

2.2a **Municipal Waste Combustors**

2.2.1a Applicability

- (a) The affected facility to which this source category applies is each MWC unit with an MWC unit capacity greater than 225 megagrams per day (250 tons per day) of MSW or RDF.
- (b) [Reserved]
- (c) Affected facilities that combust tires or fuel derived solely from tires and that combust no other MSW or RDF are exempt from all provisions of this source category except the initial report required under §2.2.3a, paragraph (a).
- (d) Cofired combustors, as defined, are exempt from all provisions of this source category except the initial report required under §2.2.3a, paragraph (a), and records and reports of the daily weight of MSW or RDF and other fuels fired as required under §2.2.3a, paragraphs (b)(14) and (m).
- (e) Cofired combustors that are subject to a Federally-enforceable permit limiting the operation of the combustor to no more than 225 megagrams per day (250 tons per day) of MSW or RDF are exempt from all provisions of this source category.
- (f) [Reserved]
- (g) Municipal waste combustors combusting medical waste combined with other MSW are subject to all provisions of this source category. Units combusting solely medical waste are not covered by this source category.
- (h) The definitions of 40CFR60.51a' are hereby incorporated by reference with the following designated changes:
  - (1) For sources subject to 40CFR60 Subpart Ea no changes are made.
  - (2) For sources not subject to 40CFR60 Subpart Ea changes are made as follows:
    - (i) MWC plant means one or more MWC units at the same location for which construction, modification, or reconstruction is commenced on or before December 20, 1989.
    - (ii) MWC plant capacity means the aggregate MWC unit capacity of all MWC units at an MWC plant for which construction, modification or reconstruction is commenced on or before December 20, 1989.
    - (iii) Replace "§60.53" wherever it occurs with "the applicable regulation".
    - (iv) Replace "§60.58a" wherever it occurs with "§2.2.2a".

2.2.2a Compliance and Performance Testing

- (a) The applicable standards apply at all times, except during periods of start-up, shutdown, or malfunction; provided, however, that the duration of start-up, shutdown, or malfunction shall not exceed 3 hours per occurrence.
  - (1) The start-up period commences when the affected facility begins the continuous burning of MSW and does not include any warm-up period when the affected facility is combusting only a fossil fuel or other non-MSW fuel and no MSW is being combusted.
  - (2) Continuous burning is the continuous, semicontinuous, or batch feeding of MSW for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of MSW solely to provide thermal protection of grate or hearth during the start-up period shall not be considered to be continuous burning.
- (b) The following procedures and test methods shall be used to determine compliance with the

emission limits for particulate matter:

- (1) Method 1 shall be used to select sampling site and number of traverse points.
  - (2) Method 3B shall be used for gas analysis.
  - (3) Method 5 shall be used for determining compliance with the particulate matter emission standard. The minimum sample volume shall be 1.7 cubic meters (60 cubic feet). The probe and filter holder heating systems in the sample train shall be set to provide a gas temperature no greater than  $160^{\circ} \pm 14^{\circ}$  Centigrade ( $320^{\circ} \pm 25^{\circ}$  Fahrenheit). An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 5 run.
  - (4) For each Method 5 run, the emission rate shall be determined using:
    - (i) Oxygen or carbon dioxide measurements,
    - (ii) Dry basis F factor, and
    - (iii) Dry basis emission rate calculation procedures in Method 19.
  - (5) An owner or operator may request that compliance be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established during the initial compliance test.
  - (6) The owner or operator of an affected facility shall conduct an initial performance test for particulate matter and opacity as required under Section 1.2.
  - (7) Method 9 shall be used to determine compliance with the opacity limit.
  - (8) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a CEMS for measuring opacity and record the output of the system on a 6-minute average basis.
  - (9) Following the date the initial compliance test for particulate matter is completed or is required to be completed under Section 1.2 for an affected facility located within a large MWC plant, the owner or operator shall conduct a performance test for particulate matter on an annual basis (no more than 12 calendar months following the previous compliance test).
  - (10) [Reserved]
- (c) [Reserved]
- (d) The following procedures and test methods shall be used to determine compliance with the limits for dioxin/furan emissions:
- (1) Method 23 shall be used for determining compliance with the dioxin/furan emission limits. The minimum sample time shall be 4 hours per test run.
  - (2) The owner or operator of an affected facility shall conduct an initial compliance test for dioxin/furan emissions as required under Section 1.2.
  - (3) Following the date of the initial compliance test or the date on which the initial compliance test is required to be completed under Section 1.2, the owner or operator of an affected facility located within a large MWC plant shall conduct a performance test for dioxin/furan emissions on an annual basis (no more than 12 calendar months following the previous compliance test).
  - (4) [Reserved]
  - (5) An owner or operator may request that compliance with the dioxin/furan emissions limit be determined using carbon dioxide measurements corrected to an equivalent of

7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established during the initial compliance test.

- (e) The following procedures and test methods shall be used for determining compliance with the sulfur dioxide limit:
- (1) Method 19, section 5.4, shall be used to determine the daily geometric average percent reduction in the potential sulfur dioxide emission rate.
  - (2) Method 19, section 4.3, shall be used to determine the daily geometric average sulfur dioxide emission rate.
  - (3) An owner or operator may request that compliance with the sulfur dioxide emissions limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established during the initial compliance test.
  - (4) The owner or operator of an affected facility shall conduct an initial compliance test for sulfur dioxide as required under Section 1.2. Compliance with the sulfur dioxide emission limit and percent reduction is determined by using a CEMS to measure sulfur dioxide and calculating a 24-hour daily geometric mean emission rate and daily geometric mean percent reduction using Method 19, sections 4.3 and 5.4, as applicable, except as provided under paragraph (e)(5) of this section.
  - (5) For batch MWC's or MWC units that do not operate continuously, compliance shall be determined using a daily geometric mean of all hourly average values for the hours during the day that the affected facility is combusting MSW.
  - (6) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a CEMS for measuring sulfur dioxide emissions discharged to the atmosphere and record the output of the system.
  - (7) Following the date of the initial compliance test or the date on which the initial compliance test is required to be completed under Section 1.2, compliance with the sulfur dioxide emission limit or percent reduction shall be determined based on the geometric mean of the hourly arithmetic average emission rates during each 24-hour daily period measured between 12:00 midnight and the following midnight using: CEMS inlet and outlet data, if compliance is based on a percent reduction; or CEMS outlet data only if compliance is based on an emission limit.
  - (8) At a minimum, valid CEMS data shall be obtained for 75 percent of the hours per day for 75 percent of the days per month the affected facility is operated and combusting MSW.
  - (9) The 1-hour arithmetic averages required under paragraph (e)(7) of this section shall be expressed in parts per million (dry basis) and used to calculate the 24-hour daily geometric mean emission rates. The 1-hour arithmetic averages shall be calculated using the data points required under §1.4(e)(2). At least two data points shall be used to calculate each 1 hour arithmetic average.
  - (10) All valid CEMS data shall be used in calculating emission rates and percent reductions even if the minimum CEMS data requirements of paragraph (e)(8) of this Section are not met.
  - (11) The procedures under Section 1.4 shall be followed for installation, evaluation, and operation of the CEMS.
  - (12) The CEMS shall be operated according to Performance Specifications 1, 2, and 3 (Appendix B).
  - (13) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 (Appendix F).
  - (14) The span value of the CEMS at the inlet to the sulfur dioxide control device is 125

percent of the maximum estimated hourly potential sulfur dioxide emissions of the MWC unit, and the span value of the CEMS at the outlet to the sulfur dioxide control device is 50 percent of the maximum estimated hourly potential sulfur dioxide emissions of the MWC unit.

- (15) When sulfur dioxide emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Director or Method 19 to provide as necessary valid emission data for a minimum of 75 percent of the hours per day for 75 percent of the days per month the unit is operated and combusting MSW.
- (16) Not operating a sorbent injection system for the sole purpose of testing in order to demonstrate compliance with the percent reduction standards for MWC acid gases shall not be considered a physical change in the method of operation under 40CFR52.21<sup>1</sup>, or under regulations approved pursuant to 40CFR51.166 or 40CFR51.165 (a) and (b)<sup>1</sup>.

(f) The following procedures and test methods shall be used for determining compliance with the hydrogen chloride limits:

- (1) The percentage reduction in the potential hydrogen chloride emissions (%P<sub>HCl</sub>) is computed using the following formula:

where:  
E<sub>i</sub> is  
the potential hydrogen chloride emission  
rate.

$$\% P_{HCl} = \frac{(E_i - E_o)}{E_i} \times 100$$

E<sub>o</sub> is the hydrogen chloride emission rate measured at the outlet of the acid gas control device.

- (2) Method 26 shall be used for determining the hydrogen chloride emission rate. The minimum sampling time for Method 26 shall be one hour.
- (3) An owner or operator may request that compliance with the hydrogen chloride emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established during the initial compliance test.
- (4) The owner or operator of an affected facility shall conduct an initial compliance test for hydrogen chloride as required under Section 1.2.
- (5) Following the date of the initial compliance test or the date on which the initial compliance test is required under Section 1.2, the owner or operator of an affected facility located within a large MWC plant shall conduct a performance test for hydrogen chloride on an annual basis (no more than 12 calendar months following the previous compliance test).
- (6) [Reserved]
- (7) Not operating a sorbent injection system for the sole purpose of testing in order to demonstrate compliance with the percent reduction standards for MWC acid gases shall not be considered a physical change in the method of operation under 40CFR52.21<sup>1</sup>, or under regulations approved pursuant to 40CFR51.166 or 40CFR51.165 (a) and (b)<sup>1</sup>.

(g) The following procedures and test methods shall be used to determine compliance with the nitrogen oxides limit under §60.55a<sup>1</sup>:

- (1) Method 19, section 4.1, shall be used for determining the daily arithmetic average nitrogen oxides emission rate.

- (2) An owner or operator may request that compliance with the nitrogen oxides emissions limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established during the initial compliance test.
  - (3) The owner or operator of an affected facility subject to the nitrogen oxides limit under §60.55a shall conduct an initial compliance test for nitrogen oxides as required under Section 1.2. Compliance with the nitrogen oxides emission standard shall be determined by using a CEMS for measuring nitrogen oxides and calculating a 24-hour daily arithmetic average emission rate using Method 19, section 4.1, except as specified under paragraph (g)(4) of this section.
  - (4) For batch MWC's or MWC's that do not operate continuously, compliance shall be determined using a daily arithmetic average of all hourly average values for the hours during the day that the affected facility is combusting MSW.
  - (5) The owner or operator of an affected facility subject to the nitrogen oxides emissions limit under §60.55a shall install, calibrate, maintain, and operate a CEMS for measuring nitrogen oxides discharged to the atmosphere and record the output of the system.
  - (6) Following the initial compliance test or the date on which the initial compliance test is required to be completed under Section 1.2, compliance with the emission limit for nitrogen oxides required under §60.55a shall be determined based on the arithmetic average of the arithmetic average hourly emission rates during each 24-hour daily period measured between 12:00 midnight and the following midnight using CEMS data.
  - (7) At a minimum, valid CEMS data shall be obtained for 75 percent of the hours per day for 75 percent of the days per month the affected facility is operated and combusting MSW.
  - (8) The 1-hour arithmetic averages required by paragraph (g)(6) of this section shall be expressed in parts per million volume (dry basis) and used to calculate the 24-hour daily arithmetic average emission rates. The 1-hour arithmetic averages shall be calculated using the data points required under Section 1.4(b). At least two data points shall be used to calculate each 1-hour arithmetic average.
  - (9) All valid CEMS data must be used in calculating emission rates even if the minimum CEMS data requirements of paragraph (g)(7) of this section are not met.
  - (10) The procedures under Section 1.4 shall be followed for installation, evaluation, and operation of the CEMS.
  - (11) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 (Appendix F).
  - (12) When nitrogen oxides emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emission data calculations to determine compliance shall be made using other monitoring systems as approved by the Director or Method 19 to provide as necessary valid emission data for a minimum of 75 percent of the hours per day for 75 percent of the days per month the unit is operated and combusting MSW.
- (h) The following procedures shall be used for determining compliance with the operating standards:
- (1) Compliance with the carbon monoxide emission limits shall be determined using a 4-hour block arithmetic average for all types of affected facilities except mass burn rotary waterwall MWC's and RDF stokers.
  - (2) For affected mass burn rotary waterwall MWC's and RDF stokers, compliance with the carbon monoxide emission limits shall be determined using a 24-hour daily arithmetic average.

- (3) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a CEMS for measuring carbon monoxide at the combustor outlet and record the output of the system.
- (4) The 4-hour and 24-hour daily arithmetic averages in paragraphs (h) (1) and (2) of this section shall be calculated from 1-hour arithmetic averages expressed in parts per million by volume (dry basis). The 1-hour arithmetic averages shall be calculated using the data points generated by the CEMS. At least two data points shall be used to calculate each 1-hour arithmetic average.
- (5) An owner or operator may request that compliance with the carbon monoxide emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established during the initial compliance test.
- (6) The following procedures shall be used to determine compliance with load level requirements under §60.56a(b)<sup>+</sup> and §2.2.4a:
  - (i) The owner or operator of an affected facility with steam generation capability recovery shall install, calibrate, maintain, and operate a steam flow meter and measure steam flow in kilograms per hour (pounds per hour) steam on a continuous basis and record the output of the monitor. Steam flow shall be calculated in 4-hour block arithmetic averages.
  - (ii) The method contained in ASME Power Test Codes: Test Code for Steam Generating Units, PTC 4.1 (1972), Section 4 (incorporated by reference, see Section 1.6) shall be used for calculating the steam flow required under paragraph (h)(6)(i) of this section. The recommendations of Instruments and Apparatus: Measurement of Quantity of Materials, ASME Interim Supplement 19.5 (1971), chapter 4 (incorporated by reference, see Section 1.6) shall be followed for design, construction, installation, calibration, and use of nozzles and orifices.
  - (iii) The owner or operator of an affected facility without heat recovery shall:
    - (A) [Reserved]
- (7) To determine compliance with the maximum particulate matter control device temperature requirements in §2.2.4a(c), the owner or operator of an affected facility shall install, calibrate, maintain, and operate a device for measuring temperature of the flue gas stream at the inlet to the final particulate matter control device on a continuous basis and record the output of the device. Temperature shall be calculated in 4-hour block arithmetic averages.
- (8) Maximum demonstrated MWC unit load shall be determined during the initial compliance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit is achieved. Maximum demonstrated MWC unit load shall be the maximum 4-hour arithmetic average load achieved during the most recent test during which compliance with the dioxin/furan limit was achieved.
- (9) The maximum demonstrated particulate matter control device temperature shall be determined during the initial compliance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit is achieved. Maximum demonstrated particulate matter control device temperature shall be the maximum 4-hour arithmetic average temperature achieved at the final particulate matter control device inlet during the most recent test during which compliance with the dioxin/furan limit was achieved.
- (10) At a minimum, valid CEMS data for carbon monoxide, steam flow, and particulate matter control device inlet temperature shall be obtained 75 percent of the hours per day for 75 percent of the days per month the affected facility is operated and combusting MSW.
- (11) All valid data must be used in calculating the parameters specified under paragraph

(h) of this section even if the minimum data requirements of paragraph (h)(10) of this section are not met.

(12) Quarterly accuracy determinations and daily calibration drift tests for carbon monoxide CEMS shall be performed in accordance with Procedure 1 (Appendix F).

(i) [Reserved]

(j) The following procedures shall be used for calculating *MWC unit capacity* as defined under §60.51a<sup>1</sup> and §2.2.1a:

(1) For MWC units capable of combusting MSW continuously for a 24-hour period, MWC unit capacity, in megagrams per day (tons per day) of MSW combusted, shall be calculated based on 24 hours of operation at the maximum design charging rate. The design heating values under paragraph (j)(4) of this section shall be used in calculating the design charging rate.

(2) For batch MWC units, MWC unit capacity, in megagrams per day (tons per day) of MSW combusted, shall be calculated as the maximum design amount of MSW that can be charged per batch multiplied by the maximum number of batches that could be processed in a 24-hour period. The maximum number of batches that could be processed in a 24-hour period is calculated as 24 hours divided by the design number of hours required to process one batch of MSW, and may include fractional batches.<sup>1</sup> The design heating values under paragraph (j)(4) of this section shall be used in calculating the MWC unit capacity in megagrams per day (tons per day) of MSW.

(3) For cofired combustors, as defined under §60.51a<sup>1</sup>, MWC unit capacity is the maximum daily amount of MSW or RDF specified in a Federally-enforceable permit that can be combusted in the cofired combustor, expressed in megagrams per day (tons per day) of MSW.

(4) MWC unit capacity shall be calculated using a design heating value of 10,500 kilojoules per kilogram (4,500 British thermal units per pound) for all MSW except medical waste and 19,800 kilojoules per kilogram (8,500 British thermal units per pound) for medical waste. If an affected MWC unit fires both medical waste and other MSW, either the procedure under (j)(4)(i) or (ii) of this section shall be used to determine the design heating value.

(i) The design heating value may be prorated using the following equation:

where:

$$HV_p = 10,500 \frac{MSW}{MSW + Med} + 19,800 \frac{Med}{MSW + Med}$$

design heating value in kilojoules per kilogram

MSW = amount of non-medical MSW fired (daily basis)

Med = amount of medical waste fired (daily basis)

If this equation is used, records must be kept of the daily amounts of medical waste and other MSW combusted.

(ii) The owner or operator of an affected MWC firing both medical waste and other MSW may elect to assume a design heating value of 10,500 kilojoules per kilogram (4,500 British thermal units per pound) for all MSW and medical waste fired. If this assumption is used, records of the daily amount of MSW and medical waste combusted are not required to be kept.

2.2.3a Reporting and Recordkeeping Requirements

(a) [Reserved]

<sup>1</sup>For example, if one batch requires 16 hours, then 24/16, or 1.5 batches, could be combusted in a 24-hour period.

- (b) The owner or operator of an affected facility located within a small or large MWC plant shall maintain records of the following information for each affected facility for a period of at least 2 years:
- (1) Calendar date.
  - (2) The emission rates and parameters measured using CEMS as specified under (b)(2)(i) and (ii) of this section:
    - (i) The following measurements shall be recorded in computer-readable format and on paper:
      - (A) All 6-minute average opacity levels required under §2.2.2a(b).
      - (B) All 1-hour average sulfur dioxide emission rates at the inlet and outlet of the acid gas control device if compliance is based on a percent reduction, or at the outlet only if compliance is based on the outlet emission limit as specified under §2.2.2a(e).
      - (C) All 1-hour average nitrogen oxides emission rates as specified under §2.2.2a(g).
      - (D) All 1-hour average carbon monoxide emission rates, MWC unit load measurements, and particulate matter control device inlet temperatures as specified under §2.2.2a(h).
    - (ii) The following average rates shall be computed and recorded:
      - (A) All 24-hour daily geometric average percent reductions in sulfur dioxide emissions and all 24-hour daily geometric average sulfur dioxide emission rates as specified under §2.2.2a(e).
      - (B) All 24-hour daily arithmetic average nitrogen oxides emission rates as specified under §2.2.2a(g).
      - (C) All 4-hour block or 24-hour daily arithmetic average carbon monoxide emission rates, as applicable, as specified under §2.2.2a(h).
      - (D) All 4-hour block arithmetic average MWC unit load levels and particulate matter control device inlet temperatures as specified under §2.2.2a(h).
  - (3) Identification of the operating days when any of the average emission rates, percent reductions, or operating parameters specified under paragraph (b)(2)(ii) of this section or the opacity level exceeded the applicable limits, with reasons for such exceedances as well as a description of corrective actions taken.
  - (4) Identification of operating days for which the minimum number of hours of sulfur dioxide or nitrogen oxides emissions or operational data (carbon monoxide emissions, unit load, particulate matter control device temperature) have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
  - (5) Identification of the times when sulfur dioxide or nitrogen oxides emission or operational data (carbon monoxide emissions, unit load, particulate matter control device temperature) have been excluded from the calculation of average emission rates or parameters and the reasons for excluding data.
  - (6) The results of daily sulfur dioxide, nitrogen oxides, and carbon monoxide CEMS drift tests and accuracy assessments as required under Appendix F, Procedure 1.

- (7) The results of all annual performance tests conducted to determine compliance with the particulate matter, dioxin/furan and hydrogen chloride limits. For all annual dioxin/furan tests, the maximum demonstrated MWC unit load and maximum demonstrated particulate matter control device temperature shall be recorded along with supporting calculations.
- (8) through (13) [Reserved]
- (14) For cofired combustors having an MWC unit capacity greater than 225 megagrams per day (250 tons per day) of MSW, the weight of MSW and each other fuel combusted on a daily basis.
- (15) For combustors firing both medical waste and other MSW, the amount of non-medical MSW and the amount of medical waste combusted on a daily basis, unless it is assumed that the total heat input to the combustor is from MSW with a design heating value of 10,500 kilojoules per kilogram (4,500 British thermal units per pound).
- (c) Following the initial compliance test as required under Section 1.2 and §2.2.2a, the owner or operator of an affected facility located within a large MWC plant shall submit the initial compliance test data, the performance evaluation of the CEMS using the applicable performance specifications in appendix B, and the maximum demonstrated MWC unit load and maximum demonstrated particulate matter control device temperature established during the dioxin/furan compliance test.
- (d) [Reserved]
- (e) The owner or operator of an affected facility located within a large MWC plant shall submit quarterly compliance reports for sulfur dioxide, nitrogen oxide (if applicable), carbon monoxide, load level, and particulate matter control device temperature to the Director containing the information recorded under paragraphs (b)(1), (2)(ii), (3), (4), (5), and (6) of this section for each pollutant or parameter. The hourly average values recorded under paragraph (b)(2)(i) of this section are not required to be included in the quarterly reports. Combustors firing a mixture of medical waste and other MSW shall also provide the information under paragraph (b)(15) of this section, as applicable, in each quarterly report. Such reports shall be postmarked no later than the 30th day following the end of each calendar quarter.
- (f) The owner or operator of an affected facility located within a large MWC plant shall submit quarterly excess emission reports, as applicable, for opacity. The quarterly excess emission reports shall include all information recorded under paragraph (b)(3) of this section which pertains to opacity and a listing of the 6-minute average opacity levels recorded under paragraph (b)(2)(i)(A) of this section for all periods when such 6-minute average levels exceeded the opacity limit. The quarterly report shall also list the percent of the affected facility operating time for the calendar quarter that the opacity CEMS was operating and collecting valid data. Such excess emission reports shall be postmarked no later than the 30th day following the end of each calendar quarter.
- (g) The owner or operator of an affected facility located within a large MWC plant shall submit reports to the Director of all annual performance tests for particulate matter, dioxin/furan, and hydrogen chloride as recorded under paragraph (b)(7) of this section, as applicable, from the affected facility. For each annual dioxin/furan compliance test, the maximum demonstrated MWC unit load and maximum demonstrated particulate matter control device temperature shall be reported. Such reports shall be submitted when available and in no case later than the date of required submittal of the quarterly report specified under paragraph (e) of this section covering the calendar quarter following the quarter during which the test was conducted.
- (h) [Reserved]
- (i) Records of CEMS data for opacity, sulfur dioxide, nitrogen oxides, and carbon monoxide, load level data, and particulate matter control device temperature data shall be maintained for at least 2 years after date of recordation and be made available for inspection upon request.
- (j) Records showing the names of persons who have completed review of the operating manual, including the date of the initial review and all subsequent annual reviews, shall be maintained for

at least 2 years after date of review and be made available for inspection upon request.

- (k) [Reserved]
- (l) [Reserved]
- (m) The owner or operator of a cofired combustor located within a plant having an MWC plant capacity, as determined under §60.51a, §2.2.1a and 2.2.2a(j)(3), greater than 225 megagrams per day (250 tons per day) shall submit quarterly reports of the daily weights of MSW and each other fuel fired as recorded under paragraph (b)(14) of this section. Such reports shall be postmarked no later than the 30th day following the end of each calendar quarter.

#### 2.2.4a Municipal Waste Combustor Operating Practices

- (a) [Reserved]
- (b) No owner or operator of an affected facility located within a large MWC plant shall cause such facility to operate at a load level greater than 110 percent of the *maximum demonstrated MWC unit load* as defined in §2.2.1a. The averaging time is specified under §2.2.3a(h).
- (c) No owner or operator of an affected facility located within a large MWC plant shall cause such facility to operate at a temperature, measured at the final particulate matter control device inlet, exceeding 17° Centigrade (30° Fahrenheit) above the *maximum demonstrated* particulate matter control device temperature as defined in §2.2.1a. The averaging time is specified under §2.2.3a(h).
- (d) Within 24 months from the date of start-up of an affected facility, each chief facility operator and shift supervisor of an affected facility located within a large MWC plant shall obtain and keep current either a provisional or operator certification in accordance with ASME QRO-1-1989 (incorporated by reference, see Section 1.6) or an equivalent State-approved certification program. For sources not subject to 40CFR60 Subpart Ea, start-up shall be as defined in the operating permit for that facility.
- (e) No owner or operator of an affected facility shall allow such affected facility located at a large MWC plant to operate at any time without a certified shift supervisor, as provided under paragraph (d) of this section, on duty at the affected facility. This requirement shall take effect 24 months after the date of start-up of the affected facility. For sources not subject to 40CFR60 Subpart Ea, start-up shall be as defined in the operating permit for that facility.
- (f) The owner or operator of an affected facility located within a large MWC plant shall develop and update on a yearly basis a site-specific operating manual that shall, at a minimum, address the following elements of MWC unit operation:
  - (1) Summary of the applicable standards and regulations;
  - (2) Description of basic combustion theory applicable to an MWC unit;
  - (3) Procedures for receiving, handling, and feeding MSW;
  - (4) MWC unit start-up, shutdown, and malfunction procedures;
  - (5) Procedures for maintaining proper combustion air supply levels;
  - (6) Procedures for operating the MWC unit within the standards established under applicable regulations;
  - (7) Procedures for responding to periodic upset or off-specification conditions;
  - (8) Procedures for minimizing particulate matter carryover;
  - (9) Procedures for monitoring the degree of MSW burnout;
  - (10) Procedures for handling ash;

- (11) Procedures for monitoring MWC unit emissions; and
- (12) Reporting and recordkeeping procedures.
  
- (g) The owner or operator of an affected facility located within a large MWC plant shall establish a program for reviewing the operating manual annually with each person who has responsibilities affecting the operation of an affected facility including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers.
- (h) The initial review of the operating manual, as specified under paragraph (g) of this section, shall be conducted prior to assumption of responsibilities affecting MWC unit operation by any person required to undergo training under paragraph (g) of this section. Subsequent reviews of the manual shall be carried out annually by each such person.
- (i) The operating manual shall be kept in a readily accessible location for all persons required to undergo training under paragraph (g) of this section. The operating manual and records of training shall be available for inspection.
- (j) [Reserved]
- (k) [Reserved]