

SECTION .1200 - CONTROL OF EMISSIONS FROM INCINERATORS AND COMBUSTION UNITS

15A NCAC 02D .1201 PURPOSE AND SCOPE

(a) The rules in this Section shall apply to incinerators and combustor units as defined in 15A NCAC 02D .1202 or regulated pursuant to 15A NCAC 02D .1208.

(b) The rules in this Section shall not apply to:

- (1) afterburners, flares, fume incinerators, or other similar devices used to reduce the emissions of air pollutants from processes whose emissions shall be regulated as process emissions;
- (2) boilers or industrial furnaces that burn waste as a fuel, except solid waste as defined in 40 CFR 241.2;
- (3) air curtain burners, which shall comply with 15A NCAC 02D .1900; or
- (4) incinerators used to dispose of dead animals or poultry that meet all of the following requirements:
 - (A) the incinerator is located on a farm and is operated by the farm owner or by the farm operator;
 - (B) the incinerator is used solely to dispose of animals or poultry originating on the farm where the incinerator is located;
 - (C) the incinerator is not charged at a rate that exceeds its design capacity; and
 - (D) the incinerator complies with 15A NCAC 02D .0521 (visible emissions).

(c) Referenced document SW-846 "Test Methods for Evaluating Solid Waste," Third Edition, cited by rules in this Section is incorporated by reference, not including subsequent amendments or editions, and may be obtained free of charge online at <https://www.epa.gov/hw-sw846>.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(1), (3), (4), (5);
Eff. October 1, 1991;

Amended Eff. July 1, 2000; July 1, 1999; July 1, 1998; April 1, 1995; December 1, 1993;

Temporary Amendment Eff. March 1, 2002;

Amended Eff. July 1, 2007; December 1, 2005; August 1, 2002;

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15A NCAC 02D .1202 DEFINITIONS

(a) For the purposes of this Section, the definitions in 40 CFR 60.5250, 40 CFR 60.2875, and 40 CFR 60.51c shall apply in addition to the following definitions:

- (1) "Air curtain incinerator," also referred to as an "air curtain burner," means an incinerator that operates by forcefully projecting a curtain of air across an open chamber or pit in which combustion occurs as defined in 40 CFR 60.2875.
- (2) "Commercial and industrial solid waste incinerator" (CISWI) or "commercial and industrial solid waste incineration unit" is defined in 40 CFR 60.2875.
- (3) "Co-fired combustor" is defined in 40 CFR 60.51c. For the purposes of this definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste shall be deemed "other" wastes when calculating the percentage of hospital, medical, or infectious waste combusted.
- (4) "Crematory incinerator" means any incinerator located at a crematory regulated pursuant to 21 NCAC 34C that is used solely for the cremation of human remains.
- (5) "Dioxin and Furan" (also referred to as "dioxins/furans") means tetra- through octa- chlorinated dibenzo-p-dioxins and dibenzofurans.
- (6) "Hospital, medical, and infectious waste incinerator (HMIWI)" means any device that combusts any amount of hospital, medical, and infectious waste.
- (7) "Large HMIWI" means:
 - (A) a HMIWI whose maximum design waste burning capacity is more than 500 pounds per hour;
 - (B) a continuous or intermittent HMIWI whose maximum charge rate is more than 500 pounds per hour; or
 - (C) a batch HMIWI whose maximum charge rate is more than 4,000 pounds per day.
- (8) "Hospital waste" means discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation.
- (9) "Medical and Infectious Waste" means any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals that is listed in Part (A)(i) through (A)(vii) of this Subparagraph.
 - (A) The definition of medical and infectious waste includes:
 - (i) cultures and stocks of infectious agents and associated biologicals, including:
 - (I) cultures from medical and pathological laboratories;
 - (II) cultures and stocks of infectious agents from research and industrial laboratories;
 - (III) wastes from the production of biologicals;
 - (IV) discarded live and attenuated vaccines; and
 - (V) culture dishes and devices used to transfer, inoculate, and mix cultures;
 - (ii) human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery, autopsy, or other medical procedures, and specimens of body fluids and their containers;
 - (iii) human blood and blood products including:
 - (I) liquid waste human blood;
 - (II) products of blood;
 - (III) items saturated or dripping with human blood; or
 - (IV) items that were saturated or dripping with human blood that are now caked with dried human blood, including serum, plasma, other blood components, and their containers, that were used or intended for use in either patient care, testing and laboratory analysis, or the development of pharmaceuticals. Intravenous bags are also included in this category;
 - (iv) sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or

- unbroken glassware that were in contact with infectious agents, such as used slides and cover slips;
- (v) animal waste, including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals, or testing of pharmaceuticals;
- (vi) isolation wastes, including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from highly communicable diseases, or isolated animals known to be infected with highly communicable diseases; and
- (vii) unused sharps, including the following unused or discarded sharps:
 - (I) hypodermic needles;
 - (II) suture needles;
 - (III) syringes; and
 - (IV) scalpel blades.
- (B) The definition of medical and infectious waste shall not include:
 - (i) hazardous waste identified or listed in 40 CFR Part 261;
 - (ii) household waste, as defined in 40 CFR 261.4(b)(1);
 - (iii) ash from incineration of medical and infectious waste after the incineration process has been completed;
 - (iv) human corpses, remains, and anatomical parts that are intended for interment or cremation; and
 - (v) domestic sewage materials identified in 40 CFR 261.4(a)(1).
- (10) "Medium HMIWI" means:
 - (A) a HMIWI whose maximum design waste burning capacity is more than 200 pounds per hour but less than or equal to 500 pounds per hour;
 - (B) a continuous or intermittent HMIWI whose maximum charge rate is more than 200 pounds per hour but less than or equal to 500 pounds per hour; or
 - (C) a batch HMIWI whose maximum charge rate is more than 1,600 pounds per day but less than or equal to 4,000 pounds per day.
- (11) "POTW" means a publicly owned treatment works as defined in 40 CFR 501.2.
- (12) "Sewage sludge" is defined in 40 CFR 60.5250.
- (13) "Sewage sludge incineration (SSI) unit" is defined in 40 CFR 60.5250.
- (14) "Small HMIWI" means:
 - (A) a HMIWI whose maximum design waste burning capacity is less than or equal to 200 pounds per hour;
 - (B) a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to 200 pounds per hour; or
 - (C) a batch HMIWI whose maximum charge rate is less than or equal to 1,600 pounds per day.
- (15) "Small remote HMIWI" means any small HMIWI that is located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area (SMSA) and that burns less than 2,000 pounds per week of hospital, medical and infectious waste. The 2,000 pound per week limitation does not apply during performance tests.
- (16) "Solid waste" means the term solid waste as defined in 40 CFR 241.2.
- (17) "Standard Metropolitan Statistical Area (SMSA)" means any area listed in Office of Management and Budget (OMB) Bulletin No. 93-17, entitled "Revised Statistical Definitions for Metropolitan Areas" dated July 30, 1993, incorporated by reference not including subsequent amendments or editions. A copy of this document may be obtained through the internet at <http://www.census.gov/population/estimates/metro-city/93mfips.txt>.

(b) Whenever reference is made to the Code of Federal Regulations in this Section, the definition in the Code of Federal Regulations shall apply unless specifically stated otherwise in a particular rule. The Code of Federal Regulations is available in electronic form free of charge at <https://www.gpo.gov/fdsys/search/home.action>.

History Note: Authority G.S. 143-213; 143-215.3(a)(1);
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15A NCAC 02D .1203 HAZARDOUS WASTE INCINERATORS

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1995;
Repealed Eff. July 1, 2018.

15A NCAC 02D .1204 SEWAGE SLUDGE INCINERATION UNITS

(a) Applicability. This Rule shall apply to sewage sludge incineration units that meet all three requirements listed in 40 CFR 60.5060(a) through (c).

(b) The provisions of this Rule shall apply to any incinerator subject to this Rule. However, when the provisions of this Rule and provisions of 15A NCAC 02D .0524, .1110, or .1111 or provisions of 40 CFR Part 61, Subpart C; 40 CFR Part 61, Subpart E; or 40 CFR Part 503, Subpart E, regulate the same pollutant, the provisions of the more restrictive standards established in Paragraphs (e) and (f) of this Rule shall apply, notwithstanding provisions of 15A NCAC 02D .0524, .1110, or .1111 or provisions of 40 CFR Part 61, Subpart C; 40 CFR Part 61, Subpart E; or 40 CFR Part 503, Subpart E to the contrary.

(c) Exemptions. Sewage sludge incineration units shall be exempted from this Rule if they are subject to:

- (1) 40 CFR Part 60 Subpart LLLL by:
 - (A) commencing construction after October 14, 2010; or
 - (B) commencing modification after September 21, 2011; or
- (2) Rule 15A NCAC 02D .1210, if they are not located at a wastewater treatment facility designed to treat domestic sewage sludge as defined in 40 CFR 60.5065.

(d) Definitions. For the purpose of this Rule, the definitions in 40 CFR 503.41, 40 CFR 60.5250, and 40 CFR 60.2 shall apply in addition to the definitions in 15A NCAC 02D .1202.

(e) Emission Standards. Any incinerator subject to this Rule shall comply with all of the following emission standards:

- (1) Emissions of particulate matter from a sewage sludge incineration unit shall meet the requirements established in 40 CFR 60.5165 or 40 CFR 60.152 as defined in Paragraph (b) of this Rule.
- (2) Fugitive emissions from a sewage sludge incineration unit ash handling process shall meet the requirements established in 40 CFR 60.5165. All other visible emissions from a sewage sludge incineration unit shall comply with 15A NCAC 02D .0521.
- (3) Emissions of hydrogen chloride from a sewage sludge incineration unit shall meet the requirements established in 40 CFR 60.5165.
- (4) Emissions of carbon monoxide from a sewage sludge incineration unit shall meet the requirements established in 40 CFR 60.5165.
- (5) Emissions of dioxin and furan (total mass basis) from a sewage sludge incineration unit shall meet the requirements established in 40 CFR 60.5165.
- (6) Emissions of dioxin and furan (toxic equivalency basis) from a sewage sludge incineration unit shall meet the requirements established in 40 CFR 60.5165.
- (7) Emissions of mercury from a sewage sludge incineration unit shall meet the requirements established in 40 CFR 60.5165 and in 40 CFR 61.52(b) as referenced in 15A NCAC 02D .1110(a), (d), and (e).
- (8) Emissions of nitrogen oxides from a sewage sludge incineration unit shall meet the requirements established in 40 CFR 60.5165.
- (9) Emissions of sulfur dioxide from a sewage sludge incineration unit shall meet the requirements established in 40 CFR 60.5165.
- (10) Emissions of cadmium from a sewage sludge incineration unit shall meet the requirements established in 40 CFR 60.5165.
- (11) Emissions of lead from a sewage sludge incineration unit shall meet the requirements established in 40 CFR 60.5165. The daily concentration of lead in sewage sludge fed to a sewage sludge incinerator shall meet the requirements specified in 40 CFR 503.43(c).
- (12) Emissions of beryllium from a sewage sludge incineration unit shall meet the requirements established in 40 CFR 61.32(a) through (c) as referenced in 15A NCAC 02D .1110(a), (d), and (e).
- (13) The daily concentration of arsenic, cadmium, chromium, and nickel in sewage sludge fed to a sewage sludge incinerator shall meet the requirements specified in 40 CFR 503.43(d).
- (14) Emissions of toxic air pollutants from a sewage sludge incineration unit shall meet the requirements specified in 15A NCAC 02D .1100 in accordance with 15A NCAC 02Q .0700.
- (15) The monthly average concentration for total hydrocarbons, or for carbon monoxide as provided in 40 CFR 503.40(c), in the exit gas from a sewage sludge incinerator stack, corrected to zero percent moisture and seven percent oxygen as specified in 40 CFR 503.44, shall not exceed 100 parts per million on a volumetric basis using the continuous emission monitoring required in Paragraph (k) of this Rule.

(f) Operating limits. The owner or operator of a sewage sludge incineration unit shall meet:

- (1) as applicable, the operating limits and requirements specified in 40 CFR 60.5170 including Subparagraphs (a) through (d) and (h) according to the schedule specified in 40 CFR 60.5170(e);
 - (2) the operating limits and requirements specified in 40 CFR 60.5170 including Subparagraphs (a) through (d) by the final compliance date specified in Paragraph (n) of this Rule;
 - (3) monitor the feed rate and moisture content of the sewage sludge fed to the sewage sludge incinerator, as specified in 40 CFR 60.5170(f)(1) and (f)(2); and
 - (4) the operating requirements in 40 CFR 60.5170(a) through (d) and (h) shall meet any new operating limits, re-established in accordance with 40 CFR 60.5210.
- (g) Emission and operational standards and limits established in Paragraphs (e) and (f) of this Rule and in accordance with provisions in Paragraph (b) of this Rule shall apply at all times that sewage sludge is in the combustion chamber before the sewage sludge feed to the combustor is cut off for a period of time not less than the sewage sludge incineration residence time and during periods of malfunction as specified in 40 CFR 60.5180.
- (h) Initial Compliance:
- (1) Requirements with the emission standards specified in the Paragraph (e) of this Rule shall be demonstrated by using the procedures specified in 40 CFR 60.5185(a) through (e).
 - (2) Requirements with the site-specific operating limits specified in 40 CFR 60.5190(a) shall be established in accordance with the requirements specified 40 CFR 60.5190(a) through (f).
 - (3) Initial air pollution control device inspection specified 40 CFR 60.5220(c) shall be conducted by the date established in accordance with 40 CFR 60.5195(a). All necessary repairs shall be completed in accordance with 40 CFR 60.5195(b).
 - (4) A site-specific monitoring plan for continuous monitoring, bag leak detection, ash handling systems, and an initial performance evaluation date shall be developed in accordance with the requirements specified in 40 CFR 60.5200(a) and (d) through (h).
- (i) Continuous Compliance Requirements. The owner or operator of a sewage sludge incineration unit subject to this Rule shall demonstrate compliance with the emissions standards in Subparagraphs (e)(1) through (13) and (15) of this Rule by:
- (1) demonstrating continuous compliance as specified in 40 CFR 60.5205(a) through (f);
 - (2) demonstrating continuous compliance with the operating limits as specified in 40 CFR 60.5210(a)(1) and (b) through (d);
 - (3) demonstrating continuous compliance with the total hydrocarbon concentration of the incinerator stack exit gas according to 40 CFR 503.45(a) unless the requirements for continuously monitoring carbon monoxide as provided in 40 CFR 503.40(c) are satisfied;
 - (4) demonstrating continuous compliance with the oxygen content of the incinerator stack exit gas as provided in 40 CFR 503.45(b);
 - (5) demonstrating continuous compliance with the moisture content of the incinerator stack exit gas as provided in 40 CFR 503.45(c);
 - (6) conducting an annual air pollution control device inspection as specified in 40 CFR 60.5215(a);
 - (7) making all necessary repairs within the time periods specified in 40 CFR 60.5215(b);
 - (8) monitoring the concentration of beryllium and mercury from the sewage sludge fed to the incinerator as frequently as specified in 40 CFR 503.46(a)(1); and
 - (9) monitoring the concentrations of arsenic, cadmium, chromium, lead, and nickel in the sewage sludge fed to the incinerator as frequently as specified in 40 CFR 503.46(a)(2) and (3).
- (j) Performance Testing, Monitoring, and Calibration Requirements. The owner or operator of a sewage sludge incineration unit subject to this Rule shall demonstrate compliance with the emissions standards in Subparagraphs (e)(1) through (13) and (15) of this Rule by:
- (1) meeting the performance testing requirements specified in 40 CFR 60.5220(a)(1) through (11), 40 CFR 61.53(d) or 40 CFR 61.54, 40 CFR 503.43(e), and 40 CFR 61.33;
 - (2) meeting the monitoring requirements specified in 40 CFR 60.5220(b)(1) through (7), 40 CFR 61.55, 40 CFR 503.55, 40 CFR 503.46; and 40 CFR 60.153;
 - (3) performing the air pollution control device inspection requirements specified in 40 CFR 60.5220(b)(1) through (3); and
 - (4) meeting the bypass stack provisions specified in 40 CFR 60.5220(d).
- (k) The owner or operator of a sewage sludge incineration unit, subject to this Rule, shall install, operate, calibrate, and maintain the continuous parameter monitoring systems to ensure compliance with the operational limits set forth in Paragraph (f) of this Rule as specified in 40 CFR 503.45, 40 CFR 60.5225 (a)(1), (2), and 40 CFR 60.153.

(l) Recordkeeping and Reporting. The owner or operator of a sewage sludge incineration unit subject to this Rule shall:

- (1) maintain on site in either paper copy or electronic format that can be printed upon request for a period of five years the following:
 - (A) the calendar date of each record as specified in 40 CFR 60.5230(a);
 - (B) increments of progress as specified in 40 CFR 60.5230(b);
 - (C) operator training records as specified in 40 CFR 60.5230(c)(1) through (4);
 - (D) air pollution control device inspections as specified in 40 CFR 60.5230(d);
 - (E) performance test reports as specified in 40 CFR 60.5230(e)(1) through (4);
 - (F) continuous monitoring data as specified in 40 CFR 60.5230(f)(1) through (4) and 40 CFR 60.153;
 - (G) other records for continuous monitoring systems as specified in 40 CFR 60.5230(g)(1) through (3) and 40 CFR 60.153;
 - (H) deviation reports as specified in 40 CFR 60.5230(h);
 - (I) equipment specifications and operation and maintenance requirements as specified in 40 CFR 60.5230(i);
 - (J) inspections, calibrations, and validation checks of monitoring devices as specified in 40 CFR 60.5230(j);
 - (K) monitoring plan and performance evaluations for continuous monitoring systems as specified in 40 CFR 60.5230(k);
 - (L) records indicating use of the bypass stack as specified in 40 CFR 60.5230(m);
 - (M) malfunction occurrence records shall as specified in 40 CFR 60.5230(n); and
 - (N) records showing compliance with standards for the use or disposal of sewage sludge listed in 40 CFR 503.47(b) through (n).
- (2) Submit to the Director in the format specified in 40 CFR 60.5235(h)(1) and by due dates established in Table 6 of 40 CFR Part 60 Subpart M the following:
 - (A) the initial compliance report as specified in 40 CFR 60.5235(b);
 - (B) the annual compliance report as specified in 40 CFR 60.5235(c);
 - (C) deviation reports (deviations from emission limits, emission standards, or operating limits, as specified in 40 CFR 60.5235(e)(1)) when it is required by 40 CFR 60.5235(d);
 - (D) notification of qualified operator deviation and notification of status of qualified operator deviation as specified in 40 CFR 60.5235(e)(1);
 - (E) notification of resumed operation pursuant to 40 CFR 60.5155(b)(2)(i) following shutdown (due to qualified operator deviation) as specified in 40 CFR 60.5235(e)(2);
 - (F) notification of a force majeure as specified in 40 CFR 60.5235(f);
 - (G) notification of intent to start or stop use of a continuous monitoring system, notification of intent to conduct a performance test, and notification of intent to conduct a rescheduled performance test as specified in 40 CFR 60.5235(g);
 - (H) performance test relative accuracy audit data (test reference method) and performance test data in the manner specified in 40 CFR 60.5235(h)(2); and
 - (I) semiannual reports as specified in 40 CFR 60.155.
- (3) With the Director's approval, the owner or operator may change the semiannual or annual reporting dates of the reports listed in Subparagraph (l)(2) of this Rule in accordance with the procedures established in 40 CFR 60.19(c) pursuant to 40 CFR 60.5235(i).

(m) Operator Training and Qualification.

- (1) A sewage sludge incineration unit subject to this Rule shall not be operated unless a fully trained and qualified sewage sludge incineration unit operator is at the facility or can be at the facility within one hour. The trained and qualified sewage sludge incineration unit operator may operate the sewage sludge incineration unit directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified sewage sludge incineration unit operators are temporarily not accessible, the procedures in 40 CFR 60.5155 shall apply.
- (2) Operator training and qualification shall be obtained by completing the requirements specified in 40 CFR 60.5130(c).
- (3) The owner or operator of a sewage sludge incineration unit subject to this Rule shall complete an annual review or refresher course covering the five topics specified in 40 CFR 60.5145(a) through (e) to maintain an operator qualification.

- (4) The owner or operator of a sewage sludge incineration unit subject to this Rule shall renew a lapsed operator qualification before he or she begins operation of the unit by one of the two methods specified in 40 CFR 60.5150(a) and (b).
 - (5) When a qualified operator of a sewage sludge incineration unit subject to this Rule is not at the facility and cannot be at the facility within one hour, the owner shall meet the criteria specified in 40 CFR 60.5155.
 - (6) The owner or operator of a sewage sludge incineration unit subject to this Rule shall maintain and review the operator training documentation as specified in 40 CFR 60.5160 (a) and (b).
- (n) Final compliance. The owner or operator of a sewage sludge incineration unit subject to this Rule shall achieve final compliance by the dates specified in 40 CFR 60.5035(a) or (b).

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4),(5);
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15A NCAC 02D .1205 LARGE MUNICIPAL WASTE COMBUSTORS

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3),(4),(5); 40 CFR 60.35b; 40 CFR 60.34e; 40 CFR 60.1515;
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Repealed Eff. July 1, 2018.

15A NCAC 02D .1206 HOSPITAL, MEDICAL, AND INFECTIOUS WASTE INCINERATORS

- (a) Applicability. This Rule shall apply to any hospital, medical, and infectious waste incinerator (HMIWI), except:
- (1) a HMIWI required to have a permit pursuant to Section 3005 of the Solid Waste Disposal Act;
 - (2) a pyrolysis unit;
 - (3) a cement kiln firing hospital waste or medical and infectious waste;
 - (4) a physical or operational change made to an existing HMIWI solely for the purpose of complying with the emission standards for HMIWIs in this Rule. These physical or operational changes shall not be deemed a modification and shall not result in an existing HMIWI becoming subject to the provisions of 40 CFR Part 60, Subpart Ec;
 - (5) a HMIWI during periods when only pathological waste, low-level radioactive waste, or chemotherapeutic waste is burned, provided that the owner or operator of the HMIWI:
 - (A) notifies the Director of an exemption claim; and
 - (B) keeps records on a calendar-quarter basis of the periods of time when only pathological waste, low-level radioactive waste, or chemotherapeutic waste was burned; or
 - (6) a co-fired HMIWI, if the owner or operator of the co-fired HMIWI:
 - (A) notifies the Director of an exemption claim;
 - (B) provides an estimate of the relative weight of hospital, medical, and infectious waste and other fuels or wastes to be combusted; and
 - (C) keeps records on a calendar-quarter basis of the weight of hospital, medical, and infectious waste combusted and the weight of all other fuels and wastes combusted at the co-fired HMIWI.
- (b) Definitions. For the purpose of this Rule, the definitions contained in 40 CFR 60.51c shall apply in addition to the definitions in 15A NCAC 02D .1202.
- (c) Emission Standards.
- (1) The emission standards in this Paragraph apply to all HMIWIs except if 15A NCAC 02D .0524, .1110, or .1111 applies. However, when Subparagraphs (6) or (7) 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) Each HMIWI for which construction was commenced on or before June 20, 1996, or for which modification is commenced on or before March 16, 1998, shall not exceed the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60.
 - (3) Each HMIWI for which construction was commenced after June 20, 1996, but no later than December 1, 2008, or for which modification is commenced after March 16, 1998, but no later than April 6, 2010, shall not exceed the more stringent of the requirements listed in Table 1B of Subpart Ce and Table 1A of Subpart Ec of 40 CFR Part 60.
 - (4) Each small remote HMIWI shall not exceed emission standards listed in Table 2B of Subpart Ce of 40 CFR Part 60.
 - (5) Visible Emissions. The owner or operator of any HMIWI shall not cause to be discharged into the atmosphere from the stack of the HMIWI any gases that exhibit greater than six percent opacity (six-minute block average).
 - (6) Toxic Air Pollutants. The owner or operator of any HMIWI subject to this Rule shall demonstrate compliance with 15A NCAC 02D .1100 according to 15A NCAC 02Q .0700.
- (d) Operational Standards.
- (1) The operational standards in this Rule shall not apply to a HMIWI if applicable operational standards in 15A NCAC 02D .0524, .1110, or .1111 apply;
 - (2) Annual Equipment Inspection.
 - (A) Each HMIWI shall undergo an annual equipment inspection no more than 12 months following the previous annual equipment inspection;
 - (B) The equipment inspection shall include all the elements listed in 40 CFR 60.36e(a)(1)(i) through (xvii);
 - (C) Necessary repairs found during the inspection shall be completed within 10 operating days after the inspection unless the owner or operator submits a written request to the Director for an extension of the 10 operating day period; and
 - (D) The Director shall grant an extension to a small remote HMIWI if the owner or operator submits a written request to the Director for an extension of the 10 operating day period,

if the owner or operator demonstrates that achieving compliance by the time allowed under this Part is not feasible, if the Director does not extend the time allowed for compliance by more than 30 days following the receipt of the written request, and if the Director concludes that the emission control standards would not be exceeded if the repairs were delayed;

- (3) Air Pollution Control Device Inspection.
 - (A) Each HMIWI shall undergo air pollution control device inspections annually, no more than 12 months following the previous annual air pollution control device inspection, to inspect air pollution control devices for proper operation, if applicable: to ensure proper calibration of thermocouples, sorbent feed systems, and all other monitoring equipment; and to observe that the equipment is maintained in good operating condition. Necessary repairs found during the inspection shall be completed within 10 operating days of the inspection unless the owner or operator submits a written request to the Director for an extension of the 10 operating day period; and
 - (B) The Director shall grant the extension if the owner or operator of the HMIWI demonstrates that achieving compliance by the 10 operating day period is not feasible, the Director does not extend the time allowed for compliance by more than 30 days following the receipt of the written request, and the Director concludes that the emission control standards would not be exceeded if the repairs were delayed.
- (4) Any HMIWI, except for a small HMIWI for which construction was commenced on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998, and subject to the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60, shall comply with 40 CFR 60.56c except sources subject to the emissions limits pursuant to Table 1B of Subject Ce of 40 CFR Part 60 or the more stringent of the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60 and Table 1A of Subpart Ec of 40 CFR Part 60 may elect to use CO CEMS as specified in 40 CFR 60.56c(c)(4) or bag detection systems as specified in 40 CFR 60.57c(h);
- (5) A small remote HMIWI constructed on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998, shall be subject to the requirements listed in Table 2B of Subpart Ce of 40 CFR Part 60. The owner or operator shall comply with:
 - (A) the compliance and performance testing requirements of 40 CFR 60.56c, excluding test methods listed in 40 CFR 60.56c(b)(7), (8), (12), (13) (Pb and Cd), and (14);
 - (B) the annual PM, CO, and HCl emissions testing requirements pursuant to 40 CFR 60.56c(c)(2);
 - (C) the annual fugitive emissions testing requirements pursuant to 40 CFR 60.56c(c)(3);
 - (D) the CO CEMS requirements pursuant to 40 CFR 60.56c(c)(4); and
 - (E) the compliance requirements for monitoring listed in 40 CFR 60.56c(c)(5) through (7), and (d) through (k).
- (6) A small remote HMIWI for which construction was commenced on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998, that is subject to the requirements listed in Table 2A or 2B of Subpart Ce of 40 CFR Part 60 and not equipped with an air pollution control device shall meet the following compliance and performance testing requirements:
 - (A) establish maximum charge rate and minimum secondary chamber temperature as site-specific operating parameters during the initial performance test to determine compliance with applicable emission limits. The 2,000 pounds per week limitation shall not apply during performance tests;
 - (B) the owner or operator shall not operate the HMIWI above the maximum charge rate or below the minimum secondary chamber temperature measured as three-hour rolling averages, calculated each hour as the average of the previous three operating hours, at all times. Operating parameter limits shall not apply during performance tests. Operation above the maximum charge rate or below the minimum secondary chamber temperature shall constitute a violation of the established operating parameters; and
 - (C) operation of a HMIWI above the maximum charge rate and below the minimum secondary chamber temperature, each measured on a three-hour rolling average, simultaneously shall constitute a violation of the PM, CO, and dioxin/furan emissions

limits. The owner or operator of a HMIWI may conduct a repeat performance test within 30 days of violation of applicable operating parameters to demonstrate that the designated facility is not in violation of the applicable emissions limits. Repeat performance tests shall be conducted under process and control device operating conditions duplicating as nearly as possible those that indicated during the violation.

- (7) A small HMIWI for which construction was commenced after June 20, 1996, but no later than December 1, 2008, or for which modification is commenced after March 16, 1998, but no later than April 6, 2010, shall comply with:

- (A) the compliance and performance testing requirements of 40 CFR 60.56c, excluding the annual fugitive emissions testing requirements pursuant to 40 CFR 60.56c(c)(3);
- (B) the CO CEMS requirements pursuant to 40 CFR 60.56c(c)(4); and
- (C) the compliance requirements for monitoring listed in 40 CFR 60.56c(c)(5)(ii) through (v), (c)(6), (c)(7), (e)(6) through (10), (f)(7) through (10), and (g)(6) through (10).

The owner or operator may elect to use CO CEMS as specified in 40 CFR 60.56c(c)(4) or bag leak detection systems as specified in 40 CFR 60.57c(h).

- (8) The owner or operator of a HMIWI equipped with selective noncatalytic reduction technology shall:

- (A) establish the maximum charge rate, the minimum secondary chamber temperature, and the minimum reagent flow rate as site-specific operating parameters during the initial performance test to determine compliance with the emissions limits;
- (B) ensure that the affected facility does not operate above the maximum charge rate or below the minimum secondary chamber temperature or the minimum reagent flow rate measured as three-hour rolling averages, calculated each hour as the average of the previous three operating hours, at all times. Operating parameter limits shall not apply during performance tests; and
- (C) operation of any HMIWI above the maximum charge rate, below the minimum secondary chamber temperature, and below the minimum reagent flow rate simultaneously shall constitute a violation of the NO_x emissions limit. The owner or operator may conduct a repeat performance test within 30 days of a violation of applicable operating parameters to demonstrate that the affected facility is not in violation of the applicable emissions limits. Repeat performance tests shall be conducted using the identical operating parameters that indicated a violation.

(e) Test Methods and Procedures.

- (1) The test methods and procedures described in 15A NCAC 02D .2600, 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 the HMIWI to demonstrate compliance with the emission standards listed in Paragraph (c) of this Rule if necessary to assure compliance.

(f) Monitoring, Recordkeeping, and Reporting.

- (1) The owner or operator of an HMIWI 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 HMIWI subject to the requirements of this Rule 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 owner or operator of an HMIWI 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 HMIWI with a permitted charge rate of 750 pounds per hour or more to install, operate, and maintain continuous monitors for oxygen, carbon monoxide, or both as necessary to determine proper operation of the HMIWI. The Director may require the owner or operator of an HMIWI 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 HMIWI.

- (3) In addition to the requirements of Subparagraphs (1) and (2) of this Paragraph, the owner or operator of a HMIWI shall comply with the reporting and recordkeeping requirements in 40 CFR 60.58c(b) through (g), excluding 40 CFR 60.58c(b)(2)(ii) and (b)(7).
- (4) In addition to the requirements of Subparagraphs (1), (2) and (3) of this Paragraph, the owner or operator of a small remote HMIWI shall:
 - (A) maintain records of the annual equipment inspections, all required maintenance, and all repairs not completed within 10 days of an inspection;
 - (B) submit an annual report containing information recorded in Part (A) of this Subparagraph to the Director no later than 60 days following the year in which data were collected. Subsequent reports shall be sent no later than 12 calendar months following the previous report. The report shall be signed by the HMIWI manager; and
 - (C) submit the reports required by Parts (A) and (B) of this Subparagraph to the Director semiannually if the HMIWI is subject to the permitting procedures of 15A NCAC 02Q .0500, Title V Procedures.
- (5) Waste Management Guidelines. The owner or operator of a HMIWI shall comply with the requirements of 40 CFR 60.55c for the preparation and submittal of a waste management plan.
- (6) Except as provided in Subparagraph (7) of this Paragraph, the owner or operator of any HMIWI shall comply with the monitoring requirements in 40 CFR 60.57c.
- (7) The owner or operator of a small remote HMIWI shall:
 - (A) install, calibrate, maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute throughout operation;
 - (B) install, calibrate, maintain, and operate a device that automatically measures and records the date, time, and weight of each charge fed into the HMIWI; and
 - (C) obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. Valid monitoring data shall be obtained for 75 percent of the operating hours per day and for 90 percent of the operating hours per calendar quarter that the HMIWI is combusting hospital, medical, and infectious waste.
- (8) An HMIWI, except for small remote HMIWI not equipped with an air pollution control device, that is subject to the emissions requirements in Table 1B or Table 2B of Subpart Ce of 40 CFR Part 60 or the more stringent of the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60 and Table 1A of Subpart Ec of 40 CFR Part 60 shall perform the monitoring requirements listed in 40 CFR 60.57c.
- (9) The owner or operator of a small remote HMIWI, not equipped with an air pollution control device and subject to the emissions requirements in Table 2B of Subpart Ce of 40 CFR Part 60 shall:
 - (A) install, calibrate to manufacturers' specifications, maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute throughout operation;
 - (B) install, calibrate to manufacturers' specifications, maintain, and operate a device which automatically measures and records the date, time, and weight of each charge fed into the HMIWI; and
 - (C) obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. Valid monitoring data shall be obtained for 75 percent of the operating hours per day for 90 percent of the operating hours per calendar quarter that the designated facility is combusting hospital, medical and infectious waste.
- (10) An HMIWI for which construction commenced on or before June 20, 1996, or for which modification was commenced on or before March 16, 1998, and is subject to requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60 or any HMIWI for which construction was commenced after June 20, 1996, but no later than December 1, 2008, or for which modification is commenced after March 16, 1998, but no later than April 6, 2010, and that is subject to the requirements of Table 1B of this Subpart and Table 1A of Subpart Ec of 40 CFR Part 60 may use

the results of previous emissions tests to demonstrate compliance with the emissions limits, provided that:

- (A) previous emissions tests had been conducted using the applicable procedures and test methods listed in 40 CFR 60.56c(b);
 - (B) the HMIWI is currently operated in a manner that would be expected to result in the same or lower emissions than observed during the previous emissions test and has not been modified such that emissions would be expected to exceed; and
 - (C) the previous emissions tests had been conducted in 1996 or later.
- (11) An HMIWI, (with the exception of small remote HMIWI and HMIWIs for which construction was commenced no later than December 1, 2008, or for which modification is commenced no later than April 6, 2010, and that is subject to the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60 or the more stringent of the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60 and Table 1A of Subpart Ec), shall include the reporting and recordkeeping requirements listed in 40 CFR 60.58c(b) through (g) in Subpart Ec.
- (12) An HMIWI for which construction was commenced no later than December 1, 2008, or for which modification is commenced no later than April 6, 2010, and that is subject to the requirements listed in Table 1B or the more stringent of the requirements listed in Table 1B of Subpart Ce of 40 CFR Part 60 and Table 1A of Subpart Ec of 40 CFR Part 60 shall not be required to maintain records required in 40 CFR 60.58c(b)(2)(xviii) (bag leak detection system alarms), (b)(2)(xix) (CO CEMS data), and (b)(7) (siting documentation).
- (g) Operator Training and Certification.
- (1) The owner or operator of a HMIWI shall not allow the HMIWI to operate at any time unless a fully trained and qualified HMIWI operator is available at the facility or is 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.
 - (2) Operator training and qualification shall be obtained by completing the requirements of 40 CFR 60.53c(c) through (g).
 - (3) The owner or operator of a HMIWI shall maintain, at the facility, all items required by 40 CFR 60.53c(h)(1) through (h)(10).
 - (4) The owner or operator of a HMIWI shall establish a program for reviewing the information required by Subparagraph (3) of this Paragraph annually with each HMIWI operator.
 - (5) The information required by Subparagraph (3) of this Paragraph shall be kept in a readily accessible location for all HMIWI operators. This information, along with records of training, shall be available for inspection by Division personnel upon request.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 40 CFR 60.34e; Eff. October 1, 1991; Amended Eff. January 1, 2011; June 1, 2008; August 1, 2002; July 1, 2000; July 1, 1999; July 1, 1998; July 1, 1996; April 1, 1995; December 1, 1993; Readopted Eff. July 1, 2018.

15A NCAC 02D .1207 CONICAL INCINERATORS

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4),(5);
Eff. October 1, 1991;
Amended Eff. July 1, 2000; July 1, 1998;
Repealed Eff. July 1, 2018.

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 an 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	2.1x10 ⁻⁶
(ii)	beryllium and its compounds	4.1x10 ⁻⁶
(iii)	cadmium and its compounds	5.5x10 ⁻⁶
(iv)	chromium (VI) and its compounds	8.3x10 ⁻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.*

15A NCAC 02D .1209 COMPLIANCE SCHEDULES

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4),(5);
Eff. October 1, 1991;
Amended Eff. July 1, 1999; July 1, 1998; April 1, 1995; December 1, 1993; March 2, 1992;
Repealed Eff. July 1, 2000.

15A NCAC 02D .1210 COMMERCIAL AND INDUSTRIAL SOLID WASTE INCINERATION UNITS

(a) Applicability. Unless exempt pursuant to Paragraph (b) of this Rule, this Rule shall apply to existing commercial and industrial solid waste incineration (CISWI) units, including energy recovery units, kilns, small remote incinerators, and air curtain incinerators that burn solid waste, pursuant to 40 CFR 60.2550 and as defined in 40 CFR 60.2875. An "existing CISWI unit" means a unit that commenced construction on or before June 4, 2010, or commenced modification or reconstruction after June 4, 2010, but no later than August 7, 2013.

(b) Exemptions. The following types of combustion units shall be exempted from this Rule:

- (1) incineration units subject to Rules 15A NCAC 02D .1203 through 15A NCAC 02D .1206 and 15A NCAC 02D .1212;
- (2) pathological waste incineration units burning 90 percent or more by weight on a calendar-quarter basis, excluding the weight of auxiliary fuel and combustion air, of pathological waste, low-level radioactive waste, or chemotherapeutic waste, as defined in 40 CFR 60.2875, if the owner or operator of the unit:
 - (A) notifies the Director that the unit qualifies for this exemption; and
 - (B) keeps records on a calendar-quarter basis of the weight of pathological waste, low-level radioactive waste, or chemotherapeutic waste burned and the weight of all other fuels and wastes burned in the unit;
- (3) small power production or cogeneration units if:
 - (A) the unit qualifies as a small power-production facility pursuant to Section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)) or as a cogeneration facility pursuant to Section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B));
 - (B) the unit burns homogeneous waste, not including refuse-derived fuel, to produce electricity, steam, or other forms of energy used for industrial, commercial, heating, or cooling purposes;
 - (C) the owner or operator of the unit notifies the Director that the unit qualifies for this exemption; and
 - (D) the owner or operator of the unit maintains the records specified in 40 CFR 60.2740(v) for a small power-production facility or 40 CFR 60.2740(w) for a cogeneration facility;
- (4) units that combust waste for the primary purpose of recovering metals;
- (5) cyclonic barrel burners;
- (6) rack, part, and drum reclamation units that burn the coatings off racks used to hold small items for application of a coating;
- (7) chemical recovery units as defined in 40 CFR 60.2875;
- (8) laboratory analysis units that burn samples of materials for the purpose of chemical or physical analysis;
- (9) air curtain incinerators that meet the requirements specified in 15A NCAC 02D .1904 and that burn only the following materials:
 - (A) 100 percent wood waste;
 - (B) 100 percent clean lumber; or
 - (C) 100 percent mixture of only wood waste, clean lumber, and/or yard waste;
- (10) sewage treatment plants that are subject to 40 CFR 60 Subpart O Standards of Performance for Sewage Treatment Plants;
- (11) space heaters that meet the requirements of 40 CFR 279.23;
- (12) soil treatment units that thermally treat petroleum contaminated soils for the sole purpose of site remediation; and
- (13) the owner or operator of a combustion unit that is subject to this Rule may petition for an exemption to this Rule by obtaining a determination that the material being combusted is:
 - (A) not a solid waste pursuant to the legitimacy criteria of 40 CFR 241.3(b)(1);
 - (B) a non-waste pursuant to the petition process submitted pursuant to 40 CFR 241.3(c); or
 - (C) a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4).

(c) Definitions. For the purpose of this Rule, the definitions contained in 40 CFR 60.2875 shall apply in addition to the definitions in 15A NCAC 02D .1202. Solid waste is defined pursuant to 40 CFR 60.2875 and 40 CFR Part 241 Standards for Combustion of Non-Hazardous Secondary Materials (NHSM).

(d) Compliance Schedule. All CISWI units subject to this Rule shall be in compliance with this Rule no later than February 7, 2018.

(e) Emission Standards. The emission standards in this Rule shall apply to all CISWI units subject to this Rule except if 15A NCAC 02D .0524, .1110, or .1111 applies. If Subparagraph (4) 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.

- (1) CISWI units subject to this Rule, including bypass stacks or vents, must meet the emissions limits specified in Tables 6 through 9 of 40 CFR 60 Subpart DDDD. The emission limitations shall apply at all times the unit is operating, including and not limited to startup, shutdown, or malfunction.
- (2) Units that do not use wet scrubbers shall maintain opacity to less than or equal to 10 percent opacity using an averaging time of three 1-hour blocks consisting of ten 6-minute average opacity values as measured by 40 CFR 60 Appendix A-4 Test Method 9 pursuant to Table 2 of 40 CFR 60 Subpart DDDD.
- (3) Odorous Emissions. An incinerator subject to this Rule shall comply with 15A NCAC 02D .1806 for the control of odorous emissions.
- (4) Toxic Emissions. The owner or operator of a CISWI unit subject to this Rule shall demonstrate compliance with 15A NCAC 02D .1100 according to 15A NCAC 02Q .0700.

(f) Operational Standards.

- (1) The operational standards in this Rule shall not apply to any CISWI unit subject to this Rule if applicable operational standards in 15A NCAC 02D .0524, .1110, or .1111 apply.
- (2) The owner or operator of a CISWI unit subject to this Rule shall operate the CISWI unit according to the provisions in 40 CFR 60.2675.
- (3) If an air pollution control device other than a wet scrubber, activated carbon sorbent injection, selective non-catalytic reduction, fabric filter, electrostatic precipitator, or dry scrubber is used to comply with this Rule or if emissions are limited in some other manner, including mass balances, to comply with the emission standards of Subparagraph (e)(1) of this Rule, the owner or operator shall petition the EPA Administrator in accordance with the requirements in 40 CFR 60.2680 for specific operating limits that shall be established during the initial performance test and be continuously monitored thereafter.

(g) Test Methods and Procedures.

- (1) For the purposes of this Paragraph, "Administrator" in 40 CFR 60.8 means "Director."
- (2) The test methods and procedures described in 15A NCAC 02D .2600, in Tables 6 through 9 of 40 CFR 60 Subpart DDDD, in 40 CFR 60.2670(b), and in 40 CFR 60.2690 shall be used to determine compliance with emission standards in Subparagraph (e)(1) of this Rule.
- (3) Compliance with the opacity limit in Subparagraph (e)(2) of this Rule shall be determined using 40 CFR 60 Appendix A-4 Test Method 9.

(h) Initial Compliance Requirements.

- (1) The owner or operator of a CISWI unit subject to this Rule shall demonstrate initial compliance with the emission limits in Subparagraph (e)(1) of this Rule and establish the operating standards in Paragraph (f) of this Rule according to the provisions in 40 CFR 60.2700 through 40 CFR 60.2706. If an owner or operator commences or recommences combusting a solid waste at an existing combustion unit at any commercial or industrial facility, the owner or operator shall comply with the requirements of this Paragraph.
- (2) The owner or operator of a CISWI unit subject to this Rule shall conduct an initial performance test pursuant to 40 CFR 60.2670, 40 CFR 60.2690, and Paragraph (g) of this Rule. The initial performance test shall be conducted no later than 180 days after February 7, 2018, or according to 40 CFR 60.2705(b) or (c). The use of the bypass stack during a performance test shall invalidate the performance test. The initial performance test shall be used to:
 - (A) determine compliance with the emission standards in Subparagraph (e)(1) of this Rule;
 - (B) establish compliance with opacity operating limits in 40 CFR 60.2675(h);
 - (C) establish the kiln-specific emission limit in 40 CFR 60.2710(y), as applicable; and
 - (D) establish operating limits using the procedures in 40 CFR 60.2675 or 40 CFR 60.2680 and in Paragraph (f) of this Rule.
- (3) The owner or operator of a CISWI unit subject to this Rule shall also conduct:
 - (A) a performance evaluation of each continuous emissions monitoring system (CEMS) or continuous monitoring system within 60 days of installation of the monitoring system; and

(B) an initial air pollution control device inspection no later than 180 days after February 7, 2018, pursuant to 40 CFR 60.2706.

(i) Continuous Compliance Requirements.

- (1) The owner or operator of a CISWI unit subject to this Rule shall demonstrate continuous compliance with the emission limits in Subparagraph (e)(1) of this Rule and the operating standards in Paragraph (f) of this Rule according to the provisions in 40 CFR 60.2710 through 40 CFR 60.2725.
- (2) If an existing CISWI unit that combusted a fuel or non-waste material commences or recommences combustion of solid waste, the owner or operator shall:
 - (A) be subject to the provisions of 40 CFR 60 Subpart DDDD on the first day solid waste is introduced or reintroduced into the combustion chamber, and this date constitutes the effective date of the fuel-to-waste switch;
 - (B) complete all initial compliance demonstrations for any Section 112 standards that are applicable to the facility before commencing or recommencing combustion of solid waste; and
 - (C) provide 30 days prior notice of the effective date of the waste-to-fuel switch identifying the parameters listed in 40 CFR 60.2710(a)(4)(i) through (v).
- (3) Pursuant to 40 CFR 60.2710(v), the use of a bypass stack at any time shall be an emissions standards deviation for particulate matter, hydrogen chloride, lead, cadmium, mercury, nitrogen oxides, sulfur dioxide, and dioxin/furans.
- (4) The owner or operator of a CISWI unit subject to this Rule shall conduct an annual performance test for the pollutants listed in Subparagraph (e)(1) of this Rule, including opacity and fugitive ash, to determine compliance with the emission standards in 40 CFR 60 Subpart DDDD Tables 6 through 9. The annual performance test shall be conducted according to the provisions in Paragraph (g) of this Rule. Annual performance tests shall not be required if CEMS or continuous opacity monitoring systems are used to determine compliance.
- (5) The owner or operator shall continuously monitor the operating parameters established in Paragraph (f) of this Rule and as specified in 40 CFR 60.2710(c) and 40 CFR 60.2735.
- (6) The owner or operator of an energy recovery unit subject to this Rule shall only burn the same types of waste and fuels used to establish applicability to this Rule and to establish operating limits during the performance test.
- (7) The owner or operator shall comply with the monitoring system-specific, unit-specific, and pollutant-specific provisions pursuant to 40 CFR 60.2710(e) through (j), (m) through (u), and (w) through (y).
- (8) The owner or operator shall conduct an annual inspection of air pollution control devices used to meet the emission limitations in this Rule, as specified in 40 CFR 60.2710(k).
- (9) The owner or operator shall develop and submit to the Director for approval a site-specific monitoring plan pursuant to the requirements in 40 CFR 60.2710(l). This plan shall be submitted at least 60 days before the initial performance evaluation of a continuous monitoring system. The owner or operator shall conduct a performance evaluation of each continuous monitoring system in accordance with the site-specific monitoring plan. The owner or operator shall operate and maintain the continuous monitoring system in continuous operation according to the site-specific monitoring plan.
- (10) The owner or operator shall meet all applicable monitoring system requirements specified in 40 CFR 60.2710(m) through (u) and (w) through (y).

(j) Monitoring.

- (1) The owner or operator of a CISWI unit subject to this Rule shall comply with the monitoring requirements in 15A NCAC 02D .0600 and 40 CFR 60.2730 through 60.2735.
- (2) For each continuous monitoring system required or optionally allowed pursuant to 40 CFR 60.2730, the owner or operator shall monitor and collect data according to 40 CFR 60.2735.
- (3) The owner or operator of a CISWI unit subject to this Rule shall establish, install, calibrate to manufacturers specifications, maintain, and operate:
 - (A) devices or methods for monitoring parameters used to determine compliance with the operating parameters established under Subparagraph (f)(2) of this Rule, as specified in 40 CFR 60.2730;

- (B) devices or methods necessary to monitor compliance with the site-specific operating parameters established pursuant to Subparagraph (f)(3) of this Rule, as specified by 40 CFR 60.2730(c).
 - (4) To demonstrate continuous compliance with an emissions limit, a facility may substitute use of a CEMS, a continuous automated sampling system, or other device specified by 40 CFR 60.2730 for conducting the annual emissions performance test and for monitoring compliance with operating parameters, as specified by 40 CFR 60.2730.
 - (5) The owner or operator of a CISWI unit subject to this Rule with a bypass stack shall install, calibrate to manufacturers' specifications, maintain, and operate a device or method for measuring the use of the bypass stack, including date, time, and duration.
 - (6) The owner or operator of a CISWI unit subject to this Rule shall conduct all monitoring at all times the CISWI unit is operating, except during:
 - (A) monitoring system malfunctions and associated repairs specified in 40 CFR 60.2735;
 - (B) monitoring system out-of-control periods specified in 40 CFR 60.2770(o);
 - (C) required monitoring system quality assurance or quality control activities, including calibrations checks and required zero and span adjustments of the monitoring system; and
 - (D) scheduled maintenance as defined in the site-specific monitoring plan required by Subparagraph (i)(9) of this Rule.
 - (7) The data recorded during monitoring malfunctions, out-of-control periods, repairs associated with malfunctions or out-of-control periods, required quality assurance or quality control activities, and site-specific scheduled maintenance shall not be used in assessing compliance with the operating standards in Paragraph (f) of this Rule. Owners and operators of a CISWI unit subject to this Rule shall use all the data collected during all other periods, including data normalized for above-scale readings, in assessing the operation of the control device and the associated control system.
 - (8) Owners or operators of a CISWI unit subject to this Rule shall perform monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and return the monitoring system to operation as expeditiously as practicable.
 - (9) Except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments, failure to collect required monitoring data shall constitute a deviation from the monitoring requirements.
- (k) Deviations, Malfunctions, and Out of Control Periods.
- (1) Owners and operators of a CISWI unit subject to this Rule shall report all deviations as defined in 40 CFR 60.2875 including the following:
 - (A) a deviation from operating limits in Table 3 of 40 CFR 60 Subpart DDDD or a deviation from other operating limits established pursuant to Paragraph (f), 40 CFR 60.2675(c) through (g), or 40 CFR 60.2680, including any recorded 3-hour average parameter level that is above the established maximum operating limit or below the established minimum operating limit;
 - (B) a deviation from the emission limitations established pursuant to Tables 6 through 9 of 40 CFR 60 Subpart DDDD that is detected through monitoring or during a performance test;
 - (C) a deviation from the CISWI operator qualification and accessibility requirements established pursuant to 40 CFR 60.2635; or
 - (D) a deviation from any term or condition included in the operating permit of the CISWI unit.
 - (2) Owners and operators of a CISWI unit subject to this Rule shall submit all required deviation reports as specified by Paragraph (l) of this Rule. The deviation report shall be submitted by August 1 of the year for data collected during the first half of the calendar year (January 1 to June 30), and by February 1 of the following year for data collected during the second half of the calendar year (July 1 to December 31). In addition, the owner and operator shall report the deviation in the annual report specified by Paragraph (l) of this Rule.
 - (3) Owners and operators of a CISWI unit subject to this Rule shall report all malfunctions, as defined in 40 CFR 60.2875, in the annual report specified by Paragraph (j) and Paragraph (l) of this Rule.

- (4) Owners and operators of a CISWI unit subject to this Rule shall report all periods during which a continuous monitoring system, including a CEMS, was out of control in the annual report specified by Paragraph (j) and Paragraph (l) of this Rule.
- (l) Recordkeeping and Reporting.
 - (1) The owner or operator of a CISWI unit subject to this Rule shall maintain records required by this Rule on site for a period of five years in either paper copy, electronic format that can be printed upon request, or an alternate format that has been approved by the Director.
 - (2) Combustion units that are exempt units pursuant to Paragraph (b) of this Rule shall be subject to the recordkeeping and reporting requirements in 40 CFR 60.2740(u) through 40 CFR 60.2740(w).
 - (3) The owner or operator of a CISWI unit subject to this Rule shall maintain all records required by 40 CFR 60.2740 through 60.2800.
 - (4) The owner or operator of a CISWI unit subject to this Rule shall submit the following reports with the required information and by the required due dates specified in Table 5 of 40 CFR 60, Subpart DDDD:
 - (A) the waste management plan specified in 40 CFR 60.2755;
 - (B) the initial test report specified in 40 CFR 60.2760;
 - (C) the annual report specified in 40 CFR 60.2765 and 60.2770;
 - (D) the emission limitation or operating limit deviation report specified in 40 CFR 60.2775 and 60.2780;
 - (E) the qualified operator deviation notification specified in 40 CFR 60.2785(a)(1);
 - (F) the qualified operator deviation status report, specified in 40 CFR 60.2785(a)(2);
 - (G) the qualified operator deviation notification of resuming operation specified in 40 CFR 60.2785(b).
 - (5) The owner or operator shall maintain CISWI unit operator records specified by 40 CFR 60.2660, 60.2665, and 60.2740(g) through (i). If the CISWI unit has been shut down by the Director pursuant to 40 CFR 60.2665(b)(2) due to failure to provide an accessible qualified operator, the owner or operator shall notify the Director that the operations have resumed after a qualified operator is accessible.
 - (6) The owner or operator of a CISWI unit subject to this Rule may request changing semiannual or annual reporting dates specified in this Paragraph, and the Director shall review the requested change using the procedures specified in 40 CFR 60.19(c).
 - (7) Reports shall be submitted to US EPA as specified in 40 CFR 60.2795.
 - (A) The owner or operator of the CISWI unit shall submit initial, annual, and deviation reports electronically on or before the submittal due dates specified in 40 CFR 60.2795(a) via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). Reports required pursuant to this Rule shall be submitted electronically or in paper format and postmarked on or before the submittal due dates.
 - (B) The owner or operator shall submit results of each performance test and CEMS performance evaluation within 60 days of the test or evaluation following the procedure specified in 40 CFR 60.2795(b).
 - (i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) listed on the EPA's ERT Web site (https://www3.epa.gov/ttn/chief/ert/ert_info.html) at the time of the test, the owner or operator shall submit the results of the performance test to the EPA via the CEDRI.
 - (ii) For data collected using test methods that are not supported by the EPA's ERT listed on the EPA's ERT Web site at the time of the test, the owner or operator shall submit the results of the performance test to the Director.
- (m) Operator Training and Certification.
 - (1) The owner or operator of the CISWI unit subject to this Rule shall not allow the CISWI unit to operate at any time unless a fully trained and qualified CISWI unit operator is present at the facility or can be present at the facility within one hour. The trained and qualified CISWI unit operator may operate the CISWI unit directly or be the direct supervisor of one or more plant personnel who operate the unit.

- (2) Operator training and qualification shall be obtained by completing the requirements of 40 CFR 60.2635(c) by the later of:
 - (A) six months after CISWI unit startup;
 - (B) six months after an employee assumes responsibility for operating the CISWI unit or assumes responsibility for supervising the operation of the CISWI unit; or
 - (C) February 7, 2018.
 - (3) Operator qualification shall be valid from the date on which the training course is completed and the operator passes the examination required by 40 CFR 60.2635(c)(2).
 - (4) Operator qualification shall be maintained by completing an annual review or refresher course covering, at a minimum, the topics specified in 40 CFR 60.2650(a) through (e).
 - (5) Lapsed operator qualification shall be renewed by:
 - (A) completing a standard annual refresher course as specified in Subparagraph (4) of this Paragraph for a lapse less than three years; or
 - (B) repeating the initial qualification requirements as specified in Subparagraph (2) of this Paragraph for a lapse of three years or more.
 - (6) The owner or operator of a CISWI unit subject to this Rule shall:
 - (A) have documentation specified in 40 CFR 60.2660(a)(1) through (10) and (c)(1) through (c)(3) available at the facility, accessible for all CISWI unit operators, and suitable for inspection upon request;
 - (B) establish a program for reviewing the documentation specified in Part (A) of this Subparagraph with each CISWI unit operator. The initial review of the documentation specified in Part (A) of this Subparagraph shall be conducted no later than February 7, 2018, or no later than six months after an employee assumes responsibility for operating the CISWI unit or assumes responsibility for supervising the operation of the CISWI unit; and
 - (C) conduct subsequent annual reviews of the documentation specified in Part (A) of this Subparagraph no later than twelve months following the previous review.
 - (7) The owner or operator of a CISWI unit subject to this Rule shall meet one of the two criteria specified in 40 CFR 60.2665(a) and (b), if all qualified operators are temporarily not at the facility and not able to be at the facility within one hour.
- (n) Prohibited waste. The owner or operator of a CISWI subject to this Rule shall not incinerate any of the wastes listed in G.S. 130A-309.10(f1).
- (o) Waste Management Plan.
- (1) The owner or operator of a CISWI unit subject to this Rule shall submit a written waste management plan to the Director that identifies the feasibility and the methods used to reduce or separate components of solid waste from the waste stream in order to reduce or eliminate toxic emissions from incinerated waste.
 - (2) The waste management plan shall include:
 - (A) consideration of the reduction or separation of waste-stream elements such as paper, cardboard, plastics, glass, batteries, or metals and the use of recyclable materials;
 - (B) a description of how the materials listed in G.S. 130A-309.10(f1) are to be segregated from the waste stream for recycling or proper disposal;
 - (C) identification of any additional waste management measures; and
 - (D) implementation of those measures considered practical and feasible based on the effectiveness of waste management measures already in place, the costs of additional measures, the emissions reductions expected to be achieved, and the environmental or energy impacts that the measures may have.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4),(5); 40 CFR 60.215(a)(4); Eff. August 1, 2002; Amended Eff. June 1, 2008; January 1, 2005; Readopted Eff. July 1, 2018.

15A NCAC 02D .1211 OTHER SOLID WASTE INCINERATION UNITS

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4), (5), (10); 40 CFR 60.3014 through 60.3020;
Eff. August 1, 2007;
Repealed Eff. July 1, 2018.

15A NCAC 02D .1212 SMALL MUNICIPAL WASTE COMBUSTORS

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3),(4),(5); 40 CFR 60.35b; 40 CFR 60.34e; 40 CFR 60.1515;
Eff. July 1, 2010;
Repealed Eff. July 1, 2018.