15A NCAC 02D .1208 OTHER INCINERATORS

(a) Applicability.

(1) This Rule shall apply to an incinerator not regulated by 15A NCAC 02D .1204, .1206, or 1210.

(2) An incinerator shall be exempt from Subparagraphs (b)(6) through (b)(9) and Paragraph (c) of this Rule if:
   (A) the incinerator is used solely to cremate pets; or
   (B) the emissions of all toxic air pollutants from an incinerator subject to this Rule and associated waste handling and storage are less than the levels listed in 15A NCAC 02Q .0711.

(b) Emission Standards.

(1) The emission standards in this Rule shall apply to an incinerator subject to this Rule except if 15A NCAC 02D .0524, 1110, or .1111 apply. However, if Subparagraphs (8) or (9) of this Paragraph and 15A NCAC 02D .0524, .1110, or .1111 regulate the same pollutant, the more restrictive provision for each pollutant shall apply notwithstanding provisions of 15A NCAC 02D .0524, .1110, or .1111 to the contrary.

(2) Particulate Matter. An incinerator subject to this Rule shall comply with one of the following emission standards for particulate matter:
   (A) For refuse charge rates between 100 and 2000 pounds per hour, the allowable emissions rate for particulate matter from each stack or chimney of an incinerator subject to this Rule shall not exceed the level calculated with the equation E=0.002P calculated to two significant figures, where "E" equals the allowable emission rate for particulate matter in pounds per hour and "P" equals the refuse charge rate in pounds per hour. For refuse charge rates of 0 to 100 pounds per hour the allowable emission rate shall not exceed 0.2 pounds per hour. For refuse charge rates of 2000 pounds per hour or greater the allowable emission rate shall not exceed 4.0 pounds per hour. Compliance with this Part shall be determined by averaging emissions over a three-hour block period.
   (B) Instead of meeting the standards in Part (A) of this Subparagraph, the owner or operator of an incinerator subject to this Rule may choose to limit particulate emissions from the incinerator to 0.08 grains per dry standard cubic foot corrected to 12 percent carbon dioxide. In order to choose this option, the owner or operator of the incinerator shall demonstrate that the particulate ambient air quality standards will not be violated. To correct to 12 percent carbon dioxide, the measured concentration of particulate matter shall be multiplied by 12 and divided by the measured percent carbon dioxide. Compliance with this Part shall be determined by averaging emissions over a three-hour block period.

(3) Visible Emissions. An incinerator subject to this Rule shall comply with 15A NCAC 02D .0521 for the control of visible emissions.

(4) Sulfur Dioxide. An incinerator subject to this Rule shall comply with 15A NCAC 02D .0516 for the control of sulfur dioxide emissions.

(5) Odorous Emissions. An incinerator subject to this Rule shall comply with 15A NCAC 02D .1806 for the control of odorous emissions.

(6) Hydrogen Chloride. An incinerator subject to this Rule shall control emissions of hydrogen chloride such that they do not exceed four pounds per hour unless they are reduced by at least 90 percent by weight or to no more than 50 parts per million by volume corrected to seven percent oxygen (dry basis). Compliance with this Subparagraph shall be determined by averaging emissions over a one-hour period.

(7) Mercury Emissions. Emissions of mercury and mercury compounds from the stack or chimney of any incinerator subject to this Rule shall not exceed 0.032 pounds per hour. Compliance with this Subparagraph shall be determined by averaging emissions over a one-hour period.

(8) Toxic Emissions. The owner or operator of an incinerator subject to this Rule shall demonstrate compliance with 15A NCAC 02D .1100 according to 15A NCAC 02Q .0700.

(9) Ambient Standards.
   (A) In addition to the ambient air quality standards in 15A NCAC 02D .0400, the following ambient air quality standards, measured by an annual average in milligrams per cubic meter at 77 degrees Fahrenheit (25 degrees Celsius) and 29.92 inches (760 mm) of
mercury pressure and in increments above background concentrations, shall apply aggregately to all incinerators at a facility subject to this Rule:

(i) arsenic and its compounds \(2.1 \times 10^{-6}\)
(ii) beryllium and its compounds \(4.1 \times 10^{-6}\)
(iii) cadmium and its compounds \(5.5 \times 10^{-6}\)
(iv) chromium (VI) and its compounds \(8.3 \times 10^{-8}\)

(B) The owner or operator of a facility with incinerators subject to this Rule shall demonstrate compliance with the ambient standards in Subparts (i) through (iv) of Part (A) of this Subparagraph by following the procedures set out in 15A NCAC 02D .1106. Modeling demonstrations shall comply with the requirements of 15A NCAC 02D .0533.

(C) The emission rates computed or used under Part (B) of this Subparagraph that demonstrate compliance with the ambient standards under Part (A) of this Subparagraph shall be specified as a permit condition for the facility with incinerators subject to this Rule as their allowable emission limits unless 15A NCAC 02D .0524, .1110 or .1111 requires more restrictive rates.

(c) Operational Standards.

(1) The operational standards in this Rule shall not apply to any incinerator subject to this Rule when applicable operational standards in 15A NCAC 02D .0524, .1110, or .1111 apply.

(2) Crematory Incinerators. Gases generated by the combustion in a crematory incinerator shall be subjected to a minimum temperature of 1600 degrees Fahrenheit for a period of not less than one second.

(3) Other Incinerators. An incinerator not subject to any other rule in this Section shall meet the following requirement: Gases generated by the combustion shall be subjected to a minimum temperature of 1800 degrees Fahrenheit for a period of not less than one second. The temperature of 1800 degrees Fahrenheit shall be maintained at least 55 minutes out of each 60-minute period, but at no time shall the temperature go below 1600 degrees Fahrenheit.

(4) Except during a start-up procedure that has been approved pursuant to 15A NCAC 02D .0535(g), waste material shall not be loaded into any incinerator subject to this Rule when the temperature is below the minimum required temperature. Start-up procedures may be determined on a case-by-case basis pursuant to 15A NCAC 02D .0535(g). An incinerator subject to this Rule shall have automatic auxiliary burners that are capable of maintaining the required minimum temperature in the secondary chamber excluding the heat content of the wastes.

(d) Test Methods and Procedures.

(1) The test methods and procedures described in 15A NCAC 02D .2600 and in 40 CFR Part 60 Appendix A and 40 CFR Part 61 Appendix B shall be used to determine compliance with emission rates. Method 29 of 40 CFR Part 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 the analysis.

(2) The Director shall require the owner or operator to test his incinerator to demonstrate compliance with the emission standards listed in Paragraph (b) of this Rule if necessary to determine compliance with the emission standards of Paragraph (b) of this Rule.

(e) Monitoring, Recordkeeping, and Reporting.

(1) The owner or operator of an incinerator subject to the requirements of this Rule shall comply with the monitoring, recordkeeping, and reporting requirements in 15A NCAC 02D .0600.

(2) The owner or operator of an incinerator, except an incinerator meeting the requirements of 15A NCAC 02D .1201(b)(4)(A) through (D), shall maintain and operate a continuous temperature monitoring and recording device for the primary chamber and, if there is a secondary chamber, for the secondary chamber. The Director shall require a temperature monitoring device for incinerators meeting the requirements of 15A NCAC 02D .1201(b)(4)(A) through (D) if the incinerator is in violation of the requirements of 15A NCAC 02D .1201(b)(4)(D). 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 pH for wet scrubber systems and the rate of alkaline injection for dry scrubber systems. The Director shall require the owner or operator of an incinerator with a permitted charge rate of 750 pounds per hour or more to install, operate, and maintain continuous monitors for oxygen or for carbon monoxide or both as necessary to determine proper operation of the
incinerator. The Director shall require the owner or operator of an incinerator with a permitted charge rate of less than 750 pounds per hour to install, operate, and maintain monitors for oxygen or for carbon monoxide or both if necessary to determine proper operation of the incinerator.

(f) Excess Emissions and Start-up and Shut-down. An incinerator subject to this Rule shall comply with 15A NCAC 02D 0535.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(10); Eff. July 1, 1998; Amended Eff. August 1, 2008; June 1, 2008; July 1, 2007; January 1, 2005; August 1, 2002; July 1, 2000; July 1, 1999; Readopted Eff. July 1, 2018.