Air Quality
ENVIRONMENTAL QUALITY

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL A. ABRACZINSKAS
Director

xx

Mr. Steve Lester
General Manager
Valley Proteins, Inc. – Rose Hill Division
PO Box 1026
Rose Hill, NC 28458

SUBJECT: Air Quality Permit No. 05127T25
Facility ID: 3100029
Valley Proteins, Inc. – Rose Hill Division
Rose Hill, North Carolina
Duplin County
Fee Class: Title V
PSD Status: Major

Dear Mr. Lester:

In accordance with your completed Air Quality Permit Application for a PSD major modification of your Title V permit received on November 16, 2017, we are forwarding herewith Air Quality Permit No. 05127T25 to Valley Proteins Inc. – Rose Hill Division, located at 469 Yellow Cut Road, Rose Hill, 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 02Q .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. 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 GS 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 GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

Duplin County has triggered increment tracking under PSD for PM-10, SO_2, and NOx. However, this permit modification does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from xx until August 31, 2019, 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 Rahul P. Thaker, P.E., QEP, at (919) 707-8740 or Rahul.Thaker@ncdenr.gov.

Sincerely,

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

Enclosure

cc: EPA Region 4 Office
Wilmington Regional Office
Connie Horne (cover letter only)
Central Files

Valley Proteins, Inc. – Rose Hill Division
Air Quality Permit No. 05127T25

ATTACHMENT 1: Summary of Changes to the Permit

Old Page No. [Air Permit No. 05127T24]	New Page No. [Air Permit No. 05127T25]	Condition No.	Changes
3	3	Section 1 Table	Include the following sources: (i) Fat extraction process equipment (ID No. ES-FE1) consisting of: Raw material unloading C201 Extractor EX204 Extractor EX205 Extractor EX206 Miscella feed tank T210-1 Miscella centrifuge CF212 Miscella filtrate tank T213 1st stage evaporator HX215 2nd stage evaporator HX216 Oil stripper VE217 Oil storage tanks (Main plt Bldg.) Work tank VE226 Solvent storage tank T2201 Solvent heater HX231 Desolventizer DT206 Vapor wash scrubber CY250 Vapor/solvent interchange HX208 Reboiler and Interchange HX227/VE227 Mineral oil heater HX225-5 Mineral oil stripper VE225-6 Evaporator condenser HX222-1 (2,900 gal/min cooling water flow rate) Stripper condenser HX222-2 (400 gal/min cooling water flow rate) DT condenser HX209 (3,600 gal/min cooling water flow rate) Vent condenser HX224 (300 gal/min cooling water flow rate) Mineral oil absorber VE225-1 (8 gal/min mineral oil flow rate) (ii) Fat extraction process meal storage room equipment (ID No. ES-FE2) consisting of: Two storage bins (each 20 feet (l) x 7 feet (w) x 17.25 ft (h) (iii) Fat extraction process equipment fugitive losses (ID No. FG1)

			(iv) Two natural gas-fired boilers (each 10.04 million Btu per hour heat input, ID No. ES-B8 ES-B9)
6	7	Section 2.1 A. Table	Include applicable requirement under 5D NESHAP.
10	-	Section 2.1 A. 6.	Remove non-applicable requirement under 6J NESHAP.
14	13	Section 2.1 C. Table	Include applicable requirement under 5D NESHAP. Remove non-applicable requirement under 6J NESHAP.
18	-	Section 2.1 C. 7.	Remove non-applicable requirement under 6J NESHAP.
-	19	Section 2.1 E.	Include this Section for all fat extraction process equipment included in the first row of this table.
-	22	Section 2.1 F.	Include this Section for two natural gas fired boilers (included in the first row of this table).
23	24	Section 2.2. A.	Include new emission sources ES-FE1, ES-FE2, ES-FG1, ES-B8, and ES-B9.
-	29	Section 2.2 C.	Include this Section for multiple source requirements (PSD and 2nd step application submittal) for all fat extraction process equipment and two natural gas fired boilers.
-	31	Section 2.2 D.	Include this Section for NESHAP 5D requirements for two natural gas fired boilers.

Valley Proteins, Inc. – Rose Hill Division
Air Quality Permit No. 05127T24

ATTACHMENT 2: Insignificant Activities Pursuant to 15A NCAC 02Q .0503(8)

ID Number	Equipment Description
IMain Plt Bldg	Raw material receiving, storage and handling of inedible animal by-products and used restaurant grease.
IEX1	Four silos
IEX2	Meal loadout process with drop chute
IEX6	Meal loadout process with drop chute w/ Sock
IWWTP-1	Waste water treatment plant
ICT-1	Cooling towers for live steam evaporator
ICT-1A	Three cooling towers for cooking operations

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 002Q .0711 "Emission Rates Requiring a Permit."
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows: http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide.

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

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
05127T25	05127T24	xx	August 31, 2019

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

Facility ID: **3100029**

Facility Site Location: **469 Yellow Cut Road**
City, County, State, Zip: **Rose Hill, Duplin County, North Carolina 28458**

Mailing Address: **P.O. Box 1026**
City, State, Zip: **Rose Hill, North Carolina 28458**

Application Number: **3100029.17C**
Complete Application Date: **November 16, 2017**

Primary SIC Code: **2077**

Division of Air Quality, Regional Office Address: **Wilmington Regional Office**
127 Cardinal Drive Extension,
Wilmington, NC 29405-3845

Permit issued this the XX day of XXXXX, XXXX

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

Table of Contents

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

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

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
7, 24, 28, 31	ES-B2 ES-B3 ES-B4 ES-B5 **MACT Subpart DDDDD**	Four natural gas/ No. 2 fuel oil/saleable fat/No. 4 fuel oil or on-specification recycled equivalent No. 4 fuel oil/ No. 6 fuel oil-fired boilers (33.5, 33.5, 33.5, and 34.5 million Btu per hour input, respectively) *ES-B2, ES-B3, ES-B4 and ES-B5 also function as thermal oxidizers for process emissions.*	N/A	N/A
11, 24	ES-1	320U Supercooker (55,000 pounds per hour of raw materials, maximum cooking capacity)	CD-18 CD-1 CD-17 ES-B2, ES-B3, ES-B4, ES-B5, or ES-B6 CD-10	Air-cooled condenser (3,300 square feet of surface area) Shell and tube condenser (6,000 square feet of surface area) Venturi scrubber (minimum scrubbant flow pressure of 5 psig) Thermal oxidizers (33.5, 33.5, 33.5, 34.5, and 99.9 million Btu per hour heat input boilers, respectively) **(Backup to Thermal Oxidizers)** Packed tower scrubber (scrubbant flow pressure of 6 to 15 psig)

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
11, 24	ES-2	Feather Hydrolyzer (35,000 pounds per hour of feathers, maximum capacity)	CD-18	Air-cooled condenser (3,300 square feet of surface area)
			CD-6	Shell and tube condenser (6,000 square feet of surface area)
			CD-17	Venturi scrubber (minimum scrubbant flow pressure of 5 psig)
			ES-B2, ES-B3, ES-B4, ES-B5, or ES-B6	Thermal oxidizers (33.5, 33.5, 33.5, 34.5 and 99.9 million Btu per hour heat input boilers, respectively)
			CD-10	**(Backup to Thermal Oxidizers)** Packed tower scrubber (scrubbant flow pressure of 6 to 15 psig)
11, 24	ES-3	Steam Driven Feather Dryer (35,000 pounds per hour of feathers, maximum capacity)		
11, 24	ES-5	320U Supercooker (55,000 pounds per hour of raw materials, maximum cooking capacity)	CD-18	Air-cooled condenser (3,300 square feet of surface area)
			CD-7	Shell and tube condenser (6,000 square feet of surface area)
			CD-17	Venturi scrubber (minimum scrubbant flow pressure of 5 psig)
			ES-B2, ES-B3, ES-B4, ES-B5, or ES-B6	Thermal oxidizers (33.5, 33.5, 33.5, 34.5, and 99.9 million Btu per hour heat input boilers, respectively)
			CD-10	**(Backup to Thermal Oxidizers)** Packed tower scrubber (scrubbant flow pressure of 6 to 15 psig)
24	ES-6	"High Intensity Odorous Vapor Collection Systems" consisting of: (5) Pressors (3) Centrifuges (2) Drainers (2) SWECO Screens (1) Feather Press (1) Mixing Tank	CD-8	Venturi scrubber (minimum scrubbant flow pressure of 5 psig)
			CD-10	Packed tower scrubber (minimum scrubbant flow pressure of 6 to 15 psig)
24	ES-7	Fugitive Room Air: Facility wide Rendering Process,	CD-11	Cross-flow scrubber (scrubbant flow pressure of 13 to 17 psig)

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
		including Receiving & Handling		
17, 24	ES-8	Live Steam Evaporator System (50,000 pounds per hour of raw materials, maximum cooking capacity)	CD-18 CD-7 CD-17 ES-B2, ES-B3, ES-B4, ES-B5, or ES-B6 CD-10	Air-cooled condenser (3,300 square feet of surface area) Shell and tube condenser (6,000 square feet of surface area) Venturi scrubber (minimum scrubbant flow pressure of 5 psig) <u>Thermal oxidizers:</u> Thermal oxidizers (33.5, 33.5, 33.5, 34.5, and 99.9 million Btu per hour heat input boilers, respectively) **(Backup to Thermal Oxidizers)** Packed tower scrubber (minimum scrubbant flow pressure of 6 to 15 psig)
13, 28, 31	ES-B6 **NSPS Dc** **MACT Subpart DDDDD** **PSD**	No. 2 fuel oil/saleable fat/natural gas-fired boiler (99.9 million Btu per hour heat input) *ES-B6 also functions as thermal oxidizers for process emissions.*	N/A	N/A
7, 28, 31	ES-B7 **MACT Subpart DDDDD**	Natural gas/No. 2 fuel oil/saleable fat/No. 4 fuel oil or on-specification recycled equivalent No. 4 fuel oil/ No. 6 fuel oil-fired boiler (29.3 million Btu per hour input)	N/A	N/A
19, 24, 29	ES-FE1* **PSD** **112(g) Case-by-case MACT**	Fat extraction process equipment (180 tons per day maximum processing rate) consisting of: Raw material unloading C201 Extractor EX204 Extractor EX205 Extractor EX206 Miscella feed tank T210-1 Miscella centrifuge CF212 Miscella filtrate tank T213 1st stage evaporator HX215 2nd stage evaporator HX216 Oil stripper VE217 Oil storage tanks (Main plt Bldg.) Work tank VE226 Solvent storage tank T2201 Solvent heater HX231 Desolventizer DT206 Vapor wash scrubber CY250 Vapor/solvent interchange HX208 Reboiler and Interchange HX227/VE227	N/A	None

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
		Mineral oil heater HX225-5 Mineral oil stripper VE225-6 Evaporator condenser HX222-1 (2,900 gal/min cooling water flow rate)[1] Stripper condenser HX222-2 (400 gal/min cooling water flow rate)[2] DT condenser HX209 (3,600 gal/min cooling water flow rate)[3] Vent condenser HX224 (300 gal/min cooling water flow rate)[4] Mineral oil absorber VE225-1 (8 gal/min mineral oil flow rate)[5]		
19, 24, 29	ES-FE2* **PSD** **112(g) Case-by-case MACT**	Fat extraction process meal storage room equipment consisting of: Two storage bins (each 20 feet (l) x 7 feet (w) x 17.25 ft (h)	N/A	None
19, 24, 29	ES-FG1* **PSD** **112(g) Case-by-case MACT**	Fat extraction process equipment fugitive losses	N/A	None
22, 29, 31	ES-B8* ES-B9* **NSPS Subpart Dc** **PSD** **MACT Subpart DDDDD**	Two natural gas-fired boilers (each 10.04 million Btu per hour heat input)	N/A	None

* These emission sources (ID Nos. ES-FE1, ES-FE2, ES-FG1, ES-B8, and ES-B9) are listed as a 15A NCAC 02Q .0501(c)(2) modification. The Permittee shall file a Title V Air Quality Permit Application on or before 12 months after commencing operation in accordance with General Condition NN.1. The permit shield described in General Condition R does not apply and compliance certification as described in General Condition P is not required.

[1] Non-optional air pollution control equipment that constitutes an integral part of the process equipment as originally designed and manufactured by the equipment supplier.
[2] Non-optional air pollution control equipment that constitutes an integral part of the process equipment as originally designed and manufactured by the equipment supplier.
[3] Non-optional air pollution control equipment that constitutes an integral part of the process equipment as originally designed and manufactured by the equipment supplier.
[4] Non-optional air pollution control equipment that constitutes an integral part of the process equipment as originally designed and manufactured by the equipment supplier.
[5] Non-optional air pollution control equipment that constitutes an integral part of the process equipment as originally designed and manufactured by the equipment supplier.

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

A. Five Natural gas/ No. 2 fuel oil/saleable fat/No. 4 fuel oil or on-specification recycled equivalent No. 4 fuel oil/No. 6 fuel oil-fired boilers (ID Nos. ES-B2, ES-B3, ES-B4, ES-B5, and ES-B7)

Note: Any one of the boilers except ES-B7 can control the exhaust from the noncondensibles venturi scrubber (ID No. CD-17).

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.30 pounds per million Btu heat input for boilers **(ID Nos. ES-B2, ES-B3, and ES-B4)** 0.31 pounds per million Btu heat input for boiler **(ID No. ES-B5)** 0.26 pounds per million Btu heat input for boiler **(ID No. ES-B7)**	15A NCAC 02D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	40 percent opacity **(ID No. ES-B5)** 20 percent opacity **(ID Nos. ES-B2, ES-B3 ES-B4, and ES-B7)**	15A NCAC 02D .0521
Sulfur dioxide	< 132.1 tons per year for boiler **(ID No. ES-B2)** < 250 tons per year for boilers **(ID Nos. ES-B3 and ES-B4)** < 157.9 tons per year for boiler **(ID No. ES-B5)** <40 tons per year for boiler **(ID No. ES-B7)**	15A NCAC 02Q .0317 (Avoidance of 15A NCAC 02D .0530)
Nitrogen oxides	<40 tons per year for boiler **(ID No. ES-B7)**	15A NCAC 02Q .0317 (Avoidance of 15A NCAC 02D .0530)
Toxic air pollutants	See Section 2.2 B.1 **State-enforceable only** Applies to all boilers **(ID Nos. ES-B2, ES-B3, ES-B4, ES-B5, and ES-B7)** that have the capability to burn recycled No. 4 fuel oil See Section 2.2 B.2 **State-enforceable only** Operation limitations on boiler **(ID No. ES-B7)**	15A NCAC 02Q .0317 (Avoidance of 15A NCAC 02D .1100)

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous air pollutants	See Section 2.2 D.2.	15A NCAC 02D .1111

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

a. Emissions of particulate matter from these boilers **(ID Nos. ES-B2, ES-B3, and ES-B4)** into the atmosphere shall not exceed 0.30 pounds per million Btu heat input.

b. Emissions of particulate matter from boiler **(ID No. ES-B5)** into the atmosphere shall not exceed 0.31 pounds per million Btu heat input.

c. Emissions of particulate matter from boiler **(ID No. ES-B7)** into the atmosphere shall not exceed 0.26 pounds per million Btu heat input.

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

d. 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, b, or c above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

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

e. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas, No. 2 fuel oil, saleable fat, No. 4 fuel oil or on-specification recycled equivalent No. 4 fuel oil, and No. 6 fuel oil in these boilers.

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

a. Emissions of sulfur dioxide from these boilers **(ID Nos. ES-B2, ES-B3, ES-B4, ES-B5, and ES-B7)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

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

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

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

c. No monitoring/recordkeeping is required for sulfur dioxide emissions from the firing of natural gas, No. 2 fuel oil, or saleable fat in the boilers.

d. The maximum sulfur content of any No. 4 fuel oil or on-specification recycled equivalent No. 4 fuel oil received and burned in the boilers shall not exceed 2.0 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content of the fuel oil exceeds this limit.

e. The maximum sulfur content of any No. 6 fuel oil received and burned in the boilers shall not exceed 2.1 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content of the No. 6 fuel oil exceeds this limit.

f. To assure compliance, the Permittee shall monitor the sulfur content of the No. 4 fuel oil, on-specification recycled equivalent No. 4 fuel oil, and No. 6 fuel oil by using oil supplier certification per shipment received. The results of the fuel oil supplier certifications shall be recorded in a logbook (written or electronic format) on a quarterly basis and include the following information:
   i. the name of the oil supplier;
   ii. the maximum sulfur content of the oil;
   iii. the method used to determine the maximum sulfur content of the oil; and
   iv. a certified statement signed by the responsible official that the records of oil supplier certification submitted represent all of the No. 4 fuel oil, on-specification recycled equivalent No. 4 fuel oil, and No. 6 fuel oil combusted during the reporting period.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516 if the sulfur content of the fuel oil is not monitored and recorded.

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

g. No reporting is required for sulfur dioxide emissions from the firing of natural gas, No. 2 fuel oil or

saleable fat in the boilers.

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

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

a. Visible emissions from this boiler **(ID No. ES-B5)** shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity. [15A NCAC 02D .0521(c)]

b. Visible emissions from these boilers **(ID Nos. ES-B2, ES-B3, ES-B4, and ES-B7)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

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

c. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A. 3.a. **(ID No. ES-B5)** or b. **(ID Nos. ES-B2, ES-B3, ES-B4, and ES-B7)** above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

d. No monitoring/recordkeeping is required for visible emissions from the firing of No. 2 fuel oil or natural gas in these sources.

e. To assure compliance, once a day the Permittee shall observe the emission points of these boilers **(ID Nos. ES-B2, ES-B3, ES-B4, ES-B5, and ES-B7)** for any visible emissions above normal when firing No. 4 fuel oil, on-specification recycled equivalent No. 4 fuel oil, No. 6 fuel oil, and saleable animal fats. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. The Permittee shall establish "normal" for boiler **(ID No. ES-B7)** in the first 30 days of its initial operation. If visible emissions from any source is observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.3.a. or b. above.

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

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

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

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

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

g. No reporting is required for visible emissions from the firing of No. 2 fuel oil or natural gas.

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

4. 15A NCAC 02Q .0317: AVOIDANCE CONDITION for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION (Sulfur Dioxide)

a. In order to avoid applicability of 15A NCAC 02D .0530(g), the Permittee shall discharge:
   i. less than 132.1 tons of sulfur dioxide per consecutive 12-month period from boiler **(ID No. ES-B2);**
   ii. less than 250 tons of sulfur dioxide per consecutive 12-month period from boilers **(ID Nos. ES-B3 and ES-B4)**;
   iii. less than 157.9 tons of sulfur dioxide per consecutive 12-month period from boiler **(ID No. ES-B5);** and
   iv. less than 40 tons of sulfur dioxide per consecutive 12-month period from boiler **(ID No. ES-B7**). [15A NCAC 02D .0530]

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

b. If emission testing is required, the Permittee shall perform such testing 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 A. 4. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. The Permittee shall keep monthly records of the amount of fuel used and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the sulfur content of the fuel is not monitored and recorded.
d. The following parameters each month shall be monitored and recorded:
   i. The amount of No.2 fuel oil used in the boilers in gallons and the percent sulfur in the No. 2 fuel oil;
   ii. The amount of saleable fat used in the boilers in gallons;
   iii. The amount of No. 6 fuel oil used in the boilers in gallons and the percent sulfur in the No. 6 fuel oil; and
   iv. The amount of No. 4 fuel oil or on-specification recycled equivalent No. 4 fuel oil used in the boilers in gallons and the percent sulfur in the No. 4 fuel oil or on-specification recycled equivalent No. 4 fuel oil.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these parameters are not monitored and recorded.
e. Each month calculations shall be performed and recorded to determine the actual sulfur dioxide emissions. For No. 2 fuel oil, No. 4 fuel oil or on-specification recycled equivalent No. 4 fuel oil, and No. 6 fuel oil, the actual emissions shall be calculated using the most current AP-42 emission factors for these fuels. For the saleable fat, actual emissions shall be calculated using the 0.018 pounds per million Btu for sulfur dioxide. The saleable fat emission factor is based on compliance test results from the Valley Proteins, Inc. - Wadesboro Division on April 5, 2001 that were approved by the Division of Air Quality.
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not kept or if the sulfur dioxide emissions exceed the limit in Section 2.1 A. 4. a.

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

f. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly sulfur dioxide emissions for each boiler group for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of fuel consumed in each boiler group for the previous 17 months; and
   iii. All instances of deviations from the requirements of this permit must be clearly identified.

5. 15A NCAC 02Q .0317: AVOIDANCE CONDITION for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION (Nitrogen Oxides)

a. In order to avoid applicability of 15A NCAC 02D .0530(g), the Permittee shall discharge less than 40 tons of nitrogen oxides per consecutive 12-month period from boiler **(ID No. ES-B7).** [15A NCAC 02D .0530]

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

b. If emission testing is required, the Permittee shall perform such testing 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 A. 5. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. The Permittee shall monitor and record the amount of saleable fat and fuel oil used in the boiler **(ID No. ES-B7)** each month.

d. The Permittee shall perform monthly calculations of the actual nitrogen oxide emissions for each fuel used. For saleable fat, actual emissions shall be calculated using the NC DAQ approved emission factor of 36.6 pounds of nitrogen oxides per thousand gallons of saleable fat fired in the boiler. For No. 2 fuel oil, No. 4 fuel oil or on-specification recycled equivalent No. 4 fuel oil, and No. 6 fuel oil, actual emissions shall be based on the most current AP-42 emission factors for the fuel. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not kept or if the nitrogen oxide emissions exceed the limit in Section 2.1 A.5.a.

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

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly nitrogen oxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of each fuel consumed for each boiler group for the previous 17 months; and
   iii. All instances of deviations from the requirements of this permit must be clearly identified.

B. The following emission sources are each controlled by a venturi scrubber (ID No. CD-17) with mist eliminator, thermal oxidizer boilers (ID Nos. ES-B2, ES-B3, ES-B4, ES-B5, and ES-B6) or packed tower scrubber (ID No. CD-10) as backup for boilers

- **320U Supercooker (ID No. ES-1) with horizontal shell and tube condenser (ID No. CD-1) and air cooled condenser (ID No. CD-18)**
- **Feather hydrolyzer (ID No. ES-2) with horizontal shell and tube condenser (ID No. CD-6) and air cooled condenser (ID No. CD-18)**
- **Steam tube feather dryer (ID No. ES-3) with horizontal shell and tube condenser (ID No. CD-6) and air cooled condenser (ID No. CD-18)**
- **320U Supercooker (ID No. ES-5) with horizontal shell and tube condenser (ID No. CD-7) and air cooled condenser (ID No. CD-18)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10P^{0.67}$ Where: E = allowable emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Odorous emissions	See Section 2.2A **State-enforceable only**	15A NCAC 02D .0539

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

a. Emissions of particulate matter from these sources shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0515(a)]

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

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

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

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

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

c. Particulate matter emissions from these emission sources shall be controlled primarily by the venturi scrubber with the thermal oxidizers and packed tower scrubber as backup. To ensure that optimum control efficiency is maintained, the Permittee shall perform monthly inspections on the scrubbers and semiannual inspections on the thermal oxidizers and perform maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
   i. an inspection of each control device's structural integrity;
   ii. visual inspection of the system ductwork, and material collection unit for leaks,
   iii. an inspection of spray nozzles for the scrubbers,
   iv. an inspection of the primary heat exchangers; and
   v. visual inspection of the inlet/outlet valves for structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the venturi scrubber, packed tower scrubber, thermal oxidizers and associated ductwork are not inspected and maintained.

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

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

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

e. The Permittee shall submit the results of any maintenance performed on control devices **(ID Nos. CD-17, ES-B2 through ES-B6, and CD-10)** within 30 days of written request by the DAQ.

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

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

a. Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

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

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

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

c. To assure compliance, once a day the Permittee shall observe the emission points of these sources for any visible emissions above normal. The daily observation must be made for each day of the calendar year

period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. 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 within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 B.2.a. above.

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

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

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

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

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

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

C. No. 2 fuel oil/saleable fat/natural gas-fired boiler (ID No. ES-B6)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.27 lbs per million Btu heat input When burning saleable fat	15A NCAC 02D .0503
	No PM standard for boilers that burn fuel oil with no more than 0.5% by weight sulfur.	15A NCAC 02D .0524 40 CFR Part 60, Subpart Dc
Sulfur dioxide	2.3 lbs per million Btu heat input When burning saleable fat	15A NCAC 02D .0516
	Not greater than 0.5 weight percent sulfur in oil	15A NCAC 02D .0524 40 CFR Part 60, Subpart Dc
	Less than 40 tons per year	15A NCAC 02Q .0317 (Avoidance of 15A NCAC 02D .0530)
Visible emissions	20 percent opacity (six-minute average) When burning saleable fat	15A NCAC 02D .0521
	20 percent opacity (six-minute average) When burning natural gas or No. 2 fuel oil.	15A NCAC 02D .0524 40 CFR Part 60, Subpart Dc
Nitrogen oxides	< 40 tons per year for boiler (ID No. ES-B6)	15A NCAC 02Q .0317 (Avoidance of 15A NCAC 02D .0530)
Hazardous air pollutants	See Section 2.2 D.3.	15A NCAC 02D .1111

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

a. Emissions of particulate matter from the combustion of saleable fat, which are discharged from this source into the atmosphere shall not exceed 0.27 pounds per million Btu heat input. [15A NCAC 02D .0503(a)]

Testing [15A NCAC 002Q .0508(f)]

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

results of this test are above the limit given in Section 2.1 C.1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

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

c. No monitoring, recordkeeping, or reporting is required for particulate emissions from the firing of saleable fat in boiler **(ID No. ES-B6).**

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

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

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

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

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

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of saleable fat in boiler **(ID No. ES-B6).**

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

a. Visible emissions from this boiler **(ID No. ES-B6)** when firing saleable fat shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

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

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

c. To assure compliance, once a day the Permittee shall observe the emission points of the boiler **(ID Nos. ES-B6)** for any visible emissions above normal when firing saleable animal fats. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period.
   i. take appropriate action to correct the above-normal emissions within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.C A.3.a. above.

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

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

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

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

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

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each

calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS
(40 CFR 60, Subpart Dc – Small Industrial-Commercial-Institutional Steam Generating Units)

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, Subpart Dc, including Subpart A "General Provisions."

Emission Limitations [15A NCAC 02D .0524]

b. The maximum sulfur content of any fuel oil received and fired in this boiler **(ID No. ES-B6)** shall not exceed 0.5 percent by weight. [40 CFR 60.42c(d)]

c. Visible emissions from the boiler 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 under this section applies at all times, except during periods of startup, shutdown, or malfunction.

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

e. 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 any limit given in Section 2.1 C.4.b. and c. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

f. The Permittee shall retain a copy of the fuel supplier certification for any No. 2 fuel oil fired in this boiler **(ID No. ES-B6)**. The fuel supplier certification shall include the following information:
   i. The name of the oil supplier;
   ii. The sulfur content of the oil (in % by weight); and,
   iii. A statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in 40 CFR 60.41c.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the sulfur content of the oil exceeds the limit provided in Section 2.1 C.4.b. of this permit or if fuel supplier certifications are not retained as described above. [40 CFR 60.48c(f)(1)]

g. When No. 2 fuel oil is fired in the boiler **(ID No. ES-B6)**, the Permittee shall demonstrate that the percent opacity from the emission points of the boiler in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.4.c. above. The Method 9 observations shall be conducted according the following schedule [40 CFR 60.47c][40 CFR 60.48c(g)(2)]:
   i. Once every 12 months or within 45 days of combusting No. 2 fuel oil, whichever is later, when no visible emissions were observed during the previous Method 9 observation;
   ii. Once every 6 months or within 45 days of combusting No. 2 fuel oil, whichever is later, when visible emissions were observed, but at no more than 5% opacity, during the previous Method 9 observation;
   iii. Once every 3 months or within 45 days of combusting No. 2 fuel oil, whichever is later, when visible emissions were observed to be greater than 5% opacity but no more than 10% opacity during the previous Method 9 observation; and
   iv. Once every 45 days when visible emissions were observed to be greater than 10 percent opacity during the previous Method 9 observation.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the opacity exceeds the limit provided in Section 2.1 C.4.c. of this permit or if the monitoring is not conducted in accordance with Section in Section 2.1 C.4.g.

h. In addition to any other recordkeeping required by 40 CFR §60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel fired during each month and the date, time and opacity of each visible observation conducted. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained. [40 CFR 60.48c(g)(2)]

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

i. In addition to any other reporting required by 40 CFR 60.48c or notification requirements to the EPA, 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. The summary report shall include the following information:

i. Fuel supplier certification(s) for distillate fuel oil, as provided in Section 2.1 C.4.e. of this permit;
ii. A certified statement signed by the owner or operator that the records of fuel supplier certification(s) submitted represents all of the fuel fired during the semiannual period; and,
iii. All instances of deviations from the requirements of this permit must be clearly identified.

5. 15A NCAC 02Q .0317: AVOIDANCE CONDITION for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION (Nitrogen Oxides)

a. In order to avoid applicability of 15A NCAC 02D .0530(g), the Permittee shall discharge less than 40 tons of nitrogen oxides per consecutive 12-month period from boiler **(ID No. ES-B6).** [15A NCAC 02D .0530]

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

b. If emission testing is required, the Permittee shall perform such testing 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. 5. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

c. The Permittee shall monitor and record the amount of natural gas, No. 2 fuel oil, and saleable fat used in the boiler **(ID No. ES-B6)** each month.
d. The Permittee shall perform monthly calculations of the actual nitrogen oxide emissions for each fuel used. For saleable fat, actual emissions shall be calculated using the NC DAQ approved emission factor of 37.68 pounds of nitrogen oxides per thousand gallons of saleable fat fired in the boiler. For natural gas and No. 2 fuel oil actual emissions shall be based on the most current AP-42 emission factors for the fuel. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not kept or if the nitrogen oxide emissions exceed the limit in Section 2.1 C.5. a.

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

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly nitrogen oxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of each fuel consumed for each boiler group for the previous 17 months; and
   iii. All instances of deviations from the requirements of this permit must be clearly identified.

6. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION (Sulfur Dioxide)

a. In order to avoid applicability of 15A NCAC 02D .0530 (g) for major sources and major modifications, the No. 2 fuel oil/ saleable fat/natural gas-fired boiler **(ID No. ES-B6)** shall discharge into the atmosphere less than 40 tons of total sulfur dioxide. The boiler shall operate less than 7,250 hours or less per consecutive 12-month period while firing No. 2 fuel oil or saleable fat.
b. The Permittee shall make the following calculations on a monthly basis:
   i. The monthly pounds of total sulfur dioxide emissions from boiler **(ID No. ES-B6)** using the following equation:

$$E_{SO2} = 142(S_2)(V_2) + (V_{fat})(2.34) + V_{ng}(0.6)$$

Where:

S_2 = Monthly average (volume-weighted) sulfur content of #2 oil burned in boiler ES-B6 (in 10^3 gal/mo)
V_2 = Monthly total volume of #2 oil burned in boiler ES-B6 (in 10^3 gal/mo);
V_{fat} = Monthly total volume of saleable fat burned in boiler ES-B6 (in 10^3 gal/mo);
V_{ng} = Monthly total volume of natural gas burned in boiler ES-B6 (in 10^6 scf/mo);

   ii. The monthly tons of total sulfur dioxide emitted from boiler **(ID No. ES-B6)** shall be obtained by dividing

E_{SO2} by 2000 lb/ton;

iii. The rolling 12-month tons of sulfur dioxide emissions from boiler **(ID No. ES-B6)** shall be obtained by adding those units' monthly tons of total sulfur dioxide for the current month to the sum of their monthly tons of total sulfur dioxide emissions for the preceding 11 months.

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

c. If emission testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C. 6. a., the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

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

d. The Permittee shall keep monthly records of the hours of operation of the boiler, amount and type of fuel used and the sulfur content, including certification of the fuel, in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the hours of operation or sulfur content of the fuel is not monitored and recorded.

e. The following parameters each month shall be monitored and recorded:
   i. The amount of No.2 fuel oil used in the boilers in gallons and the percent sulfur in the No. 2 fuel oil;
   ii. The amount of saleable fat used in the boilers in gallons;
   iii. The amount of natural gas used in standard cubic feet.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these parameters are not monitored and recorded.

f. Each month calculations shall be performed and recorded to determine the actual sulfur dioxide emissions in accordance with the equation under Section 2.1.C.6.b. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records of emissions calculations are not kept or if the sulfur dioxide emissions exceed the limit in Section 2.1 C.6. a.

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

g. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
   i. The monthly sulfur dioxide emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
   ii. The monthly quantities of fuel consumed for the previous 17 months; and
   iii. All instances of deviations from the requirements of this permit must be clearly identified.

D. Live Steam Evaporator System (ID No. ES-8) with one air-cooled condenser (ID No. CD-18), one shell-and-tube condenser (CD-7) with a venturi scrubber (CD-17) with mist eliminator, thermal oxidizer boilers (ID Nos. ES-B2 through B6) or packed tower scrubber (ID No. CD-10) as backup to thermal oxidizer boilers

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 55.0 P^{0.11} - 40$ Where E = allowable emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Odorous emissions	See Section 2.2 A. **State-enforceable only**	15A NCAC 02D .0539

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

a. Emissions of particulate matter from this source shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0515(a)]

$E = 55.0 P^{0.11} - 40$

Where E = allowable emission rate in pounds per hour (for process input rates greater than 30 tons per hour)
P = process weight in tons per hour

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

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

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

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

c. Particulate matter emissions from this source **(ID No. ES-8)** shall be controlled primarily by the venturi scrubber **(ID No. CD-17)** and the thermal oxidizer boilers **(ID Nos. ES-B2 through ES-B6)**, and by the packed tower scrubber **(ID No. CD-10)** as backup when the thermal oxidizer boilers are unavailable**.** To ensure that optimum control efficiency is maintained, the Permittee shall perform monthly inspections on the scrubbers and semiannual inspections on the thermal oxidizer boilers and perform maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
   i. an inspection of each control device's structural integrity;
   ii. visual inspection of the system ductwork, and material collection unit for leaks,
   iii. an inspection of spray nozzles for the scrubbers,
   iv. an inspection of the primary heat exchangers; and
   v. visual inspection of the inlet/outlet valves for structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the venturi scrubber, packed tower scrubber, thermal oxidizers and associated ductwork are not inspected and maintained.

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

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

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

e. The Permittee shall submit the results of any maintenance performed on control devices **(ID Nos. CD-17, ES-B2 through ES-B6, and CD-10)** within 30 days of written request by the DAQ.

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

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

a. Visible emissions from the exhaust points of this source **(ID No. ES-8)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02D .2610]

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

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

c. To assure compliance, once a day the Permittee shall observe the emission points of these sources for any visible emissions above normal. The daily observation must be made for each day of the calendar year

period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. The Permittee shall establish "normal" for boiler **(ID No. ES-8)** in the first 30 days of its initial operation. If visible emissions from these sources are observed to be above normal, the Permittee shall either:

i. take appropriate action to correct the above-normal emissions within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 D.2.a. above.

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

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

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

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

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

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

E. Fat extraction process consisting of
Process equipment (ID No. ES-FE1)
Meal storage room equipment (ID No. ES-FE2)
Process equipment fugitive losses (ID No. ES-FG1)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times (P)^{0.67}$ for $P \leq 30$ tons per hour, or $E = 55.0 \times (P)^{0.11} - 40$ for $P > 30$ tons per hour Where: E = allowable particulate emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Volatile organic compounds	Sec Section 2.2 C.1.	15A NCAC 02D .0530
Odorous emissions	See Section 2.2. A.1. **State-enforceable only**	15A NCAC 02D .0539
Toxic air pollutants	See Section 2.1 E.3.	15A NCAC 02D .1104
Hazardous air pollutants	See Section 2.1 E.4.	15A NCAC 02D .1112
-	See Section 2.2. C.2.	15A NCAC 02Q .0504

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

a. Emissions of particulate matter from the sources **(ID Nos. ES-FE1, ES-FE2, and ES-FG1)** shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 02D .0515(a)]

$E = 4.10(P)^{0.67}$ for $P \leq 30$ tons per hour, or

$E = 55.0(P)^{0.11} - 40$ 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.

Testing [15A NCAC 02Q .0308(a)(1)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0308(a)(1)]

c. No monitoring/recordkeeping/reporting is required for particulate matter emissions from the sources **(ID Nos. ES-FE1, ES-FE2, and ES-FG1)**.

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

a. Visible emissions from the sources **(ID Nos. ES-FE1, ES-FE2, and ES-FG1)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0308(a)(1)]

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

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0308(a)(1)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the sources **(ID Nos. ES-FE1, ES-FE2, and ES-FG1)**.

State-only Requirement

3. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limit shall not be exceeded:

Source	Toxic Air Pollutant	Emission Rate
Process equipment **(ID No. ES-FE1)**	n-hexane (CAS No. 110543)	28.80 lbs/day
Meal storage room equipment **(ID No. ES-FE2)** and Process equipment fugitive losses **(ID No. ES-FG1)**	n-hexane (CAS No. 110543)	140.16 lbs/day (combined total emissions)

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .1105]

b. No monitoring, recordkeeping, or reporting shall be required.

4. 15A NCAC 02D .1112 112(G) CASE BY CASE MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

a. The Permittee shall comply with all applicable provisions, including the MACT emission limitation or MACT work practice standard, and notification, operation and maintenance, performance testing, monitoring, reporting, and recordkeeping requirements, contained in Environmental Management Commission Standard 15A NCAC 02D .1112 and as promulgated in 40 CF 63 Subpart A "General Provisions."

b. The Permittee shall comply with the following MACT. These standards shall apply during all periods of

operations, including start-ups, shut-downs and malfunctions.

EMISSION SOURCE	POLLUTANT	MACT	CONTROL DESCRIPTION
Process equipment **(ID No. ES-FE1)**	Hexane (CAS No. 110543)	1.2 lb/hr (3-run stack test average)	Good design and operating practices: Use of closed loop vent system, multiple stages of process condensers, and absorber
Meal storage room equipment **(ID No. ES-FE2)**	Hexane (CAS No. 110543)	3.6 lb/hr (3-run stack test average)	Good design and operating practices: Proper operation of desolventizer, efficient transfer of meal, and use of equipment maintenance program and general housekeeping
Process equipment fugitive losses **(ID No. ES-FG1)**	Hexane (CAS No. 110543)	2.24 lb/hr	Leak detection and repair program

Testing [15A NCAC 02Q .0308(a)(1)]

c. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall demonstrate compliance with the MACT in Section 2.1 E. 4. b. above, for process equipment **(ID No. ES-FE1)** and meal storage room equipment **(ID No. ES-FE2)**, by conducting performance test, utilizing EPA reference methods, as in effect on the date of permit issuance, contained in 40 CFR 60, Appendix A, AND in accordance with a testing protocol (using testing protocol submittal form) approved by the DAQ as follows:

Use of any other test method for compliance purposes shall be approved in advance by the DAQ and must be based on a test protocol that documents the alternate method is at least as accurate as the reference method test listed above.

i. Test results shall be the average of 3 valid test runs.
ii. Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after the commencement of operations of process equipment **(ID No. ES-FE1)** or meal storage room equipment **(ID No. ES-FE2)**, whichever comes first, the Permittee shall conduct the initial performance test(s) and submit a written report of the test(s) to the Regional Supervisor, DAQ.
iii. The approval of the fat extraction process may be revoked, with proper notice to the Permittee, or enforcement procedures initiated, if the results of the test(s) indicate that the facility does not meet the applicable limitations.
iv. The Permittee shall confirm the manufacturer's recommended maximum temperature for coolant (water) exiting the condensers **(ID Nos. CD-HX222-1, CD-HX222-2, CD-HX209, and CD-HX224)** during the performance test, ensuring compliance with the applicable emission limit in Section 2.1 E.4. b. above. The Permittee shall confirm the manufacturer's recommended minimum scrubbant (mineral oil) flow pressure for mineral oil absorber **(ID No. CD-VE225-1)** during the performance test, ensuring compliance with the applicable emission limit in Section 2.1 E. 4. b. above.

Monitoring/Recordkeeping [15A NCAC 02Q .0308(a)(1)]

d. The following inspection and maintenance procedures shall apply to condensers **(ID Nos. CD-HX222-1, CD-HX222-2, CD-HX209, and CD-HX224)**, and mineral oil absorber **(ID No. CD-VE225-1)**, and desolventizer **(ID No. ES-DT206**, part of process equipment **ID No. ES-FE1**), regardless of whether a particular equipment is in service at any given point in time.
i. To comply with the provisions of this Permit, the Permittee shall perform periodic inspections and maintenance as recommended by the manufacturer. As a minimum, the inspection and maintenance program shall include:
(A) Weekly inspection of mineral oil absorber, including spray nozzles, packing material, and chemical feed system (mineral oil) to ensure proper operation.
(B) Weekly inspection of mist eliminator to ensure that it is draining properly,
(C) Weekly inspection of condensers, including ductwork leading to and coming from the condenser.
(D) Weekly inspection and replacement, as needed, of all instrumentation associated with the condensers and absorber (including pressure gauges, temperature gauges, flow rates, etc.).
(E) Weekly inspection of desolventizer to ensure proper operation.

(F) Annual internal inspection of the condensers and absorber, desolventizer, and external inspection of associated ductwork to ensure structural integrity.

e. Until the maximum temperature for coolant (water) exiting the condensers **(ID Nos. CD-HX222-1, CD-HX222-2, CD-HX209, and CD-HX224)** and the minimum scrubbant (mineral oil) flow pressure for mineral oil absorber **(ID No. CD-VE225-1)** are established / confirmed in Section 2.1 E. 4. c. above, the Permittee shall operate each condenser and the mineral oil absorber at the manufacturer-recommended values or ranges for these parameters.

f. The Permittee shall maintain a logbook (written or electronic format) for each condenser, absorber and desolventizer. This logbook(s) shall include the results of all inspection and maintenance, and monitoring activities. The logbook(s) shall be kept on site and made available to the authorized DAQ representative upon request.

i. The results shall include the following:
(A) Date and time of actions;
(B) The results of each inspection and monitoring activity;
(C) The results of any maintenance performed on condensers and absorber and/or chemical feed system; and
(D) Any variance from the manufacturer's recommendations, if any, and corrections made.

ii. The results of the required monitoring shall be maintained in a logbook (written or electronic format) on site and made available to the authorized DAQ representative upon request. The logbook shall record the following:
(A) The proper operating range for each parameter being monitored;
(B) The observed operating parameter at the time it was monitored;
(C) Date and time of this observation;
(D) Corrective action taken if any condenser or absorber is not operating in the proper operating range; and
(E) Date and time corrective action completed.

g. The Permittee shall develop and submit to the DAQ for approval a written leak detection and repair (LDAR) plan for process equipment fugitive losses **(ID No. ES-FG1)** within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after the commencement of operations of process equipment **(ID No. ES-FE1)** or meal storage room equipment **(ID No. ES-FE2)**, whichever comes first. Until the DAQ approves the LDAR plan for emissions process equipment fugitive losses **(ID No. ES-FG1)**, the Permittee shall comply with the written plan, as proposed, to reduce fugitive emissions from the extraction process. The owner or operator shall maintain at the facility the approved LDAR plan and shall make the plan available upon request for inspection by the DAQ.

Reporting [15A NCAC 02Q .0308(a)(1)]

h. The Permittee shall submit the results of any maintenance performed on the condensers, mineral oil absorber, and desolventizer, within 30 days of a written request by the DAQ.

F. Two natural gas-fired boilers (ID Nos. ES-B8 and ES-B9)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.252 pound per million Btu heat input	15A NCAC 02D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
-	Sec Section 2.1 F.4.	15A NCAC 02D .0524 (40 CFR 60, Subpart Dc)
Volatile organic compounds	Sec Section 2.2. C.1.	15A NCAC 02D .0530
Hazardous air pollutants	See Section 2.2 D.1.	15A NCAC 02D .1111
-	See Section 2.2. C.2.	15A NCAC 02Q .0504

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

a. Emissions of particulate matter from the combustion of natural gas that are discharged from these sources **(ID Nos. ES-B8 and ES-B9)** into the atmosphere shall not exceed 0.252 pounds per million Btu heat input

each.

Testing [15A NCAC 02Q .0308(a)(1)]

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

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0308(a)(1)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the burning of natural gas in these sources **(ID Nos. ES-B8 and ES-B9)**.

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

a. Emissions of sulfur dioxide in these sources **(ID Nos. ES-B8 and ES-B9)**, shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0308(a)(1)]

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

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0308(a)(1)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the burning of natural gas in these sources (**ID Nos. ES-B8 and ES-B9)**.

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

a. Visible emissions when burning natural gas from these sources **(ID Nos. ES-B8 and ES-B9)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0308(a)(1)]

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

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0308(a)(1)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the burning of natural gas in these sources **(ID Nos. ES-B8 and ES-B9)**.

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

a. The Permittee shall comply with all applicable provisions, including the notification, testing, monitoring, recordkeeping, and reporting requirements, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60, Subpart Dc, including Subpart A "General Provisions."

Monitoring/Recordkeeping/Reporting [40 CFR 60.48c(g)(2)]

b. In addition to any other recordkeeping required by 40 CFR 60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of natural gas fired in these sources **(ID Nos. ES-B8 and ES-B9)** during each calendar month.

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

A. All emission sources and control devices associated with the production of animal feed ingredients

- **Five natural gas/ No. 2 fuel oil/saleable fat/ No. 4 fuel oil or on-specification recycled equivalent No. 4 fuel oil/ No. 6 fuel oil-fired boilers (ID Nos. ES-B2, ES-B3, ES-B4, and ES-B5)**
- **No. 2 fuel oil/saleable fat/natural gas-fired boiler (ID No. ES-B6)**
- **320U Supercooker (ID No. ES-1)**
- **Feather Hydrolyzer (ID No. ES-2)**
- **Steam Driven Feather Dryer (ID No. ES-3)**
- **320U Supercooker (ID No. ES-5)**
- **"High Intensity Odorous Vapor Collection Systems" (ID No. ES-6) consisting of: (5) Pressors, (3) Centrifuges, (2) Drainers, (2) SWECO Screens, (1) Feather Press, and (1) Mixing Tank**
- **Fugitive Room Air: Facility wide Rendering Process, including Receiving & Handling (ID No. ES-7)**
- **Live Steam Evaporator System (ID No. ES-8)**
- **Fat extraction process equipment (ID No. ES-FE1) consisting of: Raw material unloading C201, Extractor EX204, Extractor EX205, Extractor EX206, Miscella feed tank T210-1, Miscella centrifuge CF212, Miscella filtrate tank T213, 1st stage evaporator HX215, 2nd stage evaporator HX216, Oil stripper VE217, Oil storage tanks (Main plt Bldg.), Work tank VE226, Solvent storage tank T2201, Solvent heater HX231, Desolventizer DT206, Vapor wash scrubber CY250, Vapor/solvent interchange HX208, Reboiler and Interchange HX227/VE227, Mineral oil heater HX225-5, Mineral oil stripper VE225-6, Evaporator condenser HX222-1 (2,900 gal/min cooling water flow rate), Stripper condenser HX222-2 (400 gal/min cooling water flow rate), DT condenser HX209 (3,600 gal/min cooling water flow rate), and Vent condenser HX224 (300 gal/min cooling water flow rate), and Mineral oil absorber VE225-1 (8 gal/min mineral oil flow rate)**
- **Fat extraction process meal storage room equipment (ID No. ES-FE2) consisting of: Two storage bins**
- **Fat extraction process equipment fugitive losses (ID No. FG1)**

STATE-ENFORCEABLE ONLY

1. 15A NCAC 02D .0539: ODOR CONTROL OF FEED INGREDIENT MANUFACTURING PLANTS

Any device, machine, equipment, or other contrivance used to process material for the production of feed-grade animal proteins or feed-grade animal fats and oils, except for any portions that are engaged exclusively in the process of food for human consumption, shall be operated in compliance with the following requirements:

a. Control Device Requirement: The Permittee shall not allow, cause, or permit the operation of any device, machine, equipment, or other contrivance unless all gases, vapors, and gas-entrained effluents from these processes are passed through condensers to remove all steam and other condensable materials. All noncondensable gases passing through the condensers shall be incinerated at 1200 degrees Fahrenheit for a period of not less than 0.3 seconds, or treated in an equally effective manner.

b. Measurement and Recording Requirements: The Permittee processing or incinerating gases, vapors, or gas-entrained matter as required by condition 2.2 A.1. above shall install, operate, calibrate, and maintain in good working order continuous operating parameter measuring and recording devices to document equipment operation in accordance with 02D .0539. In addition, the Permittee shall follow the approved quality assurance program for all monitoring devices and systems that include:
   i. procedures and frequencies for calibration,
   ii. standards traceability,

iii. operational checks,
iv. maintenance schedules and procedures,
v. auditing schedules and procedures,
vi. data validation, and
vii. schedule for implementing the quality assurance program.

c. Expeller Requirement: The Permittee shall not allow, cause, or permit the installation or operation of expeller units unless they are properly hooded and all exhaust gases are collected or ducted to odor control equipment.

d. Handling, Transport, and Storage Requirement: The Permittee shall not cause or permit any raw material to be handled, transported, or stored, or to undertake the preparation of any raw material without taking reasonable precautions to prevent odors from being discharged. Such raw material is in "storage" after it has been unloaded at a facility or after it has been located at the facility according to the schedule in Section 2.2.A.1.e, below. Reasonable precautions shall include the following:
   i. storage of all raw material before or in the process of preparation, in properly enclosed and vented equipment or areas, together with the use of effective devices and methods to prevent the discharge of odor bearing gases;
   ii. use of covered vehicles or containers of watertight construction for the handling and transporting of any raw material; and
   iii. use of hoods and fans to enclose and vent the storage, handling, preparation, and conveying of any odorous materials together with effective devices or methods, or both, to prevent emissions of odors or odor bearing gases.

   In order to avoid the storage restrictions above, the Permittee shall process each load according to the schedule in Section 2.2.A.1.e. To ensure that no raw material is in "storage," the Permittee shall track time of receipt and time of unloading of each shipment. The Permittee shall keep these records in a logbook (written or electronic format) onsite and make the logbook available to an authorized DAQ representative upon request.

e. Unloading Specific Raw Materials - A vehicle or container holding raw material, which has not been unloaded inside or parked inside an odor controlled area within the facility, shall be unloaded for processing of the raw material prior to the expiration of the following time limits:
   (A) For feathers with only trace amounts of blood, such as those obtained from slaughtering houses that separate blood from offal and feathers, no later than 48 hours after being weighed upon arrival at the facility.
   (B) For used cooking oil in sealed tankers, no later than 96 hours after being weighed upon arrival at the facility.
   (C) For all other types of raw material not in sealed containers, no later than 36 hours after being weighed upon arrival at the facility.

f. Notification of Release of Excessive and Malodorous Gases or Vapors: The Permittee shall notify the regional air quality supervisor of the appropriate regional office within two business days after conditions are encountered that cause or may cause release of excessive and malodorous gases or vapors.
g. Compliance Statement: The Permittee shall continue to operate in compliance as described in the compliance determination submitted on December 31, 1996 pursuant to 15A NCAC 02D .0539(h)(1). The Division of Air Quality may request addition information at a later date upon further review of the compliance documentation.
h. To ensure compliance with 15A NCAC 02D .0539, the Permittee shall:
   i. Wash raw material truck trailers interiors after unloading and before they are moved to a staging or parking area;
   ii. Daily clean up spilled or leaked materials, to include materials in the parking area as well as in other areas not controlled with odor control equipment;
   iii. Conduct monthly odor surveys of processes and storage areas around the plant in order to minimize odors and record the results of the survey. At a minimum, the survey should include areas identified for improvement and corrective action taken;
   iv. Wash the raw material parking area a minimum of three times per week when daily temperatures are above freezing and record the washes in a logbook; and
   v. Maintain a negative pressure in the meat processing area. Entrance doors to the meat processing area

may be opened for the entrance and exit of trucks, and the doors may remain open as long as a negative pressure is maintained.

i. Recordkeeping: The Permittee shall record the time that reasonable precautions were taken for each raw material load relative to the maximum 24-hour storage time without taking those precautions. Each exceedence of the 24-hour storage time limit and the associated calendar date shall be recorded in a logbook that shall be made available for review by the Regional Office inspector.

j. Reporting: The Permittee shall submit semi-annual reports postmarked on or before January 30 and July 30 of each calendar year relative to the storage of raw material. Each semi-annual report shall include:
   i. Calendar dates covered in that period; and
   ii. Exceedences of the 24-hour storage time limit.

k. To prevent odorous emissions from the facility, the optimum control efficiency of the condensers **(ID Nos. CD-1, CD-6, CD-7, and CD-18)**, venturi scrubbers **(ID Nos. CD-8, and CD-17),** packed tower scrubber **(ID No. CD-10)**, cross-flow scrubber **(ID No. CD-11)**, and boilers **(ID Nos. ES-B2 through ES-B6)** shall be maintained. To ensure these control devices are maintained, the Permittee shall perform inspections and maintenance as recommended by the manufacturer.

l. Inspection and Maintenance Requirements: The inspection and maintenance conditions apply to each control device regardless of whether the control device is in service at any given point in time.
   i. To comply with the provisions of this Permit and ensure that maximum control efficiency is maintained, the Permittee shall perform periodic inspections and maintenance as recommended by the manufacturer. As a minimum, the inspection and maintenance program will include:
      (A) Weekly inspection of scrubbers, including spray nozzles, packing material, and chemical feed system (chlorine dioxide or equivalent) to ensure proper operation.
      (B) Weekly inspection of mist eliminators to ensure that each system is draining properly,
      (C) Weekly visual inspection of condensers, including ductwork leading to and coming from the condenser.
      (D) Weekly inspection and replacement, as needed, of all instrumentation associated with control devices (including pH meters, pressure gauges, temperature gauges, etc.).
      (E) Semi-annual calibration of chlorine dioxide or equivalent generation system.
      (F) Daily inspection and replacement, as needed, of flow meters associated with fuel rate to each boiler.
      (G) Annual internal inspection of the control devices and external inspection of associated ductwork to ensure structural integrity.
   ii. Non-condensible vapor from the supercookers **(ID Nos. ES-1 and ES-5),** the feather dryer **(ID No. ES-3)**, the feather hydrolyzer **(ID No. ES-2)**, and the live steam evaporator system **(ID No. ES-8)** can only be exhausted from the venturi scrubber **(ID No. CD-17)** to the packed tower scrubber **(ID No. CD-10)** (backup control) when boilers **(ID Nos. ES-B2, ES-B3, ES-B4, ES-B5, and ES-6)** cannot be used for odorous emission combustion per 02D .0539.

For Odor Control Devices:

m. Monitoring Requirements: The Permittee shall monitor and record which control devices are used during all hours of operation. If the control device is not operating within the permitted operating parameter a maintenance request shall be recorded in a logbook as well as the date that the corrective action was completed.

Scrubbers:

i. The Permittee shall ensure the proper performance of the scrubber by monitoring scrubbant flow pressure, oxidation reduction potential, and exit gas temperature, as indicated for each scrubber. The packing of each packed tower scrubber shall be cleaned or replaced on a weekly basis to ensure proper operation in lieu of monitoring of pressure drop across the tower. In addition, each venturi scrubber shall be inspected internally and cleaned weekly to ensure proper operation.

Non-Condensable System Scrubbers:

(A) packed tower scrubber **(ID No. CD-10)** shall maintain a scrubbant flow pressure of 6 to 15 psig, and the pressure shall be recorded once a day. This scrubber shall utilize chlorine dioxide or equivalent to control odors. The oxidation/reduction potential shall be monitored continuously

utilizing hourly averaging and shall not fall below 200 mV for more than four hours. An oxidation/reduction potential [below 200mV] occurring for more than four hours is a reportable exceedance. Daily monitoring of the scrubbant flow pressure and the minimum oxidation-reduction potential (as described above) shall be performed to ensure proper operation.

(B) venturi scrubbers~~s~~ **(ID No. CD-17)** shall maintain a minimum scrubbant flow pressure of 5 psig, and the pressure shall be recorded once a day. The maximum temperature of the gas exiting the scrubber shall not exceed 120 degrees Fahrenheit, and the exit gas temperature shall be recorded once a day. Daily monitoring of the pressure and the gas temperature shall be performed to ensure proper operation.

High Intensity Treatment System:

(C) venturi scrubber **(ID No. CD-8)** shall maintain a minimum scrubbant flow pressure of 5 psig, and the pressure shall be recorded once a day. The maximum temperature of the gas exiting the scrubber shall not exceed 120 degrees Fahrenheit, and the exit gas temperature shall be recorded once a day. Daily monitoring of the pressure and the gas temperature shall be performed to ensure proper operation.

(D) packed tower scrubber **(ID No. CD-10)** shall maintain a scrubbant flow pressure of 6 to 15 psig, and the pressure shall be recorded once a day. This scrubber shall utilize chlorine dioxide or equivalent to control odors. The oxidation-reduction potential shall be monitored continuously utilizing hourly averaging and shall not fall below 200 mV for more than four hours. An oxidation/reduction potential below 200mV for more than four hours is a reportable exceedance. Daily monitoring of the scrubbant flow pressure and the minimum oxidation-reduction potential (as described above) shall be performed to ensure proper operation.

Fugitive Room Air: Facility-wide Rendering Process

(E) cross-flow scrubber **(ID No. CD-11)** shall maintain a scrubbant flow pressure of 13 to 17 psig, and the pressure shall be recorded once a day. The maximum temperature of the gas exiting the scrubber shall not exceed 120 degrees Fahrenheit, and the exit gas temperature shall be recorded once a day. Daily monitoring of the pressure and the gas temperature shall be performed to ensure proper operation.

Boilers:

ii. Each boiler that is to be used as a control device **(ID Nos. ES-B2 through ES-B6)** shall be equipped with a device to continuously measure and record the amount of fuel flow into the boiler. The Permittee shall daily record the date, time, fuel flow rate into each applicable boiler, while these boilers are being used as a control device.

Condensers:

iii. The condensers shall be equipped with a device to continuously measure the exit water temperature. The maximum temperature of the water exiting the condensers shall not exceed 175 degrees Fahrenheit. The device (*e.g.*, thermocouple) shall be installed in an accessible location and shall be maintained by the Permittee such that it is in proper working order at all times. Daily monitoring of the outlet temperature from each condenser shall be performed to ensure proper operation.

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

n. The Permittee shall maintain a logbook (written or electronic format) for each control device. This logbook(s) shall include the results of all inspection and maintenance and monitoring activities. The logbook(s) shall be kept on site and made available to the authorized DAQ representative upon request.
   i. The results of the inspection and maintenance performed shall be maintained in a logbook (written or electronic format). This logbook shall be on site and made available to the authorized DAQ representative.
      (A) Date and time of actions;
      (B) The results of each inspection;
      (C) The results of any maintenance performed on the control devices and/or chemical feed system; and
      (D) Any variance from the manufacturer's recommendations, if any, and corrections made.
   ii. The results of the required monitoring shall be maintained in a logbook (written or electronic format) on site and made available to the authorized DAQ representative upon request. The logbook shall record the following:

(A) The proper operating range for each parameter being monitored;
(B) The observed operating parameter at the time it was monitored;
(C) Date and time of this observation;
(D) Corrective action taken if the control device is not operating in the proper operating range; and
(E) Date and time corrective action completed.

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

o. The Permittee shall submit the results of any maintenance performed on the condensers **(ID Nos. CD-1, CD-6, CD-7, and CD-18)**, venturi scrubbers **(ID Nos. CD-8, and CD-17),** packed tower scrubber **(ID No. CD-10)**, cross-flow scrubber **(ID No. CD-11)**, and process boilers used as control devices (**ID Nos. ES-B2 through ES-B6)** within 30 days of a written request by the DAQ.

p. The Permittee shall submit a summary report of monitoring and record keeping 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.

B. Five natural gas/saleable fat/No. 4 fuel oil or on-specification recycled equivalent No. 4 fuel oil/No. 6 fuel oil-fired boilers (ID Nos. ES-B2, ES-B3, ES-B4, ES-B5, and ES-B7).

No. 2 fuel oil/saleable fat/natural gas-fired boiler (ID No. ES-B6)

STATE-ENFORCEABLE ONLY

1. 15A NCAC 02Q .0317 Avoidance Condition for 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

a. In order to be equivalent to unadulterated fossil fuel, the approved On Specification recycled No. 4 equivalent fuel oil shall not exceed the following criteria:

Constituent/Property	Allowable Level
Arsenic	1 ppm maximum
Cadmium	2 ppm maximum
Chromium	5 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	130°F minimum

Constituent/Property	Allowable Level
Sulfur	2.0 % maximum (by weight)
Ash	1.0 % maximum

The Permittee shall ensure that the On Specification recycled No. 4 equivalent fuel oil meets the approved criteria for unadulterated fuel, and the Permittee will be held responsible for any discrepancies discovered by Division of Air Quality as a result of any sampling and analysis of the used oil.

Monitoring/Recordkeeping

b. The Permittee shall maintain accurate records of the actual amount of vendor approved On Specification recycled No. 4 equivalent fuel oil delivered to and combusted at the facility on an annual basis. These records shall be retained at the facility for a minimum of three years and shall be made available to representatives of the Division of Air Quality upon request.

c. The Permittee shall maintain records of the results of the analytical testing of the vendor approved On Specification recycled No. 4 equivalent fuel oil as sampled and tested by the supplier (vendor). These records shall be retained at the facility for a minimum of three years and shall be made available to representatives of the Division of Air Quality upon request.

Reporting

d. Within 30 days after each calendar year, the Permittee shall submit in writing to the Regional Supervisor, Division of Air Quality, the following:

i. a summary of the results of the vendors' analytical testing for the previous 12 months (calendar year).
ii. the total gallons of vendor approved On Specification recycled No.4 Fuel Oil combusted at the facility for the previous 12 months (calendar year).

e. The Division of Air Quality reserves the right to require additional testing and/or monitoring of the On Specification recycled No. 4 equivalent fuel oil on an annual basis or without notice.

STATE-ENFORCEABLE ONLY

2. 15A NCAC 02Q .0317: Avoidance Condition for 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

Toxic air pollutant emissions from all combustion sources, including new or modified combustion sources permitted on or after July 10, 2010, shall remain at or below the maximum emission rate, as limited by permit restrictions in effect on July 9, 2010, from boilers **(ID Nos. ES-B2, ES-B3, ES-B4, ES-B5, and ES-B6)** combined. To ensure the hourly, daily, and yearly toxic air pollutant emissions from facility wide combustion sources do not exceed the July 9, 2010 maximum levels;

a. Boiler **(ID No. ES-B7)** may only operate when at least one boiler **(ID Nos. ES-B2, ES-B3, ES-B4, ES-B5, or ES-B6)** is not in operation;
b. Boiler **(ID No. ES-B7)** may only operate when the previous 12-month sulfur dioxide and/or nitrogen oxides emission rate(s) from boiler **(ID No. ES-B7)** added to the previous 12-month sulfur dioxide and/or nitrogen oxides emission rate(s) from the boiler it is replacing remains below the applicable emission limit(s) in Sections 2.1.A.4.a, 2.1.C.5.a, and 2.1.C.6.a of the permit;
c. Boiler **(ID No. ES-B7)** may only operate as a backup for boiler **(ID No. ES-B6)** when the previous 12-month hours of operation of the two boilers **(ID Nos. ES-B6 and ES-B7)** combined are less than 7,250 hours when burning No. 2 fuel oil and saleable fat; and
d. Boiler **(ID No. ES-B7)** may only burn No. 2 fuel oil or saleable fat as a backup for boiler **(ID No. ES-B6).**

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

e. The Permittee shall keep daily records of the operation of boiler **(ID No. ES-B7)** including the number of hours it operates, the identification of the fuel it is burning, and the identification of the boiler it is replacing in a logbook (written or in electronic format).

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

f. The Permittee shall submit a summary report of monitoring and record keeping 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.

C. Fat extraction process consisting of
Process equipment (ID No. ES-FE1)
Meal storage room equipment (ID No. ES-FE2)
Process equipment fugitive losses (ID No. ES-FG1)

Two natural gas-fired boilers (ID Nos. ES-B8 and ES-B9)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
VOC	See Section 2.2 C.1.	15A NCAC 02D .0530
-	Section 2.2 C.2.	15A NCAC 02Q .0504

1. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The Permittee shall comply with all applicable provisions, including emission limits, testing, reporting, recordkeeping, and monitoring requirements, in accordance with 15A NCAC 02D .0530, "Prevention of Significant Deterioration of Air Quality".

b. The Permittee shall comply with the following BACT. The BACT shall apply during all periods of operations, including start-ups, shut-downs and malfunctions.

EMISSION SOURCE	POLLUTANT	BACT	CONTROL DESCRIPTION
Process equipment **(ID No. ES-FE1)**	VOC	2.0 lb/hr (3-run stack test average)	Good design and operating practices: Use of closed loop vent system, multiple stages of process condensers, and absorber
Meal storage room equipment **(ID No. ES-FE2)**	VOC	6.0 lb/hr (3-run stack test average)	Good design and operating practices: Proper operation of desolventizer, efficient transfer of meal, and use of equipment maintenance program and general housekeeping
Process equipment fugitive losses **(ID No. ES-FG1)**	VOC	3.7 lb/hr	Leak detection and repair program
Natural gas-fired boilers **(ID Nos. ES-B8 and ES-B9)**	VOC	0.054 lb/million Btu (3-run stack test average)	Good combustion control and use of clean fuel (natural gas)

Testing [15A NCAC 02Q .0308(a)(1)]

c. Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall demonstrate compliance with the BACT for process equipment **(ID No. ES-FE1)** and meal storage room equipment **(ID No. ES-FE2)**, by conducting performance test, utilizing EPA reference methods, as in effect on the date of permit issuance, contained in 40 CFR 60, Appendix A, AND in accordance with a testing protocol (using testing protocol submittal form) approved by the DAQ as follows:

Use of any other test method for compliance purposes shall be approved in advance by the DAQ and must be based on a test protocol that documents the alternate method is at least as accurate as the reference method test listed above.

i. Test results shall be the average of 3 valid test runs.
ii. Within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after the commencement of operations of process equipment **(ID No. ES-FE1)** or meal storage room equipment **(ID No. ES-FE2)**, whichever comes first, the Permittee shall conduct the initial performance test(s) and submit a written report of the test(s) to the Regional Supervisor, DAQ.
iii. The approval of the fat extraction process may be revoked, with proper notice to the Permittee, or enforcement procedures initiated, if the results of the test(s) indicate that the facility does not meet the applicable limitations.

Monitoring/Recordkeeping [15A NCAC 02Q .0308(a)(1)]

d. The monitoring/recordkeeping requirements in Section 2.1 E. 4. d. through g. above shall be sufficient to ensure compliance with the applicable limits in Section 2.2 C. 1. b. above for process equipment **(ID No. ES-FE1)**, meal storage room equipment **(ID No. ES-FE2)**, and process equipment fugitive losses **(ID No. ES-FG1)**.
e. The Permittee shall perform periodic tune-ups on boilers **(ID Nos. ES-B8 and ES-B9)** in accordance with Section 2.2 D. 1. g. below to ensure compliance with the applicable limit in Section 2.2 C.1. b. above.

Reporting [15A NCAC 02Q .0308(a)(1)]

f. The reporting requirements in Section 2.1 E. 4. h. above shall be sufficient to ensure compliance with the applicable limits in Section 2.2 C. 1. b. above for process equipment **(ID No. ES-FE1)**, meal storage room equipment **(ID No. ES-FE2)**, and process equipment fugitive losses **(ID No. ES-FG1)**.
g. No reporting requirements shall apply for natural gas-fired boilers **(ID No. ES-B8 and ES-B9)**.

2. 15A NCAC 02Q .0504: OPTION FOR OBTAINING CONSTRUCTION AND OPERATION PERMIT

Permitting [15A NCAC 02Q .0504(d)]

a. For completion of the two-step significant modification process pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file an amended application following the procedures of Section 15A NCAC 02Q .0500 within one year from the date of beginning of operation of fat extraction process equipment **(ID No. ES-**

FE1), meal storage room equipment **(ID No. ES-FE2),** process equipment fugitive losses **(ID No. ES-FG1),** or two natural gas-fired boilers **(ID Nos. ES-B8 and ES-B9)**, whichever occurs first.

Reporting [15A NCAC 02Q .0308(a)(1)]

b. The Permittee shall notify the Regional Office in writing of the date of beginning of operation of fat extraction process equipment **(ID No. ES-FE1),** meal storage room equipment **(ID No. ES-FE2),** process equipment fugitive losses **(ID No. ES-FG1),** and two natural gas-fired boilers **(ID Nos. ES-B8 and ES-B9)**, postmarked no later than 30 days after such date.

D. Five Natural gas/ No. 2 fuel oil/saleable fat/No. 4 fuel oil or on-specification recycled equivalent No. 4 fuel oil/No. 6 fuel oil-fired boilers (ID Nos. ES-B2, ES-B3, ES-B4, ES-B5, and ES-B7)
No. 2 fuel oil/saleable fat/natural gas-fired boiler (ID No. ES-B6)
Two natural gas-fired boilers (ID Nos. ES-B8 and ES-B9)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous air pollutants	See Section 2.2 D.1. **(ID Nos. ES-B8 and ES-B9)**	15A NCAC 02D .1111 [40 CFR 63 Subpart DDDDD]
Hazardous air pollutants	See Section 2.2 D.2. **(ID Nos. ES-B2, ES-B3, ES-B4, ES-B5, and ES-B7)**	15A NCAC 02D .1111 [40 CFR 63 Subpart DDDDD]
Hazardous air pollutants	See Section 2.2 D.3. **(ID No. ES-B6)**	15A NCAC 02D .1111 [40 CFR 63 Subpart DDDDD]

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

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

a. For boilers **(ID Nos. ES-B8 and ES-B9)** (a new unit designed to burn gas 1 fuels only), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."

Definitions and Nomenclature [40 CFR 63.7575]

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

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

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

Compliance Date [40 CFR 63.7495(a)]

d. The Permittee shall comply with the applicable requirements upon startup of these sources.

Notifications [40 CFR 63.7545]

e. As specified in 40 CFR 63.9(b)(4) and (5), the Permittee shall submit an Initial Notification not later than 15 days after the actual date of startup of the affected source. [40 CFR 63.7545(c)]

f. The Permittee shall submit an initial Notification of Compliance Status to the DAQ. The notification must be signed by a responsible official and sent before the close of business on the 60th day following the completion of the initial tune-up. The notification shall contain the following:
   i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned.
   ii. The following certification(s) of compliance:
      (A) "This facility completed the required initial tune-up for all the boilers and process heaters covered by 40 CFR part 63 subpart DDDDD at this site according to the procedures in 40 CFR

63.7540(a)(10)(i) through (vi)".
[40 CFR 63.7545(e)]

Work Practice Standards [40 CFR 63.7500(a), 63.7540(a)(10)]

g. The Permittee shall conduct a tune-up of the source(s) annually as specified below.
   i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary The Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled 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 (you 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.

h. For these sources, each annual tune-up shall be conducted no more than 13 months after the previous tune-up. The initial tune-up shall be conducted no later than 13 months after the initial startup of the source. [40CFR 63.7515(d)]

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

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

Recordkeeping Requirements [15A NCAC 02Q .0308(a)(1)]

k. The Permittee shall keep the following:
   i. A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]
   ii. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
      (A) The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
      (B) A description of any corrective actions taken as a part of the tune-up; and
      (C) The type and amount of fuel used over the 12 months prior to the 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 the requirements in Section 2.2 D. 1. e. through j. above.

l. 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.
   [40 CFR 63.7560, 63.10(b)(1)]

Reporting Requirements [15A NCAC 02Q .0308(a)(1)]

m. 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 2.2 D.1 d. above and ending on the earliest December 31st. 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), 63.10(a)(4), (5)]

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

o. The compliance report must contain the following information:
   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. Include the date of the most recent tune-up for each unit required according to Section 2.2 D.1. g. above. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.
   v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

   [40 CFR 63.7550(a) and (c), Table 9]

2. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, §63.7490(d), §63.7499(t, u)]

a. For boilers **(ID Nos. ES-B2, ES-B3, ES-B4, ES-B5, and ES-B7)** (i.e., existing sources(s) designed to burn heavy liquid fuel with a heat input capacity 10 million Btu per hour or greater), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" (Subpart 5D) and Subpart A "General Provisions."

Definitions and Nomenclature [§63.7575]

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

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

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to Subpart 5D.

Compliance Date [§63. 7495(c)(2), §63.7510(e)]

d. The Permittee shall:
   i. Complete the initial tune up and the one-time energy assessment as required in Section 2.2 D.2. o. through r. below no later than MM/DD/YYYY (i.e., three *years after permit issuance date, fill this date in)*
   ii. Complete the initial compliance requirements in Section 2.2 D.2.j below no later than MM/DD/YYYY (*i.e.,180 days plus three years after permit issuance date, fill this date in)* and according to the applicable provisions in §63.7(a)(2).

General Compliance Requirements [§63.7505(a), §63.7500]

e. At all times the affected unit(s) is operating, the Permittee shall follow the emission standards in Section 2.2 D.2. g. below, except during periods of startup and shutdown. During startup and shutdown, the Permittee shall comply only with items 5 and 6 of Table 3 of Subpart 5D.

f. At all times, then Permittee shall operate and maintain any affected source (as defined in §63.7490),

including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

Emission Limits [§63.7500(a)(1), Table 2]

g. The affected unit(s) shall meet the following emission limits:

Pollutant	Emission Limit
Hydrochloric Acid(HCl)	1.1E-03 lb per MMBtu of heat input
Mercury (Hg)	2.0E-06 lb per MMBtu of heat input
Carbon monoxide (CO)	130 ppm by volume on a dry basis corrected to 3 percent oxygen
Filterable Particulate Matter(PM) or Total Suspended Metals (TSM)	6.2E-02 lb per MMBtu of heat input or 2.0E-04 lb per MMBtu of heat input

Testing [15A NCAC 02Q .0308(a)(1)]

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

Notifications [§§63.7545(d), 63.7530]

i. The Permittee shall submit the following notifications:
   i. The Permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.
   ii. For the initial compliance demonstration for each affected source, the Permittee shall submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all affected sources at the facility The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8) of §63.7545 as applicable.

[§§63.9(h)(2)(ii), 63.10(d)(2), 63.7545(e)]

Initial compliance requirements [§63.7510]

j. The Permittee shall demonstrate compliance with the limits in Section 2.2 D.2. g. above by conducting initial performance test(s) and fuel analyses, establishing operating limits and conducting continuous monitoring system (CMS) evaluation(s) as necessary according to §§63.7510, 63.7525 and 63.7530.

Subsequent compliance requirements [§63.7515]

k. The Permittee shall conduct subsequent performance tests and fuel analyses as necessary according to §63.7515.
   i. If the affected boiler or process heater combusts ultra-low sulfur liquid fuel, the Permittee does not need to conduct further performance tests (stack tests or fuel analyses) if the pollutants measured during the initial compliance performance tests meet the emission limits in condition g. providing the Permittee demonstrates ongoing compliance with the emissions limits by monitoring and recording the type of fuel combusted on a monthly basis.
   ii. If the Permittee intends to use a fuel other than ultra-low sulfur liquid fuel, natural gas, refinery gas, or other gas 1 fuel, the Permittee shall conduct new performance tests within 60 days of burning the new fuel type.

l. The Permittee shall demonstrate continuous compliance with each emission limit and operating limit that applies according to §63.7540.

Monitoring requirements [§63.7525]

m. The Permittee shall install, operate, and maintain an oxygen analyzer system, as defined in §63.7575, or install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen (or carbon dioxide) according to the procedures §63.7525(a). This requirement is applicable only when burning liquid fuels.

n. The Permittee shall meet the requirements for all monitoring systems as applicable according to §63.7525

when burning liquid fuels.

Work Practice Standards [§§63.7500(a), §63.7540(a)(10)]

o. The Permittee shall conduct a tune-up of the source(s) every year as specified below. The Permittee shall conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up.
   i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown;
   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 (you 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; and
   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.

p. Each tune-up shall be conducted no more than 13 months after the previous tune-up. [40 CFR 63.7515(d)]

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

Energy Assessment Requirements [§63.7510(e)]

r. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor.

Recordkeeping Requirements [§63.7555]

s. The Permittee shall:
   i. Keep a copy of each notification and report submitted to comply with Subpart 5D, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted. [§§63.7555(a)(1), 63.10(b)(2)(xiv)]
   ii. Keep records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations. [§63.10(b)(2)(viii)]
   iii. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
      A. The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
      B. A description of any corrective actions taken as a part of the tune-up; and
      C. the type and amount of fuel used over the 12 months prior to the 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. [§63.7540(a)(10)(vi)]
   iv. For each CEMS, COMS, and continuous monitoring system, keep records according to paragraphs (b)(1) through (5) of §63.7555.
   v. Keep records required in Table 8 of Subpart 5D including records of all monitoring data and calculated averages for applicable operating limits, such as opacity, pressure drop, pH, and operating load, to show continuous compliance with each emission limit and operating limit that applies.
   vi. Keep the applicable records in paragraphs (d)(1) through (13) of §63.7555.

t. 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.
[§63.7560, §63.10(b)(1)]

Reporting Requirements [§63.7550]

u. The Permittee shall submit a compliance report to the DAQ on a semi-annual basis, 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.
   i. The first compliance report shall be postmarked on or before July 30, 2019 and cover the period from May 20, 2019 through June 30, 2019.
   ii. The compliance reports shall also be submitted electronically to the EPA via the procedures in §63.7550(h).

v. The compliance report shall contain:
   i. The information in §63.7550(c) as applicable.
   ii. For each deviation from an emission limit or operating limit, the report shall contain the information in §§63.7550(d) and (e) as applicable.

w. Within 60 days after the date of completing each performance test (defined in §63.2) including any associated fuel analyses and/or CEMS performance evaluation (defined in §63.2) as required by Subpart 5D, the Permittee shall submit the results to the DAQ pursuant to 63.10(d)(2) and to the EPA via the procedures in §63.7550(h).

3. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.7485, §63.7490(d), §63.7499(q, u)]

a. For boiler **(ID No. ES-B6)** (i.e., existing sources(s) designed to burn light liquid fuel with a heat input capacity 10 million Btu per hour or greater), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" (Subpart 5D) and Subpart A "General Provisions."

Definitions and Nomenclature [§63.7575]

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

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

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to Subpart 5D.

Compliance Date [§63. 7495(c)(2), §63.7510(e)]

d. The Permittee shall:
   i. Complete the initial tune up and the one-time energy assessment as required in Section 2.2 D.3. o. through r. below, no later than MM/DD/YYYY (i.e., three years after permit issuance date, fill this date in)
   ii. Complete the initial compliance requirements in Section 2.2 D.3. j. below no later than MM/DD/YYYY (i.e.,180 days plus three years after permit issuance date, fill this date in) and according to the applicable provisions in §63.7(a)(2).

General Compliance Requirements [§63.7505(a), §63.7500]

e. At all times the affected unit(s) is operating, the Permittee shall be in compliance with the emission standards in Section 2.2 D.3. g. below, except during periods of startup and shutdown. During startup and shutdown, the Permittee shall comply only with items 5 and 6 of Table 3 of Subpart 5D.

f. At all times, then Permittee shall operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and

maintenance procedures, review of operation and maintenance records, and inspection of the source.

Emission Limits [§63.7500(a)(1), Table 2]

g. The affected unit(s) shall meet the following emission limits:

Pollutant	Emission Limit
Hydrochloric Acid(HCl)	1.1E-03 lb per MMBtu of heat input
Mercury (Hg)	2.0E-06 lb per MMBtu of heat input
Carbon monoxide (CO)	130 ppm by volume on a dry basis corrected to 3 percent oxygen
Filterable Particulate Matter(PM) or Total Suspended Metals (TSM)	7.9E-03 lb per MMBtu of heat input or 6.2E-05 lb per MMBtu of heat input

Testing [15A NCAC 02Q .0308(a)(1)]

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

Notifications [§§63.7545(d), 63.7530]

i. The Permittee shall submit the following notifications:
   i. The Permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.
   ii. For the initial compliance demonstration for each affected source, the Permittee shall submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all affected sources at the facility The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8) of §63.7545 as applicable.

[§§63.9(h)(2)(ii), 63.10(d)(2), 63.7545(e)]

Initial compliance requirements [§63.7510]

i. The Permittee shall demonstrate compliance with the limits in Section 2.2 D.3. g. above, by conducting initial performance test(s) and fuel analyses, establishing operating limits and conducting continuous monitoring system (CMS) evaluation(s) as necessary according to §§63.7510, 63.7525 and 63.7530.

Subsequent compliance requirements [§63.7515]

k. The Permittee shall conduct subsequent performance tests and fuel analyses as necessary according to §63.7515.
   i. If the affected boiler or process heater combusts ultra-low sulfur liquid fuel, the Permittee does not need to conduct further performance tests (stack tests or fuel analyses) if the pollutants measured during the initial compliance performance tests meet the emission limits in condition g. providing the Permittee demonstrates ongoing compliance with the emissions limits by monitoring and recording the type of fuel combusted on a monthly basis.
   ii. If the Permittee intends to use a fuel other than ultra-low sulfur liquid fuel, natural gas, refinery gas, or other gas 1 fuel, the Permittee shall conduct new performance tests within 60 days of burning the new fuel type.

l. The Permittee shall demonstrate continuous compliance with each emission limit and operating limit that applies according to §63.7540.

Monitoring requirements [§63.7525]

m. The Permittee shall install, operate, and maintain an oxygen analyzer system, as defined in §63.7575, or install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen (or carbon dioxide) according to the procedures §63.7525(a). This requirement is applicable only when burning liquid fuels.

n. The Permittee shall meet the requirements for all monitoring systems as applicable according to §63.7525 when burning liquid fuels.

Work Practice Standards [§§63.7500(a), 63.7540(a)(10)]

o. The Permittee shall conduct a tune-up of the source(s) every year as specified below. The Permittee shall

conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up.

i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown;
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 (you 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; and
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.

[§§63.7500(a), §63.7540(a)(10)]

p. Each tune-up shall be conducted no more than 13 months after the previous tune-up. [40CFR 63.7515(d)]
q. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [§63.7540(a)(13), §63.7515(g)]

Energy Assessment Requirements [§63.7510(e)]

r. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor.

Recordkeeping Requirements [§63.7555]

s. The Permittee shall:
   i. Keep a copy of each notification and report submitted to comply with Subpart 5D, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted.
   [§§63.7555(a)(1), 63.10(b)(2)(xiv)]
   ii. Keep records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations. [§63.10(b)(2)(viii)]
   iii. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
      A. The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
      B. A description of any corrective actions taken as a part of the tune-up; and
      C. the type and amount of fuel used over the 12 months prior to the 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.

   [§63.7540(a)(10)(vi)]
   iv. For each CEMS, COMS, and continuous monitoring system, keep records according to paragraphs (b)(1) through (5) of §63.7555.
   v. Keep records required in Table 8 of Subpart 5D including records of all monitoring data and calculated averages for applicable operating limits, such as opacity, pressure drop, pH, and operating load, to show continuous compliance with each emission limit and operating limit that applies.
   vi. Keep the applicable records in paragraphs (d)(1) through (13) of §63.7555.
t. 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.

   [§63.7560, §63.10(b)(1)]

Reporting Requirements [§63.7550]

u. The Permittee shall submit a compliance report to the DAQ on a semi-annual basis, 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.
   i. The first compliance report shall be postmarked on or before July 30, 2019 and cover the period from May 20, 2019 through June 30, 2019.
   ii. The compliance reports shall also be submitted electronically to the EPA via the procedures in §63.7550(h).

v. The compliance report shall contain:
   i. The information in §63.7550(c) as applicable.
   ii. For each deviation from an emission limit or operating limit, the report shall contain the information in§§63.7550(d) and (e) as applicable.

w. Within 60 days after the date of completing each performance test (defined in §63.2) including any associated fuel analyses and/or CEMS performance evaluation (defined in §63.2) as required by Subpart 5D, the Permittee shall submit the results to the DAQ pursuant to 63.10(d)(2) and to the EPA via the procedures in §63.7550(h).

SECTION 3 - GENERAL CONDITIONS (version 5.2, 04/03/2018)

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

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

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

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

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous

monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air 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. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

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

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

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading

areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

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

1. For modifications made pursuant to 15A NCAC 02Q .0501(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
PM_{10}	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
SO_2	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound