

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.