



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

Beverly Eaves Purdue
Governor

B. Keith Overcash, P.E.
Director

Dee Freeman
Secretary

XXX xxx, 2009

Mr. Alan Skrzypczak
Facility Manager
Stericycle, Inc.
Post Office Box 310
Haw River, North Carolina 27258

Dear Mr. Skrzypczak:

SUBJECT: **Air Quality Permit No. 05896T18**
Facility ID: 04/01/00010
Stericycle, Inc.
Haw River
Alamance County
Fee Class: Title V

In accordance with your request for a **Renewal of the Title V permit received October 30, 2009**, we are forwarding herewith **Air Quality Permit No. 05896T18** to Stericycle, Inc., 1168 Porter Avenue, Haw River, 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

Mr. Alan Skrzypczak

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

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

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

This Air Quality Permit shall be effective from XXX xxx, 2009 until XXX xxx, 2009, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Gautam Patnaik, at (919) 715-6246.

Sincerely yours,

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

Enclosure

c: Winston-Salem Regional Office
Gregg Worley, EPA Region 4
Central Files

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

Emission Source ID No.	Emission Source Description
I-CT-1 and I-CT-2	Two cooling towers (55,200 gallons per hour water recirculation rate each)

Table of changes made in this permit.

Page(s)	Section	Description of Change(s)
6	2.1. A. 1. b. (7). G.	Added reference to “non-hazardous materials” not regulated under 15A NCAC 13A .0106
6 to 7	2.1. A. 1. b. (7). G.	Modified recoding requirements for the charge rate and pressure difference
11	Testing.	Change all testing reference
14 to 23	General Conditions	Updated

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
05896T18	05896T17	XXX xxx, 2009	XXX xxx, 1014

Until such time as this permit expires or is modified or revoked, the below named Permittee is authorized to operate as outlined in Part I and to construct as outlined in Part II, 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: Stericycle, Inc.
Facility ID: 04/01/00010

Facility Site Location: 1168 Porter Avenue
City, County, State, Zip: Haw River, Alamance County, North Carolina 27258

Mailing Address: Post Office Box 310
City, State, Zip: Haw River, North Carolina 27258

Application Number: 0100010.06A
Complete Application Date: October 30, 2009

Primary SIC Code: 4953
Division of Air Quality, Winston-Salem Regional Office
Regional Office Address: 585 Waughtown Street
Winston-Salem, North Carolina 27107

Permit issued this the xxth day of XXX, 2009.

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

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

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

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES01	dual chamber hospital, medical and infectious waste incinerator (HMIWI) firing natural gas (4.6 million Btu/hr primary chamber burner and 6.0 million Btu/hr secondary chamber burner)	CD01 CD03	one packed bed scrubber and associated quench column in series with venturi scrubber equipped with a mist eliminator
ES02	dual chamber hospital, medical and infectious waste incinerator (HMIWI) firing natural gas (4.6 million Btu/hr primary chamber burner and 6.0 million Btu/hr secondary chamber burner)	CD02 CD04	one packed bed scrubber and associated quench column in series with venturi scrubber equipped with a mist eliminator
EG01	diesel-fired emergency generator (395 kW)	N/A	N/A

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

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

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

- A. Two Dual Chamber Hospital, Medical, and Infectious Waste Incinerators (HMIWI) firing supplemental natural gas (ID Nos. ES01 and ES02) and packed bed scrubbers (ID Nos. CD01 and CD02) in series with two venturi scrubbers (ID Nos. CD03 and CD04) equipped with mist eliminators**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
toxic air pollutants	State-enforceable only - See Section 2.2 A.	15A NCAC 2D .1100
odorous emissions	State-enforceable only - See Section 2.2 B.	15A NCAC 2D .1806
PM, SO ₂ , NO _x , CO, metal HAPs	Limits for Hospital, Medical, and Infectious Waste Incinerators	15A NCAC 02D .1206

1. EMISSION LIMITS

State Only

a. 15A NCAC 02D .1206 Hospital, Medical, and Infectious Waste Incinerators

The following table summarizes emission limitations for these Hospital, Medical, Infectious Waste Incinerator (HMIWI) units.

Pollutant	Emission Limits*	Applicable 2D.1206 State Rule
Particulate matter	34 mg/dscm 0.015 gr/dscf	15A NCAC 2D.1206(c)(2)(A)
Carbon monoxide	40 ppmv	15A NCAC 2D.1206(c)(6)
Dioxins/furans	125 ng/dscm total D/F or 2.3 ng/dscm TEQ	15A NCAC 2D.1206(c)(12)(A)
Hydrogen chloride	100 ppmv or 93% reduction	15A NCAC 2D.1206(c)(8)(A)
Sulfur dioxide	55 ppmv	15A NCAC 2D.1206(c)(4)
Nitrogen dioxide	250 ppmv	15A NCAC 2D.1206(c)(5)
Lead	1.2 mg/dscm or 70% reduction	15A NCAC 2D.1206(c)(10)(A)
Cadmium	0.16 mg/dscm or 65% reduction	15A NCAC 2D.1206(c)(11)(A)
Mercury	0.55 mg/dscm or 85% reduction	15A NCAC 2D.1206(c)(9)(A)
Visible emissions	10% opacity (6-minute block averages)	15A NCAC 2D.1206(c)(3)

*All limits are corrected to 7% oxygen on a dry standard basis.

b. Operational requirements for incinerators: [NSPS Subpart Ec (40 CFR 60.56c and 60.57c), ,15A NCAC 2D.1206(d), and 15A NCAC 2Q.0508(f)]

- (1) The Permittee shall not exceed a maximum charge rate of 1,952.6 pounds per hour for Unit 1 (ID No. ES01) and 2,091.9 pounds per hour for Unit 2 (ID No. ES02).
- (2) Except as provided in paragraph (3) below, simultaneous operation of the HMIWI above the maximum charge rate and below the minimum secondary chamber temperature, each measured on a 3-hour rolling average, shall constitute a violation of the particulate matter, carbon monoxide, and dioxin and furan emission limits.
- (3) Pursuant to 40 CFR Part 60.56c(d)(1), for a wet scrubber control system, the Permittee shall re-establish the appropriate maximum and minimum operating parameters as **site specific operating parameters** identified below every year based on performance testing to determine compliance with emission limits:
 - A. Maximum waste charge rate (pounds per hour);
 - B. Maximum flue gas temperature;
 - C. Minimum secondary chamber temperature;
 - D. Minimum pressure drop across the venturi scrubbers;
 - E. Minimum liquor flow rate to the venturi scrubbers;
 - F. Minimum liquor pH of the packed bed scrubbers; and
 - G. Bypass stack position.

The Permittee may revise these parameters based on approved performance tests pursuant to 40 CFR 60.56c(j). In order to revise the parameters, the Permittee shall make a written request to have the permit administratively amended that cites the parameters documented during the test and the calculation methods

pursuant to 60.51c. Within 30 days of receipt of the request, DAQ must verify accuracy and issue a revised permit.

- (4) Following the date in which the annual performance test is approved and the permit is modified, the Permittee shall ensure that the affected facility does not operate above the maximum parameters or below the minimum parameters measured as 3 hour rolling averages (calculated each hour as the average of the previous 3 operating hours). Operation above the established maximum or below the established minimum shall constitute a violation of the applicable emissions standard as indicated in this permit except during start-up, shutdown, or malfunction.

Based on the most recent performance test and consistent with 60.56c(f)(1)-(6), 62.14455(d), and 2D .1206(d)(3), the tables below identify operating scenarios for each incinerator that define compliance with the pollutant emissions standards. The Permittee shall be deemed in noncompliance with the applicable emission standard if operation is noted outside of these ranges.

HMIWI - UNIT 1

Pollutant Emission Limit Violation	Operating Scenario Defining Compliance
particulate matter	maximum charge rate of 1,952 pounds per hour and minimum pressure drop across venturi scrubber of 40.0 inches W.C.
CO	maximum charge rate of 1,952 pounds per hour and minimum secondary chamber temperature of 1,795.5°F
dioxin/furan	maximum charge rate of 1,952 pounds per hour minimum secondary chamber temperature of 1,795.5°F and minimum venturi scrubber liquor flow rate of 65.8 gallons per minute
HCl	maximum charge rate of 1,952 pounds per hour and minimum packed bed scrubber liquor pH of 4.15
mercury	maximum charge rate of 1,952 pounds per hour and maximum flue gas temperature of 133.7°F
particulate matter, dioxin/furan, HCl, lead, cadmium, mercury	operation of bypass stack except during start-up, shutdown, or malfunction

HMIWI - UNIT 2

Pollutant Emission Limit Violation	Operating Scenario Defining Compliance
particulate matter	maximum charge rate of 2,091.9 pounds per hour and minimum pressure drop across the venturi scrubber of 40.1 inches W.C.
CO	maximum charge rate of 2,091.9 pounds per hour and minimum secondary chamber temperature of 1,798.2°F
dioxin/furan	maximum charge rate of 2,091.9 pounds per hour, minimum secondary chamber temperature of 1,798.2°F, and minimum venturi scrubber liquor flow rate of 66.0 gallons per minute
HCl	maximum charge rate of 2,091.9 pounds per hour and minimum packed bed scrubber liquor pH of 3.6
mercury	maximum charge rate of 2,091.9 pounds per hour and maximum flue gas temperature of 134.3°F
particulate matter, dioxin/furan, HCl, lead, cadmium, mercury	operation of bypass stack except during start-up, shutdown, or malfunction

- (5) The Permittee shall not charge any waste into the incinerators until the proper operating temperature of 1,795.5 degrees Fahrenheit is attained in the secondary chamber of Unit 1 and 1,798.2 degrees Fahrenheit is attained in the secondary chamber of Unit 2.

- (6) Gases generated by the combustion shall, for a period of not less than one second, be subjected to a minimum temperature of 1,795.5 degrees Fahrenheit in Unit 1 and 1,798.2 degrees Fahrenheit in Unit 2.
- (7) Incineration of wastes shall be limited to the following:
- A. items and materials that fit within the definition of hospital, medical, and infectious waste contained in 40 CFR 60.51c;
 - B. international garbage (USDA/APHIS) defined as waste material derived in whole or in part from fruits, vegetables, meats, or other plant or animal material, and other refuse of any character whatsoever that has been associated with any such material aboard any means of conveyance and includes food scraps, table refuse, galley refuse, food wrappers, or packaging materials, and other waste material from stores, food preparation areas, passengers' or crews' quarters, dining rooms, or any other areas on vessels, aircraft, or other means of conveyance;
 - C. confidential documents generated in the health care industry,
 - D. controlled substances captured by law enforcement agencies;
 - E. non-hazardous trace chemotherapeutic waste materials;
 - F. non-hazardous pharmaceuticals.
 - G. **non-hazardous materials under Section 2.1. A. 1. b. (7). E., and F., refer to those substance that are not regulated under 15A NCAC 13A .0106.**
- (8) Visible emissions from these HMIWIs shall not be more than 10 percent opacity when averaged over a six-minute period.
- A. **Visible Emissions Monitoring** [15A NCAC 2Q .0508(f)]
To assure compliance, once a day the Permittee shall observe the emission points of each unit for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semi-annual period. If the emission sources is not operating, a record of this fact along with the corresponding date and time shall substitute for the daily observation. If visible emissions from this source are observed to be above normal, the Permittee shall either: (a) be deemed to be in noncompliance with 40 CFR 60.52c(b) and 15A NCAC 2D .1206(c)(3) or (b) demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .0501(c)(8) is below the limit given above. If the demonstration in (b) above cannot be made, the Permittee shall be deemed to be in noncompliance with 40 CFR 60.52c(b) and 15A NCAC 2D .1206.
 - B. **Visible Emissions Recordkeeping** [15A NCAC 2Q .0508(f)]
The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log 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 40 CFR 52c(b) and 15A NCAC 2D .1206 if these records are not maintained.
- (9) Venturi Scrubber Requirements - Particulate matter emissions shall be controlled as described in the permitted equipment list.
- A. **Venturi Scrubber Monitoring** - In accordance with 40 CFR 60.57c(a), to demonstrate compliance with the PM₁₀ standard, the pressure drop across the venturi scrubbers shall not be maintained below 40.0 inches W.C. for Unit 1 and below 40.1 inches W.C. for Unit 2, and the charging rate shall not be more than 1952.6 pounds per hour for Unit 1 and 2,091.9 pounds per hour for Unit 2.
 - B. **Venturi Scrubber Recordkeeping** - **The Permittee shall continuously monitor the pressure drop across the venturi scrubbers and the charging rate to each incinerator. The Permittee shall record, the pressure drop**

across each venturi scrubber (once per minute) and record the charging rate to each incinerator (once per hour). Records shall be maintained on-site and made available to DAQ personnel upon request. The Permittee shall be deemed in noncompliance with 40 CFR 57c(a) and 15A NCAC 2D .1206 if these measurements are not recorded as required.

c. Test Methods and Procedures [15A NCAC 2D .1206(d) and (e) and NSPS Subpart Ec (40 CFR 60.56c)]

- (1) The Permittee shall comply with the compliance and performance testing requirements of 40 CFR 60.56c, excluding the fugitive emissions testing requirements under 40 CFR 60.56c(b)(12) and (c)(3). Pursuant to 60.56c, the emission limits apply at all times except during periods of startup, shutdown or malfunction, provided that no hospital, medical, or infectious waste is charged to the incinerator during startup, shutdown, or malfunction.
- (2) The test methods and procedures described in Rule 15A NCAC 2D .0501 and in 40 CFR Part 60 Appendix A shall be used to determine compliance with emission rates according to the provisions of General Condition JJ. Method 29 of 40 CFR 60 shall be used to determine emission rates for metals. However, Method 29 shall be used to sample for chromium (VI), and SW 846 Method 0060 shall be used for analysis. For dioxin/furan testing purposes, a minimum sample time of 4 hours shall be used.
- (3) The Director may require the owner or operator to test his incinerator at any time to demonstrate compliance with the emission standards listed above.
- (4) Pursuant to 40 CFR 60.56c(h), the Permittee may conduct a repeat performance test within 30 days of violation of applicable operating parameters to demonstrate that the HMIWI is not in continual violation of the applicable emission limits. Repeat performance tests shall be conducted using identical operating parameters that indicated violation.

d. Monitoring/Recordkeeping/Reporting [15A NCAC 2D .1206(f)]

- (1) The Permittee shall comply with the monitoring, recordkeeping, and reporting requirements in Section 15A NCAC 2D .0600. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1206 if records are not maintained.

Pursuant to 15A NCAC 2D .0605, the Permittee shall maintain:

- A. records detailing all malfunctions under Rule 2D .0535,
- B. records of all testing, and
- C. records of all monitoring.

The owner or operator of a source of excess emissions which last for more than 4 hours and which results from a malfunction, a breakdown of process or control equipment, or any other abnormal conditions shall report excess emissions in accordance with the requirements of Rule 2D .0535.

- (2) Records indicating the hourly (beginning on the hour) weight charged to the incinerators shall be maintained and available for inspection by the Division of Air Quality.
- (3) The Permittee shall maintain and operate a continuous temperature monitoring and recording device for the primary chamber and secondary chamber. 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 pH for wet scrubber systems. The Permittee shall install, operate, and maintain continuous monitors for oxygen and for carbon monoxide to determine proper operation of the incinerators.

All monitoring devices and associated paraphernalia used to show compliance with emission limits, shall be subject to a quality assurance program to include procedures and frequency of calibration, standards traceability, operational checks, maintenance, auditing, data validation, and a schedule for implementing the quality assurance program. This program should be submitted and approved by the Regional Supervisor,

North Carolina Division of Air Quality, Winston-Salem Regional Office, 585 Woughtown Street, Winston-Salem, North Carolina 27107, within 60 days of the initial operating date of the Title V permit.

e. **NSPS Monitoring/Recordkeeping/Reporting Requirements** [NSPS Subpart Ec (40 CFR 60.55c, 60.57c 60.58c)]

- (1) In addition to the requirements of 1. d. (1), (2), and (3) above, the Permittee shall comply with the reporting and recordkeeping requirements listed in 40 CFR 60.58c(b), (c), (d), (e), and (f), excluding 40 CFR 60.58c(b)(2)(ii) and (b)(7). The Permittee shall maintain the following information for a period of at least 5 years:
 - A. Calendar date of each record;
 - B. Records of the following data:
 - i. concentrations of any pollutant listed in Table 1.a. above,
 - ii. HMIWI charge dates, times and weights and hourly charge rates,
 - iii. secondary chamber temperature recorded as three hour rolling average,
 - iv. liquor flow rate to the venturi scrubbers' inlet recorded as three hour rolling average,
 - v. temperature at the outlet from the venturi scrubbers recorded as three hour rolling average,
 - vi. pH at the inlet to the packed bed scrubber systems recorded as three hour rolling average, and
 - vii. records indicating use of bypass stacks, including dates, times, and durations,
 - C. Identification of calendar days for which data on emission rates or operating parameters have not been obtained, with an identification of the emission rates or parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken,
 - D. Identification of calendar days, times and durations of malfunctions, a description of the malfunction and the corrective action taken,
 - E. Identification of calendar days for which data of emission rates or operating parameters exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of the corrective actions taken,
 - F. Records showing the names of HMIWI operators who have completed review of information in 60.53c(h) including the date of the initial review and all subsequent annual reviews,
 - G. Records showing the names of HMIWI operators who have completed the operator training requirements, including documentation of training and dates of the training,
 - H. Records showing the names of HMIWI operators who have met the criteria for qualification under 60.53c and the dates of their qualifications,
 - I. Records of calibration of any monitoring devices as required under 60.57c(a),(b), and (c).
- (2) The Permittee shall submit the information below no later than 60 days following the initial performance test. All reports shall be signed by the facilities manager.
 - A. The initial performance test data as recorded under 60.56c(b)(1) through (b)(12), as applicable,
 - B. The values for the site-specific operating parameters established pursuant to 60.56c, and
- (3) Following the initial report, the Permittee shall submit reports **semi-annually** signed by the facilities manager containing the following information:
 - A. The values for the site-specific operating parameters established pursuant to 60.56c,
 - B. The highest maximum operating parameter and the lowest minimum operating parameter for each operating parameter recorded for the calendar year being reported and the preceding year,
 - C. If a performance test was conducted during the reporting period, the results of that test,
 - D. If no exceedances or malfunctions occurred for the calendar year, a statement that no exceedances occurred,
 - E. Any use of bypass stacks, the duration, reason for malfunction, and corrective action taken, and
 - F. Any information recorded under e(1)B above as electronic one-minute data for the calendar year being reported and the preceding year.

All records shall be maintained onsite in either paper copy or computer readable format, unless an alternative format is approved.

- (4) The Permittee shall submit annually a waste management plan including provisions for the segregation of dental waste for DAQ approval by no later than January 30th of each calendar year. The waste management plan shall comply with the requirements of 40 CFR 60.55c. The Permittee shall implement the DAQ approved waste management plan in its entirety. The Permittee shall not incinerate dental waste at the facility, which is defined in the DAQ approved waste management plan.

If the Permittee does not implement the DAQ approved waste management plan in its entirety or any dental waste is incinerated at the facility, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

Within 30 days of approval and receipt of the air permit 05896T18, the Permittee shall submit a draft waste management plan including language addressing the management of dental waste at the Haw River facility.

- (5) The Permittee shall comply with the monitoring requirements in 40 CFR 60.57c. Pursuant to 40 CFR 60.57c(a), the Permittee shall install, calibrate (to manufacturer's specification), maintain, and operate devices (or establish methods) for monitoring the applicable maximum and minimum operating parameters and the frequencies required such that these devices (or methods) measure and record values at all times except during periods of startup and shutdown.

Pursuant to 40 CFR 60.57c(b), the Permittee shall install, calibrate (to manufacturer's specification), maintain, and operate a device or method for measuring the use of the **bypass stack** including date, time, and duration.

Pursuant to 40 CFR 60.57c(d), the Permittee shall obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day and 90 percent of the operating days per calendar quarter that the facility is combusting hospital waste and/or medical/infectious waste.

f. Excess Emissions, Start-up and Shutdown [15A NCAC 2D .1206(g)]

- (1) All incinerators shall comply with Rule 15A NCAC 2D .0535.

g. Operator Training and Certification [15A NCAC 2D .1206(h) and NSPS Subpart Ec (40 CFR 60.53c)]

- (1) The Permittee shall not allow the HMIWI to operate at any time unless a fully trained and qualified HMIWI operator is accessible, either at the facility or available within one hour. The trained and qualified HMIWI operator may operate the HMIWI directly or be the direct supervisor of one or more HMIWI operators.

Operator training shall be obtained by completing the requirements of 40 CFR 60.53c(c) through (g). Training shall be obtained by completing an HMIWI operator training course that includes, at a minimum, the following provisions:

- A. 24 hours of training on the following subjects;
- i. environmental concerns, including pathogen destruction and types of emissions,
 - ii. basic combustion principles, including products of combustion,
 - iii. operation of the type of incinerator being used, including power startup, waste charging, and shutdown procedures,
 - iv. combustion controls and monitoring,
 - v. operation of air pollution control equipment and factors affecting performance,
 - vi. methods to monitor pollutants and equipment calibration procedures,
 - vii. inspection and maintenance of the HMIWI, and air pollution control devices,
 - viii. actions to correct malfunctions or conditions that may lead to malfunctions,

- ix. ash characteristics and handling procedures,
- x. applicable state, federal, and local regulations,
- xi. work safety procedures,
- xii. pre-start up inspections, and
- xiii. recordkeeping requirements.

B. Qualification shall be obtained by:

- i. completion of a training course that satisfies the criteria mentioned above, and
- ii. either 6 months experience as an HMIWI operator, 6 months experience as a direct supervisor of an HMIWI operator, or completion of at least two burn cycles under observation of two qualified HMIWI operators.

C. To maintain qualification, the trained and qualified HMIWI operator shall complete and pass an **annual** review or refresher course of at least 4 hours covering, at a minimum, the following:

- i. update of regulations,
- ii. incinerator operation, including startup and shutdown procedures,
- iii. inspection and maintenance,
- iv. responses to malfunctions or conditions that may lead to malfunction, and
- v. discussion of operating problems encountered by attendees.

D. A lapsed qualification shall be renewed by one of the following methods:

- i. for a lapse of less than 3 years, the HMIWI operator shall complete and pass a standard **annual** refresher course as outlined in c. above.
- ii. for a lapse of more than 3 years, the HMIWI operator shall complete and pass a training course with the minimum criteria described in a. above.

(2) Pursuant to 40 CFR 60.53c(h)(1) through (h)(10), the Permittee shall maintain documentation at the facility that addresses the following:

- A. summary of applicable standards;
- B. description of basic combustion theory applicable to an HMIWI;
- C. procedures for receiving, handling, and charging waste;
- D. HMIWI start-up, shut-down, and malfunction procedures;
- E. procedures for maintaining proper air supply levels;
- F. procedures for operating the HMIWI and associated air pollution control systems within the standards established;
- G. procedures for responding to periodic malfunction or conditions that may lead to malfunction;
- H. procedures for monitoring HMIWI emissions;
- I. reporting and recordkeeping procedures; and
- J. procedures for handling ash.

The Permittee shall establish a program for reviewing the information documented above annually with each HMIWI operator. This information shall be kept in a readily accessible location for HMIWI operators.

B. One diesel fuel-fired emergency generator (ID No. EG01)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516

visible emissions	20 percent opacity	15A NCAC 2D .0521
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1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

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

Testing [15A NCAC 02D .2601]

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2D .0501(c)(4) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 B. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

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

- c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of diesel fuel in this emergency generator.

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

- a. Visible emissions from the emergency generator 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 02D .2601]

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

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

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

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

STATE ENFORCEABLE ONLY

A. 15A NCAC 2D .1100: TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING REQUIREMENT

The emission limits in the table below represent total emissions from both incinerators combined. Pursuant to 15A NCAC 2D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

EMISSION SOURCES	TOXIC AIR POLLUTANTS	EMISSION LIMITS
Incinerators (ID Nos. ES01	Chromium VI	0.964 pounds per year
and ES02)	Arsenic	2.673 pounds per year
	Cadmium	63.91 pounds per year
	Hydrogen Chloride	2.2 pounds per hour
	Hexachlorodibenzo-P-dioxin	0.8831 pounds per year

EMISSION SOURCES	TOXIC AIR POLLUTANTS	EMISSION LIMITS
	Tetrachlorodibenzo-P-dioxin	0.0349 pounds per year
	Mercury	3.82 pounds per day
	Chlorine	24.00 pounds per day; 1.00 pounds per hour
	Beryllium	47.64 pounds per year
	Nickel	12.00 pounds per day
	Manganese	8.22 pounds per day
	Hydrogen Fluoride	24.00 pounds per day; 1.00 pounds per hour

1. To ensure compliance with the above limits, the following restrictions apply:
 - a. The charge rate into the incinerator (**ID No. ES01**) shall not exceed 1,911 pounds per hour.
 - b. The charge rate into the incinerator (**ID No. ES02**) shall not exceed 1,911 pounds per hour.
2. The incinerators’ stack height shall be a minimum of 82.4 feet above ground level.
3. The Permittee shall maintain records or any other process operational information as is necessary to determine compliance with 15A NCAC 2D .1100. All records of compliance shall be maintained in a log (in written or electronic format) and made available for inspection by personnel of the Division of Air Quality.
4. The Permittee shall test one of the two incinerators (to be selected by DAQ prior to the testing date) once every twenty-four to twenty-six consecutive months to demonstrate compliance with 15A NCAC 2D .0408, .0521, and .1100 for the following pollutants: lead, visible emissions, arsenic, beryllium, cadmium, chlorine, chromium VI, hexachlorodibenzo-p-dioxin, tetrachlorodibenzo-p-dioxin, hydrogen chloride, hydrogen fluoride, manganese, and nickel.

The Permittee shall test one of the two incinerators (to be selected by DAQ prior to the testing date) once each calendar year quarter to demonstrate compliance with 15A NCAC 2D .1100 for mercury. If four consecutive quarterly performance tests indicate compliance with the mercury emission limit, the Permittee may conduct performance tests semi-annually. If two consecutive semi-annual performance tests indicate compliance with the mercury emission limit, the Permittee may then conduct performance tests annually. Testing will go back to quarterly whenever a stack test is failed. If the facility resumes quarterly performance tests, the same relaxation schedule mentioned above can go into effect.

For each stack test conducted as required by this Section, the company shall track and record details for the waste being burned and the material that may be carried over into the stack test period. Tracking shall include at a minimum, a cross reference of the identity of the waste generator with the company’s customer list, the type of business waste, the total weight of each container, and the time the material entered the incinerator. The identity information shall include the nature of the business activity. This information will be summarized and submitted as part of the stack test report. Additional tracking information may be required by the Regional Air Quality Supervisor.

5. In order to minimize bypass event duration and emissions, the Permittee shall:
 - a. Install an uninterruptible power supply (UPS) for the control system to eliminate any “Reboot” time associated with the programmable logic controllers (PLCs).
 - b. Install a power outage indicator as an input to the PLCs.
 - c. Revise the PLC logic to require automatic re-closure of the bypass stack **within 5 minutes** after a power failure.
 - d. Install a low level switch on the emergency generator diesel tank.
 - e. Install a pressure switch to the water supply to alert operators to a loss of water supply.

- f. Operate devices to assure continuous removal of the ash from the primary chamber.
- g. Reduce combustion air to the primary chamber by alternately shutting the fan off and on in 1 minute cycles to achieve a net reduction in airflow of 50% during the bypass event.

STATE ENFORCEABLE ONLY

- B. 1.** Venturi Scrubber Requirements - Particulate matter emissions from the incinerators shall be controlled as described in the permitted equipment list. The inspection, maintenance and recordkeeping requirements shall become effective upon the effective date of the permit.
- a. Inspection and Maintenance Requirements - To comply with the provisions of this permit and ensure that emissions do not exceed the regulatory limits, the Permittee shall perform periodic inspections and maintenance (I&M) as recommended by the manufacturer. In addition, the Permittee shall perform an annual internal inspection of the scrubber systems.
 - b. Recordkeeping Requirements - The results of all inspections and any variance from manufacturer's recommendations or from those given in this permit (when applicable) shall be investigated with corrections made and dates of actions recorded in a log (in written or electronic form). Records of all inspection and maintenance activities shall be recorded in the log. The log shall be kept on-site and made available to DAQ personnel upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1206(f) and 2D .0600 if records are not maintained.
2. Packed Bed Scrubber Requirements - Gaseous emissions shall be controlled as described in the permitted equipment list. The monitoring, inspection, maintenance and record keeping requirements shall become effective upon the effective date of the permit.

The Permittee shall monitor and record the temperature at the outlet of the packed bed scrubbers and pressure drop across the packed bed scrubbers once per shift.

- a. Inspection and Maintenance Requirements - To comply with the provisions of this permit and ensure that emissions do not exceed the regulatory limits, the Permittee shall perform periodic inspections and maintenance as recommended by the manufacturer. In addition, the Permittee shall perform an annual internal inspection of the scrubber systems.

As a minimum, the annual internal inspection will include inspection of spray nozzles, packing material, chemical feed system (if so equipped), and the cleaning/calibration of all associated instrumentation annually.

- b. Recordkeeping Requirements - The results of all inspections and any variance from manufacturer's recommendations or from those given in this permit (when applicable) shall be investigated with corrections made and dates of actions recorded in a log (in written or electronic form). Records of all inspection and maintenance activities shall be recorded in the log. The log shall be kept on-site and made available to DAQ personnel upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1206(f) and 2D .0600 if records are not maintained.

C. All 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; State-enforceable only	15A NCAC 2D .1806 15A NCAC 2D 1206(c)(7)

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.
- b. If the Director determines that a source or facility is emitting an objectionable odor, by the procedures described below, the Permittee shall:
 - i. within 180 days of receipt of written notification from the Director of the requirement to implement maximum feasible controls, complete the determination process outlined in 15A NCAC 2D .1807 and submit to the Director a completed maximum feasible control determination process, a permit application for maximum feasible controls and a compliance schedule;
 - ii. within 18 months of receipt of written notification from the Director of the requirement to implement maximum feasible controls, have installed and begun operating maximum feasible controls.
- c. The Director may require the Permittee to implement maximum feasible controls per 15A NCAC 2D .1806(g) if:
 - i. a member of the Division staff determines by field investigation that an objectionable odor is present by taking into account nature, intensity, pervasiveness, duration, and source of the odor and other pertinent factors;
 - ii. the source or facility emits known odor causing compounds such as ammonia, total volatile organics, hydrogen sulfide, or other sulfur compounds at levels that cause objectionable odors beyond the property line of that source or facility; or
 - iii. the Division receives epidemiological studies associating health problems with odors from the source or facility or evidence of documented health problems associated with odors from the source or facility provided by the State Health Director.

SECTION 3 - GENERAL CONDITIONS (version 3.0)

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)]
 - 1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 2D and 2Q.
 - 2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
 - 3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
 - 4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
 - 5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
 - 6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.
- B. **Permit Availability** [15A NCAC 2Q .0507(k) and .0508(i)(9)(B)]

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

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

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

D. **Submissions** [15A NCAC 2Q .0507(e) and 2Q .0508(i)(16)]

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

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

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

E. **Duty to Comply** [15A NCAC 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 1 must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application;

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

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

- 2. Section 502(b)(10) Changes [15A NCAC 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. Specific Permit Modifications [15A NCAC 2Q.0501 and .0523]

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.

**OO. Mandatory Greenhouse Gas Reporting Requirements [15A NCAC 2Q .0508]
FEDERAL-ENFORCEABLE ONLY**

If the Permittee is subject to requirements of 40 CFR 98.2(a), the Permittee shall submit all required reports to the EPA Administrator in accordance with 40 CFR 98.

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
CAIR	Clean Air Interstate Rule
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
NAA	Non-Attainment Area
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
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound