



ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL A. ABRACZINSKAS
Director

July X, 2017

Mr. Luis Mendoza
Site Manager
Fortron Industries LLC
P. O. Box 327
Wilmington, N.C. 28402-0327

SUBJECT: Air Quality Permit No. 07323T21
Facility ID: 6500303
Fortron Industries LLC
Wilmington, North Carolina
New Hanover
Fee Class: Title V
PSD Class: Major

Dear Mr. Mendoza:

In accordance with your completed Air Quality Permit Application for the second step of a significant (15A NCAC 2Q .0501(c)(2)) modification of a Title V permit received March 29, 2017, we are forwarding herewith Air Quality Permit No. 07323T21 to Fortron Industries LLC, Wilmington, New Hanover County, 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 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

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

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings.

Mr. Luis Mendoza
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Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

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

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

New Hanover County has triggered increment tracking under PSD for sulfur dioxide (SO₂), particulate matter of 10 microns in size or less (PM₁₀) and nitrogen oxides (NO_x). This modification will result in an increase in 23.9 pounds per hour of NO_x, 8.8 pounds per hour of PM₁₀, and 11.7 pounds per hour of SO₂.

This Air Quality Permit shall be effective from July X, 2017 until June 30, 2022 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 Jenny Kelvington, P.E., at (919) 707-8452 or Jenny.Kelvington@ncdenr.gov.

Sincerely,

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

Enclosure

cc: Heather Ceron, EPA Region 4 (with review)
Brad Newland, Wilmington Regional Office, Supervisor
Connie Horne, Raleigh Central Office
Central Files

ATTACHMENT to Permit No. 07323T21

Insignificant Activities per 15A NCAC 2Q .0503(8)

Emission Source ID No.	Emission Source Description
ITA-072	One No. 2 oil tank
ITA-718	Byproduct NaSH storage tank
IVE-351	One polymer pH control tank
IVE-361	One polymer pH control tank
IVE-061	One glycol surge tank
IVE-554	NMP (N-Methyl-2-Pyrrolidone, 50-60 gallon capacity) waste drum
IVE-2554	NMP (N-Methyl-2-Pyrrolidone, 50-60 gallon capacity) waste drum
I-railcar	One pDCB railcar top unloading system
ITA-736-R1	Brine filtrate tank
ITA-152	Acetic acid storage tank
ITA-717	Waste water treatment tank
ITA-801	Waste water treatment tank
ITA-881	Waste water treatment tank
ITA-873	Waste water treatment tank
IRE-811	Waste water treatment tank
IRE-821	Waste water treatment tank
IRE-822	Waste water treatment tank
ITA-2717	Waste water treatment tank
IRE-2811	Waste water treatment tank
IRE-2821	Waste water treatment tank
IPW-1	Parts washer
ITA-2736	Brine filtrate tank
ITA-171	73% NaOH storage tank
ITA-172	73% NaOH storage tank
ITA-181	20% NaOH storage tank
ITA-191	20% NaOH storage tank
IMA-890	Gasoline-fired power washer

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."

Summary of Changes to Permit

The following changes were made to the Fortron Industries, LLC – Wilmington, Air Permit No. 07323T20:

Page No(s).	Condition No.	Description of Change(s)
Cover letter		Amended application type, permit revision numbers and dates and added increment tracking for NO _x , PM ₁₀ and SO ₂ .
Cover letter attachment	Insignificant Activities	Added the gasoline-fired power washer (ID No. IMA-890) to the list of insignificant activities.
1	Permit Cover Page	Updated permit revision number and permit issuance date
2-39	All	Updated the permit revision number in header; corrected typographical errors, updated 2.2.B condition reference numbers and updated to the current permit language.
5-7	Section 1, Table	Updated the page number references and corrected the control devices for the following sources: <ul style="list-style-type: none"> • VE-431R1 and VE-2431 • VE-081, VE-082, VE-208A and VE-2082 • VE-2744
12	2.1 A.4	Made the following changes: <ul style="list-style-type: none"> • Corrected the sulfur content limit to 0.5 percent (2.1.A.4.i.i) • Deleted non-applicable condition 2.1. A.4.i.iii. • Corrected reference in 2.1.A.4.i.i to “Section 2.1.A.4.g.”
15	2.1 A.5	Made the following changes: <ul style="list-style-type: none"> • Added the No. 1 hot oil process heater (ID No. FU-081R1) to the list of equipment subject to 2.1 A.5.I.iv. • Deleted condition 2.1 A.5.I.iii and renumbered A.5.I.iv through A.5.I.vi as through A.5.I.v.
25	Section 2.2 B	Removed the no longer applicable 2D .0958 work practices in Condition 2.2.B.1 and renumbered 2.2 B.2 and 2.2 B.3 as 2.2 B.1 and 2.2 B.2.



AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
07323T21	07323T20	July X, 2017	June 30, 2022

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

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

Permittee: **Fortron Industries, LLC**
Facility ID: **6500303**

Facility Site Location: **4600 Hwy 421 North**
City, County, State, Zip: **Wilmington, New Hanover County, North Carolina 28401**

Mailing Address: **P. O. Box 327**
City, State, Zip: **Wilmington, North Carolina, 28402**

Application Number: **6500303.14A, 6500303.14C, and 6500303.17A**
Complete Application Date: **March 29, 2017**

Primary SIC Code: **2821**
Division of Air Quality, **Wilmington Regional Office**
Regional Office Address: **127 Cardinal Drive**
Wilmington, North Carolina 28405-3845

Permit issued this the Xth of July, 2017

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

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SECTION 3: GENERAL PERMIT CONDITIONS

ATTACHMENT

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SECTION 1- PERMITTED EMISSION SOURCES AND ASSOCIATED AIR POLLUTION CONTROL DEVICES AND APPURTENANCES

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

Page Nos.	Source ID No.	Emission Source Description	Control/Recovery Device ID No.	Control/Recovery Device Description
Group 2 Continuous Polymer Recovery [All Sources are MACT FFFF, Gpv2]				
22-25	MA-311-1	#1 product sifter	FU-751R1	Natural gas/No. 2 fuel oil-fired thermal oxidizer with low NO _x burner (11.0 million Btu per hour maximum heat input) installed on: sulfur scrubber (50 gallons per minute circulation rate) installed on: three chilled condensers installed on: two continuous vent systems and cyclic vent system
	DR-431R1, DR-2431	Two salt dryers		
	MA-2311-1, MA-2311-2	Two product sifters	TW-728 HE-721, HE-722, HE-2721 VS-721, VS-2721 VS-722	
Group 2 Continuous Polymer Recovery Area [All Sources are MACT FFFF, Gpv2]				
22-25	VE-531	Reflux drum installed on one NMP dehydration tower (TW-531)	FU-751R1	Natural gas/No. 2 fuel oil-fired thermal oxidizer with low NO _x burner (11.0 million Btu per hour maximum heat input) installed on: sulfur scrubber (50 gallons per minute circulation rate) installed on: three chilled condensers installed on: two continuous vent systems and cyclic vent system
	VE-2531	Reflux drum installed on one NMP dehydration tower (TW-2531)	TW-728 HE-721, HE-722, HE-2721 VS-721, VS-2721 VS-722	
Polyphenylene Sulfide Polymer Reaction Area Batch Process Vents [All Sources are MACT FFFF, Gpvb2]				
22-25	VE-572	Reflux drum	FU-751R1	Natural gas/No. 2 fuel oil-fired thermal oxidizer with low NO _x burner (11.0 million Btu per hour maximum heat input) installed on: sulfur scrubber (50 gallons per minute circulation rate) installed on: three chilled condensers installed on: two continuous vent systems and cyclic vent system
	VE-331, VE-341	Polymer wash tanks A & B		
	TA-304 to TA-307	#1, #2, #3, and #4 recovered water tanks	TW-728	
	VE-571	Tower feed tank installed on one para dichlorobenzene recycle tank (1,190 gallons capacity, MS-571) and one packed tower (TW-571) with integral kettle (HE-571)	HE-721, HE-722, HE-2721	
	VE-553, VE-2553	Two NMP recovery drums	VS-721, VS-2721 VS-722	
	VE-2571	Tower feed tank installed on para dichlorobenzene recycle tank (1,190 gallon capacity, MS-571) and packed tower (TW-571) with integral kettle (HE-571)		

Page Nos.	Source ID No.	Emission Source Description	Control/Recovery Device ID No.	Control/Recovery Device Description
Group 2 Surge Control Vessels/Bottoms Receivers [All Sources are MACT FFFF, Gscvbr2]				
22-25	TA-502	Recovered solvent service tank	FU-751R1	Natural gas/No. 2 fuel oil-fired thermal oxidizer with low NO _x burner (11.0 million Btu per hour maximum heat input) installed on: sulfur scrubber (50 gallons per minute circulation rate) installed on: three chilled condensers installed on: two continuous vent systems and cyclic vent system
	VE-503, VE-2503	Maintenance/shutdown equipment drain collection systems		
	VE-311, VE-321	#1 and #2 acetone reslurry tanks	TW-728	
	VE-231, VE-241	Wet polymer storage tank A & B		
	VE-401, VE-411	#1 and #2 salt decanter feed tanks		
	VE-421	Crude acetone receiver	HE-721, HE-722, HE-2721	
	TA-501	Recovered water service tank		
	TA-711	Acetone wastewater tank	VS-721, VS-2721 VS-722	
	VE-581	Acetone flush surge drum		
	TA-263	Liquid ring separator installed on polymerization cooling vessel (VE-261) with one condenser (HE-261)		
	VE-2502	Recovered solvent service tank		
	VE-2311, VE-2321	Two acetone reslurry tanks		
	VE-2401, VE-2411	Two salt decanter feed tanks		
	VE-2396	CW conveyor slurry surge vessel		
	VE-2395	CW column #1 recovered solvent vessel		
	VE-2397	CW column #2 recovered water vessel		
	VE-2421	Crude acetone receiver		
	VE-2231	Wet polymerization storage tank C		
	VE-2241	Wet polymerization storage tank D		
	TA-2263	Liquid ring separator installed on polymerization cooling vessel (VE-2261) with one condenser (HE-2261)		
VE-542	NMP vapor-liquid separation drum venting from NMP recovery tower reflux drum (VE-541) installed on NMP dehydrator tower (TW-541) and #1 NMP recovery drum (VE-552) installed on NMP evaporator (VE-551) and one condenser (HE-551)			
VE-2542	NMP vapor liquid separation drum venting from NMP recovery tower reflux drum (VE-2541) installed on NMP dehydration tower (TW-2541) and #2 NMP recovery drum (VE-2552) installed on NMP evaporator (VE-2551) and one condenser (HE-2551)			

Page Nos.	Source ID No.	Emission Source Description	Control/Recovery Device ID No.	Control/Recovery Device Description
22-25	VE-431R1, VE-2431	Two salt dissolving tanks		
Storage Tanks [Both Sources are MACT FFFF, Gst2]				
22-25	TA-131	Para dichlorobenzene storage tank (34,000 gallon capacity)	None	None
	TA-132	Para dichlorobenzene storage tank (47,000 gallon capacity)	None	None
Heat Exchange Systems [Both Sources are MACT FFFF]				
22-25	MS-091, MS-2091	Cooling tower #1 and #2	None	None
Non-MACT Affected Emission Sources				
25	MA-411-A, MA-411-B MA-411-C	#1 salt decanter A #1 salt decanter B #1 salt decanter C	FU-751R1	Natural gas/No. 2 fuel oil-fired thermal oxidizer with low NO _x burner (11.0 million Btu per hour maximum heat input) installed on:
	MA-421	#2 salt decanter	TW-728	sulfur scrubber (50 gallons per minute circulation rate) installed on:
	MA-321-1	#2 product sifter		three chilled condensers installed on:
	VE-511	#1 acetone reflux drum installed on #1 acetone tower (TW-511)	HE-721, HE-722, HE-2721	two continuous vent systems and cyclic vent system
	VE-521	Reflux drum installed on #2 acetone tower (TW-521)	VS-721, VS-2721 VS-722	
	VE-561	Reflux drum installed on #3 acetone tower (TW-561)		
	VE-413 VE-414 VE-415 VE-423	Release chamber from MA-411-A Release chamber from MA-411-B Release chamber from MA-411-C Release chamber from MA-421		
	MA-321R1-2	#2 product sifter		
	MA-2321-1, MA-2321-2	Two product sifters		
	WS-1	Waste pDCB loading area		
	VE-301	Wet polymer hopper		
	TA-302, TA-303	#1 and #2 recovered acetone tanks		
	TA-141	Acetone storage tank (51,822 gallon capacity)		
	MA-301	Acetone decanter		
	VE-303	Release chamber from MA-301		
	VE-2521	Reflux drum installed on #4 acetone tower (TW-2521)		
	VE-2511	Reflux drum installed on #5 acetone tower (TW-2511)		

Page Nos.	Source ID No.	Emission Source Description	Control/Recovery Device ID No.	Control/Recovery Device Description
25	VE-2413, VE-2414, VE-2423	Release chamber from MA-2411A Release chamber from MA-2411B Release chamber from MA-2421A	FU-751R1	Natural gas/No. 2 fuel oil-fired thermal oxidizer with low NO _x burner (11.0 million Btu per hour maximum heat input) installed on: sulfur scrubber (50 gallons per minute circulation rate) installed on: three chilled condensers installed on: two continuous vent systems and cyclic vent system
	VE-2390	CW vapor release chamber		
	MA-2390, MA-2392, MA-2394	CW column #1, CW column #2 CW column #3	TW-728	
	MA-2391	CW screw conveyor	HE-721, HE-722, HE-2721	
	MA-2411A	#3 and #4 salt decanter feed tank		
	MA-2411B	#3 and #4 salt decanter feed tank		
	MA-2421A	#5 salt decanter feed tank	VS-721, VS-2721 VS-722	
	VE-281	Reactor condenser flash separator installed on one condenser (HE-271) installed on reactors (RE-211, RE-221, and RE-222)		
	VE-2281	Reactor condenser flash separator installed on one condenser (HE-2271) and two reactors (RE-2211 and RE-2221**)		
	TA-111, TA-2111	Two NMP storage tank (51,822 gallon capacity each)		
	HE-552, HE-2552	Two NMP condensers		
	TW-711	Acetone stripper/tower		
	TW-2541	NMP dehydrator tower		
	VE-2541	NMP recovery tower reflux drum		
TA-2501	Spent solvent storage tank (68,000 gallons)			
25	VE-081, VE-082, VE-2081, VE-2082	Four therminol expansion tanks	FU-751R1	Natural gas/No. 2 fuel oil-fired thermal oxidizer with low NO _x burner (11.0 million Btu per hour maximum heat input) installed on: sulfur scrubber (50 gallons per minute circulation rate)
			TW-728	
25	TW-372	Polymer dryer gas scrubber installed on one cyclone (MS-371R-1) installed on the #1 polymer dryer (DR-371)	FU-751R1	Natural gas/No. 2 fuel oil-fired thermal oxidizer with low NO _x burner (11.0 million Btu per hour maximum heat input)
	TW-2372	Polymer dryer gas scrubber installed on cyclone (MS-2371) installed on the #2 polymer dryer (DR-2371)		
17-19, 25	TA-601	Final PPS product silo (37,016 gallon capacity)	FU-751R1	Natural gas/No. 2 fuel oil-fired thermal oxidizer with low NO _x burner (11.0 million Btu per hour maximum heat input) installed on: two bagfilters (44 square feet of surface area each)
	TA-602	Final PPS product silo (8,680 gallon capacity)		

Page Nos.	Source ID No.	Emission Source Description	Control/Recovery Device ID No.	Control/Recovery Device Description
17-19, 25	TA-2601, TA-2602	Two final PPS product silos	FU-751R1 MS-2603-1 MS-2603-2	Natural gas/No. 2 fuel oil-fired thermal oxidizer with low NO _x burner (11.0 million Btu per hour maximum heat input) installed on: two bagfilters (318 square feet of surface area each)
17-19	MA-601, MA-602	Two PPS product baggers	MS-605R	One bagfilter (802 square feet of surface area)
	MS-631	Portable bag dumper		
	MS-632	Supersack dumper		
	TA-603, TA-2603	Two product surge hoppers		
25	TA-161R1	Hydrochloric acid (HCl) storage tank (15,000 gallon capacity)	None	None
	MA-741R1, MA-2741	Two salt presses venting to atmosphere during dump process	None	None
25	VE-203 and VE-2203	Two H ₂ S absorber/internal process recycle units	FU-751R1	Natural gas/No. 2 fuel oil-fired thermal oxidizer with low NO _x burner (11.0 million Btu per hour maximum heat input) installed on Two NaSH recovery towers
	VE-201R1 and VE-2201	Two reactor reflux drums		
	VE-731 and VE-2731	Two salt neutralizing vessels	TW-713-1 TW-713-2	
	TA-713-1 and TA-713-2	Two NaSH recovery bottom tanks (1,250 gallon capacity)		
	TA-121 and TA-122	Two NaSH storage tanks		
	TA-718	Byproduct NaSH tank		
	VE-733	Sour brine tank		
	VE-2733	Sour brine tank		
25	VE-2744	Filter press core blow tank	FU-751R1	Natural gas/No. 2 fuel oil-fired thermal oxidizer with low NO _x burner (11.0 million Btu per hour maximum heat input)
Utilities				
9-17	FU-081R1 NSPS Dc, MACT DDDDD	Natural gas/No. 2 fuel oil-fired No. 1 hot oil process heater with low-NO _x burner (44.0 million Btu per hour maximum heat input)	None	None
9-17	FU-2081 NSPS Dc, MACT DDDDD	Natural gas/No. 2 fuel oil-fired No. 2 hot oil process heater with low-NO _x burner (55.0 million Btu per hour maximum heat input)	None	None

Page Nos.	Source ID No.	Emission Source Description	Control/Recovery Device ID No.	Control/Recovery Device Description
9-17	BLR-1, BLR-2 NSPS Dc, MACT DDDDD	Two boilers with low-NO _x burners firing natural gas (90.6 million Btu per hour maximum heat input) and No. 2 fuel oil as backup (87.1 million Btu per hour maximum heat input)	None	None
20-21	MS-726 MACT ZZZZ	Emergency use diesel-fired generator (1,100 kW rated capacity, 1475.1 hp) used primarily to supply reactor power to reactor mixing, circulation, and cooling equipment	None	None
20-21	MS-2726 MACT ZZZZ	Emergency use diesel-fired generator (1,350 kW rated capacity, 1810.4 hp) used primarily to supply reactor power to reactor mixing, circulation, and cooling equipment	None	None

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1- Emission Sources and Control Devices Specific Limitations and Conditions

The emission sources and associated air pollution control devices 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. The following external combustion units:

- **Natural gas/No. 2 fuel oil-fired No. 1 hot oil process heater (44.0 million Btu per hour maximum heat input, ID No. FU-081R1);**
- **Natural gas/No. 2 fuel oil fired No. 2 hot oil process heater (55.0 million Btu per hour maximum heat input, ID No. FU-2081); and**
- **Two boilers (ID Nos. BLR-1 and BLR-2) with low-NOX burners firing natural gas (90.6 million Btu per hour maximum heat input) and No. 2 fuel oil as backup (87.1 million Btu per hour maximum heat input).**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	<u>No. 1 hot oil process heater:</u> 0.41 pounds per million Btu heat input <u>No. 2 hot oil process heater and boilers:</u> 0.25 pounds per million Btu heat input	15A NCAC 2D .0503
Sulfur dioxide emissions	<u>For natural gas combustion only</u> 2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	<u>For natural gas combustion only</u> 20 percent opacity	15A NCAC 2D .0521
Sulfur dioxide	<u>For No. 2 fuel oil combustion only</u> 0.5 percent by weight sulfur content by weight	15A NCAC 2D .0524 40 CFR Part 60, Dc
Visible emissions	<u>For No. 2 fuel oil combustion only</u> 20 percent opacity (6-minute average) except for one 6-minute period per hour of not more than 27 percent	
Hazardous air pollutants	Work practices	15A NCAC 2D .1111 40 CFR Part 63, DDDDD

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 the No. 1 hot oil process heater (**ID No. FU-081R1**) into the atmosphere shall not exceed 0.41 pounds per million Btu heat input.
- b. Emissions of particulate matter from the combustion of natural gas and No. 2 fuel oil, that are discharged from the No. 2 hot oil process heater (**ID No. FU-2081R1**) and the boilers (**ID Nos. BLR-1 and BLR-2**) into the atmosphere shall not exceed 0.25 pounds per million Btu heat input.

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

- c. 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 or A.1.b, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

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

- d. No monitoring, recordkeeping or reporting is required for particulate emissions from the firing of natural gas or No. 2 fuel oil in these sources.

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

- a. Emissions of sulfur dioxide from the Nos. 1 and 2 hot oil process heaters and boilers (**ID No. FU-081R1, FU-2081, BLR-1 and BLR-2**) shall not exceed 2.3 pounds per million Btu heat input when firing natural gas. 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 A.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from the firing of natural gas in the Nos. 1 and 2 hot oil process heaters and boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**).

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

- a. Visible emissions from combustion of natural gas in the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 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 A.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. No monitoring, recordkeeping or reporting is required for visible emissions from the firing of natural gas in the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**).

4. 15A NCAC 2D .0524: NSPS, STANDARDS OF PERFORMANCE FOR SMALL INDUSTRIAL COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS (40 CFR Part 60, Subpart Dc)

- a. For the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) while firing No. 2 fuel oil, only, the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."

Emission Limitations [15A NCAC 2D .0524]

- b. The maximum sulfur content of any fuel oil received and burned in the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) shall not exceed 0.5 percent by weight. [40 CFR 60.42c(d) and 60.42c(i)]
- c. On and after the date on which the initial performance test is required under Section 2.1 A.4.g, below, visible emissions from the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) when firing No. 2 fuel oil shall not be more than 20 percent opacity when averaged over a six-minute period, except for one six-minute period per hour of not more than 27 percent opacity [40 CFR 60.43c(c)]
- d. The opacity standard in Section 2.1 A.4.c, above, applies at all times when firing No. 2 fuel oil, except during periods of startup, shutdown, or malfunction. [40 CFR 60.43c(d)]
- e. No fuel sulfur limits or opacity limits apply under 15A NCAC 2D .0524 when firing natural gas in the Nos. 1 and 2

hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**).

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

- 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 Section 2.1 A.4.b, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.
- g. The Permittee shall conduct a performance test using Method 9 of Appendix A-4 of 40 CFR Part 60 and in accordance with General Condition JJ to demonstrate compliance with the opacity limit in Section 2.1 A.4.c, above, and as follows. [40 CFR 60.47c(a)]
- i. The Permittee shall conduct the performance test within 180 days of switching fuel firing from natural gas to No. 2 fuel oil.
 - ii. The Permittee shall comply with Section 2.1 A.4.i, below.
 - iii. The observation period for Method 9 of Appendix A-4 of 40 CFR Part 60 performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.
 - iv. If the No. 1 or No. 2 hot oil process heater or each boiler (**ID Nos. FU-081R1, FU-2081, BLR-1 or BLR-2**) is not firing No. 2 fuel oil on the required date for the performance test; the performance test must be conducted the next time No. 2 fuel oil is fired in that unit, excluding startups, shutdowns and malfunctions, and only if fuel oil is fired for three hours or more during daylight hours.

If the results of this test are above the limits in Section 2.1 A.4.c, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

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

- h. The Permittee shall monitor the fuel sulfur content according to either Section 2.1 A.4.h.i or A.4.h.ii, below.
- i. To assure compliance with the fuel sulfur limit in Section 2.1 A.4.b, above, the Permittee shall retain a copy of the fuel supplier certification for any oil fired in the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**). The fuel supplier certification shall include the following information:
 - (A) The name of the oil supplier;
 - (B) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and
 - (C) The sulfur content or maximum sulfur content of the oil.
[40 CFR 60.42c(h)(1), 60.44c(h), 60.46c(e), 60.48c(f)]
 - ii. As an alternative to fuel supplier certification and to assure compliance with the fuel sulfur limit in Section 2.1 A.4.b, above, the Permittee may monitor the fuel sulfur content of the No. 2 fuel oil fired in the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) based on fuel shipment sampling according to the following procedures. [40 CFR 60.46c(d)]. The sulfur content of the fuel shall be determined on a 30-day rolling average basis. [40 CFR 60.42c(g)].
 - (A) The Permittee shall collect oil samples from the fuel tank for the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) immediately after the fuel tank is filled and before any oil is combusted.
 - (B) The Permittee shall analyze the oil sample to determine the sulfur content of the oil.
 - (C) The Permittee shall conduct a new sample and analysis of the fuel in the tank upon filling, if a partially empty fuel tank is refilled.
 - (D) Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the Permittee shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the fuel sulfur content monitoring requirements for either fuel supplier certification or fuel sulfur sampling are not met.

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

- i. After completion of the initial performance testing in Section 2.1 A.4.g, above, the Permittee shall operate the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) according to the following site-specific monitoring plan to be in use when fuel sulfur content of the No. 2 fuel oil is being monitored using fuel sampling as specified in Section 2.1 A.4.h(ii). [40 CFR 60.13(i)(2)]

- i. The Permittee shall purchase low sulfur (i.e., less than or equal to 0.5 percent sulfur content) No. 2 oil as backup fuel.
- ii. The Permittee shall keep records of all fuel usage on a monthly basis.
- iii. The Permittee shall perform regular maintenance on the oil burners to ensure they are properly set up to fire oil as specified by the vendor and to meet vendor specifications.
- iv. In the event the Permittee notices inefficient combustion while firing No. 2 oil, the Permittee shall conduct maintenance immediately to address any issues.
- v. The Permittee shall conduct a 10-minute observation (during normal operation) on the first operating day the Nos. 1 or 2 hot oil process heaters or the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) fire No. 2 fuel oil using Method 22 and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (i.e., 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (i.e., 90 seconds per 30 minute period), the Permittee shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (i.e., 90 seconds) or conduct a new Method 9 performance test using the procedures in Section 2.1 A.4.g. above within 45 calendar days, or the next time No. 2 fuel oil is fired, whichever is later.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) are not operated according to the approved site-specific monitoring plan.

Recordkeeping [15A NCAC 2Q .0508(f) and 40 CFR 60.48c(g)(2)]

- j. The Permittee shall record and maintain records of the amounts of each fuel fired during each month. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if records of the amount of each fuel fired during each month are not maintained.
- k. The Permittee shall maintain records of fuel sulfur content monitoring as follows:
 - i. The Permittee shall maintain records of No. 2 fuel oil supplier certifications as specified in Section 2.1 A.4.h.i, above. [40 CFR 60.48c(e)(11), (f)(1)]
 - ii. If the Permittee is using fuel sampling to demonstrate compliance as specified in Section 2.1 A.4.h.ii, above, the Permittee shall maintain the following records:
 - (A) Records of each 30-day average sulfur content (weight percent) calculated during the reporting period, ending with the last 30-day period;
 - (B) Reasons for any noncompliance with emissions standards and a description of corrective actions taken, if necessary.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if records of fuel sulfur content monitoring are not maintained.

- l. The Permittee shall keep the following opacity monitoring records:
 - i. For each performance test conducted using Method 9 of appendix A-4 of this part, the Permittee shall keep the records including the following:
 - (A) Dates and time intervals of all opacity observation periods;
 - (B) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
 - (C) Copies of all visible emission observer opacity field data sheets.
 - ii. For each performance test conducted using Method 22 of appendix A-4 of this part, the Permittee shall keep the records including the following:
 - (A) Dates and time intervals of all visible emissions observation periods;
 - (B) Name and affiliation for each visible emission observer participating in the performance test;
 - (C) Copies of all visible emission observer opacity field data sheets; and
 - (D) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the Permittee to demonstrate compliance with the applicable monitoring requirements. [40 CFR 60.48c(c)(1), (2)]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these opacity monitoring records are not maintained.

- m. The Permittee shall maintain records of any occurrence and duration of any startup, shutdown, or malfunction in the

operation the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**). [40 CFR 60.7(b)] The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the records of startups, shutdowns, and malfunctions are not maintained.

- n. All records required under Section 2.1 A.4.j through A.4.m shall be maintained by the Permittee for a period of two years following the date of such record. [40 CFR 60.48c(i)] The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the records are not maintained for the duration of 2 years.

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

- o. The Permittee shall submit a semiannual summary report 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 from the requirements of this permit and excess emissions must be clearly identified. The summary report shall include the following information:
 - i. The fuel sulfur content monitoring method being used to demonstrate compliance with the limits in Section 2.1 A.4.b.
 - ii. When fuel supplier certification is being used to demonstrate compliance with the fuel sulfur content standard, the Permittee shall include the following:
 - (A) Fuel supplier certification(s), as described in Section 2.1 A.4.h.i;
 - (B) A certified statement signed by the Permittee that the records of fuel supplier certification(s) submitted represents all of the No. 2 fuel oil fired during the semiannual period;
 - iii. When fuel sampling is used to comply with the fuel sulfur content standard, the Permittee shall include the following:
 - (A) Records specified in Section 2.1 A.4.k, above; and
 - (B) Records from any subsequent performance tests performed as shown in Section 2.1 A.4.l, above.
- p. The Permittee shall submit a notification of the actual date of initial startup of the No. 2 hot oil process heater and the boilers (**ID Nos. FU-2081, BLR-1 and BLR-2**) to the Regional Supervisor, DAQ, postmarked within 15 days after such date. [40 CFR 60.7, 60.48c(a)]

5. 15A NCAC 2D .1111 NATIONAL EMISSION STANDARD FOR HAZARDOUS AIR POLLUTANTS, 40 CFR PART 63, SUBPART DDDDD – BOILER AND PROCESS HEATERS

Applicability

- a. For the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 2D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions." [40 CFR 63.7485, 63.7490, 63.7499(l)]
- b. In order for the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) to be considered in the "unit designed to burn gas 1" subcategory (as defined in 40 CFR 63.7575), the Permittee shall only burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year, and during periods of gas curtailment or gas supply interruptions of any duration. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the No. 2 fuel oil is burned in the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) for periodic testing of liquid fuel, maintenance or operator training for more than 48 hours during any calendar year or if No. 2 fuel oil is burned in the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) during any periods other than gas curtailment or gas supply interruption.

Definitions and Nomenclature

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

40 CFR Part 63 Subpart A General Provisions

- d. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD. [40 CFR 63.7565]

Compliance Date

- e. The Permittee shall comply with the applicable requirements for the No. 1 hot oil process heater (**ID No. FU-081R1**) no later than January 31, 2016. [40 CFR 63.7495(b)]
- f. The Permittee shall comply with the applicable requirements upon startup of the No. 2 hot oil process heater and the boilers (**ID Nos. FU-2081, BLR-1 and BLR-2**). [40 CFR 63.7495(a)]

Notifications

- g. As specified in §63.9(b)(4) and (5), the Permittee shall submit an Initial Notifications for the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) according to the following schedule:
 - i. The initial notification for the No. 1 hot oil process heater (**ID No. FU-081R1**) shall be submitted no later than May 31, 2014. [40 CFR 63.7545(b)]
 - ii. The initial notification for the No. 2 hot oil process heater and the boilers (**ID Nos. FU-2081, BLR-1 and BLR-2**) shall be submitted no later than 15 days after the actual date of startup for each unit. [40 CFR 63.7545(c)]
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the Initial Notification is not submitted.
- h. The Permittee shall submit a Notification of Compliance Status for the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**). The notification must be signed by a responsible official. [40 CFR 63.7530(d) and (f) and 63.7545(e)]
 - i. The Permittee shall submit the Notification of Compliance Status for the No. 2 hot oil process heater and the boilers (**ID Nos. FU-2081, BLR-1 and BLR-2**) before the close of business on the 60th day following the completion of the initial tune-up required in Section 2.1 A.5.k. The notification shall contain the following:
 - (A) A description of the units including a statement that each of the No. 2 hot oil process heater and the boilers (**ID Nos. FU-2081, BLR-1 and BLR-2**) is in the “unit designed to burn gas 1 subcategory,” the design heat input capacity of unit, and description of the fuel(s) burned.
 - (B) A certification of compliance, signed by the responsible official, that the Permittee has conducted the initial tune-up according to the procedures in Section 2.1 A.5.k, below.
 - ii. The Permittee shall submit the Notification of Compliance Status for the No. 1 hot oil process heater (**FU-081R1**) no later than March 31, 2016. The notification shall contain the following:
 - (A) A description of the unit including a statement the No. 1 hot oil process heater (**ID Nos. FU-081R1**) is in the “unit designed to burn gas 1 subcategory,” the design heat input capacity of unit, and description of the fuel(s) burned.
 - (B) A signed certification that the furnace tune-up was conducted and the energy assessment was completed no later than January 31, 2016.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the Notification of Compliance Status is not submitted.

- i. The Permittee shall submit a notification of intent to fire an alternative fuel (i.e., No. 2 fuel oil) within 48 hours of the declaration of each period of natural gas curtailment or supply interruption. The notification may be sent to the Wilmington Regional Office via email from the Responsible Official and shall include the following information [40 CFR 63.7545(f)]:
 - i. Company name and address;
 - ii. Identification of the affected boiler;
 - iii. Reason the Permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began;
 - iv. The type of alternative fuel the Permittee intends to use; and
 - v. Dates when the alternative fuel use is expected to begin and end.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the notification of intent to fire alternative fuels is not submitted.

General Compliance Requirements

- j. The Permittee shall comply with the work practice standards in Section 2.1 A.5.k, below. These standards apply at all times the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) are operating. [40 CFR 63.7500(f) and 63.7505(a)]

Work Practice Standards [15A NCAC 2Q .0508(f)]

- k. The Permittee shall conduct tune-ups of the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**), as specified below.
- i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may delay the burner inspection until the next scheduled shutdown.
 - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The Permittee may delay the inspection until the next scheduled unit shutdown.
 - iv. Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject.
 - v. Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- [40 CFR 63.7500(a) and 63.7540(a)(10)]
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if these work practice standards are not met.
- l. For the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**), the tune-ups shall be conducted according to the following schedule. [Table 3 of Subpart DDDDD]
- i. The initial tune-up for the No. 1 hot oil process heater (**ID No. Fu-081R1**) shall be conducted no later than January 31, 2016. [40 CFR 63.7510(e)]
 - ii. The initial tune-ups for the No. 2 hot oil process heater and the boilers (**ID Nos. FU-2081, BLR-1 and BLR-2**) shall be no later than 61 months after the initial startup of the unit. [40 CFR 63.7510(g) and 63.7515(d)]
 - iii. Each subsequent tune-up for the Nos. 1 and 2 hot oil process heaters and the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) shall be conducted every 5 years and no more than 61 months after the previous tune-up. [40 CFR 63.7540(a)(12), 63.7515(d)]
- The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the initial and annual tune-ups are not conducted as specified.
- m. If the Nos. 1 and 2 hot oil process heaters or the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) are not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7515(g) and 63.7540(a)(13)]
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the tune-up is not conducted within 30 calendar days of restarting.
- n. The Permittee shall conduct a one-time 8-hour (or longer at the discretion of the Permittee) on-site energy assessment for the No. 1 hot oil process heater (**ID No. FU-081R1**). The energy assessment shall be performed by qualified energy assessor on or before January 31, 2016. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in Section 2.1 A.5.n.i through A.5.n.viii or an energy management program that includes the No. 1 hot oil process heater (FU-081R1) compatible to ISO 50001, satisfies the energy assessment requirement. The energy assessment must include the following information. [40 CFR 63.7500(a) and Table 3 to Subpart DDDDD]
- i. A visual inspection of the boiler or process heater system.
 - ii. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
 - iii. An inventory of major energy use systems consuming energy from affected boiler and process heaters and which are under the control of the boiler/process heater owner/operator.
 - iv. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
 - v. A review of the facility's energy management practices. (Provide recommendations for improvements consistent with the definition of energy management practices, if identified.)
 - vi. A list of cost-effective energy conservation measures that are within the facility's control.
 - vii. A list of the energy savings potential of the energy conservation measures identified
 - viii. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the energy assessment is not conducted.

- o. At all times, the Permittee shall operate and maintain Nos. 1 and 2 hot oil process heaters or the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to DAQ that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the boiler is not operated in a manner consistent with safety and good air pollution control practices for minimizing emissions.

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

- p. The Permittee shall keep the following records:
 - i. A copy of each notification and report submitted to comply with Section 2.1 A.5, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in §63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]
 - ii. An annual report, maintained on-site and submitted to DAQ if requested, containing the information in paragraphs (A) through (C) below:
 - (A) The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the source;
 - (B) A description of any corrective actions taken as a part of the combustion adjustment; and
 - (C) The type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 CFR 63.7540(a)(10)(vi)]
 - iii. The associated records for compliance with the work practice standards in Section 2.1 A.5.k through A.5.o, above, including the occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment. [40 CFR 63.10(b)(2)]
 - iv. Records of the calendar date, time, occurrence, duration, type(s) and amount(s) of fuels used during of each startup and shutdown. [40 CFR 63.7555(i) and (j)]
 - v. Records of the total hours per calendar year that alternative fuel (i.e., No. 2 fuel oil) is burned and the total hours per calendar year that the unit operated during periods of natural gas curtailment or natural gas supply emergencies. [40 CFR 63.7555(h)]

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

- q. The Permittee shall:
 - i. maintain records in a form suitable and readily available for expeditious review;
 - ii. keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
 - iii. keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if records are not maintained as specified above. [40 CFR 63.7560 and 63.10(b)(1)]

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

- r. The Permittee shall submit compliance reports to the DAQ on an annual basis. The first report shall cover the period beginning on the compliance date specified in Section 2.1 A.5.d, above, and ending on December 31 one year after the compliance date in Section 2.1 A.5.d, above. Subsequent annual reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 30. [40 CFR 63.7550(a), (b) and 63.10(a)(4), (5)]
- s. The Permittee shall submit the annual compliance report electronically through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the Permittee shall submit the report to DAQ. [40 CFR

63.7550(h)(3)]

- t. The Permittee shall include the following information in the annual compliance report:
 - i. Company name and address;
 - ii. Process unit information, emissions limitations, and operating parameter limitations;
 - iii. Date of report and beginning and ending dates of the reporting period;
 - iv. The total operating time during the reporting period;
 - v. The date of the most recent tune-up for the Nos. 1 and 2 hot oil process heaters or the boilers (**ID Nos. FU-081R1, FU-2081, BLR-1 and BLR-2**) required according to Section 2.1 A.5.k. Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown; and
 - vi. If there are no deviations from the requirements of the work practice requirements in Section 2.1 A.5.k, above, a statement that there were no deviations from the work practice standards during the reporting period.
[40 CFR 63.7550(a) and (c), Table 9]

- u. If the Permittee has a deviation from a work practice standard during the reporting period, the annual compliance report must also contain the following information:
 - i. A description of the deviation and which work practice standard from which the Permittee deviated; and
 - ii. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.
[40 CFR 63.7540(b), 63.7550(a) and (d) and Table 9]

B. Polyphenylene sulfide (PPS) product storage and bagging

- **Two final PPS product silos (TA-601 and TA-602) and associated bagfilters (MS-603-1 and MS-603-2) and two final PPS product silos (TA-2601 and TA-2602) and associated bagfilters (MS-2603-1 and MS-2603-2) all with associated thermal oxidizer (FU-751-R1)**
- **Two PPS product baggers (MA-601 and MA-602), one portable bag dumper (MS-631), one supersack dumper (MS-632), and two product surge hoppers (TA-603 and TA-2603), all with associated bagfilter (MS-605R)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate emissions	$E = 4.10 \times P^{0.67}$ for $P \leq 30$ tons per hour $E = 55 \times (P)^{0.11} - 40$ for $P > 30$ tons per hour Where E = allowable emission rate in pounds per hour P = process weight in tons per hour Liquid and gaseous fuels and combustion air are not considered as part of the process weight.	15A NCAC 2D .0515
Sulfur dioxide emissions	For thermal oxidizer FU-751R1 only 2.3 pounds per million Btu per hour heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Toxic air pollutants	For thermal oxidizer FU-751R1 only See Section 2.2.B.1 – <i>State enforceable only</i>	15A NCAC 2D .1100
Odors	See Section 2.2.B.2 – <i>State enforceable only</i>	15A NCAC 2D .1806

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

- a. Emissions of particulate matter from the product silos, product baggers, dumpers, and hopper (**ID Nos. TA-601, TA-602, TA-2601, TA-2602, MA-601, MA-602, MS-631, MS-632, TA-603, TA-2603**) shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67} \quad \text{for } P \leq 30 \text{ tons per hour}$$

$$E = 55 \times (P)^{0.11} - 40 \quad \text{for } P > 30 \text{ tons per hour}$$

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

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

- c. Particulate matter emissions from the emission sources shall be controlled by bagfilters (**ID Nos. MS-603-1, MS-603-2, MS-2603-1, MS-2603-2, MS-605R**) as listed in Section 1.0 of the permit. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- a monthly visual inspection of the system ductwork and material collection unit for leaks; and
 - an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

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

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
- the date and time of each recorded action;
 - the results of each inspection;
 - the results of any maintenance performed on the bagfilters; and
 - 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 the bagfilters within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

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

- a. Emissions of sulfur dioxide from the thermal oxidizer (**ID No. FU-751R1**) shall not exceed **2.3 pounds per million Btu heat input**. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

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

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

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

- c. No monitoring/recordkeeping is required for sulfur dioxide emissions from natural gas and No. 2 fuel oil firing in the thermal oxidizer.

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

- a. Visible emissions from the product silos, product baggers, dumpers, and hoppers (**ID Nos. TA-601, TA-602, TA-2601, TA-2602, MA-601, MA-602, MS-631, MS-632, TA-603, TA-2603**) and from thermal oxidizer (**ID No. FU-751R1**) 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 B.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once each month, the Permittee shall observe the emission point of the product silos, product baggers, dumpers, and hoppers (**ID Nos. TA-601, TA-602, TA-2601, TA-2602, MA-601, MA-602, MS-631, MS-632, TA-603, TA-2603**) and the thermal oxidizer (**ID No. FU-751R1**) 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. The Permittee shall establish normal for each silo, bagger, dumper, and hopper in the first 30 days following the effective date of the permit. 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 B. 3. a. above.

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

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

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

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

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

C. Emergency use diesel-fired generators

- **MS-726 (1,100 kW rated capacity, 1475.1 hp)**
- **MS-2726 (1,350 kW rated capacity, 1810.4 hp)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Hazardous air pollutants	Operate as an emergency use engine	15A NCAC 2D .1111 40 CFR Part 63, ZZZZ

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

- a. Emissions of sulfur dioxide from emergency generators (**ID Nos. MS-726 and MS-2726**) shall not exceed **2.3 pounds per million Btu heat input**. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

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

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

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

- c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from firing diesel fuel in emergency generator (ID No. MS-726).

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

- a. Visible emissions from the emergency generators (**ID Nos. MS-726 and MS-2726**) shall not be more than **20 percent opacity** each 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 found in Section 3. If the results of this test are above the limit provided in Section 2.1 C. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of diesel fuel in the emergency generators.

3. 15A NCAC 2D 1111, 40 CFR Part 63, Subpart ZZZZ “National Emission Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines (RICE)

The Permittee shall maintain the emergency RICE classification defined by limiting the operation of the emergency engines (**ID Nos. MS-726 and MS-2726**) as follows:

- a. There is no time limit on the use of the engines in emergency situations.
- b. Each engine may operate during the following situations for a combined total of no more than 100 hours per calendar year, except as noted in § 63.6640(f)(2)(i).
 - i. The engine may operate for maintenance checks and readiness testing as specified in §63.6640(f)(2)(i).
 - ii. Each engine may operate for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies, or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3.
 - iii Each engine may operate during periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

iv. Each engine may operate up to 50 hours per calendar year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power. The Permittee shall meet all the requirements in this subpart for non-emergency engines prior to operating the generators beyond what is allowed in i to iv above.

c. The Permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Monitoring [15A NCAC 2Q .0508(f) and §63.6650(h)]

d. For each emergency generator that operates or is contractually obligated to be available for more than 15 hours per calendar year for emergency response demand and/or during voltage/frequency deviations, the Permittee shall, beginning January 1, 2015, keep records, readily accessible in written or electronic format for a period of at least 5 years, which demonstrate that the fuel meets the requirements in § 80.510(b) for nonroad diesel fuel.¹ The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f) and § 63.6650(h)]

e. If one or both of the engines operate or are contractually obligated to be available for more than 15 hours per calendar year for emergency response demand and/or during voltage/frequency deviations, the Permittee shall submit an annual report, signed by a responsible official, to the NC DAQ Regional Supervisor, in writing, and to the EPA electronically using the Compliance and Emissions Data Reporting Interface (CEDRI)² that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx) by March 31st following each calendar year and beginning no later than March 31, 2016. The report shall contain the following information:

- i. The company name and address where the engine is located;
- ii. The date of the report and beginning and ending dates of the reporting period;
- iii. The engine site rating and model year;
- iv. The latitude and longitude of the engine in decimal degrees reported to the fifth decimal place;
- v. The hours operated for the purposes specified in § 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(2)(ii) and (iii);
- vi. The number of hours the engine is contractually obligated to be available for the purposes specified in § 63.6640(f)(2)(ii) and (iii),
- vii. Hours spent for operation for the purpose specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii), the name of the entity that dispatched the engine and the situation that necessitated the dispatch of the engine; and
- viii. Either a statement that there were no deviations from the fuel requirements in 2.1 C. 3. d above or information detailing the number, duration, and cause of fuel deviations.

f. If the monitoring in Section 2.1 C. 3. d above applies to the emergency engine(s), the Permittee shall submit a summary report to the NC DAQ, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. If applicable, the first semiannual summary report shall be submitted no later than July 30, 2015.

¹ Except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until deplete.

² If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the Permittee is only required to submit the written notification to the NC DAQ.

2.2- MULTIPLE EMISSION SOURCES SPECIFIC LIMITATIONS AND CONDITIONS

A. Polyphenylene sulfide (PPS) production and associated control devices

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Air toxic emissions	See Section 2.2.B.1	15A NCAC 2D .1100
Hazardous air pollutants	Recordkeeping and leak detection and repair	15A NCAC 2D .1111 40 CFR Part 63, FFFF
Odorous emissions	Suitable control measures – See Section 2.2.B.2	15A NCAC 2D .1806

1. 2D .1111: MAXIMUM AVAILABLE CONTROL TECHNOLOGY (40 CFR 63, Subpart FFFF: “MON”)

- 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 .1111, “Maximum Available Control Technology,” as promulgated in 40 CFR 63, Subpart FFFF, including Subpart A, “General Provisions.”

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

- b. Unless specified further below, the Permittee shall maintain records in accordance with 40 CFR 63.2525.

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

- c. Unless specified further below, the Permittee shall submit reports in accordance with 40 CFR 63.2520. Periodic (semiannual) compliance reports shall contain the information specified, as applicable, within 40 CFR 63.2520(e). The Permittee shall submit a summary report postmarked on or before February 28 of each calendar year for the preceding six-month period between July and December and August 31 of each calendar year for the preceding six-month period between January and June.

2. 2D .1111: MAXIMUM AVAILABLE CONTROL TECHNOLOGY (40 CFR 63, Subpart FFFF: “MON” for Group 2 Batch Process Vents)

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

- a. The Permittee shall determine the PPS batch process vent group status by summing the uncontrolled organic HAP emissions from each of the batch process vents within the process using the procedures specified in [§ 63.1257\(d\)\(2\)\(i\)](#) and (ii), except as specified in §63.2460. The Permittee shall maintain all records for a period of five years during which time the records shall be kept onsite for at least the first two years, and made available to DAQ personnel upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if these records are not maintained.

3. 15A NCAC 2D .1111: MAXIMUM AVAILABLE CONTROL TECHNOLOGY (40 CFR 63, Subpart FFFF: “MON” for Group 2 Continuous Process Vents with TRE > 5.0)

Process Changes, TRE Determinations, and Reporting Requirements [15A NCAC 2Q .0508(f)]

- a. The Permittee shall recalculate the TRE index value, flow, or organic HAP concentration for each process vent, as necessary, to determine whether the vent is Group 1 or Group 2, whenever process changes are made that could reasonably be expected to change the vent to a Group 1 vent. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or catalyst type, or whenever there is a replacement, removal, or addition of recovery equipment. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the required TRE determinations are not conducted in accordance with the requirements provided above.

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

- b. The Permittee shall maintain records, measurements, engineering assessments, and calculations performed to determine the TRE index value of the PPS process vent stream including changes in production capacity, production rate, feedstock type, or catalyst type, or the replacement, removal, or addition of recovery equipment, and any recalculation of the TRE index value. The Permittee shall maintain all records for a period of five years during which time the records shall be kept onsite for at least the first two years, and made available to DAQ personnel upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if these records are not maintained.

4. 15A NCAC 2D .1111: MAXIMUM AVAILABLE CONTROL TECHNOLOGY (40 CFR 63, Subpart FFFF: “MON” for Heat Exchange Systems)

Monitoring [15A NCAC 2Q .0508(f) and §63.104]

- a. The Permittee shall evaluate the heat exchange systems (**ID No. MS-091 and MS-2091**) for leaks by monitoring the cooling water for the presence of one or more organic hazardous air pollutants or other representative substances whose presence in cooling water indicates a leak in accordance with §63.104 and Part 63, Subpart FFFF. The Permittee shall collect and analyze cooling water samples each quarter. A leak is detected if the exit mean concentration is found to be greater than the entrance mean using a one-sided statistical procedure at the 0.05 level of significance and the amount by which it is greater is at least 1 part per million or 10 percent of the entrance mean, whichever is greater. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 monitoring is not performed as specified above
- b. If a leak is detected, then, except for allowed repair delays described at §63.104 (d) and (e), the Permittee shall repair the leak as follows:
 - i. The leak shall be repaired as soon as practical but not later than 45 calendar days after receiving results of monitoring tests indicating a leak; and
 - ii. Once the leak has been repaired, the Permittee shall confirm that the heat exchange system has been repaired within seven calendar days of the repair or startup, whichever is later.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 leak repairs are not completed as specified above.

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

- c. The Permittee shall maintain records of the leak detection testing and the presence of any leak including when it was repaired. The Permittee shall maintain all records for a period of five years during which time the records shall be kept onsite for at least the first two years, and made available to DAQ personnel upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if these records are not maintained.

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

- d. The Permittee shall submit a summary report postmarked on or before February 28 of each calendar year for the preceding six-month period between July and December and August 31 of each calendar year for the preceding six-month period between January and June. All instances of leaks, leak repairs, and delay of repairs shall be clearly identified.

5. 15A NCAC 2D .1111: MAXIMUM AVAILABLE CONTROL TECHNOLOGY (40 CFR 63, Subpart FFFF: “MON” for Group 2 Wastewater)

- a. To avoid Group 1 wastewater requirements, the wastewater stream characteristics shall not exceed any of the following limitations:
 - i. At any flow rate, if the total annual average concentration of compounds in Table 8 of 40 CFR 63, Subpart FFFF is greater than or equal to 10,000 ppmw, the total annual load of compounds in Table 8 shall be limited to less than 200 lb/yr;
 - ii. If the annual average flowrate is greater than or equal to 1 liter per minute, the total annual average concentration of compounds in Table 8 of Subpart FFFF shall be limited to less than 1,000 ppmw; and,
 - iii. If the combined total annual average concentration of compounds in Tables 8 and 9 of this Subpart is greater than or equal to 30,000 ppmw, the combined total annual load of compounds in Tables 8 and 9 of 40 CFR 63, Subpart FFFF shall be limited to less than 1 tpy.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the wastewater concentration and flowrate exceed any of the above limitations unless the Permittee follows all applicable Group 1 requirements in 40 CFR 63, Subpart FFFF for the wastewater stream.

Recordkeeping [40 CFR 63.147(b)(8) and 15A NCAC 2Q .0508(f)]

- b. The Permittee shall maintain the following records for each wastewater stream:
 - i. The originating process unit identification(s) and description(s).
 - ii. The identification code and flowrate.
 - iii. The average annual concentration of each 40 CFR 63, Subpart FFFF, Table 8 compound present (in parts per million, by weight) and the documentation of the methodology used to determine concentration.

The Permittee shall maintain all records for a period of five years during which time the records shall be kept onsite for at least the first two years, and made available to DAQ personnel upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if these records are not maintained.

6. 15A NCAC 2D .1111: National Emission Standards for Equipment Leaks-Control Level 2 Standards (40 CFR 63, Subparts FFFF and UU)

- 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 .1111, "Maximum Available Control Technology," as promulgated in 40 CFR 63, Subpart UU, including Subpart A, "General Provisions."
- b. The Permittee shall identify each valve, agitator, connector, pump and end cap for open ended lines in accordance with §63.102.
- c. Each pressure relief valves in gas/vapor service shall be returned to a condition of less than 500 ppm as soon as practical and within five days after each pressure relief, except as provided in §63.1024(d).
- d. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63Subpart UU.

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

- e. The Permittee shall monitor equipment in gas/vapor service using Method [21 of 40 CFR Part 60](#), Appendix A, except as otherwise provided in 40 CFR 63, Subpart UU, following the monitoring frequency and the definitions of a leak specified below.
 - i. Monthly monitoring for agitators with a leak defined as 10,000 ppm or greater. [§63.1028]
 - ii. Quarterly monitoring for valves, except monitoring shall be increased to monthly if 2% or more of the valves are found to leak. A leak is defined as 500 ppm or greater. [§63.1025]
 - iii. Annual monitoring for connectors with a leak defined as 500 ppm or greater. [§63.1027]
- f. The Permittee shall repair each leak detected as soon as practical, but no later than 15 calendar days after it is detected, except as provided in 40 CFR 63 Subpart UU and make a first attempt at repair no later than 5 calendar days after the leak is detected.
- g. As soon as practical and within 5 calendar days of evidence of a potential leak from a pump, valve, connector, agitator, or pressure relief device in heavy liquid service to the atmosphere found by visual, audible, olfactory, or any other detection method, the Permittee shall either:
 - i. Use an applicable instrument monitoring method to verify the potential leak [§63.1029 (b)(1)], or
 - ii. Make a first attempt to repair the leak, and repair no later than 15 calendar days after leak discovery such that the visual, audible, olfactory or other indications of a leak to the atmosphere have been eliminated, that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure. [§63.1029 (b)(3)]
- h. The Permittee shall maintain documentation of all leak detection and repair for a period of five years during which time the records shall be kept onsite for at least the first two years, and made available to DAQ personnel upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if these records are not maintained.
- i. The Permittee shall submit a summary report postmarked on or before February 28 of each calendar year for the preceding six-month period between July and December and August 31 of each calendar year for the preceding six-month period between January and June. All instances of leaks, leak repairs, and delay of repairs shall be clearly identified.

7. 15A NCAC 2D .1111: AVAILABLE CONTROL TECHNOLOGY (40 CFR 63, Subpart FFFF: “MON” for Group 2 Storage Vessels, Group 2 Surge Control Vessels and Bottoms Receivers, & Group 2 Transfer Racks)

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

- a. There are no monitoring/recordkeeping requirements associated with the equipment types identified in this paragraph.

B. Facility wide emission sources

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	<i>State-enforceable only</i> Modeled permit limits	15A NCAC 2D .1100
Odorous emissions	<i>State-enforceable only</i> Suitable control measures	15A NCAC 2D .1806

1. TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING REQUIREMENT – STATE ENFORCEABLE CONDITION

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

Emission Source ID	Emissions Sources	Toxic Air Pollutant	Emission Limits
FU-751R1	PPS process sources controlled by thermal oxidizer	Hydrogen chloride	75.3 pounds per hour
		Chlorine	103 pounds per hour
TODIVERT	PPS process sources diverting the thermal oxidizer	Hydrogen sulfide	1.18 pounds per hour
TA-161R1	HCL Storage Tank + Fugitives	Hydrogen chloride	3.47 pounds per hour
MA-741R1	Salt press	Hydrogen sulfide	0.133 pounds per hour
MA-2741	Salt press	Hydrogen sulfide	0.133 pounds per hour

STATE-ONLY REQUIREMENT: ODOR REQUIREMENTS

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.

SECTION 3 - GENERAL CONDITIONS (version 4.0 12/17/15)

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

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

F. **Circumvention** - STATE ENFORCEABLE ONLY

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

G. **Permit Modifications**

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

H. **Changes Not Requiring Permit Modifications**

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

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

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
 - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
 - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
 - c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
 - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
 - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. the change is not covered under any applicable requirement.

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

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

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

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

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

Excess Emissions

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

Permit Deviations

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

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

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

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

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

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

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation,

and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

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

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

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

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

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

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

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

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

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

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

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

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

- c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

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

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

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

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

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

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

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

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

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

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

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

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

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(4)]

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(e)]

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

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

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

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

ONLY

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

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

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

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

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

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

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

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

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

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

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

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

- b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

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

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

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

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540] - STATE ENFORCEABLE ONLY

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(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and

- d. any permit term or condition that is no longer applicable as a result of the change.

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

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

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

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
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
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound