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

Michael F. Easley, Governor

William G. Ross, Jr., Secretary
B. Keith Overcash, P.E., Director

September 17, 2007

Mr. Paul Humphries
General Manager
Valley Proteins, Inc.
P.O. Box 3588
Winchester, Virginia 22604

Dear Mr. Humphries:

SUBJECT: Air Quality Permit No. 03590T27
Facility ID: 3600026
Valley Proteins, Inc.
d.b.a. Carolina By-Products – Gastonia Division
Gastonia, North Carolina
Gaston County
Fee Class: Title V

In accordance with your completed Air Quality Permit Application, 3600026.06B, for a 502(b)(10) change of a Title V permit received October 20, 2006, we are forwarding herewith Air Quality Permit No. 03590T27 to Valley Proteins, Inc., d.b.a. Carolina By-Products – Gastonia Division, 5533 South York Road, Gastonia, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3 of Part I. **The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.**

The Permittee shall notify the Director and EPA with written notification at least seven days before the "change is made" pursuant to 15A NCAC 2Q .0523(a)(1)(C) for the air emission sources (ID Nos. ES-2 and ES-15).

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. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding.

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.

This Air Quality Permit shall be effective from September 17, 2007 until June 30, 2009, 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 Mr. Gautam Patnaik, P.E., at (919) 715-6246.

Sincerely yours,

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

Enclosure

c: Mooresville Regional Office
Central Files
Gregg Worley, EPA Region 4

ATTACHMENT to cover letter to Air Quality Permit Number 03590T27

Table of Changes

Page(s)	Section	Description of Change(s)
3 & 6	Part I Sources table	Added No. 2 fuel oil for boilers ES-2 and ES-15
9	2.1 B.	Added No. 2 fuel oil for boilers ES-2 and ES-15
10	2.1 B. 1	Subject to 2D .0503 regulation
10	2.1 B. 2	Subject to 2D .0516 regulation
11	2.1 B. 3	Subject to 2D .0521 regulation
18	2.2 A	Added No. 2 fuel oil for boilers ES-2 and ES-15
18	2.2 A.1	Subject to 2Q. 0317 regulation
20	2.2 B.1	Updated the requirements for recycled fuel oil
24	General Conditions	Updated

ATTACHMENT

Insignificant Activities pursuant to 15 NCAC 2Q .0503(8)

Emission Source ID No.	Emission Source Description
IES-11	Chlorine Delivery System
IES-Storage	Storage silos
IES-12 and IES-13	two No. 6 fuel oil tanks (15, 000 gallons capacity each)
IES-16	one truck diesel fuel tank (30,000 gallon capacity)
IES-14	one No. 2 fuel oil tank (18,000 gallon capacity)
IES-17	dissolved air flotation system
IES-Load	Load-out area

State of North Carolina,
Department of Environment,
and Natural Resources

Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
03590T27	03590T26	September 17, 2007	June 30, 2009

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee:	**Valley Proteins, Inc. d.b.a. Carolina By-Products – Gastonia Division**
Facility ID:	**3600026**
Facility Site Location:	**5533 South York Road**
City, County, State, Zip:	**Gastonia, Gaston County, North Carolina 28052**
Mailing Address:	**P.O. Box 3588**
City, State, Zip:	**Winchester, Virginia 22604**
Application Number:	**3600026.06B**
Complete Application Date:	**October 20, 2006**
Primary SIC Code:	**2077**
Division of Air Quality, Regional Office Address:	**Mooresville Regional Office 610 E. Center Ave., Suite 301 Mooresville, North Carolina 28115**

Permit issued this the 17th day of September, 2007

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

Table Of Contents

PART I

PART II

Does not have a part II.

PART I

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

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

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

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

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-1 **NSPS**	One natural gas/No. 2 fuel oil/saleable fat oil-fired boiler (50.2 million Btu per hour heat input) *Note: ES-1 also functions as a thermal oxidizer for process emissions.*	N/A	N/A
ES-2**	One natural gas/ No. 2 fuel oil/No. 4 fuel oil/No. 5 fuel oil/No. 6 fuel oil/approved equivalent waste oil/saleable fat oil-fired boiler (50.6 million Btu per hour heat input) *Note: ES-2 also functions as a thermal oxidizer for process emissions.*	N/A	N/A
ES-3 **NSPS**	One natural gas/No. 2 fuel oil/No. 6 fuel oil/saleable fat oil-fired boiler (29.5 million Btu per hour heat input) *Note: ES-3 also functions as a thermal oxidizer for process emissions.*	N/A	N/A

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-4	Meat material process	(1st control option)	The flow from ES-4 is through either of the 4 control devices below:
		CD-4f	Shell and Tube Condenser, OR
		CD-4c	Air Condenser, OR
		CD-4d	Air Condenser, OR
		CD-4e	Air Condenser. The exhaust from any of the above 4 control devices is then controlled in series by:
		CD-10b	One venturi scrubber (90 gallons per minute liquid injection rate), and
		CD-10c	One packed bed scrubber (276 gallons per minute liquid injection rate)
		(2nd control option)	The flow from ES-4 is through either of the 4 control devices below:
		CD-4f	Shell and Tube Condenser, OR
		CD-4c	Air Condenser, OR
		CD-4d	Air Condenser, OR
		CD-4e	Air Condenser. The exhaust from any of the above 4 control devices is then controlled in series by:
		CD-10b	One venturi scrubber (90 gallons per minute liquid injection rate), and
		CD-9d	One biofilter (13,200 square feet of surface area)
		(3rd control option)	The flow from ES-4 is through either of the 4 control devices below:
		CD-4f	Shell and Tube Condenser, OR
		CD-4c	Air Condenser, OR
		CD-4d	Air Condenser, OR
		CD-4e	Air Condenser. The exhaust from any of the above 4 control devices is then controlled in series by:
		CD-10b	One venturi scrubber (90 gallons per minute liquid injection rate);
		CD-3a	Mist Eliminator The exhaust from the mist eliminator is controlled by either of the thermal oxidizers:
		ES-1	(50.2 million Btu per hour heat input), OR
		ES-2	(50.6 million Btu per hour heat input), OR
		ES-3	(29.5 million Btu per hour heat input), OR
		ES-15	(41.8 million Btu per hour heat input)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-5	*Blood/grease room		The emissions are controlled by any of the control device devices listed below:
		CD-8c	Two-stage scrubber (1,370 gallons per minute liquid injection rate), OR
		CD-11a	Two-stage scrubber (1,370 gallons per minute liquid injection rate), OR
		CD-9d	One biofilter (13,200 square feet of surface area)
ES-6	Press/centrifuge process	(1st control option)	controlled in series by:
		CD-10b	One venturi scrubber (90 gallons per minute liquid injection rate) and
		CD-10c	One packed bed scrubber (276 gallons per minute liquid injection rate)
		(2nd control option)	controlled in series by:
		CD-10b	One venturi scrubber (90 gallons per minute liquid injection rate)
		CD-3a	Mist Eliminator The exhaust from the mist eliminator is controlled by either of the thermal oxidizers:
		ES-1	(50.2 million Btu per hour heat input), OR
		ES-2	(50.6 million Btu per hour heat input), OR
		ES-3	(29.5 million Btu per hour heat input), OR
		ES-15	(41.8 million Btu per hour heat input)
		(3rd control option)	controlled in series by:
		CD-10b	One venturi scrubber (90 gallons per minute liquid injection rate);
		CD-9d	One biofilter (13,200 square feet of surface area)
ES-8	Meat room air		The emissions are controlled by any of the control device devices listed below:
		CD-8c	Two-stage scrubber (1,370 gallons per minute liquid injection rate), OR
		CD-11a	Two-stage scrubber (1,370 gallons per minute liquid injection rate), OR
		CD-9d	One biofilter (13,200 square feet of surface area)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-9 ES-9a	Steam Rotodisc Dryer (25,000 pounds per hour maximum design capacity) Feather Hydrolizer	(1st control option) CD-9e CD-10b CD-10c (2nd control option) CD-9e CD-10b CD-3a ES-1 ES-2 ES-3 ES-15 (3rd control option) CD-9e CD-10b CD-9d	controlled in series by: Shell and Tube Condenser; One venturi scrubber (90 gallons per minute liquid injection rate); One packed bed scrubber (276 gallons per minute liquid injection rate); controlled in series by: Shell and Tube Condenser; One venturi scrubber (90 gallons per minute liquid injection rate); Mist Eliminator The exhaust from the mist eliminator is controlled by either of the thermal oxidizers: (50.2 million Btu per hour heat input), OR (50.6 million Btu per hour heat input), OR (29.5 million Btu per hour heat input), OR (41.8 million Btu per hour heat input) controlled in series by: Shell and Tube Condenser; One venturi scrubber (90 gallons per minute liquid injection rate); One biofilter (13,200 square feet of surface area)
ES-9f	Feather room air	 CD-8c CD-11a CD-9d	The emissions are controlled by any of the control device devices listed below: Two-stage scrubber (1,370 gallons per minute liquid injection rate), OR Two-stage scrubber (1,370 gallons per minute liquid injection rate), OR One biofilter (13,200 square feet of surface area)
ES-15**	One Natural gas/No. 2 fuel oil /No. 4 fuel oil/No. 6 fuel oil/ approved equivalent waste oil /saleable fat oil-fired boiler (41.8 million Btu per hour heat input) *Note: ES-15 also functions as a thermal oxidizer for process emissions.*	N/A	N/A

***** These emission sources are insignificant for Title V purposes; however, they are listed pursuant to state-enforceable only requirements.

*** The combustion of "On Specification recycled No. 4 equivalent fuel oil" in boilers ES-2 and ES-15 is authorized as a 502(b)(10) change as per 15A NCAC 2Q .0523. The permit shield described in General Condition R does not apply, and compliance certification as described in General Condition P is not required.*

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. One natural gas/No. 2 fuel oil/saleable fat oil-fired boiler (ID No. ES-1) and one natural gas/No. 2 fuel oil/No. 6 fuel oil/saleable fat oil-fired boiler (ID No. ES-3)

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	0.29 pounds per million Btu heat input	15A NCAC 2D .0503
Sulfur dioxide	Natural gas/saleable fat oil firing: 2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Sulfur dioxide	Fuel oil firing: 0.5 percent sulfur content fuel oil	15A NCAC 2D .0524 (40 CFR Part 60 Subpart Dc)
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Sulfur dioxide	See Subsection 2.2 (A)	15A NCAC 2Q .0317 (PSD Avoidance)
Carbon monoxide	See Subsection 2.2 (A)	15A NCAC 2Q .0317 (PSD Avoidance)

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

a. Emissions of particulate matter from these sources into the atmosphere shall not exceed **0.29 pounds per million Btu heat input**. [15A NCAC 2Q .0503(a)]

Testing [15A NCAC 2D .0501(c)(3)]

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

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

c. No monitoring/recordkeeping/reporting is required for particulate matter emissions from the firing of natural gas, No. 2 fuel oil, No. 6 fuel oil or saleable fat oil in these sources.

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

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

Testing [15A NCAC 2D .0501(c)(4)]

b. If emission testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas, No. 2 fuel oil, No. 6 fuel oil or saleable fat oil in these sources.

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

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

Testing [15A NCAC 2D .0501(c)(8)]

b. If emission testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ. If the results of this test are above the limit given in Section 2.1 A. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 2Q .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 the emission source is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. 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 2D .0501(c)(8) is below the limit given in Section 2.1 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 2D .0521.

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

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

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

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

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

4. 15A NCAC 2D .0524: NSPS 40 CFR PART 60 SUBPART Dc

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524, "New Source Performance Standards (NSPS) as promulgated in 40 CFR 60, Subpart Dc, including Subpart A "General Provisions."[15A NCAC 2D .0524]

Emission Limitations [15A NCAC 2D .0524]

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

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

c. Sulfur dioxide emissions shall be monitored as follows:
   i. Distillate Oil - Fuel supplier certification shall be used to demonstrate compliance as described under 40 CFR 60.46c(e).
   ii. Residual Oil - The Permittee shall sample and analyze the oil in the fuel tank after each new shipment of oil is received as described under 40 CFR 60.46c(d)(2) to demonstrate compliance. Results of the fuel analysis taken after each new shipment of oil received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. The 30-day rolling average sulfur content shall be 0.5 percent by weight or less.
   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if sulfur dioxide emissions are not monitored as described above.

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

d. In addition to any other recordkeeping required by 40 CFR 60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel combusted during each day.
   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the records are not maintained.

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

e. In addition to any other reporting required by 40 CFR 60.48c or notification requirements to the EPA, the Permittee is required to NOTIFY the DAQ in **writing** of the following:
   i. a summary report , acceptable to the Regional Air Quality Supervisor, of the sulfur content of the distillate or residual fuel oil fired, by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June as follows:
      (A) Distillate Oil - Fuel supplier certification shall include the following information:
         (1) the name of the oil supplier;
         (2) a statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in 40 CFR 60.41c; and
         (3) a certified statement signed by the owner or operator of an affected facility that the records of fuel supplier certification submitted represents all of the fuel fired during the semi annual period.
      (B) Residual Oil - The report shall include the results of the fuel oil sampling and analysis as required in condition 2.1(A)(4)(e)(i).
   All instances of deviations from the requirements of this permit must be clearly identified.

B. One natural gas/ No. 2 fuel oil/No. 4 fuel oil/No. 5 fuel oil/No. 6 fuel oil/approved equivalent waste oil/saleable fat oil-fired boiler (ID No. ES-2) and one natural gas/ No. 2 fuel oil/No. 4/No. 6 fuel oil/approved equivalent/saleable fat oil-fired boiler (ID No. ES-15)

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	0.29 pounds per million Btu heat input	15A NCAC 2D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Sulfur dioxide	See Subsection 2.2 (A)	15A NCAC 2Q .0317 (PSD Avoidance)
Carbon monoxide	See Subsection 2.2 (A)	15A NCAC 2Q .0317 (PSD Avoidance)
Toxic air pollutants	See Subsection 2.2 (B) - **State-enforceable only**	15A NCAC 2D .1100

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

a. Emissions of particulate matter from this source into the atmosphere shall not exceed **0.29 pounds per million Btu heat input**. [15A NCAC 2Q .0503(a)]

Testing [15A NCAC 2D .0501(c)(3)]

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

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

c. No monitoring/recordkeeping/reporting is required for particulate matter emissions from the firing of natural gas, No. 2 fuel oil, No. 4 fuel oil, No. 5 fuel oil, No. 6 fuel oil or saleable fat oil in these sources.

d. The maximum ash content of any waste oil burned in the boiler shall not exceed 1.0 percent by weight. [15A NCAC 2Q .0508(bb)]

e. The minimum flash point of any waste oil burned in the boiler shall not exceed 130^{o}F. [15A NCAC 2Q .0508(bb)]

f. The Permittee shall collect one representative sample of approved waste oil from the waste fuel oil storage tank during each calendar year that waste oil was fired. Each representative sample shall be analyzed for the ash content and flash point.
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503 if these representative samples are not collected and analyzed.

g. The Permittee shall submit a summary report of the 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.

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

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

Testing [15A NCAC 2D .0501(c)(4)]

b. If emission testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 B. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

d. The maximum sulfur content of any No. 5 fuel oil or No. 6 fuel oil received and burned in the boilers shall not exceed 2.1 percent by weight. The maximum sulfur content of any No. 4 fuel oil received and burned in the boilers shall not exceed 2.0 percent by weight. The maximum sulfur content of any No. 2 fuel oil received and burned in the boilers shall not exceed 0.5 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the fuel oil exceeds this limit.

e. The Permittee shall monitor the sulfur content of the oil by using oil supplier certification per shipment received. The oil supplier certification shall be recorded on a quarterly basis and include the following information:
   i. the name of the oil supplier;
   ii. the maximum sulfur content of the oil received for the quarter;
   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 oil combusted during the reporting period.

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

f. The maximum sulfur content of any approved waste oil burned in the boiler shall not exceed 2.0 percent by weight. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if the sulfur content of the waste oil exceeds this limit.

g. The Permittee shall collect one representative sample of approved waste oil from the waste fuel oil storage tank during each calendar year that waste oil was fired. Each representative sample shall be analyzed for the sulfur content. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516 if these representative samples are not collected and analyzed.

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

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

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

a. Visible emissions from 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 2D .0521(d)]

Testing [15A NCAC 2D .0501(c)(8)]

b. If emission testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ. If the results of this test are above the limit given in Section 2.1 B. 3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

c. To assure compliance, once 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 the emission source is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. 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 2D .0501(c)(8) is below the limit given in Section 2.1 B. 3. a. above.

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

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

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

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

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

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

C. Meat material process (ID No. ES-4) and feather drying process (ID No. ES-9) and associated venturi scrubber (ID No. CD-10b) with thermal oxidizers (ID Nos. ES-1, ES-2, ES-3 and ES-15) or packed bed scrubber (ID No. CD-10c) and/or biofilter (ID No. CD-9d) as back-up

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	For P < 30 tons per hour: $E=4.10P^{0.67}$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour, and For P > 30 tons per hour: $E=55.0P^{0.11} - 40$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 2D .0515
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Odorous emissions	See Subsection 2.2 (C) - **State-enforceable only**	15A NCAC 2D .0539

1. 15A NCAC 2D .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 2D .0515(a)]

For process weights up to 30 tons per hour:

$E = 4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

For process weights greater than 30 tons per hour:

$E = 55 \times P^{0.11} - 40$ Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

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

Testing [15A NCAC 2D .0501(c)(3)]

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

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

c. Particulate matter emissions from these emission sources shall be controlled by the packed bed scrubber, and thermal oxidizers. To ensure that optimum control efficiency is maintained, the Permittee shall perform monthly inspections on the scrubbers and semi-annual 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 is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
   i. an inspection of the 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 2D .0515 if the venturi scrubber, packed bed 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 2D .0515 if these records are not maintained.

e. The Permittee shall monitor and record in a logbook, at least once per calendar week, the following:
   i. the pressure drop across the venturi scrubber (CD-10b) which shall be a maximum of 6 inches of water,
   ii. the liquid injection flow rate to the venturi scrubber (CD-10b) which shall be a minimum of 22 gallons per minute, and
   iii. the exit temperature of the venturi scrubber (CD-10b) which shall be a maximum of 120 degrees F at the inlet to the biofilter.

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

f. Each boiler that is to be used as a thermal oxidizer (**ID Nos. ES-1, ES-2, ES-3 and ES-15**) shall be

equipped with a device to continuously measure and record the amount of fuel flow into the boiler. The Permittee shall record daily the date, time, fuel flow rate into each applicable boiler, while these boilers are being used as a control device.
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

g. The Permittee shall monitor operation of the boilers as thermal oxidizers (**ID Nos. ES-1, ES-2, ES-3 and ES-15**) via an automated damper system that directs the odors to the boilers while in operation. The automated damper system shall have an indicator of baffle/damper position depending on firing rate that shall be recorded. In addition, the dampers shall be checked and logged weekly for proper operation.
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

h. The Permittee shall monitor operation of the packed bed scrubber (ID No. CD-10c) as back-up control for the thermal oxidizers above. The Permittee shall record in a log book when the packed bed scrubber is in operation and venting to the atmosphere rather than to the biofilter below. The Permittee shall also follow the monitoring and recordkeeping (including operation and maintenance) requirements for the packed bed scrubber as specified below:

Scrubber (packed bed) Operation and Maintenance Requirements –

i. Particulate matter emissions from the meat material process (ID No. ES-4) and the feather drying process (ID No. ES-9) shall be controlled by the packed bed scrubber (ID No. CD-10c). The Permittee shall utilize a chlorine dioxide and water scrubbing medium in the packed bed scrubber (ID No. CD-10c) when venting directly to the atmosphere (not to the biofilter (ID No. CD-9d)). The Permittee shall also record the method of operation (vent to atmosphere or vent to biofilter) upon change.
To 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 inspection of spray nozzles, packing material, chemical feed system, and the cleaning/calibration of all associated instrumentation. Results of the inspections and any maintenance performed on the scrubber system shall be recorded in a logbook.
    a. The Permittee shall ensure the proper performance of the packed bed scrubber (ID No. CD-10c) by monitoring and recording in a logbook daily when in operation the following operational parameter:
        1. liquid injection pressure - (minimum of 15 psig).

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the above items are not monitored and the associated records are not maintained.

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

ii. The Permittee shall record in a log book when the biofilter (ID No. CD-9d) is in operation as back-up control. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

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

iii. Upon request from the DAQ, the Permittee shall submit, within 30 days of such request, a report of any maintenance performed on a control device system.

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

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

a. Visible emissions from 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 2D .0521(d)]

Testing [15A NCAC 2D .0501(c)(8)]

b. If emission testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and 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 2D .0521.

Monitoring [15A NCAC 2Q .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 the emission source is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. 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 2D .0501(c)(8) is below the limit given in Section 2.1 C. 2. a. above.

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

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

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

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

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

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

D. Press/centrifuge process (ID No. ES-6) and associated venturi scrubber (ID No. CD-10b) with thermal oxidizers (ID Nos. ES-1, ES-2, ES-3 and ES-15) or packed bed scrubber (ID No. CD-10c) and/or biofilter (ID No. CD-9d) as back-up

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	For P < 30 tons per hour: $E=4.10P^{0.67}$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour, and For P > 30 tons per hour: $E=55.0P^{0.11} - 40$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 2D .0515

Visible emissions	20 percent opacity	15A NCAC 2D .0521
Odorous emissions	See Subsection 2.2 (C) – **State-enforceable only**	15A NCAC 2D .0539

1. 15A NCAC 2D .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 2D .0515(a)]

For process weights up to 30 tons per hour:

$E = 4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

For process weights greater than 30 tons per hour:

$E = 55 \times P^{0.11} - 40$ Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

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

Testing [15A NCAC 2D .0501(c)(3)]

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

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

c. Particulate matter emissions from these emission sources shall be controlled by the venturi scrubber, packed bed scrubber, and thermal oxidizers. To ensure that optimum control efficiency is maintained, the Permittee shall perform monthly inspections on the scrubbers and semi-annual 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 is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:
   i. an inspection of the 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
   vi. visual inspection of the inlet/outlet valves for structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the venturi scrubber, packed bed 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 2D .0515 if these records are not maintained.

e. The Permittee shall monitor and record in a logbook, at least once per calendar week, the following:
   i. the pressure drop across the venturi scrubber (CD-10b) which shall be a maximum of 6 inches of water,
   ii. the liquid injection flow rate to the venturi scrubber (CD-10b) which shall be a minimum of 22 gallons per minute, and
   iii. the exit temperature of the venturi scrubber (CD-10b) which shall be a maximum of 120 degrees F at the inlet to the biofilter.

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

f. Each boiler that is to be used as a thermal oxidizer (**ID Nos. ES-1, ES-2, ES-3 and ES-15**) shall be equipped with a device to continuously measure and record the amount of fuel flow into the boiler. The Permittee shall record daily the date, time, fuel flow rate into each applicable boiler, while these boilers are being used as a control device.
   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

g. The Permittee shall monitor operation of the boilers as thermal oxidizers (**ID Nos. ES-1, ES-2, ES-3 and ES-15**) via an automated damper system that directs the odors to the boilers while in operation. The automated damper system shall have an indicator of baffle/damper position depending on firing rate that shall be recorded. In addition, the dampers shall be checked and logged weekly for proper operation.
   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

h. The Permittee shall monitor operation of the packed bed scrubber (ID No. CD-10c) as back-up control for the thermal oxidizers above. The Permittee shall record in a log book when the packed bed scrubber is in operation and venting to the atmosphere rather than to the biofilter below.

   To 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 inspection of spray nozzles, packing material, chemical feed system, and the cleaning/calibration of all associated instrumentation. Results of the inspections and any maintenance performed on the scrubber system shall be recorded in a logbook.
   i. The Permittee shall ensure the proper performance of the packed bed scrubber (ID No. CD-10c) by monitoring and recording in a logbook daily when in operation the following operational parameter:
      1. liquid injection pressure - (minimum of 15 psig).
   ii. The Permittee shall record in a log book when the biofilter (ID No. CD-9d) is in operation as back-up control. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the above items are not monitored and the associated records are not maintained.

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

i. Upon request from the DAQ, the Permittee shall submit, within 30 days of such request, a report of any maintenance performed on a control device system.

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

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

a. Visible emissions from 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 2D .0521(d)]

Testing [15A NCAC 2D .0501(c)(8)]

b. If emission testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(8) and General Condition JJ. If the results of this test are above the limit given in Section 2.1 D. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

c. To assure compliance, 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 the emission source is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. 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 2D .0501(c)(8) is below the limit given in Section 2.1 D. 2. a. above.

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

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

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

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

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

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

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

A. One natural gas/ No. 2 fuel oil/No. 4 fuel oil/No. 5 fuel oil/No. 6 fuel oil/approved equivalent waste oil/saleable fat oil-fired boiler (ID No. ES-2), one natural gas/No. 2 fuel oil/No. 6 fuel oil/saleable fat oil-fired boiler (ID No. ES-3), one natural gas/ No. 2 fuel oil/No. 4 fuel oil/No. 6 fuel oil/approved equivalent waste oil/saleable fat oil-fired boiler (ID No. ES-15), and one natural gas/No. 2 fuel oil/saleable fat oil-fired boiler (ID No. ES-1)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation

Sulfur dioxide	less than 250 tons per year	15A NCAC 2Q .0317 (PSD Avoidance)
Carbon monoxide	less than 250 tons per year	15A NCAC 2Q .0317 (PSD Avoidance)

1. 15A NCAC 2Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 2D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and major modifications, the boilers **(ID Nos. ES-1, ES-2, ES-3 and ES-15)** shall discharge into the atmosphere less than 250 tons of sulfur dioxide or carbon monoxide, per consecutive 12-month period. [15A NCAC 2D .0530]

Testing [15A NCAC 2Q .0501(c)(4)]

b. 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 A. 1. a., the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

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

i. The use of all fuels in boilers (**ID Nos. ES-1, ES-2, ES-3 and ES-15**) shall be limited such that sulfur dioxide and carbon monoxide emissions are less than 250 tons for any consecutive twelve-month period.

d. The following parameters each month shall be measured and recorded:
   i. The amount of natural gas used in the boilers in cubic feet.
   ii. The amount of No. 6 fuel oil used in the boilers in gallons and the percent sulfur in the No. 6 fuel oil.
   iii. The amount of No. 2 fuel oil used in boiler (ID Nos. ES-1, ES-2, ES-3 and ES-15) in gallons and the percent sulfur in the No. 2 fuel oil.
   iv. The amount of No. 4 fuel oil used in boiler (ID Nos. ES-2 and ES-15) in gallons and the percent sulfur in the No. 4 fuel oil.
   v. The amount of No. 5 fuel oil used in boiler (ID Nos. ES-2) in gallons and the percent sulfur in the No. 5 fuel oil.
   vi. The amount of saleable fat oil used in the boilers in gallons.

e. Each month calculations shall be performed and recorded to determine the actual sulfur dioxide and carbon monoxide emissions. For natural gas, No. 2 fuel oil, No. 4 fuel oil, No. 5 fuel oil, and No. 6 fuel oil, actual emissions shall be based on the most current AP-42 emission factors for these fuels. For saleable fat oil, actual emissions shall be calculated by using the following emission factors: 0.002 pounds per million Btu for carbon monoxide and 0.011 pounds per million Btu for sulfur dioxide. Note: The saleable fat oil emission factors are based on compliance test results that were performed at the Wadesboro Division on April 5, 2001 and approved by the Division of Air Quality.
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not kept or if the sulfur dioxide and carbon monoxide emissions exceed the limit in Section 2.2 A. 1. a.

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

f. The Permittee shall submit a 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 natural gas and No. 6 fuel oil consumed for the previous 17 months and the average sulfur content for the fuel oil; and
   iii. The average sulfur content for the fuel oil.

B. One natural gas/ No. 2 fuel oil/No. 4 fuel oil/No. 5 fuel oil/No. 6 fuel oil/approved equivalent waste oil-fired boiler (ID No. ES-2), and one natural gas/No. 4/No. 6/approved equivalent waste oil/saleable fat oil-fired boiler (ID No. ES-15)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
toxic air pollutants	the approved equivalent waste oil shall not exceed: arsenic 1 ppm cadmium 2 ppm chromium VI 5 ppm lead 100 ppm total halogens 1000 ppm	15A NCAC 2D .1100

STATE ENFORCEABLE ONLY
15A NCAC 2Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 2Q .0700: TOXIC AIR POLLUTANT PROCEDURES (for firing of Vendor Supplied Recycled fuels and avoidance of toxics air pollutants regulation)

1. 15A NCAC 2Q. 0317: AVOIDANCE CONDITIONS for SECTION 15A NCAC 2Q .0700: TOXIC AIR POLLUTANTS PROCEDURES

a. Vendor supplied recycled No. 4 fuel oil requirements - In accordance with Rule 2Q .0317, the Permittee is avoiding the applicability of Rule 2Q .0700 by using recycled fuel which is equivalent to their virgin counterpart. The Permittee is allowed to use the recycled fuel oil supplied by a DAQ-approved vendor as follows: [15A NCAC 2Q .0702]

Specifications - The recycled fuel oil shall be equivalent to unadulterated fossil fuel by meeting the following criteria:

Constituent/Property	Allowable Level
Arsenic	1.0 ppm maximum
Cadmium	2.0 ppm maximum
Chromium	5.0 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	
No. 2	100^{o}F minimum
No. 4	130^{o}F minimum
No. 5	175^{o}F minimum
No. 6	175^{o}F minimum
Sulfur	
No. 2	0.5% maximum (by weight)
No. 4	2.0% maximum (by weight)
No. 5	2.0% maximum (by weight)
No. 6	2.0% maximum (by weight)
Ash	1.0% maximum

Testing [15A NCAC 2D .0605]

b. The DAQ reserves the right to require additional testing and/or monitoring of the recycled fuel oil(s) on an annual basis or without notice.

Monitoring/Recordkeeping [15A NCAC 2D .0605]

c. The Permittee is responsible for ensuring that the recycled fuel oil, as received at the site, meet the approved criteria for unadulterated fuel. The Permittee is held responsible for any discrepancies discovered by DAQ as a result of any sampling and analysis of the fuel oil.
d. The Permittee shall maintain at the facility for a minimum of three years, and shall make available to representatives of the DAQ upon request, accurate records of the following:
   i. The actual amount of recycled fuel oil delivered to, and combusted at the facility on an annual basis.
   ii. Each load of recycled fuel oil received shall include the following:
      A. A delivery manifest document clearly showing the shipment content and amount, its place and date of loading, and place and date of destination;
      B. A batch specific analytical report that contains an analysis for all constituents/properties listed above. Analytical results of the samples representative of the recycled oil shipment from the vendor shall be no more than one year old when received;
      C. Batch signature information consisting of the following: a batch number, tank identification with batch volume of recycled oil, date and time the batch completed treatment, and volume(s) delivered; and
      D. A certification indicating that the recycled fuel oil does not contain detectable PCBs (< 2 ppm).

Reporting [15A NCAC 2D .0605]

c. Within 30 days after each calendar year, regardless of the amount received or combusted, the Permittee shall submit in writing to the Regional Supervisor, DAQ, the following:
   i. A summary of the results of the analytical testing for the previous 12 months; and
   ii. The total gallons of recycled fuel oil(s) from each approved vendor and combusted at the facility for the previous 12 months.

C. All emission sources associated with the production of feed ingredients

STATE ONLY REQUIREMENT:

1. 15A NCAC 2D .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 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 condensible materials. All noncondensible 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 C.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 2D .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 for at least 24 hours. 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.

e. 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.

f. 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 2D .0539(h)(1). The Division of Air Quality may request addition information at a later date upon further review of the compliance documentation.

g. To ensure compliance with 15A NCAC 2D .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.

h. 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.

i. Reporting: The Permittee shall submit quarterly reports by January 30, April 30, July 30, and October 30 of each calendar year relative to the storage of raw material. Each quarterly report shall include:
   i. Calendar dates covered in that period; and
   ii. Exceedences of the 24-hour storage time limit.

j. ODOR-SCRUBBER (TWO-STAGE) OPERATION AND MAINTENANCE REQUIREMENTS - Odorous emissions from the meat room air (ID No. ES-8), blood/grease room air (ID No. ES-5), and feather room air (ID No. ES-9f) shall be controlled by two two-stage scrubbers (ID Nos. CD-8c and CD-11a) both with a chlorine dioxide and water scrubbing medium. To 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 inspection of spray nozzles, packing material, chemical feed system, and the cleaning/calibration of all

associated instrumentation. Results of the inspections and any maintenance performed on the scrubber system shall be recorded in a logbook.

i. The Permittee shall ensure the proper performance of the scrubbers (ID Nos. CD-8c and CD-11a) by continuously monitoring and recording the oxidation reduction potential (ORP) of the recycle solution in the mix tanks of the crossflow scrubbers utilizing hourly averaging while maintaining a minimum ORP level of +100 mV. If the continuous ORP reading falls below +100 mV, then the Permittee shall record what corrective actions were taken to regain an ORP level of +100mV or higher. In addition, the Permittee shall inspect and calibrate the continuous ORP meters in accordance with the manufacturer's recommendations or as approved by DAQ to ensure proper operation.

ii. The Permittee shall ensure the proper performance of the scrubbers (ID Nos. CD-8c and CD-11a) by monitoring and recording in a logbook daily when in operation the following operational parameters:
   (a) liquid injection pressure - (range 13 to 17 psig);
   (b) chlorine dioxide input flow rate - (minimum of 0.3 gpm); and
   (c) chlorine dioxide pH at the generator - (range 2.0 to 4.0).

k. BIOFILTER OPERATION AND MAINTENANCE REQUIREMENTS - Odorous emissions from the meat material process (ES-4), press/centrifuge process (ES-6), feather drying process (ID No. ES-9) and the feather hydrolizer (ID No. ES-9a), shall be controlled by a biofilter (ID No. CD-9d). Odorous emissions from the meat room air (ID No. ES-8), blood/grease room air (ID No. ES-5), and feather room air (ID No. ES-9f) shall be controlled by biofilter (ID No. CD-9d). The biofilter shall also act as back-up control to the thermal oxidizers if required. The Permittee shall submit written operation and maintenance procedures for the biofilter, including temperature, pH, and moisture monitoring, and biofilter bed media replacement, as well as operating procedures for the feather drying process should the biofilter go off-line. To ensure that optimum control efficiency is maintained, the Permittee shall establish an inspection and maintenance schedule/checklist based on the design engineer's recommendations. The results of this inspection and any maintenance performed on the biofilter shall be recorded in a logbook.
The Permittee shall ensure the proper performance of the biofilter by monitoring and recording in a log book weekly the following operational parameters:

i. The biofilter shall be equipped with a device to continuously measure the gauge pressure directly upstream of the biofilter itself. The device 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. As a minimum, the gauge shall be monitored monthly (range = 0.3 to 10 inches w.c.),

ii. The pH of the liquid leaving the biofilter shall be monitored monthly (range = 5.0 to 9.0), and

iii. The moisture content of the biofilter shall be monitored monthly (range = 45 to 80 percent by weight).

l. ODOR-SCRUBBER (VENTURI) OPERATION AND MAINTENANCE REQUIREMENTS - Odorous emissions from the feather drying process (ID No. ES-9) and the meat material process (ID No. ES-4) shall be controlled by a venturi scrubber (ID No. CD-10b). Odorous emissions from the feather hydrolizer (ID No. ES-9a) shall be controlled by a shell and tube condenser (ID No. CD-9e) and a venturi scrubber (ID No. CD-10b). The Permittee shall follow the monitoring, recordkeeping, and reporting requirements specified in Section 2.1 C. 1.(c-j) above.

m. ODOR-SCRUBBER (VENTURI) OPERATION AND MAINTENANCE REQUIREMENTS - Odorous emissions from the press/centrifuge process (ID No. ES-6) shall be controlled by a venturi scrubber (ID No. CD-10b). The Permittee shall follow the monitoring, recordkeeping, and reporting requirements specified in Section 2.1 D. 1.(c-j) above.

n. ODOR-SCRUBBER (PACKED BED) OPERATION AND MAINTENANCE REQUIREMENTS - Odorous emissions from the meat material process (ID No. ES-4), the press/centrifuge process (ID No. ES-6), and the feather drying process (ID No. ES-9) shall be controlled by the packed bed scrubber (ID No. CD-10c). The Permittee shall utilize a chlorine dioxide and water scrubbing medium in the packed bed scrubber (ID No. CD-10c) when venting directly to the atmosphere (not to the biofilter (ID No. CD-9d)). The Permittee shall also record the method of operation (vent to atmosphere or vent to biofilter) upon change.
To 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 inspection of spray nozzles, packing material, chemical feed system, and the cleaning/calibration of all associated instrumentation. Results of the inspections and any maintenance performed on the scrubber system shall be recorded in a logbook.

i. The Permittee shall ensure the proper performance of the packed bed scrubber (ID No. CD-10c) by continuously monitoring and recording the oxidation reduction potential (ORP) of the recycle solution in the mix tank of the packed bed scrubber utilizing hourly averaging while maintaining a minimum ORP setpoint of +200 mV. If the continuous ORP reading falls below +200 mV, then the Permittee shall record what corrective actions were taken to regain an ORP level of +200mV or higher. In addition, the Permittee shall inspect and calibrate the continuous ORP meters in accordance with the manufacturer's recommendations or as approved by DAQ to ensure proper operation.

ii. The Permittee shall ensure the proper performance of the packed bed scrubber (ID No. CD-10c) by monitoring and recording in a logbook daily when in operation the following operational parameters:
   (a) liquid injection pressure - (minimum of 15 psig);
   (b) chlorine dioxide input flow rate - (minimum of 0.3 gpm); and
   (c) chlorine dioxide pH at the generator - (range 2.0 to 4.0).

o. BOILER/THERMAL OXIDIZER OPERATION AND MAINTENANCE REQUIREMENTS - Odorous emissions from the meat material process (ID No. ES-4), the press/centrifuge process (ID No. ES-6), and the feather drying process (ID No. ES-9) shall be controlled by the thermal oxidizers (ID Nos. ES-1, ES-2, ES-3 and ES-15), which will act as the primary control device for all noncondensible vapors from the above sources. The thermal oxidizers (ID Nos. ES-1, ES-2, ES-3 and ES-15) shall not be used as control devices for odorous emissions if the boilers are being operated in a low fire condition.

i. Each boiler that is to be used as a thermal oxidizer (ID Nos. ES-1, ES-2, ES-3 and ES-15) shall be equipped with a device to continuously measure and record the amount of fuel flow into the boiler. The Permittee shall record daily the date, time, fuel flow rate into each applicable boiler, while these boilers are being used as a control device.

ii. The Permittee shall monitor operation of the boilers as thermal oxidizers (ID Nos. ES-1, ES-2, ES-3 and ES-15) via an automated damper system that directs the odors to the boilers while in operation. The automated damper system shall have an indicator of baffle/damper position depending on firing rate that shall be recorded. In addition, the dampers shall be checked and logged weekly for proper operation.

2.3- Other Applicable Requirements

STATE-ONLY REQUIREMENT:

A. PERMIT REOPENING

The state-only portion of the permit shall be reopened following issuance of this permit to evaluate the effectiveness of additional controls and/or limitations that may be implemented to significantly reduce the odorous emissions.

B. The Permittee shall collect one representative sample of saleable fat oil during each calendar year that this fuel is fired in any boiler. Each representative sample shall be analyzed for density and Btu value and this analysis will be reported by January 30 annually.

SECTION 3 - GENERAL CONDITIONS

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

A. **General Provisions** [NCGS 143-215 and 15A NCAC 2Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 2D and 2Q.

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

B. **Permit Availability** [15A NCAC 2Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environment and Natural Resources upon request.

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

D. **Submissions** [15A NCAC 2Q .0507(e) and 2Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

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

E. **Duty to Comply** [15A NCAC 2Q .0508(i)(2)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

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

G. **Permit Modifications**

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

H. **Changes Not Requiring Permit Modifications**

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

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

[15A NCAC 2D .0535(f) and 2Q .0508(f)(2)]
"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 2D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 2Q .0700. *(Note: Definitions of excess emissions under 2D .1110 and 2D .1111 shall apply where defined by rule.)*
"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

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

Permit Deviations

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

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

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 2D .0535, including 15A NCAC 2D .0535(c) as follows:

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

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

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

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
   a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
   b. the permitted facility was at the time being properly operated;
   c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of

emissions that exceeded the standards or other requirements in the permit; and

d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.

4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

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

This permit is issued for a fixed term of five years for facilities subject to Title IV requirements and for a term not to exceed five years in the case of all other facilities. This permit shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 2Q .0512(b)(1), this permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of this permit shall remain in effect until the renewal permit has been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 2Q .0508(i)(4)]

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

M. **Duty to Provide Information (submittal of information)** [15A NCAC 2Q .0508(i)(9)]

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

N. **Duty to Supplement** [15A NCAC 2Q .0507(f)]

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

O. **Retention of Records** [15A NCAC 2Q .0508(i)(16) and 2Q .0517(f)]

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

P. **Compliance Certification** [15A NCAC 2Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street, Atlanta, GA 30303) postmarked on or before **March 1** a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification

shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

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

3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 2Q .0520]
A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 2Q .0512]
1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
   c. the applicable requirements under Title IV; or
   d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 2Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 2Q .0515.

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

T. **Insignificant Activities** [15A NCAC 2Q .0503]
Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 2Q .0508(i)(8)]
This permit does not convey any property rights in either real or personal property or any exclusive privileges.

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

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

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

W. **Annual Fee Payment** [15A NCAC 2Q .0508(i)(10)]

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

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

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 2Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 2Q .0107 and 2Q. 0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 2Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 2Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 2Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 2Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 2Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 2Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 2Q .0507(d)(3)]

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

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 2Q .0501(e)]

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

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 2Q .0508(h)]

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

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

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

FF. **Title IV Allowances** [15A NCAC 2Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 2D .0300]
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 2D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 2D .0200]
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 2D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 2D .0501(e)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 2D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 2Q .0508(i)(16)]
If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ in support of a permit application, the Permittee shall perform such testing in accordance with the appropriate EPA reference method(s) as approved by the DAQ and follow the procedures outlined below. The Permittee must request **in writing** and receive approval from the DAQ for an alternate test method or procedure.

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

verify maximum normal operation.

5. The testing requirement(s) shall be considered satisfied only upon written approval of the test results by the DAQ.
6. The DAQ will review emission test results with respect exclusively to the specified testing objectives as proposed by the Permittee and approved by the DAQ. The use of the test results beyond the stated objectives remains subject to the approval of the DAQ.

KK. **Reopening for Cause** [15A NCAC 2Q .0517]

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

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 2Q .0508(i)(16)]

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

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
CAA	Clean Air Act
DAQ	Division of Air Quality
DENR	Department of Environment and Natural Resources
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound