



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

August XYZ, 2008

Mr. John Hubbard
Interim Director
New Hanover County WASTEC
3002 Hwy 421 North
Wilmington, NC 28401

Dear Mr. Hubbard:

SUBJECT: Air Quality Permit No. 05151T17
Facility ID: 6500263
New Hanover County WASTEC
Wilmington
New Hanover County
Fee Class: Title V

In accordance with your completed Air Quality Permit Application for an initial Title V permit received December 1, 1998, we are forwarding herewith Air Quality Permit No. 05151T17 to New Hanover County WASTEC, Wilmington, New Hanover County, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. **The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.**

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

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

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

One
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Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

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

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of GS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

This Air Quality Permit shall be effective from MM DD, YYYY until MM DD, YYYY 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 Joseph Voelker, P.E. at (919) 715-7218.

Sincerely yours,

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

Enclosure

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

Table of Changes

Existing Condition No.	Changes
ALL	Changed Layout to current TV permit layout
ALL	Removed reference to PART I as TV permits will no longer contain a PART II. See below.
All Testing [15A NCAC 2D .0501 (c)(3), (4) and (8)] Conditions	For all Testing [15A NCAC 2D .0501 (c)(3), (4) and (8)] Conditions the regulatory citation was revised to 15A NCAC 2D .2601 to reflect recent rule changes
A.1	The 2D .0516 condition was removed. It is not applicable to sources subject to other sulfur dioxide emission standards (e.g. 2D.1205)
A.2	The 2D .0521 condition was removed. It is not applicable to sources subject to other visible emission standards (e.g. 2D.1205)
A.3	Units 1 and 2 are covered by Subpart JJJ, As such, this rule NSPS Subpart E does not apply. It will be removed from the revised air permit.
A.4	The 2D .1205 stipulation was substantially reworked. See the attached table in the permit review for the full extent of the changes.
New	Added a 40 CFR 62 Subpart JJJ condition. As it is Federal enforceable only, the typical placeholder language was included.
B.1	The 2D .0516 condition was removed. It is not applicable to sources subject to other sulfur dioxide emission standards (e.g. 2D.1205)
B.2 and B.3	Since unit 3 is subject to Subpart FFF—Federal Plan Requirements for Large Municipal Waste Combustors Constructed on or Before September 20, 1994 which implements subpart 40 CFR 60 Subpart Cb, Subpart Db does not apply. These conditions will be removed from the revised air permit.
B.4	Unit 3 is covered by Subpart FFF. As such, NSPS Subpart E does not apply. It will be removed from the revised air permit
B.5	The PSD avoidance condition for Unit 3 was substantially reworked to make it more practically enforceable. Given the current performance of the NOX CERMs, conditions requiring bias testing and data adjustment were added to the condition.
B.6	The 2D .1205 stipulation was substantially reworked. See the attached table in the permit review for the full extent of the changes.
C.1	The 2D.1205 regulation does not have an opacity standard of 5% for fugitive ash sources. Previous permits misinterpreted the rule. Method 22 determines duration of visible emissions not opacity. The rule specifies visible emissions shall not exceed 5% of observation time, NOT 5% opacity. This was corrected in the revised condition. An initial performance was done in May 23, 2001 and indicated an opacity of 3 % Reporting condition was revamped to coincide with current language and submittal dates.
D.1	The 2D .0515 condition was revised to current DAQ shell standards. No substantive changes.
D.2	The 2D .0521 condition was revised to current DAQ shell standards. No substantive changes.
A.2.A.	The compliance schedule requirements of 2D .1205 were removed as they are no longer applicable. All the compliance dates have passed and the milestones have been met.
A.2.C	The 2D .0535 condition was removed. It is contained in all current TV permits as a General Condition.
2.2.A.4 (new)	A specific condition addressing 2D .1205(c)(14) TAPs was added.
General Conditions	Updated to version v.2.22.1, which includes the new conditions: <ul style="list-style-type: none"> • MM, which is for 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources", a state enforceable only condition and • NN, which addresses application guidance for modifications made pursuant to 15A NCAC 2Q .0501(c)(2), 15A NCAC 2Q .0501(d)(2), and 502(b)(10), in accordance with 15A NCAC 2Q .0523(a)(1)(C)

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
05151T17	05151R16	XXXX	September 01, 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: **New Hanover County WASTEC**

Facility ID: **08/65/00263**

Facility Site Location: **3002 Highway 421 North**
City, County, State, Zip: **Wilmington, New Hanover County, North Carolina, 28401**

Mailing Address: **3002 Highway 421 North**
City, State, Zip: **Wilmington, North Carolina, 28401**

Application Number: **6500263.98A**
Complete Application Date: **December 1, 1998**

Primary SIC Code: **4953**
Division of Air Quality, **Wilmington Regional Office**
Regional Office Address: **127 Cardinal Drive Extension**
Wilmington, North Carolina, 28405

Permit issued this the XYZth day of MM, 2008

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

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(Including specific requirements, testing, monitoring, recordkeeping, and
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(Including specific requirements, testing, monitoring, recordkeeping, and
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ATTACHMENT

List of Acronyms

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

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

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

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

Emission Source I.D. No.	Emission Source Description	Control Device I.D. No.	Control Device Description
ES-1A	Natural gas/municipal waste massburn waterwall combustor (42 million Btu per hour heat input, 4.17 tons per hour charging capacity)	CD-1A-UI	Urea injection system (2-5 gallons per hour injection rate)
		CD-1A-CIS	Carbon injection system (2-50 pounds per hour injection rate)
		CD-1A-SD	Spray-dry scrubber (144 gallons per hour maximum liquid injection rate)
		CD-1A-FF	Fabric filter (11,445 square feet of filter area)
ES-2A	Natural gas/municipal waste massburn waterwall combustor (42 million Btu per hour heat input, 4.17 tons per hour charging capacity)	CD-2A-UI	Urea injection system (2-5 gallons per hour injection rate)
		CD-2A-CIS	Carbon injection system (2-50 pounds per hour injection rate)
		CD-2A-SD	Spray-dry scrubber (144 gallons per hour maximum liquid injection rate)
		CD-2A-FF	Fabric filter (11,445 square feet of filter area)
ES-3A	one natural gas/municipal waste massburn waterwall combustor (113.3 million Btu per hour heat input, 12.52 tons per hour charging capacity)	CD-3A-UI	Urea injection system (2-5 gallons per hour injection rate)
		CD-3A-SD	Spray-dry scrubber (432 gallons per hour maximum liquid injection rate)
		CD-3A-CIS	Carbon injection system (2-50 pounds per hour injection rate)
		CD-3A-FF	Fabric filter (29,544 square feet of filter area)
ES-3D	ash handling area	N/A	N/A
ES-3E	lime storage silo	CD-3E-BF	bagfilter (8.1 square feet of filter area)

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

A. Two municipal waste combustors as described in Table 2.1.A.

Table 2.1.A.

Emission Source I.D. No.	Emission Source Description	Control Device I.D. No.	Control Device Description
ES-1A	Natural gas/municipal waste massburn waterwall combustor (42 million Btu per hour heat input, 4.17 tons per hour charging capacity)	CD-1A-UI	Urea injection system (2-5 gallons per hour injection rate)
		CD-1A-CIS	Carbon injection system (2-50 pounds per hour injection rate)
		CD-1A-SD	spray-dry scrubber (144 gallons per hour maximum liquid injection rate)
		CD-1A-FF	fabric filter (11,445 square feet of filter area)
ES-2A	Natural gas/municipal waste massburn waterwall combustor (42 million Btu per hour heat input, 4.17 tons per hour charging capacity)	CD-2A-UI	Urea injection system (2-5 gallons per hour injection rate)
		CD-2A-CIS	Carbon injection system (2-50 pounds per hour injection rate)
		CD-2A-SD	spray-dry scrubber (144 gallons per hour maximum liquid injection rate)
		CD-2A-FF	fabric filter (11,445 square feet of filter area)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation	
Particulate matter	27 milligrams per dry standard cubic meter, corrected to 7% oxygen	15A NCAC 2D .1205 State-enforceable only	
Sulfur dioxide	75% reduction by weight or volume, OR 31 parts per million by volume corrected to 7% oxygen (dry basis), whichever is less stringent		
Visible emissions	10 percent opacity (Thirty 6-minute averages)		
Carbon monoxide	100 parts per million by volume corrected to 7% oxygen (dry basis)		
Nitrogen oxides	200 parts per million by volume corrected to 7% oxygen (dry basis)		
Lead	0.490 milligrams per dry standard cubic meter, corrected to 7% oxygen		
Hydrogen chloride	95% reduction by weight or volume, OR 31 parts per million by volume corrected to 7% oxygen (dry basis), whichever is less stringent		40 CFR 62 Subpart JJJ Federal-enforceable only
Mercury	85% reduction by weight, OR 0.08 milligrams per dry standard cubic meter corrected to 7% oxygen, whichever is less stringent		
Cadmium	0.040 milligrams per dry standard cubic meter, corrected to 7% oxygen		
Dioxins and furans	30 nanograms per dry standard cubic meter (total mass), corrected to 7% oxygen		
Arsenic and its compounds	See Section 2.2.A.4	15A NCAC 2D .1205 State-enforceable only	
Beryllium and its compounds			
Cadmium and its compounds			
Chromium (VI) and its compounds			
Toxic Air Pollutants	See Section 2.2.A.2 and 3.	15A NCAC 2D .1100 and 2Q .0705 State-enforceable only	
Odors	See Section 2.2.A.1	15A NCAC 2D .1806 State-enforceable only	

FEDERAL-ENFORCEABLE ONLY

1. 40 CFR 62 Subpart JJJ - FEDERAL PLAN REQUIREMENTS FOR SMALL MUNICIPAL WASTE COMBUSTION UNITS CONSTRUCTED ON OR BEFORE AUGUST 30, 1999

- a. The facility shall comply with all emission limits, monitoring, testing, recordkeeping, reporting, and notification requirements contained in 40 CFR 62 Subpart JJJ. [40 CFR 62.1500]

STATE-ENFORCEABLE ONLY

2. 15A NCAC 2D .1205: MUNICIPAL WASTE COMBUSTORS

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .1205 "Municipal Waste Combustors".

Emission Standards [15A NCAC 2D .1205]

- b. Particulate matter emissions from each combustor shall not exceed 27 milligrams per dry standard cubic meter (dscm) corrected to seven percent oxygen. [15A NCAC 2D .1205(c)(2)]
- c. Visible emissions (opacity) shall not exceed 10% (average of thirty six-minute averages) [15A NCAC 2D .1205(c)(3)]
- d. Sulfur dioxide emissions shall be reduced by 75% by weight or volume of potential sulfur dioxide emissions or to no more than 31 ppm_v, corrected to seven percent oxygen (dry basis), whichever is less stringent. Compliance with this limit is based on a 24-hr block daily geometric mean. [15A NCAC 2D .1205(c)(4)(A)]
- e. Nitrogen oxides shall not exceed 200 ppm_v, dry basis corrected to seven percent oxygen. Compliance with this limit is based on a 24-hr daily block arithmetic average. [15A NCAC 2D .1205(c)(5)(A), 40 CFR 60 Subpart BBBB, Table 3]
- f. Hydrogen chloride emissions shall be reduced by 95% by weight or volume of potential hydrogen chloride emissions or to no more than 31 ppm_v, corrected to seven percent oxygen (dry basis), whichever is less stringent. [15A NCAC 2D .1205(c)(7)(A)]
- g. Mercury emissions shall be reduced by at least 85% by weight of potential mercury emissions or shall not exceed 0.08 mg/dscm corrected to seven percent oxygen, whichever is less stringent. [15A NCAC 2D .1205(c)(8)]
- h. Lead emissions shall not exceed 0.49 mg/dscm corrected to seven percent oxygen. [15A NCAC 2D .1205(c)(9)]
- i. Cadmium emissions shall not exceed 0.040 mg/dscm corrected to seven percent oxygen. [15A NCAC 2D .1205(c)(10)]
- j. Dioxins and furans shall not exceed 30 ng/dscm (total mass) corrected to seven percent oxygen. [15A NCAC 2D .1205(c)(11)(B)]
- k. The permittee shall comply with the fugitive ash limitations in 15A NCAC 2D .1205(c)(12).
- l. The facility shall comply with 15A NCAC 2D .1806 for the control of odorous emissions. [15A NCAC 2D .1205(c)(6)]
- m. The permittee shall demonstrate compliance with 15A NCAC 2D .1100 (Control of Toxic Air Pollutants) according to 15A NCAC 2Q .0700. [15A NCAC 2D .1205(c)(13)]
- n. The ambient air quality standards for arsenic and its compounds, beryllium and its compounds, cadmium and its compounds, and chromium (VI) and its compounds found in 15A NCAC 2D .1205(c)(14)(A) shall apply aggregately to all incinerators at the subject facility. [15A NCAC 2D .1205(c)(14)]
- o. The emission standards in paragraphs b. through l. above shall apply at all times except during periods of municipal waste combustion unit startup, shutdown, or malfunction that last no more than three hours. [15A NCAC 2D .1205(c)(15)]

Operational Standards [15A NCAC 2D .1205]

- p. The permittee shall comply with the following operational standards: [15A NCAC 2D .1205(d)]
- i. Carbon monoxide at the combustor outlet shall not exceed 100 ppm_v (corrected to seven percent oxygen) using a 4-hour block arithmetic average. Compliance is determined by continuous emission monitoring system. [15A NCAC 2D .1205(d)(2)(A)(ii), 40 CFR 60 Subpart BBBB Table 5].
 - ii. The load level shall not exceed 110 percent of the maximum demonstrated municipal waste combustor unit load (four-hour block average). [15A NCAC 2D .1205(d)(2)(B), 40 CFR 60 .1690(a)]
 - iii. The temperature at which the combustor operates measured at the particulate matter control device inlet, shall not exceed 63 degrees F above the maximum demonstrated particulate matter control device temperature (four-hour block average) [15A NCAC 2D .1205(d)(2)(C), 40 CFR 60 .1690(b)]
 - iv. Meet the following carbon feed rate and other requirements: [15A NCAC 2D .1205(d)(2)(D), 40 CFR 60 .1690(c) and (d)]
 - (A) maintain an eight hour block average carbon feed rate at or above the highest average level established during the most recent dioxins and furans or mercury test,
 - (B) Evaluate the total carbon usage for each quarter using the following equation from 40 CFR 60.1935(f):

$$C = f_i * h_i \quad \text{Equation p.iv.(B)}$$

Where:

C = required quarterly carbon usage for the unit, i, in kilograms (or pounds).

f_i = required carbon feed rate for the municipal waste combustion unit, i, in kilograms (or pounds) per hour. That is the average carbon feed rate during the most recent mercury or dioxins/furans stack tests (whichever has a higher feed rate).

h_i = number of hours the municipal waste combustion unit, i, was in operation during the calendar quarter (hours).

- (C) The total amount of carbon purchased and delivered to the municipal waste combustors shall be at or above the required quarterly usage of carbon as calculated as specified in equation p.iv.(B).
- v. The permittee shall, under certain situations, be exempted from limits on load level, temperature at the inlet of the particulate matter control device, and carbon feed rate in accordance with 15A NCAC 2D .1205(d)(2)(E).
- vi. The permittee shall comply with the incinerator loading requirements in accordance with the requirements contained in 15A NCAC 2D .1205(d)(3).
- vii. The operational standards in 2.1A.1.(p)(i.-vi.) apply at all times except during periods of municipal waste combustor startup, shutdown, or malfunction that last no more that three hours. [15A NCAC 2D .1205(d)(4)]
- q. The municipal waste combustors shall comply with 15A NCAC 2D .0535, Excess Emissions Reporting and Malfunctions. [15A NCAC 2D .1205(g)]
- r. The permittee shall comply with the Operator Training and Certification requirements in 15A NCAC 2D .1205(h) and 40 CFR 60.1645 through 60.1685.

Testing [15A NCAC 2D .1205(e)]

- s. The test methods and procedures described in 15A NCAC 2D .2601, 40 CFR Part 60, Appendix A, 40 CFR Part 61, Appendix B and 40 CFR 60.1790 shall be used to determine compliance with the emission standards in Paragraphs b. through k. [15A NCAC 2D .1205(e)(1)]
- t. Method 29 of 40 CFR Part 60, Appendix A-8 shall be used to determine emission rates for metals for toxic evaluations except for chromium (VI). Method 29 shall be used only to collect samples and SW 846 Method 0060 shall be used to analyze the samples of chromium (VI).[15A NCAC 2D .1205(e)(1)]

- u. Conduct annual stack tests for the following pollutants: [40 CFR 60.1775]

Dioxins/Furans	Lead	Mercury	Opacity
Cadmium	Particulate matter	Hydrogen chloride	Fugitive ash

- i. Conduct each annual stack test no later than 13 months after the previous test. [40 CFR 60.1785(b)]
- ii. Compliance with the carbon monoxide, nitrogen oxides, and sulfur dioxide emission limits shall be determined with the data obtained by the continuous emission monitoring systems required per paragraph v. ii. [40 CFR 60.1725]

Monitoring Requirements [15A NCAC 2D .1205(f), 15A NCAC 2D .0600]

- v. The permittee shall comply with the monitoring requirements in 15A NCAC 2D .0600. [15A NCAC 2D .1205(f)(1)]
- w. The owner or operator of an incinerator that has installed air pollution abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous monitoring equipment to measure the rate of alkaline injection for dry scrubber systems [15A NCAC 2D .1205(f)(2)]. To assure compliance, the Permittee shall perform inspections and maintenance recommended by the manufacturer. In addition to the manufacturer’s inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following: [15A NCAC 2D .0605]
 - i. a monthly external visual inspection of the alkaline injection system, and
 - ii. the performance of any maintenance and repair when necessary to assure proper operation of the alkaline injection system.

In addition, the Permittee shall:

- iii. during each stack test for hydrogen chloride emissions, determine the average alkaline injection rate in kilograms (or pounds) per hour;
- iv. maintain an eight-hour block average alkaline injection rate at or above the highest average level established during the most recent hydrogen chloride emissions test;
- v. continuously monitor the alkaline injection rate during all periods when the municipal waste combustion unit is operating and combusting waste and calculate the 8-hour block average alkaline injection rate in kilograms (or pounds) per hour. When calculating the 8-hour block average, do two things:
 - (A) Exclude hours when the municipal waste combustion unit is not operating.
 - (B) Include hours when the municipal waste combustion unit is operating but the lime slurry injection system is not working correctly.

The Permittee shall maintain records of the 8- hour block average amounts of the alkaline usage for a period of five years

- x. The owner or operator shall install, calibrate, operate and maintain, for each municipal waste combustor, continuous emission monitors to determine the following:
 - i. opacity, according to 40 CFR 60.1760 through 60.1770 [15A NCAC 2D .1205(f) (3) (A)(i), 15A NCAC 2D .0600];
 - ii. sulfur dioxide, nitrogen oxides, and oxygen (or carbon dioxide); according to 40 CFR 60.1720 through 60.1770 [15A NCAC 2D .1205(f) (3) (A)(ii, iii, iv), 15A NCAC 2D .0600];
 - iii. carbon monoxide, according to 40 CFR 60.1720 through 60.1770 [15A NCAC 2D .1205(f)(1), 15A NCAC 2D .0611], 40 CFR 60 Subpart BBBB, Table 5]; and
 - iv. temperature level in the primary chamber, and , where there is a secondary chamber, in the secondary chamber according to the manufacturer’s recommendations. [15A NCAC 2D .1205(f) (3) (A)(v), 15A NCAC 2D .0600].
- y. The owner or operator shall monitor the load level with a steam flowmeter according to 40 CFR 60.1810. [15A NCAC 2D .1205(f)(3)(B)]
- z. The owner or operator shall monitor the temperature of the flue gas at the inlet of the particulate control device according 40 CFR 60.1815. [15A NCAC 2D .1205(f)(3)(C)]
- aa. The owner or operator shall monitor the carbon feed rate as follows:
 - [15A NCAC 2D .1205(f)(3)(D), 15A NCAC 2D .0600, 40 CFR 60.1820]

- i. Select a carbon injection system operating parameter that can be used to calculate carbon feed rate (for example, screw feeder speed),
 - ii. During each dioxins/furans and mercury stack test, determine the average carbon feed rate in kilograms (or pounds) per hour. Also, determine the average operating parameter level that correlates to the carbon feed rate. Establish a relationship between the operating parameter and the carbon feed rate in order to calculate the carbon feed rate based on the operating parameter level,
 - iii. Continuously monitor the selected operating parameter during all periods when the municipal waste combustion unit is operating and combusting waste and calculate the 8-hour block average carbon feed rate in kilograms (or pounds) per hour, based on the selected operating parameter. When calculating the 8-hour block average, do two things:
 - (A) Exclude hours when the municipal waste combustion unit is not operating.
 - (B) Include hours when the municipal waste combustion unit is operating but the carbon feed system is not working correctly.
- bb. Particulate emissions shall be controlled by a bagfilter. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
 - ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.
- cc. The Permittee shall install, operate, and maintain a pressure drop indicator on each bagfilter. The pressure drop across each bagfilter shall be maintained between 3 and 6 inches of water.
- dd. As an indicator of good operation and maintenance (O&M), the Permittee shall calculate, on a quarterly basis, percent excess emissions (%EE) and percent monitor downtime (%MD) summaries for each COMS and CEMS operating at the facility using the following equations:

$$\%EE = \frac{\text{Total Excess Emission Time}}{(\text{Total Source Operating Time} - \text{Total Monitor Downtime})} \times 100$$

$$\%MD = \frac{\text{Total Monitor Downtime}}{(\text{Total Source Operating Time})} \times 100$$

Where:

Total Excess Emission Time is the duration of actual excess emissions that occurred during a calendar quarter and includes emissions from startup/shutdown, control equipment problems, process problems, other known causes, and unknown causes; for opacity, use 6-minute averages; for gases, use hourly averaging times as defined.

Total Source Operating Time is the duration of the actual process operating time during a calendar quarter; if a source operates less than 2200 hours during any quarter, the source may calculate the %EE and/or %MD using all operating data for the current quarter and the preceding quarters until 2200 hours of data are obtained.

Total Monitor Downtime is the duration of monitor downtime that occurred during a calendar quarter and includes periods due to monitor equipment malfunctions, non-monitor equipment malfunctions, quality assurance procedures, other known causes, and unknown causes. Downtime occurs only when source is actually operating and the monitoring system is not; periods that occur when the source is shut down (off-line) are not included in the calculation.

These sources shall be deemed to be properly operated and maintained if the percent excess emissions and/or percent monitor downtime does not exceed 6% for any single quarter or 3% for two consecutive quarters.

[15A NCAC 2D .0611(d)]

- ee. The Permittee shall develop and implement quality assurance procedures pursuant to 15A NCAC 2D .0613.

Recordkeeping Requirements [15A NCAC 2D .1205(f), 15A NCAC 2D .0600]

- ff. The permittee shall comply with the recordkeeping requirements in 15A NCAC 2D .0600. [15A NCAC 2D .1205(f)(1)]
- gg. The owner or operator shall maintain records of the information listed in 40 CFR 60.1840 through 1855 for class I municipal waste combustors for a period of at least five years. [15A NCAC 2D .1205(f)(3)(E)]
- hh. The results of the inspection and maintenance of the bagfilter shall be maintained in a logbook (written or electronic format) on-site and made available to a DAQ representative upon request. The logbook shall record the following:
 - i. The date and time of each recorded action;
 - ii. The pressure drop once weekly at a minimum;
 - iii. The results of each inspection;
 - iv. a report of any maintenance performed on the bagfilter, and
 - v. any variance from the manufacturer's recommendation, if any, and corrections made.

Reporting Requirements [15A NCAC 2D .1205(f), 15A NCAC 2D .0600]

- ii. The permittee shall comply with the reporting requirements in 15A NCAC 2D .0600 [15A NCAC 2D .1205(f)(1).
- jj. The owner or operator shall, following the first year of municipal combustor operation, submit an annual report specified in 40 CFR 60.1885, no later than February 1 of each year following the calendar year in which the data were collected. Once the unit is subject to permitting requirements under 15A NCAC 02Q .0500, Title V Procedures, the owner or operator of an affected facility shall submit these reports semiannually. [15A NCAC 2D .1205(f)(3)(G)]
- kk. The owner or operator shall submit a semiannual report specified in 40 CFR 60.1900 for any recorded pollutant or parameter that does not comply with the pollutant or parameter limit specified in this Section, according to the schedule specified in 40 CFR 60.1895 [15A NCAC 2D .1205(f)(3)(H)].
- ll. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- mm. The Permittee shall submit the results of any maintenance performed on the alkaline injection system within 30 days of a written request by the DAQ
- nn. The Permittee shall submit a report summarizing the quarterly percent excess emissions (%EE) and percent monitor downtime (%MD) as calculated in condition dd. The report shall clearly identify all instances of EE and MD. The reports shall be used as an indicator of good operation and maintenance (O&M) for all COMS and CEMS operating at the facility.
 - i. If the percent excess emissions and/or percent monitor downtime does not exceed 6% for any single quarter or 3% for two consecutive quarters, the report shall be submitted as required in General Condition D, 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.
 - ii. If the percent excess emissions and/or percent monitor downtime exceeds 6% for any single quarter or 3% for two consecutive quarters, the report shall be submitted as required in General Condition D, postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September.

B. One Municipal waste combustor as described in Table 2.1.B.

Table 2.1.B.

Emission Source I.D. No.	Emission Source Description	Control Device I.D. No.	Control Device Description
ES-3A	one natural gas/municipal waste massburn waterwall combustor (113.3 million Btu per hour heat input, 12.52 tons per hour charging capacity)	CD-3A-UI	Urea injection system (2-5 gallons per hour injection rate)
		CD-3A-SD	Spray-dry scrubber (432 gallons per hour maximum liquid injection rate)
		CD-3A-CIS	Carbon injection system (2-50 pounds per hour injection rate)
		CD-3A-FF	Fabric filter (29,544 square feet of filter area)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation	
Particulate matter	27 milligrams per dry standard cubic meter, corrected to 7% oxygen	15A NCAC 2D .1205 State-enforceable only 40 CFR 62 Subpart FFF Federal-enforceable only	
Sulfur dioxide	75% reduction by weight or volume, OR 31 parts per million by volume corrected to 7% oxygen (dry basis), whichever is less stringent		
Visible emissions	10 percent opacity (Thirty 6-minute averages)		
Carbon monoxide	100 parts per million by volume corrected to 7% oxygen (dry basis)		
Nitrogen oxides	200 parts per million by volume corrected to 7% oxygen (dry basis)		
Lead	0.490 milligrams per dry standard cubic meter, corrected to 7% oxygen		
Hydrogen chloride	95% reduction by weight or volume, OR 31 parts per million by volume corrected to 7% oxygen (dry basis), whichever is less stringent		
Mercury	85% reduction by weight, OR 0.08 milligrams per dry standard cubic meter corrected to 7% oxygen, whichever is less stringent		
Cadmium	0.040 milligrams per dry standard cubic meter, corrected to 7% oxygen		
Dioxins and furans	30 nanograms per dry standard cubic meter (total mass), corrected to 7% oxygen		
Arsenic and its compounds	See Section 2.2.A.4		15A NCAC 2D .1205 State-enforceable only
Beryllium and its compounds			

Regulated Pollutant	Limits/Standards	Applicable Regulation
Cadmium and its compounds		
Chromium (VI) and its compounds		
Toxic Air Pollutants	See Section 2.2.A.2. and 3.	15A NCAC 2D .1100 and 2Q .0705 State-enforceable only
Odors	See Subsection 2.2.A.1.	15A NCAC 2D .1806 State-enforceable only
Sulfur dioxide	< 100 tons per year (consecutive 12-month period)	15A NCAC 2D .0530
Carbon monoxide	< 100 tons per year (consecutive 12-month period)	
Nitrogen oxides	< 100 tons per year (consecutive 12-month period)	

FEDERAL-ENFORCEABLE ONLY

1. 40 CFR 62 Subpart FFF - FEDERAL PLAN REQUIREMENTS FOR LARGE MUNICIPAL WASTE COMBUSTION UNITS CONSTRUCTED ON OR BEFORE SEPTEMBER 20, 1994

- a. The facility shall comply with all emission limits, monitoring, testing, recordkeeping, reporting, and notification requirements contained in 40 CFR 62 Subpart FFF. [40 CFR 62.14102]

STATE-ENFORCEABLE ONLY

2. 15A NCAC 2D .1205: MUNICIPAL WASTE COMBUSTORS

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, record keeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .1205 "Municipal Waste Combustors".

Emission Standards [15A NCAC 2D .1205(c)]

- b. Emissions of particulate matter from the large municipal waste combustor shall not exceed 27 milligrams per dry standard cubic meter (dscm) corrected to seven percent oxygen. [15A NCAC 2D .1205(c)(2)]
- c. Visible emissions from the large municipal waste combustor shall not exceed 10% (average of thirty six-minute averages) [15A NCAC 2D .1205(c)(3)]
- d. Sulfur dioxide emissions shall be reduced by 75% by weight or volume of potential sulfur dioxide emissions or to no more than 29 ppm_v corrected to seven percent oxygen (dry basis), whichever is less stringent. Compliance with this limit is based on a 24-hr block daily geometric mean. [15A NCAC 2D .1205(c)(4)(B)(ii)]
- e. Nitrogen oxides shall not exceed 205 ppm_v, dry basis corrected to seven percent oxygen. Compliance with this limit is based on a 24-hr daily block arithmetic average. [15A NCAC 2D .1205(c)(5)(B), 40 CFR 60.33b(d), Table 1]

- f. The facility shall comply with 15A NCAC 2D .1806 for the control of odorous emissions. [15A NCAC 2D .1205(c)(6)]
- g. Hydrogen chloride emissions shall be reduced by 95% by weight or volume of potential hydrogen chloride emissions or to no more than 29 ppm_v corrected to seven percent oxygen (dry basis), whichever is less stringent. [15A NCAC 2D .1205(c)(7)(B)(ii)]
- h. Mercury emissions shall be reduced by at least 85% by weight of potential mercury emissions or shall not exceed 0.08 mg/dscm corrected to seven percent oxygen, whichever is less stringent. [15A NCAC 2D .1205(c)(8)]
- i. Lead emissions shall not exceed 0.44 mg/dscm corrected to seven percent oxygen.[15A NCAC 2D .1205(c)(9)(B)]
- j. Cadmium emissions shall not exceed 0.040 mg/dscm corrected to seven percent oxygen.[15A NCAC 2D .1205(c)(10)]
- k. Dioxins and furans shall not exceed 30 ng/dscm (total mass) corrected to seven percent oxygen.[15A NCAC 2D .1205(c)(11)(B)]
- l. The permittee shall comply with the fugitive ash limitations in 15A NCAC 2D .1205(c)(12).
- m. The permittee shall demonstrate compliance with 15A NCAC 2D .1100 (Control of Toxic Air Pollutants) according to 15A NCAC 2Q .0700 [15A NCAC 2D .1205(c)(13)]
- n. The ambient air quality standards for arsenic and its compounds, beryllium and its compounds, cadmium and its compounds, and chromium (VI) and its compounds found in 15A NCAC 2D .1205(c)(14)(A) shall apply aggregately to all incinerators at the subject facility. [15A NCAC 2D .1205(c)(14)]
- o. The emission standards in paragraphs b. through l. above shall apply at all times except during periods of municipal waste combustion unit startup, shutdown, or malfunction that last no more than three hours. [15A NCAC 2D .1205(c)(15)]

Operational Standards [15A NCAC 2D .1205(d)]

- p. The permittee shall comply with the following operational standards: [15A NCAC 2D .1205(d)]
 - i. Carbon monoxide at the combustor outlet shall not exceed 100 ppm_v (dry basis, corrected to seven percent oxygen) using a 4-hour block arithmetic average. Compliance is determined by continuous emission monitoring system. [15A NCAC 2D .1205(d)(2)(A)(i), 40 CFR 60.34b(a) Table 3].
 - ii. The load level shall not exceed 110 percent of the maximum demonstrated municipal waste combustor unit load (four-hour block average). [15A NCAC 2D .1205(d)(2)(B), 40 CFR 60.34b(b), 40 CFR 60.53b(b)]
 - iii. The temperature at which the combustor operates measured at the particulate matter control device inlet, shall not exceed 63 degrees F above the maximum demonstrated particulate matter control device temperature (four-hour block average) [15A NCAC 2D .1205(d)(2)(C), 40 CFR 60.53b(c)]
 - iv. Meet the following carbon feed rate and other requirements: [15A NCAC 2D .1205(d)(2)(D)]
 - (A) maintain an eight hour block average carbon feed rate at or above the highest average level established during the most recent dioxins and furans or mercury test,
 - (B) Evaluate the total carbon usage for each quarter using the following equation from 40 CFR 60.1935(f):

$$C = f_i * h_i \quad \text{Equation p.iv.(B)}$$

Where:

C = required quarterly carbon usage for the unit, i, in kilograms (or pounds).

f_i = required carbon feed rate for the municipal waste combustion unit, i, in kilograms (or pounds) per hour. That is the average carbon feed rate during the most recent mercury or dioxins/furans stack tests (whichever has a higher feed rate).

h_i = number of hours the municipal waste combustion unit, i, was in operation during the calendar quarter (hours).

- (C) The total amount of carbon purchased and delivered to the municipal waste combustors shall be at

or above the required quarterly usage of carbon as calculated as specified in equation 2.p.iv.B.

- v. The permittee shall, under certain situations, be exempted from limits on load level, temperature at the inlet of the particulate matter control device, and carbon feed rate in accordance with 15A NCAC 2D .1205(d)(2)(E).
- vi. The permittee shall comply with the incinerator loading requirements in accordance with the requirements contained in 15A NCAC 2D .1205(d)(3).
- vii. The operational standards in 2.1 B 2(p)(i.-vi.) apply at all times except during periods of municipal waste combustor startup, shutdown, or malfunction that last no more than three hours except as specified in 40 CFR 60.58b(a)(1)(iii). [15A NCAC 2D .1205(d)(4)(B)]
- q. The municipal waste combustors shall comply with 15A NCAC 2D .0535, Excess Emissions Reporting and Malfunctions. [15A NCAC 2D .1205(g)]
- r. The permittee shall comply with the Operator Training and Certification requirements in 15A NCAC 2D .1205(h) and 40 CFR 60.54b.

Testing [15A NCAC 2D .1205(e)]

- s. The test methods and procedures described in 15A NCAC 02D .2601, 40 CFR Part 60, Appendix A, 40 CFR Part 61, Appendix B and 40 CFR 60.58b shall be used to determine compliance with the emission standards in Paragraphs b. through k. [15A NCAC 2D .1205(e)(1) and (2)]
- t. Method 29 of 40 CFR Part 60, Appendix A-8 shall be used to determine emission rates for metals for toxic evaluations except for chromium (VI). Method 29 shall be used only to collect samples and SW 846 Method 0060 shall be used to analyze the samples of chromium (VI). [15A NCAC 2D .1205(e)(1)]
- u. Conduct annual stack tests for the following pollutants: [40 CFR 60.58(b)]

Dioxins/Furans	Lead	Mercury	Opacity
Cadmium	Particulate matter	Hydrogen chloride	Fugitive ash

- i. Conduct each annual stack test no later than 13 months after the previous test. [40 CFR 60.58(b)]
- ii. Compliance with the carbon monoxide, nitrogen oxides, and sulfur dioxide emission limits shall be determined with the data obtained by the continuous emission monitoring systems required per paragraph x. [40 CFR 60.58(b) and 60.34(b)]

Monitoring Requirements [15A NCAC 2D .1205(f), 15A NCAC 2D .0600]

- v. The permittee shall comply with the monitoring requirements in 15A NCAC 2D .0600. [15A NCAC 2D .1205(f)(1)].
- w. The owner or operator of an incinerator that has installed air pollution abatement equipment to reduce emissions of hydrogen chloride shall install, operate, and maintain continuous monitoring equipment to measure the rate of alkaline injection for dry scrubber systems [15A NCAC 2D .1205(f)(2)]. To assure compliance, the Permittee shall perform inspections and maintenance recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following: [15A NCAC 2D .0605]
 - i. a monthly external visual inspection of the alkaline injection system, and
 - ii. the performance of any maintenance and repair when necessary to assure proper operation of the alkaline injection system.

In addition, the Permittee shall:

 - iii. during each stack test for hydrogen chloride emissions, determine the average alkaline injection rate in kilograms (or pounds) per hour;
 - iv. maintain an eight-hour block average alkaline injection rate at or above the highest average level established during the most recent hydrogen chloride emissions test;
 - v. continuously monitor the alkaline injection rate during all periods when the municipal waste combustion unit is operating and combusting waste and calculate the 8-hour block average alkaline injection rate in kilograms (or pounds) per hour. When calculating the 8-hour block average, do two things:
 - (A) Exclude hours when the municipal waste combustion unit is not operating.
 - (B) Include hours when the municipal waste combustion unit is operating but the lime slurry injection system is not working correctly.

The Permittee shall maintain records of the 8- hour block average amounts of the alkaline usage for a period of five years.
- x. The owner or operator shall install, calibrate, operate, and maintain continuous emission monitors to determine the following:
 - i. opacity according to 40 CFR 60.58b(c) [15A NCAC 2D .1205(f)(3)(A)(i)],
 - ii. sulfur dioxide according to 40 CFR 60.58b(e) [15A NCAC 2D .1205(f)(3)(A)(ii)],
 - iii. nitrogen oxides according to 40 CFR 60.58b(h) [15A NCAC 2D .1205(f)(3)(A)(iii)],
 - iv. oxygen (or carbon dioxide) according to 40 CFR 60.58b(b) [15A NCAC 2D .1205(f)(3)(A)(iv)],
 - v. carbon monoxide according to 40 CFR 60.58b(i)(1 through 5 and 10 through 12) {15A NCAC 2D .1205(f)(1), 15A NCAC 2D .0611}, and
 - vi. temperature level in the primary chamber, and , where there is a secondary chamber, in the secondary chamber according to the manufacturer's recommendations. [15A NCAC 2D .1205(f)(3)(A)(v), 15A NCAC 2D .0600].
- y. The owner or operator shall monitor the load level with a steam flowmeter according to 40 CFR 60.51b(i)(6).[15A NCAC 2D .1205(f)(3)(B)]
- z. The owner or operator shall monitor the temperature of the flue gas at the inlet of the particulate control device according 40 CFR 60 1815. [15A NCAC 2D .1205(f)(3)(C)]
- aa. The owner or operator shall monitor the carbon feed rate as follows:

[15A NCAC 2D .1205(f)(3)(D), 15A NCAC 2D .0600, 40 CFR 60.1820]

 - i. Select a carbon injection system operating parameter that can be used to calculate carbon feed rate (for example, screw feeder speed),
 - ii. During each dioxins/furans and mercury stack test, determine the average carbon feed rate in kilograms (or pounds) per hour. Also, determine the average operating parameter level that correlates to the carbon feed rate. Establish a relationship between the operating parameter and the carbon feed rate in order to calculate the carbon feed rate based on the operating parameter level,
 - iii. Continuously monitor the selected operating parameter during all periods when the municipal waste

combustion unit is operating and combusting waste and calculate the 8-hour block average carbon feed rate in kilograms (or pounds) per hour, based on the selected operating parameter. When calculating the 8-hour block average, do two things:

- (A) Exclude hours when the municipal waste combustion unit is not operating.
- (B) Include hours when the municipal waste combustion unit is operating but the carbon feed system is not working correctly.

The Permittee shall maintain records of the quarterly amounts of the carbon usage for a period of five years.

- bb. Compliance with the operating requirements shall be demonstrated in accordance with the procedures in 40 CFR 60.58b(i):
 - i. carbon monoxide in accordance with 60.58b(i)(1 through 5 and 10 through 12),
 - ii. load level in accordance with 60.58b(i)(6),
 - iii. particulate matter control device inlet temperature in accordance with 60.58b(i)(7) and 60.58b(i)(9), and
 - iv. maximum demonstrated municipal waste combustor unit load during dioxin and furan testing in accordance with 60.58b(i)(8).
- cc. Particulate emissions shall be controlled by a bagfilter. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
 - ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.
- dd. The Permittee shall install, operate, and maintain a pressure drop indicator on each bagfilter. The pressure drop across each bagfilter shall be maintained between 3 and 6 inches of water.
- ee. As an indicator of good operation and maintenance (O&M), the Permittee shall calculate, on a quarterly basis, percent excess emissions (%EE) and percent monitor downtime (%MD) summaries for each COMS and CEMS operating at the facility using the following equations:

$$\%EE = \frac{\text{Total Excess Emission Time}}{(\text{Total Source Operating Time} - \text{Total Monitor Downtime})} \times 100$$

$$\%MD = \frac{\text{Total Monitor Downtime}}{(\text{Total Source Operating Time})} \times 100$$

Where:

Total Excess Emission Time is the duration of actual excess emissions that occurred during a calendar quarter and includes emissions from startup/shutdown, control equipment problems, process problems, other known causes, and unknown causes; for opacity, use 6-minute averages; for gases, use hourly averaging times as defined.

Total Source Operating Time is the duration of the actual process operating time during a calendar quarter; if a source operates less than 2200 hours during any quarter, the source may calculate the %EE and/or %MD using all operating data for the current quarter and the preceding quarters until 2200 hours of data are obtained.

Total Monitor Downtime is the duration of monitor downtime that occurred during a calendar quarter and includes periods due to monitor equipment malfunctions, non-monitor equipment malfunctions, quality assurance procedures, other known causes, and unknown causes. Downtime occurs only when source is actually operating and the monitoring system is not; periods that occur when the source is shut down (off-line) are not included in the calculation.

These sources shall be deemed to be properly operated and maintained if the percent excess emissions and/or

percent monitor downtime does not exceed 6% for any single quarter or 3% for two consecutive quarters. [15A NCAC 2D .0611(d)]

- ff. The Permittee shall develop and implement quality assurance procedures pursuant to 15A NCAC 2D .0613.

Recordkeeping Requirements [15A NCAC 2D .1205(f), 15A NCAC 2D .0600]

- gg. The results of the inspection and maintenance of the bagfilter shall be maintained in a logbook (written or electronic format) on-site and made available to a DAQ representative upon request. The logbook shall record the following:
- i. The date and time of each recorded action;
 - ii. The pressure drop once weekly at a minimum;
 - iii. The results of each inspection;
 - iv. a report of any maintenance performed on the bagfilter, and
 - v. any variance from the manufacturer's recommendation, if any, and corrections made.
- hh. The permittee shall comply with the recordkeeping requirements in 15A NCAC 2D .0600. [15A NCAC 2D .1205(f)(1)]
- ii. The Permittee shall maintain records of the information listed in 40 CFR 60.59b(d)(1) through (d)(15) for a period of at least five years. [15A NCAC 2D .1205(f)(3)(E)].

Reporting Requirements [15A NCAC 2D .1205(f), 15A NCAC 2D .0600]

- jj. The permittee shall comply with the reporting requirements in 15A NCAC 2D .0600 [15A NCAC 2D .1205(f)(1)].
- kk. The owner or operator shall, following the first year of municipal combustor operation, submit an annual report specified in 40 CFR 60.59b(g), no later than February 1 of each year following the calendar year in which the data were collected. Once the unit is subject to permitting requirements under 15A NCAC 02Q .0500, Title V Procedures, the owner or operator of an affected facility shall submit these reports semiannually. [15A NCAC 2D .1205(f)(3)(G)]
- ll. The owner or operator shall submit a semiannual report specified in 40 CFR 60.59b(h) for any recorded pollutant or parameter that does not comply with the pollutant or parameter limit specified in this Section, according to the schedule specified in 40 CFR 60.59b(h)(6) [15A NCAC 2D .1205(f)(3)(H)].
- mm. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- nn. The Permittee shall submit the results of any maintenance performed on the alkaline injection system within 30 days of a written request by the DAQ.
- oo. The Permittee shall submit a report summarizing the quarterly percent excess emissions (%EE) and percent monitor downtime (%MD) as calculated in condition ee. The report shall clearly identify all instances of EE and MD. The reports shall be used as an indicator of good operation and maintenance (O&M) for all COMS and CEMS operating at the facility.
- i. If the percent excess emissions and/or percent monitor downtime does not exceed 6% for any single quarter or 3% for two consecutive quarters, the report shall be submitted as required in General Condition D, 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.
 - ii. If the percent excess emissions and/or percent monitor downtime exceeds 6% for any single quarter or 3% for two consecutive quarters, the report shall be submitted as required in General Condition D, postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 for the calendar year for the preceding three-month period between July and September.

**3. 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), emission source ES-3A shall discharge in the atmosphere:
 - i. less than 100 tons of sulfur dioxide per consecutive 12-month period;
 - ii. less than 100 tons of carbon monoxide per consecutive 12-month period; and
 - iii. less than 100 tons of nitrogen oxide per consecutive 12-month period. [15A NCAC 2D .0530]

Testing [15A NCAC 02D .2601]

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

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

- c. The Permittee shall install, calibrate, operate, and maintain continuous emission rate monitoring systems (CERMS) for carbon monoxide, sulfur dioxide and nitrogen oxides.
- d. The CERMS shall be installed, tested, and certified in accordance with 40 CFR Part 60, Appendix B, Performance Specifications (PS) 2, 4A and 6 (PS 2 for NO_x and SO₂ Analyzers, PS 4A for CO Analyzer and PS6 for CERMS).
- e. The CERMS relative accuracy test audit (RATA) for the NO_x, SO₂, CO, and flow monitors shall be conducted for the individual components, with results expressed in dry parts per million volume (ppmv; uncorrected for O₂) and dry standard cubic feet per minute (DSCFM) respectively, and for the CERMS with results expressed in units of the standard (lb/hr).
- f. The Permittee may use the annual emission limit of 100 tons per year (or 22.83 lb/hr) for the purposes of calculating relative accuracy only.
- g. The Permittee shall compute an hourly average from four or more data points equally spaced over each 1-hour period as required in 40 CFR 60.13 except that:
 - i. a valid hour of data for a full source operating hour shall be comprised of at least one data point in each of the four 15-minute quadrants (used to calculate the hourly average) and;
 - ii. a valid hour of data for a partial operating hour shall be comprised of at least one valid data point in each 15-minute quadrant of the hour in which the source operates.
- h. For any operating hour in which required maintenance or quality-assurance activities are performed, a minimum of two data points separated by at least 15 minutes is required to calculate the hourly average. Continuous flow meters shall meet the requirements of 40 CFR 60.13(d) and (e) except that adjustment for zero and span drift may be made in accordance with the manufacturers recommendation and/or written procedure.
- i. The Permittee shall test the NO_x CERMS for bias during RATA testing using the following procedure:
 - i. Calculate, the following parameters per Performance Specification (PS) 2:
 - 1. \bar{d} , the arithmetic mean of the difference between a reference method value and the corresponding CERMS value per equation 2-3 in PS2.
 - 2. $|cc|$, the absolute value of the confidence coefficient per equation 2-5 in PS2.
 - ii. Compare \bar{d} and $|cc|$. If $\bar{d} \leq |cc|$, the CERMS has passed the bias test. If $\bar{d} > |cc|$, the CERMS has failed to meet the bias test requirement and the Permittee shall do the following:

1. adjust the NOx or flow monitor to eliminate the cause of bias such that it passes the bias test; or
2. use the following procedure to adjust monthly NOx emissions (tons per month) until the NOx CERMS successfully passes the bias test.
 - A. Calculate the bias adjustment factor (*BAF*) according to the following equation:

$$BAF = 1 + \frac{|\bar{d}|}{CERMS_{avg}}$$

Where:

BAF = Bias adjustment factor, calculated to the nearest thousandth.

$|\bar{d}|$ = Absolute value of \bar{d} , calculated per equation 2-3 in PS2.

$CERMS_{avg}$ = Mean of the data values provided by the CERMS during the failed bias test.

- B. Adjust the data provided by the monitor at time *i*, by the following equation:

$$CERMS_i^{Adjusted} = CERMS_i^{Monitor} \times BAF$$

Where:

$CERMS_i^{Monitor}$ = Data (measurement) provided by the CERMS at time *i*.

$CERMS_i^{Adjusted}$ = Data value, adjusted for bias, at time *i*.

- C. The Permittee shall continue to use the *BAF* to adjust monthly NOx emissions (tons per month) until the NOx CERMS successfully passes the low bias test.
 - j. The Permittee shall develop and implement a Quality Assurance/Quality Control (QA/QC) measure for all the CERMS (NOx, SO₂, CO and flow monitors). The QA/QC shall at the minimum include a provision for Calibration Drift (CD) determination and adjustments, data accuracy assessment, preventive maintenance, and program for corrective action for malfunctioning CERMS.
 - k. The CERMS shall be maintained to ensure data availability in accordance with the EPA Region 4 CEM Enforcement Plan (CEP) or any guidelines succeeding the Region 4 CEP. During periods when the certified monitor is down or "out-of-control," as defined in 40 CFR Part 60, Appendix F, the owner or operator shall substitute emission data using the preceding monthly average emission rate for the period in which the monitor is not collecting quality assured data. During periods when monitor downtime coincides with any control device downtime, the maximum potential emissions shall be substituted.

The Permittee shall be deemed in non-compliance with 15A NCAC 2D .0530 if the sulfur dioxide, carbon monoxide, and nitrogen oxides CERMS are not installed, calibrated, operated, and maintained as provided in conditions c. through k.

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

- l. The Permittee must keep each monthly record of sulfur dioxide, carbon monoxide, and nitrogen oxides emissions in a logbook (written or electronic format) for a minimum of three (3) years.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not kept or if the sulfur dioxide, carbon monoxide, or nitrogen oxides emissions exceed the limits in condition a.

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

- m. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the

preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:

- i. the monthly sulfur dioxide, carbon monoxide, and nitrogen oxides emissions (in units of tons) calculated over the previous seventeen months;
- ii. the total sulfur dioxide, carbon monoxide, and nitrogen oxides emissions (in units of tons) calculated for each of the 12-month periods over the previous 17 months; and
- iii. the emissions of nitrogen oxides will be calculated with and without the bias adjustment factor (as necessary).

C. One ash handling area (ID No. ES-3D)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Fugitive ash	Visible emissions shall not exceed 5 percent of the observation period	15A NCAC 2D .1205 State-enforceable only 40 CFR 62 Subpart JJJ Federally-enforceable only

STATE-ENFORCEABLE ONLY

1. 15A NCAC 2D .1205: MUNICIPAL WASTE COMBUSTORS

Emission Limitation [15A NCAC 2D .1205(e)]

- b. Visible emissions of combustion ash from the ash conveying system (including conveyor transfer points) shall not exceed 5 percent of the observation period (i.e., nine minutes per block three hour period), as determined by EPA Reference Method 22 observations as specified in 40 CFR 60.58b(k), except as provided in paragraph c.
- c. This emission limit covers visible emissions discharged to the atmosphere from buildings, or enclosures, not the visible emissions discharged inside of the buildings or enclosures, of ash conveying systems.

Testing [15A NCAC 2D .1205(e)]

- d. Performance testing for visible emissions shall be conducted in accordance with 40 CFR 60.58b(k) on an annual basis. Subsequent annual tests shall be performed between six and twelve months after the previous test.

Monitoring [15A NCAC 2D .0611]

- e. Whenever this area (ID No. ES-3D) is in operation, the Permittee shall observe the emission point from this source from the facility once a day for any visible emissions above normal operating conditions.

Record keeping [15A NCAC 2D .0605]

- f. The Permittee shall record the results of the observations, along with any corrective actions taken to reduce visible emissions to normal operating conditions.

Reporting [15A NCAC 2D .0605]

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

D. One lime storage silo (ID No. ES-3E) and associated bagfilter (ID Nos. CD-3E-BF)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 4.10P^{0.67}$ or $E = 55.0(P)^{0.11} - 40$ 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

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

- h. Emissions of particulate matter from this source shall not exceed an allowable emission rate as calculated by the following equation(s): [15A NCAC 2D .0515(a)]

Process Rate	Allowable Emission Rate Equation
Less than or equal to 30 tons per hour	$E = 4.10 \times P^{0.67}$
Greater than 30 tons per hour	$E = 55.0(P)^{0.11} - 40$

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 .2601]

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

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

- j. Particulate matter emissions from the emission source shall be controlled by the bagfilter. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer’s inspection and maintenance recommendations, or if there is no manufacturer’s inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
 - ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and bagfilters are not inspected and maintained.
- k. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - i. the date and time of each recorded action;
 - ii. the results of each inspection;
 - iii. the results of any maintenance performed on the bagfilters; and
 - iv. any variance from manufacturer’s recommendations, if any, and corrections made.

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

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

- l. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.
- m. 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 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 .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .2601 and General Condition JJ. If the results of this test are above the limit given in Section 2.1 A. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

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

- c. To assure compliance, once a week the Permittee shall observe the emission points of this source for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. The Permittee shall establish A_{normal} for the source in the first 30 days following the effective date of the permit (If visible emissions from this source are observed to be above normal, the Permittee shall either:
 - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
 - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) (Method 9) for 12 minutes is below the limit given in Section 2.1 K.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.

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

A. Facility-wide emission sources

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
odors	odorous emissions must be controlled;	15A NCAC 2D .1806 State-enforceable only
Toxic Air Pollutants	facility-wide TAP compliance demonstration required	15A NCAC 2D .1100 State-enforceable only
		15A NCAC 2Q .0705 State-enforceable only
Arsenic and its compounds	facility-wide TAP compliance demonstration required	15A NCAC 2D .1205(c)(14) State-enforceable only
Beryllium and its compounds		
Cadmium and its compounds		
Chromium (VI) and its compounds		

STATE-ENFORCEABLE ONLY

1. 15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

- a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

STATE-ENFORCEABLE ONLY

2. TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REQUIREMENT

- a. Pursuant to 15A NCAC 2D .1100 and in accordance with the approved application for an air toxic compliance demonstration as submitted on September 11, 2007, the following permit limits shall not be exceeded:

Pollutant	Facility-wide Emission Limits		
	(lb/yr)	(lb/day)	(lb/hr)
Acetaldehyde (75-07-0)			76907.1
Acetic acid (64-19-7)			10539.1
Acrolein (107-02-8)			227.9
Acrylonitrile (107-13-1)	87305.9		
Ammonia (as NH3) (7664-41-7)			7690.7
Aniline (62-53-3)			2848.4

Pollutant	Facility-wide Emission Limits		
	(lb/yr)	(lb/day)	(lb/hr)
Arsenic & Compounds (total mass of elemental AS, arsine and all inorganic compounds) (ASC (7778394))	133.9		
Aziridine (151-56-4)		1132.7	
Benzene (71-43-2)	69844.7		
Benidine & salts (Component of 83329/POMTV) (92-87-5)	8.73		
Benzo(a)pyrene (Component of 83329/POMTV & 56553/7PAH) (50-32-8)	19207.3		
Benzyl chloride (100-44-7)			1424.2
Beryllium chloride (Component of BEC) (7787-47-5)	2386.4		
Beryllium fluoride (Component of BEC & Fluorides) (7787-49-7)	2386.4		
Beryllium metal (unreacted) (Component of BEC) (7440-41-7)	2386.4		
Beryllium nitrate (Component of BEC) (13597-99-4)	2386.4		
Bis-chloromethyl ether (542-88-1)	215.4		
Bromine (7726-95-6)			569.7
Butadiene, 1,3- (106-99-0)	98946.7		
CFC- 113 (Trichloro-1,2,2-trifluoroethane, 1,1,2-) (76-13-1)			2705990.3
CFC-11(Trichlorofluoromethane) (75-69-4)			1595110.1
CFC-12 (Dichlorodifluoromethane) (75-71-8)		46818147.3	
Cadmium Metal (elemental unreacted, Component of CDC) (7440-43-9)	3201.2		
Cadmium acetate (Component of CDC) (543-90-8)	3201.2		
Cadmium bromide (Component of CDC) (7789-42-6)	3201.2		
Carbon disulfide (75-15-0)		35113.6	
Carbon tetrachloride (56-23-5)	3899662.5		
Chlorine (7782-50-5)		7079.4	2563.6
Chlorobenzene (108-90-7)		415322.3	
Chloroform (67-66-3)	2502768.5		
Chloroprene (126-99-8)		83064.5	9969.4
Chromate (VI) Bioavailable Pigments as a Group (Component of BioCR6 & CRC) (BioCR6)	48.3		
Chromium (VI) Non-Specific Compounds, as Chrom(VI) (Component CRC) (NSCR6)	48.3		
Chromium (VI) Soluble Chromate Compounds (Component of CRC) (SolCR6)	48.3		

Pollutant	Facility-wide Emission Limits		
	(lb/yr)	(lb/day)	(lb/hr)
Cresol (mixed isomers) (1319-77-3)			6266.5
Di(2-ethylhexyl)phthalate (DEHP) (117-81-7)		5663.5	
Dichlorobenzene(p), 1,4- (106-46-7)			187995.1
Dichlorofluoromethane (75-43-4)		94391.4	
Dimethyl sulfate (77-78-1)		566.3	
Dioxane, 1,4- (123-91-1)		105718.4	
Epichlorohydrin (106-89-8)	48309252.2		
Ethyl acetate (141-78-6)			398777.5
Ethyl mercaptan (75-08-1)			284.8
Ethylene dibromide (106-93-4)	232815.7		
Ethylene dichloride (1,2-dichloroethane) (107-06-2)	2211748.9		
Ethylene glycol monoethyl ether (Component of GLYET) (110-80-5)		22653.9	5412.0
Ethylene oxide (75-21-8)	15715.1		
Ethylenediamine (107-15-3)		56634.9	7121
Fluorides (sum of all fluoride compounds) (16984-48-8)		3020.5	712.1
Formaldehyde (50-00-0)			427.3
Hexachlorocyclopentadiene (77-47-4)		113.3	28.5
Hexachlorodibenzo-p-dioxin 1,2,3,6,7,8 (Component of CLDC) (57653-85-7)	44.2		
Hexane (isomers, except n-hexane) (HEXANEISO)			1025427.9
Hexane, n- (110-54-3)		207661.1	
Hydrazine (302-01-2)		113.3	
Hydrogen chloride (hydrochloric acid) (7647-01-0)			1993.9
Hydrogen cyanide (as HCN - Component of CNC) (74-90-8)		26429.6	3133.3
Hydrogen fluoride (hydrofluoric acid as mass of HF-Component of Fluorides) (7664-39-3)		5663.5	712.1
Hydrogen sulfide (7783-06-4)		396444.0	
Maleic anhydride (108-31-6)		2265.4	284.8
Manganese & compounds (MNC)		5852.3	
Manganese cyclopentadienyl tricarbonyl (Component of MNC) (12079-65-1)		113.3	
Manganese tetroxide (Component of MNC) (1317-35-7)		1170.5	
Mercury - Alkyl compounds, total mass (Component of HGC) (MERCALKYL)		11.3	
Mercury, aryl and inorganic compounds (Component of HGC) (MERCARYL)		113.3	

Pollutant	Facility-wide Emission Limits		
	(lb/yr)	(lb/day)	(lb/hr)
Mercury, vapor (Component of HGC) (7439-97-6)		113.3	
Methyl chloroform (71-55-6)		2265394.2	697860.7
Methyl ethyl ketone (78-93-3)		698496.6	252084.4
Methyl isobutyl ketone (108-10-1)		483284.1	85452.3
Methyl mercaptan (74-93-1)			142.4
Methylene chloride (75-09-2)	13968940.4		4842.3
Nickel carbonyl (Component of 373024/NIC) (13463-39-3)		113.3	
Nickel metal (Component of 373024/NIC) (7440-02-0)		1132.7	
Nickel subsulfide (Component of 373024/NIC) (12035-72-2)	1222.3		
Nickel, soluble compounds as nickel (Component of 373024/NIC) (NICKSOLCPDS)		113.3	
Nitric acid (7697-37-2)			2848.4
Nitrobenzene (98-95-3)		11327.0	1424.2
Nitrosodimethylamine, N- (62-75-9)	29102.0		
Pentachlorophenol (87-86-5)		566.3	71.2
Perchloroethylene (tetrachloroethylene) (127-18-4)	110587444.8		
Phenol (108-95-2)			2706.0
Phosgene (75-44-5)		472.0	
Phosphine (7803-51-2)			370.3
Polychlorinated biphenyls (PCB) (1336-36-3)	48309.3		
Styrene (100-42-5)			30193.2
Sulfuric acid (7664-93-9)		2265.4	284.8
Tetrachloro-1,2-difluoroethane, 1,1,2,2- (CFC 112) (76-12-0)		9816708.3	
Tetrachloro-2,2-difluoroethane, 1,1,1,2- (CFC 112a) (76-11-9)		9816708.3	
Tetrachlorodibenzo-p-dioxin, 2,3,7,8- (Component of CLDC & 83329/POMTV) (1746-01-6)	1.746		
Tetrachloroethane, 1,1,2,2- (79-34-5)	3666846.9		
Toluene (108-88-3)		887279.4	159511.0
Toluene diisocyanate, 2,4- and 2,6- isomers (584-84-9,91-08-7)		37.8	
Trichloroethylene (79-01-6)	34340311.8		
Vinyl chloride (75-01-4)	221174.9		
Vinylidene chloride (75-35-4)		22653.9	
Xylene (1330-20-7)		509713.7	185146.7

- b. To ensure compliance with the above limits, the Permittee shall maintain records of the process operational information as necessary to demonstrate compliance with the specified pollutant emission limits.

STATE-ENFORCEABLE ONLY

3. 15A NCAC 2Q .0705: EXISTING FACILITIES AND SIC CALLS for TOXIC AIR POLLUTANT EMISSIONS LIMITATION REQUIREMENT

- a. As of February 6, 2008, emissions of toxic air pollutants have been demonstrated on a facility-wide basis (demonstration submitted on September 11, 2007)(excluding those sources exempt under 15A NCAC 2Q .0702 "Exemptions") that each of the toxic air pollutants (TAPs) emitted from all sources at the facility are either below its respective toxic permit emission rates (TPER) listed in 15A NCAC 2Q .0711 - "Emission Rates Requiring a Permit" or the TAPs are in compliance with 15A NCAC 2D .1100 "Control of Toxic Air Pollutants" as described elsewhere in this permit.
- b. The facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions of any TAP listed in 15A NCAC 2Q .0711 or in this permit from all sources at the facility (excluding those sources exempt under 15A NCAC 2Q .0702 "Exemptions"), including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TPER listed in 15A NCAC 2Q .0711 without first obtaining an air permit to construct or operate.
- c. PRIOR to exceeding any of the TPERs listed in 15A NCAC 2Q .0711, the Permittee shall be responsible for obtaining an air permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 2D .1100 "Control of Toxic Air Pollutants".
- d. The Permittee shall maintain at the facility records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A NCAC 2Q .0711. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required pursuant to 15A NCAC 2Q .0711 and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

Pollutant	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Asbestos (1332-21-4)	1.9X10 ⁻⁶			

STATE-ENFORCEABLE ONLY

4. 15A NCAC 2D .1205: MUNICIPAL WASTE COMBUSTORS

- a. To comply with the ambient air quality standards for arsenic and its compounds, beryllium and its compounds, cadmium and its compounds, and chromium (VI) and its compounds found in 15A NCAC 2D .1205(c)(14)(A) shall apply aggregately to all incinerators at the subject facility. [15A NCAC 2D .1205(c)(14)]

Pollutant	Facility-wide Emission Limits		
	(lb/yr)	(lb/day)	(lb/hr)
Arsenic & Compounds (total mass of elemental AS, arsine and all inorganic compounds) (ASC (7778394))	133.9		
Beryllium metal (unreacted) (Component of BEC) (7440-41-7)	2386.4		
Cadmium Metal (elemental unreacted, Component of CDC) (7440-43-9)	3201.2		

Pollutant	Facility-wide Emission Limits		
	(lb/yr)	(lb/day)	(lb/hr)
Chromium (VI) Non-Specific Compounds, as Chrom(VI) (Component CRC) (NSCR6)	48.3	117.0	

- b. To ensure compliance with the above limits, the Permittee shall maintain records of the process operational information as necessary to demonstrate compliance with the specified pollutant emission limits.

SECTION 3 - GENERAL CONDITIONS (version 2.22.1)

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

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

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section I must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application;
- b. changes that modify equipment or processes; or
- c. changes in the quantity or quality of materials processed.

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

2. Section 502(b)(10) Changes [15A NCAC 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.
3. 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.
4. Emissions Trading [15A NCAC 2Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 2D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 2Q .0523(c).

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

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

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

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

Excess Emissions

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

Permit Deviations

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Q. **Certification by Responsible Official** [15A NCAC 2Q .0520]

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

R. **Permit Shield for Applicable Requirements** [15A NCAC 2Q .0512]

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

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 2Q .0519]

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

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

out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 2Q .0503]

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

U. **Property Rights** [15A NCAC 2Q .0508(i)(8)]

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

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

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:

- a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
- b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

FEDERALLY-ENFORCEABLE ONLY

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

FF. Title IV Allowances [15A NCAC 2Q .0508(i)(1)]

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

GG. Air Pollution Emergency Episode [15A NCAC 2D .0300]

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

HH. Registration of Air Pollution Sources [15A NCAC 2D .0200]

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

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

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 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 or to demonstrate compliance, the Permittee shall perform such testing in accordance

with 15A NCAC 2D .2600 and follow the procedures outlined below:

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 description of the training and air testing experience of the person directing the test;
 - b. a certification of the test results by sampling team leader and facility representative;
 - c. 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);
 - d. 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;
 - e. all field, analytical, and calibration data necessary to verify that the testing was performed as specified in the applicable test methods;
 - f. example calculations for at least one test run using equations in the applicable test methods and all test results including intermediate parameter calculations; and
 - g. 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.

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

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

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

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

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

As required by 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 2D .0540(f).

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

- NN.
1. For modifications made pursuant to 15A NCAC 2Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
 2. For modifications made pursuant to 15A NCAC 2Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
 3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 2Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth St., Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

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

ATTACHMENT

List of Acronyms

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