.4
Methyl isobutyl ketone (108-10-1)		52		7.6
Perchloroethylene (127-18-4)	13,000			
Phenol (108-95-2)			0.24	
Styrene (100-42-5)			2.7	
Sulfuric Acid (7664-93-9)		0.25		
Tetrachloroethane, 1,1,2,2- (79-34-5)	430			
Toluene (108-88-3)		98		14.4
Trichloro-1,2,2- trifluoroethane, 1,1,2 (76-13-1)				240
Trichlorofluoromethane (75-69-4)			140	
Trichloroethylene (79-01-6)	4,000			
Vinylidene chloride (75-35-4)		2.5		

		TPERs Limitations					
	Carcinogens						
	(lb/year)	Toxicants	Systemic	(lb/hour)			
Pollutant		(lb/day)	Toxicants				
(CAS Number)			(lb/hour)				
Xylene		57		16.4			
(1330-20-7)							

 4. <u>State-enforceable only</u>
 4. **ISA NCAC 2D .1100:** CONTROL OF AIR TOXICS - Pursuant to 15A NCAC 2D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following emission limits shall not be exceeded:

Source Description	Source ID	Toxic Air Pollutant	Emission Rate
DC-2 Bag Filter - Carbon	BT-2,	Benzene	5.57 lb/yr
Black Transfer from BT-1	BC-2,	1,3-Butadiene	216.80 lb/yr
to Banbury Mixer 622;		Cadmium	1.88 lb/yr
Banbury 622 Charging;		Carbon Disulfide	7.26 lbs/day
		Di(2-ethylhexyl) phthalate	0.41 lb/day
		Methylene Chloride	0.06 lb/hr 563.19 lb/yr
		Nickel	0.94 lb/day
Banbury 622 Discharging	BD-2	Benzene	2.78 lb/yr
& Sheet Forming		1,3-Butadiene	108.40 lb/yr
		Cadmium	0.94 lb/yr
		Carbon Disulfide	3.63 lbs/day
		Di(2-ethylhexyl) phthalate	0.20 lb/day
		Methylene Chloride	0.03 lb/hr 281.59 lb/yr
		Nickel	0.47 lb/day
DC-3 Bag Filter - Pigment	RCS-2	Cadmium	0.10 lb/yr
Bin Loading and			
Automated Weighing			
System			
N-14 Bag Filter - Banbury	BC-1, BD-	Benzene	5.57 lb/yr
621 Charging and	1	1,3-Butadiene	216.80 lb/yr
Banbury 621 final Mix		Cadmium	1.88 lb/yr
discharging		Carbon Disulfide	7.26 lbs/day
		Di(2-ethylhexyl) phthalate	0.41 lb/day
		Methylene Chloride	0.06 lb/hr 563.19 lb/yr
		Nickel	0.94 lb/day
DC-5 Bag Filter -	RCS-1	Cadmium	0.10 lb/yr
Chemical Bin Loading			
DC-6 Bag Filter - Manual	CW-1	Cadmium	0.10 lb/yr
Chemical Weighing			
Station from Chemical			
Bins			
TB-3 Bag Filter - Banbury	BC-3	Benzene	1.86 lb/yr
273 Charging		1,3-Butadiene	72.27 lb/yr
		Cadmium	0.63 lb/yr
		Carbon Disulfide	2.42 lb/day
		Di(2-ethylhexyl) phthalate	0.14 lb/day
		Methylene Chloride	0.02 lb/hr 187.73 lb/yr
		Nickel	0.31 lb/day

Source Description	Source ID	Toxic Air Pollutant	Emission Rate
Banbury 273 Discharging,	BD-3, TK-	Benzene	0.93 lb/yr
Banbury 273 Rubber	3	1,3-Butadiene	36.13 lb/yr
Mixing & Slab Cooling		Cadmium	0.31 lb/yr
		Carbon Disulfide	1.21 lb/day
		Di(2-ethylhexyl) phthalate	0.07 lb/day
		Methylene Chloride	0.01 lb/hr 93.86 lb/yr
		Nickel	0.16 lb/day
Banbury 621 Slab Dip	RM-2	Benzene	2.78 lb/yr
Tank & Cooling		1,3-Butadiene	108.40 lb/yr
		Cadmium	0.94 lb/yr
		Carbon Disulfide	3.63 lb/day
		Di(2-ethylhexyl) phthalate	0.20 lb/day
		Methylene Chloride	0.03 lb/hr 281.59 lb/yr
		Nickel	0.47 lb/day
Banbury 622 Slab Dip	RM-3	Benzene	2.78 lb/yr
Tank & Cooling		1,3-Butadiene	108.40 lb/yr
C		Cadmium	0.94 lb/yr
		Carbon Disulfide	3.63 lb/day
		Di(2-ethylhexyl) phthalate	0.20 lb/day
		Methylene Chloride	0.03 lb/hr 281.59 lb/yr
		Nickel	0.47 lb/day
Banbury 624 Rubber	I-RM-4	Benzene	2.78 lb/yr
Mixing & Slab Forming		1,3-Butadiene	108.40 lb/yr
		Cadmium	0.94 lb/yr
		Carbon Disulfide	3.63 lb/day
		Di(2-ethylhexyl) phthalate	0.20 lb/day
		Methylene Chloride	0.03 lb/hr 281.59 lb/yr
		Nickel	0.47 lb/day
N-2 Bag Filter - Banbury	BC-4,	Benzene	4.18 lb/yr
624 Remix & Final Mix	BD-4	1,3-Butadiene	162.60 lb/yr
Charging; Banbury 624		Cadmium	1.41 lb/yr
Remix & Final Mix		Carbon Disulfide	5.44 lb/day
Discharging		Di(2-ethylhexyl) phthalate	0.21 lb/day
2 10 01100 gring		Methylene Chloride	0.05 lb/hr 422.39 lb/yr
		Nickel	0.71 lb/day
N-1 Bag Filter - Carbon	BT-4,	Benzene	4.18 lb/yr
Black Transfer from BT-1	BC-4,	1,3-Butadiene	162.60 lb/yr
to Banbury Mixer 624;	BD-4	Cadmium	1.41 lb/yr
Banbury 624 Master		Carbon Disulfide	5.44 lb/day
Batch Charging; Banbury		Di(2-ethylhexyl) phthalate	0.21 lb/day
624 Master Batch		Methylene Chloride	0.05 lb/hr 422.39 lb/yr
Discharging		Nickel	0.71 lb/day
Rubber Cement Mixing	RCM-1	Benzene	4.39 lb/yr
reactor coment withing		Lentene	
No. 4 Extrusion Line	UT-2	Benzene	5.71 lb/yr
Undertread Cementing	01-2		5.7 1 10/ y1
No. 1 Extrusion Line	UT-1	Benzene	5.88 lb/yr
Undertread Cementing	01-1		5.00 10/ y1
FI-T Fume Incinerator -	UT-3	Benzene	5.71 lb/yr
No. 5 Extrusion Line	01-3		5.71 10/y1
Undertread Cementing			
	SW-4	Panzana	9 65 lb/yr
Side Wall Comenting		Benzene	8.65 lb/yr
Side Wall Cementing	SW-5	Benzene	8.65 lb/yr

Source Description	Source ID	Toxic Air Pollutant	Emission Rate
3-Roll Calender Exhaust	C-1	Benzene	10.72 lb/yr
		1,3-Butadiene	126.66 lb/yr
		Carbon Disulfide	6.25 lb/day
		Di(2-ethylhexyl) phthalate	2.13 lb/day
		Methylene Chloride	0.45 lb/hr 3905.32 lb/yr
		5	5
3-Roll Calender Exhaust	C-2,	Benzene	10.72 lb/yr
		1,3-Butadiene	126.66 lb/yr
		Carbon Disulfide	6.25 lb/day
		Di(2-ethylhexyl) phthalate	2.13 lb/day
		Methylene Chloride	0.45 lb/hr 3905.32 lb/yr
New 4-Roll Calender	C-3	Benzene	10.72 lb/yr
Exhaust		1,3-Butadiene	126.66 lb/yr
		Carbon Disulfide	6.25 lb/day
		Di(2-ethylhexyl) phthalate	2.13 lb/day
		Methylene Chloride	0.45 lb/hr 3905.32 lb/yr
4 D - 11 C - 1	DMC1 4	Deveene	10.08 lb /cm
4 Roll Calender Mill Exhaust (9 Rubber Mills)	RMC1 to RMC9	Benzene Carbon Disulfide	10.98 lb/yr
Exhaust (9 Rubber Mills)	KMC9		3.91 lb/day
		Di(2-ethylhexyl) phthalate	4.25 lb/day
		Methylene Chloride	0.07 lb/hr 653.38 lb/yr
New 4-Roll Calender Mill	RMC10 to	Benzene	10.98 lb/yr
Exhaust (2 new rubber	RMC11,	Carbon Disulfide	3.91 lb/day
mills) and new Extruder	TUC-3	Di(2-ethylhexyl) phthalate	4.25 lb/day
Exhaust	100 5	Methylene Chloride	0.07 lb/hr 653.38 lb/yr
L'Allaust			0.07 10/11 0003.50 10/91
Minor Buff Spray Paint	PB-1,	Benzene	10.21 lb/yr
Booth No. 1 & No. 2	PB-2		
Minor Buff Spray Paint	PB-3	Benzene	5.10 lb/yr
Booth No. 3		_	
Minor Buff Spray Paint	PB-4	Benzene	5.10 lb/yr
Booth No. 4		D	2 79 11 /
Banbury 621 Slab Cooling	I-RM-1,	Benzene	2.78 lb/yr
& Handling; Banbury 622	I-RM-5	1,3-Butadiene	108.40 lb/yr
Slab Cooling & Handling		Cadmium Carbon Digulfido	0.94 lb/yr
		Carbon Disulfide	3.63 lb/day
		Di(2-ethylhexyl) phthalate Methylene Chloride	0.20 lb/day 0.03 lb/hr 281.59 lb/yr
		Nickel	0.03 lb/hr 281.59 lb/yr 0.47 lb/day
RT073 Storage Tank	ST-1	Benzene	40.04 lb/yr
(NW)	51-1	DUIZUIU	+0.04 10/ yi
RT018 Storage Tank (SE)	ST-3	Benzene	40.04 lb/yr
Diesel-fired peak shaving	EGDD-1	Benzene	18.28 lb/yr
generator 15.7 million			- ,
Btu/hr			
Diesel-fired peak shaving	EGDD-2	Benzene	18.28 lb/yr
generator 15.7 million			
Btu/hr			
Diesel-fired emergency	ES4.5	Benzene	1.47 lb/yr
fire pump engine		1,3-Butadiene	2.93 lb/yr
Diesel-fired emergency	ES4.6	Benzene	1.47 lb/yr
fire pump engine		1,3-Butadiene	2.93 lb/yr

Source Description	Source ID	Toxic Air Pollutant	Emission Rate
IT - Natural Gas Fired	ES4.7	Benzene	0.98 lb/yr
Emergency Generator		1,3-Butadiene	1.95 lb/yr
Diesel- fired emergency Process Water House	ES4.8	Benzene 1,3-Butadiene	0.35 lb/yr 0.70 lb/yr
Diesel-fired peak shaving generator	EGDD-3	Benzene	21.30 lb/yr
Diesel-fired peak shaving generator	EGDD-4	Benzene	21.30 lb/yr
Diesel-fired peak shaving generator	EGDD-5	Benzene	21.30 lb/yr
Final Inspection	FI-1	Benzene Methylene Chloride	21.77 lb/yr 0.30 lb/hr 2596.40 lb/yr
Sidewall and Tread Grinding Area	GA-1	Benzene 1,3-Butadiene Carbon Disulfide Di(2-ethylhexyl) phthalate Methylene Chloride	10.16 lb/yr 1048.74 lb/yr 0.54 lb/day 0.94 lb/day 0.01 lb/hr 64.44 lb/yr
Boiler No. 1 and Boiler No. 2	UA-1, UA-2	Benzene Cadmium Arsenic Beryllium Nickel	1.89 lb/yr 11.08 lb/yr 17.56 lb/yr 1.28 lb/yr 1.84 lb/day
Curing Area Nos. 1, 2, 3 and 4, Tire Doping, Tire Assembly	CA-1, CA-2, CA-3 and CA-4, GT- 11, Through GT-24 and TA-1	Benzene 1,3-Butadiene Di(2-ethylhexyl) phthalate Methylene Chloride Methylene Chloride	221.92 lb/yr 268.65 lb/yr 1.11 lb/yr 0.00 lb/hr 3.19 lb/yr
Six extrusion lines One extrusion line One extrusion line	TU-1 TU-2 TU-4, RMT-1 to RMT3 RMT6 to RMT-11	Benzene 1,3-Butadiene Cadmium compounds Carbon Disulfide Di(2-ethylhexyl) phthalate Methylene Chloride Methylene Chloride Nickel Compounds	137.04 lb/yr 10257.69 lb/yr 1.58 lb/yr 32.58 lb/day 5.15 lb/yr 2.29 lb/hr 20068.74 lb/yr 43.38 lb/day
Tandem mixer	TM-1	Benzene Cadmium compounds Carbon Disulfide Di(2-ethylhexyl) phthalate Methylene Chloride Methylene Chloride Nickel Compounds	6.56 lb/yr 2.22 lb/yr 8.56 lb/day 0.48 lb/day 0.08 lb/hr 663.76 lb/yr 1.11 lb/day
Tandem mixer slab cooling and handling	RM-5	Benzene Cadmium compounds Carbon Disulfide Di(2-ethylhexyl) phthalate Methylene Chloride Methylene Chloride Nickel Compounds	2.19 lb/yr 0.74 lb/yr 2.85 lb/day 0.16 lb/day 0.03 lb/hr 221.25 lb/yr 0.37 lb/day

#### Monitoring/Recordkeeping/Reporting

- a. The Permittee shall keep records and report to DAQ as follows:
  - i. The total amount of fuel oil burned in each boiler (ID Nos. UA-1 and UA-2) must be recorded in a logbook on a and monthly basis, and the records shall be kept on file for a minimum of two years.
  - ii. The Permittee shall report semi-annually the combined daily fuel oil burning rate for each month (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) and report annually the fuel oil burning rate (postmarked on or before January 30 of each calendar year for the preceding six-month period between January and June) and report annually the fuel oil burning rate (postmarked on or before January 30 of each calendar year for the preceding calendar year) for boilers (ID Nos. UA-1 and UA-2).

#### 5. 15A NCAC 2Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 2D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

- a. In order to remain classified as a minor source for hazardous air pollutants and avoid applicability of this regulation, the facility shall be less than:
  - i. 10 tons per year of each hazardous air pollutant, and
  - ii. 25 tons per year of all hazardous air pollutants combined.

The Permittee shall be deemed in noncompliance with this condition and 2D .1111 (Subpart XXXX entitled "National Emission Standards for Hazardous Air Pollutants for Rubber Tire Manufacturing"), (Subpart JJJJJJ "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers"), and (Subpart ZZZZ "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines,") if the HAP emissions exceed this limit.

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

- b. To ensure that emissions are less than the 10/25 tons per year limits, the Permittee shall maintain monthly consumption records of each material used containing hazardous air pollutants:
  - i. Material Safety Data Sheets (MSDS) or formulation data for cements, inks, paints, and solvents in the manufacturing process,
  - ii. Usage of production related cements, inks, paints, solvents, and other production materials containing hazardous air pollutants,
  - iii. Monthly production throughput data necessary to calculate hazardous air pollutant emissions, and
  - iv. Monthly hazardous air pollutant emissions calculations and 12-month rolling total hazardous air pollutant emissions calculations by the end of each month for the previous month.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the HAP emissions are not monitored or records are not maintained.

- c. The Permittee shall keep a record of the applicability determination on site at the source for a period of five years after the determination, or until the source becomes an affected source. The determination must include the analysis demonstrating why the Permittee believes the source is unaffected pursuant to 40 CFR Part 63.10(b)(3).
- d. The Permittee shall comply with the Recordkeeping in Section 2.1 H.i, Monitoring and Recordkeeping in Section 2.1 I.j and k, and Recordkeeping in Section 2.1 J.c respectively.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the records are not maintained.

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

- d. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
  - i. the pounds of hazardous air pollutants emitted during the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months; and
  - ii. the greatest quantity in pounds of an individual hazardous air pollutant emitted during the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.

### 2.3 Permit Shield for Nonapplicable Requirements

The Permittee is shielded from the following nonapplicable requirements [15A NCAC 2Q .0512(a)(1)(B)]:

- a. 40 CFR 60, Subpart Db is not applicable to boilers (ID Nos. UA-1 and UA-2) because they were constructed prior to June 19, 1984 and have not been modified or reconstructed as of April 16, 2002.
- b. 40 CFR 60, Subpart BBB is not applicable to doper (ID No. GT-2) and 10 inch undertread line (ID No. UT-1) because they were constructed prior to January 30, 1983 and have not been modified or reconstructed as of April 16, 2002.
- c. 40 CFR 60, Subpart VVV is not applicable to the painting processes at the facility because they are not considered web coating processes that apply polymeric coatings.

## 2.4 Actuals PAL Permit Requirements

### A. VOC emissions limits

	a. The following Actuals Plantwide Applicability Limitations (Actuals PAL) shall not be exceeded:			
PAL	Actuals	Effective	Expiration	PAL Emissions Units
Pollutant	PAL (Tons	Date	Date	
	Per			
	Rolling 12-			
	Months)			
VOC	505	May 8, 2020	April 30,	Mixing Emissions Units (ID Nos. BC-1, BD-1, BC-2, BD-2, BC-3, BD-
		-	2030	3, BC-4, TM-1, BD-4, BC-4FM, BD-4FM, RM-2, RM-3, RM-6,
				RM-5 and ES-5)
				Milling Emissions Units (ID Nos. RMC-1 through RMC-11, RMT-11,
				RMT-1 through RMT-3, RMT-6 through RMT-10)
				Calendering Emissions Units (ID Nos. CAL-1 and C-3)
				Extrusion Emissions Units (ID Nos. UT-1, UT-2, UT-3, TU-1, TU-2,
				TU-3, TU-4, TU-5 and ES-10)
				The Sidewall Cementing Operations (SW-4 and SW-5)
				Bead Cementing Emissions Units (ID Nos. BCO-1 and BCO-2)
				Tire Doping Emissions Units (ID Nos. GT-10, GT-11, GT-12, GT-13,
				GT-14, GT-15, GT-16, GT-17, GT-18, GT-19, GT-20, GT-21,
				GT-20, GT-23 and GT-24)
				Curing Emissions Units (ID Nos. CA-1, CA-2, CA-3 and CA-4)
				Paint Booths Emissions Units (ID Nos. PB-1 through PB-7)
				Grinding Emissions Unit (ID No. GA-1)
				Plantwide Coating/Solvent Emissions Units (ID Nos. PW-1, TA-1, FI-1,
				and ES-6)
				Carbon Black and Dry Chemical/Pigment Handling Emissions Units (ID
				Nos. RCS-1, CW-1, RCS-2, BU-1, BT-1 and SI-1 through SI-6)
				Rubber Cement Mixer/Solvent Storage Tanks Emissions Units (ID Nos.
				RCM-1, ST-1, ST-2, ST-3, and ST-4)
				Oil Storage Tanks Emissions Units (ID Nos. ES-1.1, ES-1.2, ES-2.1,
				ES-2.2, ES-3, ES-7, ES-8, and ES-13)
				Boilers/Peak Shaving and Emergency Generators/Emergency Fire Pump
				Engines/Air Compressors Emissions Units (ID Nos. UA-1, UA-2, UA-T1, ECDD 1, ECDD 2, ES 45, and ES 4.()
				2, UA-T1, EGDD-1, EGDD-2, ES-4.5 and ES-4.6)
				<sup>#</sup> Diesel-fired peak shaving generator (2,145 kilowatts, each, ID Nos.
				EGDD-3, EGDD-4 and EGDD-5)

a. The following Actuals Plantwide Applicability	I imitations (Actuals PAI)	) shall not be exceeded.
a. The following Actuals I failtwide Application	Limitations (Actuals I AL	

The Permittee may make modifications or additions to the PAL emissions units in Section 2.4 A.a above, without requiring a modification to the PAL provisions of this permit if the emissions from the modified or additional emissions units will be calculated according to the monitoring methods specified in Section 2.4 A.j through s below, and the plantwide actual VOC emissions will remain less than 505 tons per rolling 12 months.

- b. If the Permittee applies to renew the PAL permit in accordance with 40 CFR 51.166(w)(10) before the end of the PAL effective period in Section 2.4 A.a above, then the PAL permit shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the DAQ. [40 CFR 51.166(w)(7)(iii)]
- c. Once the PAL permit expires, the Permittee is subject to the requirements in 40 CFR 51.166(w)(9). Upon PAL permit expiration, the DAQ shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each PAL emissions unit, as the DAQ determines is appropriate. The DAQ will retain the ultimate discretion to decide whether and how the allowable emissions will be allocated. [40 CFR 51.166(w)(7)(v)]

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

d. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the

results of this testing indicate that the VOC emissions on a 12-month rolling basis have exceeded the actual PAL in Section 2.4 A.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

e. The Permittee shall revalidate the emission factors and any other data used in Section 2.4 A.j through s below, for calculations of VOC emissions through performance testing or other scientifically valid means approved by the DAQ. The Permittee shall perform such revalidation once every five years after the issuance of the PAL permit, in accordance with General Condition JJ. If the Permittee does not perform this revalidation, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

If any emission factors included in this Section 2.4 A are revised, the applicable provision of the PAL permit may be modified through a modification to the permit to reflect the results of a revalidation. The Permittee shall not rely on the updated emission factors until they are approved by DAQ and incorporated into the permit. [40 CFR 51.166(w)(12)(ix)]

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

- f. The Permittee shall record rubber throughput on a monthly basis for the mixing, milling, calendering, extrusion, curing, and grinding PAL emissions units. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained.
- g. The Permittee shall keep monthly records in a logbook (written or electronic format) of the amount of natural gas, No. 2 fuel oil, and diesel fuel burned in each boiler. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the amount of fuel burned in each boiler is not monitored.
- h. The Permittee shall keep monthly records in a logbook (written or electronic format) of hours of operation for each peak shaving generator, emergency generator, emergency fire pump engine, and air compressor. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained.
- i. The Permittee shall include in emissions calculations for compliance purposes emissions from startups, shutdowns, and malfunctions in Section 2.4 A.j though s below. [40 CFR 51.166(w)(7)(iv)]
- j. The Permittee shall calculate VOC emissions per month after the end of each month for mixing as follows:

VOC, tons/month =  $\Sigma$  [rubber throughput<sub>i</sub>, lb x emission factor for generic rubber compound<sub>i</sub>, lb/lb rubber] / 2000

Where emission factors for generic rubber compounds used at the facility are as below:

Compound  $\#1 = 6.17 \times 10^{-5}$  lb/lb rubber Compound  $\#2 = 3.91 \times 10^{-5}$  lb/lb rubber Compound  $\#3 = 1.36 \times 10^{-4}$  lb/lb rubber Compound  $\#4 = 3.88 \times 10^{-5}$  lb/lb rubber Compound  $\#5 = 2.15 \times 10^{-4}$  lb/lb rubber Compound  $\#6 = 3.86 \times 10^{-5}$  lb/lb rubber i = 1 through 6 [40 CFR 51.166(w)(7)(vi) and 51.166(w)(12)(vi)]

k. The Permittee shall calculate VOC emissions per month after the end of each month for milling as follows:

VOC, tons/month =  $\Sigma$  [rubber throughput<sub>i</sub>, lb x emission factor for generic rubber compound<sub>i</sub>, lb/lb rubber] / 2000

Where emission factors for generic rubber compounds used at the facility are as below: Compound #1 = 8.99 x  $10^{-5}$  lb/lb rubber Compound #2 = 1.10 x  $10^{-4}$  lb/lb rubber Compound #3 = 1.13 x  $10^{-4}$  lb/lb rubber Compound #4 = 8.37 x  $10^{-5}$  lb/lb rubber Compound #5 = 3.14 x  $10^{-4}$  lb/lb rubber Compound #6 = 5.64 x  $10^{-5}$  lb/lb rubber i = 1 through 6 [40 CFR 51.166(w)(7)(vi) and 51.166(w)(12)(vi)]

1. The Permittee shall calculate VOC emissions per month after the end of each month for calendering as follows:

VOC, tons/month =  $\Sigma$  [rubber throughput<sub>i</sub>, lb x emission factor for generic rubber compound<sub>i</sub>, lb/lb rubber]

/ 2000
Where emission factors for generic rubber compounds used at the facility are as below: Compound #1 = 5.33 x 10<sup>-5</sup> lb/lb rubber Compound #2 = 5.59 x 10<sup>-5</sup> lb/lb rubber Compound #3 = 1.17 x 10<sup>-4</sup> lb/lb rubber Compound #4 = 3.35 x 10<sup>-5</sup> lb/lb rubber Compound #5 = 1.86 x 10<sup>-4</sup> lb/lb rubber Compound #6 = 3.34 x 10<sup>-5</sup> lb/lb rubber i = 1 through 6
[40 CFR 51.166(w)(7)(vi) and 51.166(w)(12)(vi)]

m. The Permittee shall calculate VOC emissions per month after the end of each month for extrusion as follows:

VOC, tons/month =  $\Sigma$  [rubber throughput<sub>i</sub>, lb x emission factor for generic rubber compound<sub>i</sub>, lb/lb rubber] / 2000

Where emission factors for generic rubber compounds used at the facility are as below:

Compound #1 = 1.48 x 10<sup>-5</sup> lb/lb rubber Compound #2 = 9.37 x 10<sup>-6</sup> lb/lb rubber Compound #3 = 3.25 x 10<sup>-5</sup> lb/lb rubber Compound #4 = 5.67 x 10<sup>-6</sup> lb/lb rubber Compound #5 = 5.15 x 10<sup>-5</sup> lb/lb rubber Compound #6 = 1.23 x 10<sup>-5</sup> lb/lb rubber Compound #7 = 2.92 x 10<sup>-5</sup> lb/lb rubber i = 1 through 7 [40 CFR 51.166(w)(7)(vi) and 51.166(w)(12)(vi)]

n. The Permittee shall calculate VOC emissions per month after the end of each month for curing as follows:

VOC, tons/month =  $\Sigma$  [rubber throughput, lb x emission factor for tire curing or tire bladder curing, lb/lb rubber] / 2000

Where emission factor for tire curing emissions units = See confidential information letter dated March 16, 2009, and

emission factor for tire bladder curing emissions units for Compound  $\#7 = 2.36 \times 10^{-4} \text{ lb/lb}$  rubber

[40 CFR 51.166(w)(7)(vi) and 51.166(w)(12)(vi)]

o. The Permittee shall calculate VOC emissions per month after the end of each month for grinding as follows:

VOC, tons/month =  $\Sigma$ [rubber throughput, lb x emission factor for carcass or sidewall/whitewall, lb/lb rubber] / 2000

Where emission factors for: Carcass =  $5.21 \times 10^4$  lb/lb rubber, and Sidewall/Whitewall =  $1.59 \times 10^{-2}$  lb/lb rubber [40 CFR 51.166(w)(7)(vi) and 51.166(w)(12)(vi)]

- p. The Permittee shall calculate VOC emissions per month after the end of each month for ethanol producing pigment processes using the emission factors included in the March 16, 2009 confidential information letter. [40 CFR 51.166(w)(7)(vi) and 51.166(w)(12)(vi)]
- q. The Permittee shall calculate VOC emissions per month after the end of each month for rubber cement mixer, solvent storage tanks, and oil storage tanks as follows:

VOC, tons/month =  $\Sigma$  [solvent throughput, lb x emission factor for rubber cement mixer or solvent storage tanks, lb/lb of solvent] / 2000

Where emission factors for:

Rubber cement mixer =  $4.01 \times 10^{-4}$  lb/lb solvent, and Solvent storage tanks =  $2.83 \times 10^{-3}$  lb/lb solvent (ST-1, ST-2 and ST-3) and  $8.17 \times 10^{-3}$  lb/lb solvent (ST-4).

The Permittee shall use a combined emission factor (rate) of 0.152 tons VOC per month for all oil storage tanks. [40 CFR 51.166(w)(7)(vi) and 51.166(w)(12)(vi)]

r. The Permittee shall calculate VOC emissions per month at the end of each month for each boiler, peak shaving generator, emergency generator, and air compressor, as follows:

VOC, tons/month =  $\Sigma$  [{0.2 lb/10<sup>3</sup>gallon x A gallon/month} + + {5.5 lb/10<sup>6</sup> scf x C scf/month} + {2.16 lb/hr x D hour/month} + {0.240 lb/hr x E hour/month} + {0.00251 lb/hp-hr x F hp-hr/month}] / [2000 lbs/ton]

Where,

- A = No. 2 fuel oil usage in gallon per month for each boiler.
- C = natural gas usage in standard cubic feet per month for each boiler.
- D = operating time in hour per month for each diesel-fired peak shaving generator.
- E = operating time in hour per month for each diesel-fired air compressor.
- F = power output in hp-hr per month for each diesel fired emergency generator or diesel fired emergency fire pump engine ( $\leq 600$  hp)

[40 CFR 51.166(w)(7)(vi) and 51.166(w)(12)(vi)]

- s. The Permittee shall perform mass balance calculations per month after the end of each month for each coating or solvent used in mixing, calendering, extrusion, bead cementing, tire doping, curing, paint booths, plantwide coating/solvent storage tanks, and carbon black and dry chemical/pigment handling PAL emissions units. VOC emissions shall be determined by multiplying the total amount of each type of coating or solvent consumed during the month by the VOC content of each coating or solvent. The Permittee shall provide a demonstrated means of validating the published content of VOC that is contained in or created by all materials used in or at the PAL emissions units. The Permittee shall assume that the VOC content is either 100 percent or obtain from the vendor of the material a certificate of analysis confirming the VOC content included in the material safety data sheet (MSDS) or use formulation data. If the vendor of the material provides a range of VOC content for such material, the Permittee shall use the highest value of the range to calculate the VOC emissions unless the DAQ approves the site-specific data (such as Method 24 analysis) showing that another value in the range is more appropriate. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the Permittee does not comply with the requirements of this Section 2.4 A.s [40 CFR 51.166(w)(7)(vi) and 51.166(w)(12)(iii)]
- t. The Permittee shall record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for a PAL emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit. Notwithstanding the foregoing, the Permittee may consider actual production or operating data in determining its emissions for such a period if the Permittee has written records of such data and if the data are substantially the same as or similar in form or content to the monitoring data required by the PAL permit. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the Permittee does not comply with the requirements of this Section 2.4 A.t. [40 CFR 51.166(w)(12)(vii)]
- u. The Permittee shall determine facility wide VOC emissions per month using the emissions calculations in Section 2.4 A.j through s above. Calculations and the total amount of facility wide VOC emissions shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the 12-month rolling facility wide VOC emissions exceed the limit in Section 2.4 A.a above, or the facility wide VOC emissions are not recorded.
- v. The Permittee shall retain on site a copy of all records necessary to determine compliance with any requirement in 40 CFR 51.166(w) and of the PAL, including a determination of each PAL emissions unit's 12-month rolling total emissions, for 5 years from the date of such record. The records may be retained in electronic format. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530, if these records are not maintained. [40 CFR 51.166(w)(7)(viii) and 51.166(w)(13)(i)]
- w. The Permittee shall retain a copy of the following records, for the duration of the PAL effective period plus 5 years:

- i. A copy of the PAL permit application and any applications for revisions to the PAL; and
- ii. Each annual certification of compliance pursuant to Title V and the data relied on in certifying the compliance. This requirement applies only to the data used to certify compliance with the terms of the actuals PAL permit in this Section 2.4 A.

The records may be retained in electronic format. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530, if these records are not maintained. [40 CFR 51.166(w)(7)(viii) and 51.166(w)(13)(ii)]

**<u>Reporting</u>** [15A NCAC 2Q .0508(f), and §51.166(w)(7)(ix) and §51.166(w)(14)]

- x. The Permittee shall submit monitoring reports and prompt compliance reports to the reviewing authority in accordance with the applicable Title V operating permit program. The reports shall meet the requirements in paragraphs 40 CFR 51.166(w)(14)(i) through (iii).
  - i. Semi-annual report. The semi-annual report shall be submitted to the Regional Air Quality Supervisor 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. This report shall contain the information required in paragraphs 40 CFR 51.166(w)(14)(i)(a) through (g).
    - A. The identification of Permittee and the permit number.
    - B. Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph 40 CFR 51.166 (w)(13)(i).
    - C. All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.
    - D. A list of any PAL emissions units modified or added to the major stationary source during the preceding 6-month period.
    - E. The number, duration, and cause of any instance of deviation or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
    - F. A notification of a shutdown of any PAL permit monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the PAL emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by 40 CFR 51.166(w) (12)(vii).
    - G. A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
  - ii. Instance of Noncompliance report. The Permittee shall promptly submit reports of any instances of noncompliance or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to 40 CFR 70.6(a)(3)(iii)(B) of this chapter shall satisfy this reporting requirement. The instance of noncompliance reports shall be submitted within the time limits prescribed by the applicable program implementing 40 CFR 70.6(a)(3)(iii)(B). The reports shall contain the following information:
    - A. The identification of owner and operator and the permit number;
    - B. The PAL requirement that experienced the instance of noncompliance or that was exceeded;
    - C. Emissions resulting from the instance of noncompliance or the exceedance; and
    - D. A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
  - iii. Re-validation results. The Permittee shall submit to the Regional Air Quality Supervisor the results of any re-validation within three months after completion of such revalidation.

# 2.5 Use of Projected Actual Emissions to Avoid The Applicability of PSD

#### A. All the Affected Sources as identified in application 9800043. 15C and 9800043. 17A

1. 15A NCAC 02D. 0530(u): USE OF PROJECTED ACTUAL EMISSIONS TO AVOID APPLICABILITY OF PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS

Pursuant to Application **9800043.15C**, **9800043.15C** and **9800043.17A** for the addition of two green tire dopers (GT-23 and GT-24) of the tire assembly machine, two green tire dopers (GT-21 and GT-22), tire assembly area (ID No. TA-1), Tandem mixer (TM-1), Tandem mixer slab cooling and handling (RM-5), one extrusion line (TU-4) and curing area (CA-4) the Permittee shall perform the following:

#### Monitoring/Recordkeeping/Reporting [15A NCAC 02D .0530(u)]

- a. The Permittee shall maintain records of annual emissions of PM/TSP, PM<sub>10</sub>, PM<sub>2.5</sub>, and NOx in tons per year, from the:
  - two green tire dopers (GT-23 and GT-24) of the tire assembly machine,
  - two green tire dopers (GT-21 and GT-22)
  - tire assembly area (ID No. TA-1),
  - Tandem mixer (TM-1),
  - Tandem mixer slab cooling and handling (RM-5)
  - One extrusion line (TU-4) and
  - curing area (CA-4)

on a calendar year basis, related to the modification for 10 years following resumption of regular operations after the change is made.

b. The reported actual emissions (post-construction emissions) for each of the 10 calendar years will be compared to the projected actual emissions (pre-construction projection) as included below:

Pollutant	Projected Actual Emissions* (tons per year)
PM/TSP	67.26
PM <sub>10</sub>	60.30
PM <sub>2.5</sub>	55.52
NO <sub>x</sub>	164.32

\* These projections are not enforceable limitations. If projected emissions are exceeded, consistent with 15A NCAC 2D .0530, the permit shall include in its annual report an explanation as to why the actual rates exceeded the projection.

- c. The Permittee shall submit a report to the director within 60 days after the end of each calendar year during which these records must be generated. The report shall contain the items listed in 40 CFR 51.166(r)(6)(v)(a) through (c).
- d. The Permittee shall make the information documented and maintained under this condition available to the Director or the general public pursuant to the requirements in 40 CFR 70.4(b)(3)(viii).

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

Emission Source ID No.	Emission Source Description <sup>1,2</sup>
IS-9	One LPG storage tank (1,000 gallon capacity)
I-RM-1	Banbury 621 slab cooling and handling
I-RM-4	Banbury 624 rubber mixing and slab forming
I-RM-5	Banbury 622 slab cooling and handling
IES-4.7 (NSPS JJJJ)	100 kW natural gas-fired emergency generator
IES-4.8 (NSPS JJJJ)	130 kW propane-fired emergency generator

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

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

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

#### A. <u>General Provisions</u> [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

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

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

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

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

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

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

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

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

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

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

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

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F. <u>Circumvention</u> - STATE ENFORCEABLE ONLY

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

#### G. Title V Permit Modifications

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

#### H. Changes Not Requiring Permit Modifications

- 1. Reporting Requirements [15A NCAC 02Q .0508(f)]
  - Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
  - a. changes in the information submitted in the application;
  - b. changes that modify equipment or processes; or
  - c. changes in the quantity or quality of materials processed.

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

- 2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
  - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
  - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
    - i. the changes are not a modification under Title I of the Federal Clean Air Act;
    - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
    - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
    - iv. the Permittee shall attach the notice to the relevant permit.
    - The written notification shall include:
    - i. a description of the change;

c.

- ii. the date on which the change will occur;
- iii. any change in emissions; and
- iv. any permit term or condition that is no longer applicable as a result of the change.
- d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
- 3. Off Permit Changes [15A NCAC 02Q .0523(b)]
  - The Permittee may make changes in the operation or emissions without revising the permit if:
  - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
  - b. the change is not covered under any applicable requirement.
- 4. Emissions Trading [15A NCAC 02Q .0523(c)]

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

#### I.A <u>Reporting Requirements for Excess Emissions [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]</u>

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

#### I.B <u>Reporting Requirements for Permit Deviations</u> [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

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

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

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

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

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

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

- 1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
- 2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technologybased emission limitations if the conditions specified in 3. below are met.
- 3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:

- a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
- b. the permitted facility was at the time being properly operated;
- c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
- d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- 4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

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

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

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

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

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

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

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

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

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

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

#### P. <u>Compliance Certification</u> [15A NCAC 02Q .0508(n)]

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

- 1. the identification of each term or condition of the permit that is the basis of the certification;
- 2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);

- 3. whether compliance was continuous or intermittent;
- 4. the method(s) used for determining the compliance status of the source during the certification period;
- 5. each deviation and take it into account in the compliance certification; and
- 6. as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (CAM) occurred.

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

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

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

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

#### S. <u>Termination, Modification, and Revocation of the Permit</u> [15A NCAC 02Q .0519]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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#### EE. National Emission Standards Asbestos - 40 CFR Part 61, Subpart M [15A NCAC 02D .1110]

The Permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

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

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

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

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

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

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

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

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

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

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .1110, or .1111 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance for emission sources subject to Rules .0524, .1110, or .1111, the Permittee shall provide and submit all notifications, conduct all testing, and submit all test reports in accordance with the requirements of 15A NCAC 02D .0524, .1110, or .1111, as applicable. Otherwise, if emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ or and follow the procedures outlined below:

- 1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
- 2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
- 3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
- 4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
  - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
    - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.

- ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
- iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in 15A NCAC 02D .2600 if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
- b. The Director may authorize the DAQ to conduct independent tests of any source subject to a rule in 15A NCAC 02D to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in 15A NCAC 02D .2600 has precedence over all other tests.

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

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

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

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

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

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

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

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

- 1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
- For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.

- 3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (Air Permitting Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) in writing at least seven days before the change is made.
  - a. The written notification shall include:
    - i. a description of the change at the facility;
    - ii. the date on which the change will occur;
    - iii. any change in emissions; and
    - iv. any permit term or condition that is no longer applicable as a result of the change.
  - b. In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

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

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