

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 60**

**[EPA-HQ-OAR-2005-0117; FRL- ]**

**RIN 2060-AL97**

**Standards of Performance for New Stationary Sources and  
Emission Guidelines for Existing Sources:  
Large Municipal Waste Combustors**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** EPA is promulgating amendments to the air emission standards for existing and new large municipal waste combustor (MWC) units. Standards for MWC units were promulgated in 1995 and implemented in 2000. The Clean Air Act (CAA) requires review of these standards every 5 years. The review is to be conducted in accordance with CAA section 129 and section 111 requirements, with standards revised as necessary. For existing MWC units, the goal of this action is to amend the standards to reflect the actual performance levels being achieved by existing MWC units. For new MWC units, the goal of this action is to amend the standards to reflect the performance level achievable by MWC units constructed in the future. Other technical improvements are also being made to the standards for MWC units.

**EFFECTIVE DATES:** The final rule amendments to the standards for new sources in subpart Eb of 40 CFR part 60 (§§60.50b

through 60.59b) are effective [INSERT THE DATE 180 DAYS AFTER PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]. The final rule amendments to the emission guidelines for existing sources in subpart Cb of 40 CFR part 60 (§§60.30b through 60.39b) are effective [INSERT THE DATE 60 DAYS AFTER PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

**ADDRESSES:** Docket. EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2005-0117. All documents in the docket are listed on the [www.regulations.gov](http://www.regulations.gov) web site. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Air and Radiation Docket, Docket ID No. EPA-HQ-OAR-2005-0117, EPA/DC, EPA West Building, Room B102, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the EPA Docket Center is (202) 566-1742.

**FOR FURTHER INFORMATION CONTACT:** Mr. Walt Stevenson, Energy

Strategies Group, Sector Policies and Programs Division  
 (D243-01), U.S. EPA, Research Triangle Park, North Carolina  
 27711; telephone number: (919) 541-5264; e-mail address:  
[stevenson.walt@epa.gov](mailto:stevenson.walt@epa.gov).

**SUPPLEMENTARY INFORMATION:**

Regulated Entities. Categories and entities potentially affected by the final rule are MWC units with a design combustion capacity of greater than 250 tons per day. The NSPS and emission guidelines for municipal waste combustors affect the following categories of sources:

Category	NAICS Code	SIC Code (optional)	Examples of potentially regulated entities
Industry, Federal government, and State/local /tribal governments	562213 92411	4953 9511	Solid waste combustors or incinerators at waste-to-energy facilities that generate electricity or steam from the combustion of garbage (typically municipal solid waste); and solid waste combustors or incinerators at facilities that combust garbage (typically municipal solid waste) and do not recover energy from the waste combustion.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by the final rule. To determine whether your facility is regulated by the final rule, you should examine the applicability criteria in 40 CFR 60.32b of subpart Cb

and 40 CFR 60.50b of subpart Eb. If you have any questions regarding the applicability of the final rule to a particular entity, contact the person listed in the preceding FOR FURTHER INFORMATION CONTACT section.

Docket. The docket number for the large MWC NSPS (40 CFR part 60, subpart Eb) and emission guidelines (40 CFR part 60, subpart Cb) is Docket ID No. EPA-HQ-OAR-2005-0117.

Worldwide Web (WWW). In addition to being available in the docket, an electronic copy of the final rule is available on the WWW through the Technology Transfer Network Web site (TTN Web). Following signature, EPA posted a copy of the final rule on the TTN's policy and guidance page for newly proposed or promulgated rules at <http://www.epa.gov/ttn/oarpg>. The TTN provides information and technology exchange in various areas of air pollution control.

Judicial Review. Under CAA section 307(b)(1), judicial review of the final rule is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by [INSERT THE DATE 60 DAYS AFTER PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]. Under CAA section 307(d)(7)(B), only an objection to the final rule that was raised with reasonable specificity during the period for public comment can be raised during judicial review. Moreover, under CAA section

307(b) (2), the requirements established by today's final action may not be challenged separately in any civil or criminal proceedings brought by EPA to enforce these requirements.

Section 307(d) (7) (B) of the CAA further provides that "only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review." This section also provides a mechanism for the EPA to convene a proceeding for reconsideration, "if the person raising the objection can demonstrate to the EPA that it was impracticable to raise such an objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule." Any person seeking to make such a demonstration to the EPA should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, Ariel Rios Building, 1200 Pennsylvania Ave., NW., Washington, DC 20460, with a copy to both the person(s) listed in the preceding FOR FURTHER INFORMATION CONTACT section, and the Director of the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave., NW., Washington, DC 20004.

Organization of This Document. The following outline is provided to aid in locating information in this preamble.

- I. Background Information
- II. Summary of Amendments
  - A. What are the major revisions resulting from the review?
  - B. What are the revised emission limits?
  - C. Are other amendments being promulgated?
  - D. Is an implementation schedule being promulgated?
  - E. Has EPA revised the applicability date of the NSPS?
- III. Responses to Significant Comments
  - A. What areas of the proposal received the most comments?
  - B. Why did EPA not recalculate the MACT floor?
  - C. Relative to technical issues, how were statistical methods used to develop emission limits?
  - D. How were the final emission limits selected?
  - E. What types of comments were received on the EPA statistical methods?
  - F. What comments were received on the EPA database and data screening procedures?
  - G. What was the most important factor affecting emissions estimates?
  - H. What emission variability factor is appropriate?
  - I. What other significant comments were received on the proposal, and how were they addressed in the final rule?
  - J. What comments were received on the proposed 95 percent CEMS data availability requirement and how were they addressed in the final rule?
  - K. What comments were received on the expanded use of continuous emission monitors technology, and how were the comments addressed in the final rule?
  - L. Would the use of particulate matter continuous emission monitors or mercury continuous emission monitors for compliance testing require EPA to adopt alternative particulate matter and mercury emission limits?
- IV. Impacts of the Final Amendments for Existing Units
- V. Statutory and Executive Order Reviews
  - A. Executive Order 12866: Regulatory Planning and Review
  - B. Paperwork Reduction Act
  - C. Regulatory Flexibility Act
  - D. Unfunded Mandates Reform Act
  - E. Executive Order 13132: Federalism
  - F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
  - G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks
  - H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution or Use

- I. National Technology Transfer Advancement Act
- J. Congressional Review Act

### **I. Background Information**

Section 129 of the CAA, entitled "Solid Waste Combustion," requires EPA to develop and adopt NSPS and emission guidelines for solid waste incineration units pursuant to CAA sections 111 and 129. Section 111(b) of the CAA (NSPS program) addresses emissions from new MWC units and section 111(d) of the CAA (emission guidelines program) addresses emissions from existing MWC units. The NSPS are directly enforceable Federal regulations. The emission guidelines are not directly enforceable but, rather, are implemented by State air pollution control agencies through sections 111(d)/129 State plans.

In December 1995, EPA adopted NSPS (subpart Eb of 40 CFR part 60) and emission guidelines (subpart Cb of 40 CFR part 60) for MWC units with a combustion capacity greater than 250 tons per day. These MWC units are referred to as large MWC units. Both the NSPS and emission guidelines require compliance with emission limitations that reflect the performance of maximum achievable control technology (MACT). The NSPS apply to new MWC units after the effective date of the NSPS or at start-up, whichever is later. The emission guidelines apply to existing MWC units built before the NSPS applicability date and required compliance by

December 2000. These retrofits were completed on time, and the controls installed to meet the required emission limitations were highly effective in reducing emissions of all of the CAA section 129 pollutants emitted by large MWC units.

Section 129(a)(5) of the CAA requires EPA to conduct a 5-year review of the NSPS and emissions guidelines and, if appropriate, revise the NSPS and emission guidelines. The EPA has completed that review. On December 19, 2005 (70 FR 75348), EPA proposed amendments to the NSPS and emission guidelines to reflect the revisions EPA believes are appropriate. EPA carefully considered comments received on the proposal, and this action promulgates those revisions.

## **II. Summary of Amendments**

### **A. What are the major revisions resulting from the review?**

Two major revisions result from EPA's review: revisions to the emission limits and revisions to compliance testing provisions. Relative to the 1995 emission guidelines for existing MWC units, the emission limits are revised for dioxin, cadmium, lead, mercury, and particulate matter. The nitrogen oxides emission limit for mass burn rotary waterwall type MWC units is also revised. Relative to the 1995 NSPS for new MWC units, the emission limits are revised for cadmium, lead, mercury, and particulate matter. For both the emission guidelines and NSPS, the compliance



testing provisions have been revised to require increased data availability from continuous emissions monitoring systems (CEMS). The revisions require CEMS to generate at least 95 percent data availability on a calendar year basis and at least 90 percent data availability on a calendar quarter basis. The emission guidelines and NSPS have also been revised to allow the optional use of CEMS to monitor particulate matter and mercury.

**B. What are the revised emission limits?**

The final amendments revise many of the emission limits in both the NSPS and emission guidelines. Relative to the NSPS, the most significant revisions are in the cadmium and mercury emission limits. Relative to the emission guidelines, the most significant revisions are in the dioxin/furan (for units equipped with electrostatic precipitators (ESPs)) and mercury emission limits, as well as nitrogen oxides for mass burn rotary combustors. Table 1 of this preamble contains a summary of the final emission limits.

**Table 1. Final Emission Limits for Large MWC Units**

Pollutant	Emission limit for existing MWC units <sup>a</sup>	Emission limit for new MWC units <sup>a</sup>
Dioxin/furan (CDD/CDF)	30 nanograms per dry standard cubic meter total mass basis (non-ESP equipped units)/35	13 nanograms per dry standard cubic meter total mass basis <sup>b</sup>

	nanograms per dry standard cubic meter total mass basis (ESP-equipped units)	
Cadmium (Cd)	35 micrograms per dry standard cubic meter	10 micrograms per dry standard cubic meter
Lead (Pb)	400 micrograms per dry standard cubic meter	140 micrograms per dry standard cubic meter
Mercury (Hg)	50 micrograms per dry standard cubic meter or 85 percent reduction of mercury emissions	50 micrograms per dry standard cubic meter or 85 percent reduction of mercury emissions
Particulate Matter (PM)	25 milligrams per dry standard cubic meter	20 milligrams per dry standard cubic meter
Hydrogen chloride (HCl)	29 parts per million dry volume or 95 percent reduction of hydrogen chloride emissions <sup>b</sup>	25 parts per million dry volume or 95 percent reduction of hydrogen chloride emissions <sup>b</sup>
Sulfur dioxide (SO <sub>2</sub> )	29 parts per million dry volume or 75 percent reduction of sulfur dioxide emissions <sup>b</sup>	30 parts per million dry volume or 80 percent reduction of sulfur dioxide emissions <sup>b</sup>
Nitrogen Oxides (NO <sub>x</sub> )	Varies by combustor type (see table 1 to subpart Cb of part 60)	180 parts per million dry volume /150 parts per million dry volume after first year of operation <sup>b</sup>

<sup>a</sup> All emission limits are measured at 7 percent oxygen.

<sup>b</sup> No change promulgated.

C. Are other amendments being promulgated?

The final amendments also make the following changes

based on information received during implementation of the MWC emission guidelines and apply equally to the NSPS and emission guidelines, unless otherwise specified. Following is a list of the most significant changes compared to the 1995 NSPS and emission guidelines.

#### Operating Practices

- The final amendments revise the operator stand-in provisions in §60.54b(c) to clarify how long a shift supervisor is allowed to be off site when a provisionally certified control room operator is standing in. A provisionally certified control room operator may stand in for up to 12 hours without notifying EPA; for up to 2 weeks if EPA is notified; and longer than 2 weeks if EPA is notified and the MWC owner demonstrates to EPA that a good faith effort is being made to ensure that a certified chief facility operator or certified shift supervisor is on site as soon as practicable. In the final amendments, a provisionally certified operator who is newly promoted or recently transferred to a shift supervisor position or chief facility operator position is able to serve up to 6 months without notification before taking the American Society of Mechanical Engineer's (ASME) Standard for the Qualification and Certification of Resource Recovery Facility Operators (QRO)

certification exam for full certification.

- The final amendments add two additional classifications of MWC units to the emission guidelines and add associated carbon monoxide limits to assure good combustion practices. The two new classifications are "spreader stoker fixed floor refuse-derived fuel (RDF)-fired/100 percent coal capable combustor" and "semi-suspension RDF-fired combustor/wet RDF process conversion."

#### Operating Parameters

- The final amendments revise §60.58b(m) to establish an 8-hour block average for measuring activated carbon injection (ACI) rate. This makes the NSPS and emission guidelines for large MWC units consistent with the newer (year 2000) CAA section 129 regulations for small MWC units (40 CFR part 60, subparts AAAA and BBBB), which monitor ACI rate using an 8-hour block average.

#### Performance Testing and Monitoring

- The final amendments revise the annual mercury testing requirements to additionally allow for optimization of mercury control operating parameters by waiving operating parameter limits during the mercury performance test and during the 2 weeks preceding the mercury performance test. This is already done for dioxin testing. It is recommended that both dioxin and

mercury testing be done during optimization testing.

- The final amendments revise the relative accuracy criterion for sulfur dioxide and carbon monoxide CEMS.
- The final amendments add flexibility to the annual compliance testing schedule so that a facility tests once per calendar year, but no less than 9 months and no more than 15 months since the previous test. The revision provides flexibility to facilities when facing scheduled and unscheduled outages, adverse local weather conditions, and other conditions, while still meeting the intent of the compliance testing. The final amendments also require at least five compliance tests be completed in each 5-year calendar period.
- The final amendments allow the use of parametric monitoring limits from an exceptionally well-operated MWC unit (i.e., MWC unit with dioxin emissions for 2 years in a row below 15 nanogram/dry standard cubic meter (ng/dscm) for existing MWC units and below 7 ng/dscm for new MWC units) be applied to all identical units at the same plant site without retesting for dioxin.
- The final amendments revise the particulate matter and mercury compliance testing requirements to allow the optional use of a particulate matter CEMS or mercury CEMS in place of stack testing and would allow the

optional use of multi-metal, hydrogen chloride, dioxin/furan CEMS in place of stack tests after which performance specifications for these CEMS are promulgated.

- The final amendments add provisions for monitoring the activated carbon injection pressure or equivalent parameter.
- The final amendments revise the data availability requirement for CEMS. Data must be available for at least 90 percent of the hours of operation per calendar quarter and at least 95 percent of the hours of operation per calendar year.
- The final amendments clarify the exclusion of monitoring data from compliance calculations during periods of startup, shutdown, or malfunctions, but requires identification of such periods and an explanation for exclusion of such data.

#### Other Amendments

- The final amendments clarify the meaning of the term "Administrator" in the standards.

#### D. Is an implementation schedule being promulgated?

Yes. Under the emission guidelines, and consistent with CAA section 129, revised State plans containing the revised emission limits and other requirements in the revised emission guidelines are due within 1 year after

promulgation of these revisions. That is, revised State plans must be submitted to EPA by [INSERT THE DATE 1 YEAR AFTER PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

The emission guidelines then allow MWC units two compliance schedules. As a first option, MWC units have up to 2 years from the date of EPA approval of a State plan to comply. Consistent with CAA section 129, EPA expects States to require compliance as expeditiously as practicable. Large MWC units have already installed the emission control equipment necessary to meet the revised limits, and EPA, therefore, anticipates that most State plans will include compliance dates less than 2 years following approval of State plans. In most cases, the only changes necessary are to review the revisions and adjust the emission monitoring and reporting accordingly. State plan revisions are not approvable until the related State rule or enforceable mechanism is adopted and becomes effective. As a second compliance option, an owner or operator of an MWC unit that plans a substantial upgrade, can apply to the EPA Administrator (if the MWC is regulated by a Federal Section 111(d)/129 plan) or the State Administrator (if the MWC is regulated by an EPA approved State section 111(d)/129 plan), for a site-specific compliance schedule that can extend up to 5 years following publication of these amendments.

In revising the emission limits in a State plan, a State has two options. First, it could insert the new emission limits in place of the current emission limits, follow procedures in 40 CFR part 60, subpart B, and submit a revised State plan to EPA for approval. If the revised State plan contains only the new emission limits (i.e., the existing emission limits are not retained), then the new emission limits must become effective immediately since the current limits would be removed from the State plan. A second approach would be for a State plan to include both the current and the new emission limits. This allows a phased approach in applying the new limits. That is, the State plan would make it clear that the existing emission limits remain in force and apply until the date the new emission limits are effective (as defined in the State plan).

E. Has EPA revised the applicability date of the NSPS?

No. The applicability date for the NSPS units remains September 20, 1994; however, units for which construction or modification is commenced after December 19, 2005, are subject to more stringent emission limits. Under the final amendments, units that commenced construction after September 20, 1994, and on or before December 19, 2005, continue to be subject to the NSPS emission limits that were promulgated in 1995 and that remain in the 40 CFR part 60,



subpart Eb NSPS. Units that commence construction after December 19, 2005, are subject to the new NSPS limits being added to subpart Eb.

The EPA is not aware of, and commenters did not identify, any MWC units that were modified or reconstructed after June 19, 1996 (effective date of the December 19, 1995 NSPS), therefore, EPA simplified the applicability text for the NSPS to be MWC units that commenced construction, modification, or reconstruction after September 20, 1994. The use of one date is the most understandable. As noted in adopting regulations for MWC in 1995, any change made to an MWC unit for the principal purpose of complying with the subpart Cb, 40 CFR part 60, emission guidelines or subpart Eb NSPS is not considered to be a modification or reconstruction.

### **III. Responses to Significant Comments**

#### **A. What areas of the proposal received the most comments?**

The comment letters received by EPA on the proposed rule, identified more than 50 issues for consideration. The most common issue was related to the statistical methods used by EPA to assist in development of the proposed emission limits. Associated comments included those on the adequacy of the database, appropriateness of the data screening procedures, and development of emissions variability factors. In addition, EPA received legal

comments on recalculating the MACT floor.

B. Why did EPA not recalculate the MACT floor?

Section 129(a)(5) of the CAA requires EPA to “. . . review, and in accordance with this section and section 111, revise” performance standards and other requirements under section 129. The provision does not mandate that this review be conducted in a single, unvarying manner. One commenter, nevertheless, maintains that because of the reference to “this section and section 111,” EPA is necessarily required to repeat the CAA section 129(a) standards development process, which includes re-determining the MACT floor for new and existing MWC units. EPA does not read the provision as requiring another analysis of the MACT floor. A more natural reading of the provision is that EPA is to conduct a periodic review to determine whether advances in technology warrant revisions to the standards. This is the same general approach taken by EPA in reviewing CAA section 111 standards.

There is nothing in the language of section 129(a)(5) that speaks directly to the issue of whether another floor analysis is required. EPA believes that a reasonable interpretation of the reference cited by the commenter leads to the conclusion that such an analysis is not required. EPA believes that a reasonable interpretation of the reference requires EPA to determine “the degree of emission

limitation achievable through application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated." See, Clean Air Act section 111(a)(1). Recalculating the floor as advocated by the commenter would eviscerate the Administrator's ability to effectively consider factors that Congress has otherwise mandated be considered. That is, once a new floor has been calculated, the Administrator cannot establish emission limits which are less stringent than that floor even if consideration of costs and other factors would otherwise lead him to conclude that this is appropriate. EPA believes that Congress would have been explicit in its instructions had it intended this result. Since it was not, EPA believes that a reasonable interpretation of section 129(a)(5) is that it does not require EPA to recalculate the floor for existing units.

EPA also believes that interpreting section 129(a)(5) as requiring additional floor determinations could effectively convert existing source standards into new source standards. After 5 years, all sources will be performing at least at the existing source MACT level of performance and some sources will be performing at the new source MACT level of performance. As a result, it is likely

that the average performance of the best performing 12 percent of sources will be at or near the new source MACT level of performance. This would result in existing sources being subject to new source MACT requirements on a 5-year cycle regardless of whether those sources have undergone a change which would otherwise require compliance with that standard. EPA sees no indication that section 129(a)(5) was intended to have this inexorable downward ratcheting effect. Rather, we read the provision as requiring EPA to consider developments in pollution control at the sources and to revise the standards based on its evaluation of the costs, non-air quality effects and energy implications of doing so.

C. Relative to technical issues, how were the statistical methods used to develop emission limits?

The statistical methods were used as an aid. One must remember that statistical methods attempt to estimate what could occur in the future based on what occurred in the past. Statistical methods provide an estimate of what could occur, but they are not the actual process. Actual events will determine what actually occurs. The usefulness of statistical methods is affected by the appropriateness of the model and assumptions used as well as the quality and size of the database. Statistical methods are a useful aid in making an informed decision but they alone cannot dictate a decision. Human judgment must always be applied in making

the final decision.

D. How were the final emission limits selected?

The final emission limits were selected in a three-step process. The first step was to develop statistical estimates. The second step was to consider the statistical estimates in relation to current performance levels. The third step was for EPA to select emission limits. Relative to the first step, EPA identified an appropriate statistical model, defined reasonable assumptions, and applied the model to year 2000 compliance data for all MWC units with the relevant control technologies to estimate the peak emission rate that is estimated to occur from time to time, considering inherent variability in emission levels. Next, EPA obtained year 2000 to 2005 test data from more than a dozen MWC units. This data was compared to the statistical estimates and considered in relation to public comments. As a last step, EPA selected the emission limits for the final standards.

E. What types of comments were received on the EPA statistical methods?

A range of comments were received on the statistical methodology. Some commenters simply presented their own statistical methodology, which they claimed was more conventional or appropriate for the data analysis being conducted. They went on to claim their methodology would

lead to more appropriate emission limits. The most common statistical methodology identified by commenters followed the approach presented by the Integrated Waste Services Association (IWSA). EPA concludes that the IWSA approach presents another generally acceptable methodology for developing emission limits. Based on public comments, EPA revised its methodology and updated the database and conducted another analysis. The revised methodology used by EPA followed that used by IWSA, but improved upon it with more accurate selection of frequency distributions on which to base the analyses. Regardless of the statistical methodology used, the results of the statistical analysis were used only as a tool to aid in selection of appropriate emission limits. That is, the estimates from the new statistical analysis were used as an aid in selecting the final emission limits. The new analysis is contained in the docket.

F. What comments were received on the EPA database and data screening procedures?

Although the MWC database is one of the larger databases EPA has had for standards development, a number of commenters indicated the database is inadequate because of its age. They indicated that the data from initial MACT compliance tests (year 2000) is old and should be supplemented with more current data. Some commenters

suggested the more current data would address emission control performance over time including deterioration of the control system. (It could also be argued more current data could show improved performance as MWC operators became more familiar with operating an emission control system.) EPA believes the size of the year 2000 database adequate to address emission variability for developing estimates; however, EPA did collect 2000 to 2005 test data from more than a dozen MWC units to aid in reviewing emission control performance over time and to compare to the statistical estimates. Additionally, commenters identified a number of errors in the database. These were corrected by EPA. Relative to data screening as done by EPA at proposal, commenters claimed its use inappropriate and that it introduced bias to the results. At proposal, EPA had screened data to identify values that required additional investigation not because the values were high or low. Based on public comments, EPA dropped the data screening procedure in its final analysis. In some cases, using the unscreened data rather than the screened data changed estimates, but in other cases it did not. For example, the particulate matter emissions limit with or without data screening did not change. For cadmium, the change from data screening to non-screening changed the estimate by 1 micrograms/dry standard cubic meter (ug/dscm) (31 ug/dscm to

32 ug/dscm). A more significant change resulting from changing from data screening to non-screening was in the estimate for the lead emission limit.

EPA found that data received following proposal showed highly variable lead emissions. The statistical analysis data for lead used by EPA and IWSA was not as variable as data for subsequent years that were obtained after the statistical analyses were completed. Therefore, EPA discounted both the EPA and industry statistical estimates, and based the final limit on a review of the year 2000-2005 test data and public comment, selecting a higher emission limit.

In selecting the final mercury emission limit, EPA again discounted both the EPA and industry statistical estimates, and based the final limit on a review of the year 2000-2005 test data and public comment, this time selecting a lower emission limit. The EPA and IWSA analyses used year 2000 test data, and both analyses supported retention of the existing mercury limit of 80  $\mu\text{g}/\text{dscm}$ . However, EPA obtained mercury test data for 68 different tests conducted on ESP-equipped MWC units in the 2000 to 2005 time period. These data showed that mercury emissions are considerably lower than suggested by the statistical analyses. To understand this performance, EPA reviewed uncontrolled mercury emissions data from a number of MWC units for the 1995 to



2005 time period. The data showed that in 1995, when the MACT standards were adopted, average uncontrolled mercury emission levels were about 250 µg/dscm, and, by 2005, the level was reduced by about 50 percent to about 125 µg/dscm.

The result of application of 85 percent mercury control to these lower mercury inlet levels has resulted in much lower mercury outlet levels, as demonstrated by the test data. A 50 percent reduction in inlet mercury levels suggests an emission limit of 40 µg/dscm in the MACT standards. Public comments and test data suggested that levels less than 30 µg/dscm are being achieved. However, in consideration of the potential use of mercury CEMS and the higher mercury variability that may be observed with CEMS use, the final standards were set at 50 µg/dscm for both existing and new MWC units.

G. What was the most important factor affecting emissions estimates?

The emission variability factor was the most important factor affecting emissions estimates. The emission variability factor is an emission factor that is added to the mean performance level in order to estimate the peak emissions level that will occur from time to time. For example, over an extended period (many years) particulate matter emissions from an MWC could average 15 milligrams per dry standard cubic meter (mg/dscm). Clearly, individual

particulate matter tests would be above and below 15 mg/dscm. The emission variability factor addresses how much individual test values are estimated to be above the 15 mg/dscm mean value. If the variability factor were 10 mg/dscm, it would mean that it is estimated that from time to time particulate matter emissions could be as high as 25 mg/dscm ( $15+10=25$ ).

H. What emission variability factor is appropriate?

Although most commenters and EPA used similar statistical methodology, differences were identified in assumptions used to develop emission variability factors. EPA used percentiles. The percentile addresses how often one would estimate that an emissions level may exceed a certain value (the standard). For analysis of CEMS data, such as sulfur dioxide or nitrogen oxides, where 365 tests (24-hr CEMS average) are conducted per year, EPA and commenters agreed the emission limit should be set at a level that would be expected to be exceeded only once per year at a well-operated MWC plant. Once per year translates into a 99.7 percentile level. A number of commenters suggested the use of a 99.7 percentile for development of limits using both CEMS data (sulfur dioxide and nitrogen oxide) and stack test data (cadmium, lead, mercury, particulate matter, dioxin, and hydrogen chloride). This is

one area where EPA disagrees with these commenters. EPA concludes a different assumption is appropriate.

For stack test emission limits, EPA used a different and lower percentile. This is the same approach EPA used at proposal. Analysis of data to estimate emission limits to be enforced by stack test methods must be done using a different approach than where enforcement is to be based on CEMS. Historically, for stack test data, EPA used its judgment to select appropriate emission limits in consideration of emissions variability over a wide range of operating conditions, and consideration of the limitations of compliance determination by infrequent stack testing. For this rulemaking, EPA moved a step forward using statistical methods to aid in estimating appropriate emission levels for stack test compliance. The percentile for estimating emission limits enforced by infrequent stack testing must also reflect a reasonable consideration of emissions variability and compliance limitations of stack testing. Based on EPA's experience, EPA concluded a 99 percentile was appropriate to estimate achievable emission levels for emission limits enforced by stack testing. Therefore, just as done in the December 19, 2005 proposal, EPA continues to use a 99 percentile for estimating emission limits to be enforced by stack testing and 99.7 percentile for estimating emission limits to be enforced by CEMS. The

commenters did not provide any persuasive information for the use of a 99.7 percentile for both CEMS and stack test compliance methods.

I. What other significant comments were received on the proposal, and how were they addressed in the final rule?

Other significant comment topics included CEMS data availability and increased use of CEMS, including particulate matter CEMS and other new CEMS technology. The CEMS data availability issue and increased use of CEMS technology are discussed below. Other comments are addressed in the response to comment document, which is contained in the docket.

J. What comments were received on the proposed 95 percent CEMS data availability requirement, and how were they addressed in the final rule?

Most commenters agreed that 95 percent CEMS data availability was achievable by a single CEMS, but indicated that legally requiring demonstration of such high availability levels on a short term basis may result in the installation of a second backup CEMS to assure compliance. Commenters indicated that from time to time it is necessary to obtain replacement parts for CEMS, sometimes from foreign suppliers, and this can quickly deteriorate data availability levels on a short term basis. In proposing the 95 percent data availability requirement, it was not EPA's

intention to require installation of a second backup CEMS. To address these concerns, the final rule addresses CEMS data availability in two steps. First, a 90 percent CEMS data availability requirement is applied on a calendar quarter basis. Second, a 95 percent data availability requirement is applied on a calendar year basis. The procedure for calculation of data availability is also revised in the final rule to be hours of valid CEMS data collected divided by the hours of MWC operation. This is done on a calendar quarter basis for the 90 percent requirement and on a calendar year basis for the 95 percent requirement. The current requirement of obtaining CEMS data for 75 percent of the operating hours per day before data is counted toward the CEMS data availability requirement has been removed from the MWC regulations to assure consistency with CEMS requirements for other source categories.

K. What comments were received on the expanded use of CEMS technology, and how were the comments addressed in the final rule?

In the proposal, EPA allowed the optional use of particulate matter CEMS and requested comment on the optional use of particulate matter CEMS, multi-metal CEMS, hydrogen chloride CEMS, and semi-continuous dioxin monitoring. Some commenters stated the CEMS have not been validated on MWC units; that PM CEMS have not been installed

in any MWC in the United States; and the use of PM CEMS on MWCs in Europe are not indicative of the appropriateness of their use in the United States, because of differences in how CEMS are used for enforcement. While PM CEMS are used in the United States on other types of sources, there could be some operational differences between these sources and MWCs that affect the performance of PM CEMS on MWCs.

In the final rule, EPA is allowing, as optional test methods, the use of particulate matter CEMS and mercury CEMS, since performance specifications are available for these CEMS. In the regulations, the owners or operators of an MWC would provide EPA a 30 day notice before starting to use the CEMS and provide a 30 day notice if they elect to discontinue the use of the CEMS. As an incentive for the optional application of CEMS in the MWC context, EPA is modifying the monitoring availability requirements. The 90 percent and 95 percent CEMS data availability requirements do not apply to particulate matter CEMS or mercury CEMS use for the first 2 years of application. For the other CEMS (multi-metal, hydrogen chloride, and semi-continuous dioxin monitoring), their optional use is allowed after their respective performance specifications are adopted by EPA. No dates for adoption are currently scheduled.

L. Would the use of particulate matter CEMS or mercury CEMS for compliance testing require EPA to adopt alternative

particulate matter and mercury emission limits?

Theoretically, yes. The use of particulate matter CEMS or mercury CEMS for compliance testing would theoretically require EPA to adopt alternative particulate matter and mercury emission limits. The move from once per year stack testing (where emission limits were calculated from the 99 percentile) to CEMS (99.7 percentile) suggests the emission limit should be increased if the same data averaging period is used. To address this, the final rule increases the data averaging period from 8 hours (typical particulate matter and mercury stack test period) to a 24-hr daily average if particulate matter or mercury CEMS are used. Past analysis of sulfur dioxide CEMS and nitrogen oxides CEMS data (and utility particulate matter CEMS data) indicate increasing the averaging period to a 24-hr daily average will reduce emissions variability and associated peak emissions estimates. EPA supports the optional use of particulate matter and mercury CEMS, but is fully aware that no particulate matter CEMS or mercury CEMS data from MWC units are available from domestic MWC units. EPA encourages MWC owners or operators who elect to apply particulate matter or mercury CEMS, to notify EPA as soon as data are collected to allow a determination if alternative emission limits are appropriate.

**IV. Impacts of the Final Amendments**

EPA projects the final amendments will have no additional impacts to air, water, or energy since the final emission limits can be achieved using the same air pollution control technology that was used to comply with the current emission limits. Similarly, EPA expects minimal cost and no economic impact for the same reason. Existing large MWC units will continue to use their existing MACT control technology to meet the emission limits, and will not incur costs to retrofit equipment. In addition, EPA does not believe that the revised limits will result in any increase in operating or maintenance costs. The same conclusions apply to new MWC units since EPA expects that new MWC units will be equipped with the same control technology used to comply with the 1995 NSPS.

## **V. Statutory and Executive Order Reviews**

### **A. Executive Order 12866: Regulatory Planning and Review**

Under Executive Order 12866 (58 FR 51735, October 4, 1993), EPA must determine whether the regulatory action is "significant" and, therefore, subject to review by OMB and the requirements of the Executive Order. The Executive Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition,



jobs, the environment, public health or safety, or State, local, or Tribal governments or communities;

(2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, OMB has notified EPA that it considers the final rule a "significant regulatory action" within the meaning of the Executive Order. EPA has submitted today's action to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

#### B. Paperwork Reduction Act

The Office of Management and Budget previously approved the information collection requirements contained in the NSPS and emission guidelines for large MWC units under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., at the time the NSPS and emission guidelines were promulgated on December 19, 1995 and subsequent recertifications. The information collection request has been assigned OMB Control Number 2060-0210 (EPA ICR No.

1506.10).

The final amendments result in no changes to the information collection requirements of the NSPS or emission guidelines and will have no impact on the information collection estimate of project cost and hour burden made and approved by OMB. Therefore, the information collection requests have not been revised.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in

40 CFR part 9 and 40 CFR chapter 15.

C. Regulatory Flexibility Act

EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with the final rule.

For purposes of assessing the impacts of the final rule on small entities, small entity is defined as follows: (1) a small business in the regulated industry that has gross annual revenues of less than \$6 million; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; or (3) a small organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field.

After considering the economic impacts of the final rule on small entities, EPA has concluded that today's action will not have a significant economic impact on a substantial number of small entities. The final rule will not impose any requirements on small entities.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act (UMRA) of 1995, Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must

prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted.

Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, EPA must have developed a small government agency plan under section 203 of the UMRA. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA's regulatory proposals with significant

Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

EPA has determined that the final rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any 1 year because the final rule does not require a change in the control technology applied. Thus, the final rule is not subject to the requirements of section 202 and 205 of the UMRA. In addition, EPA has determined that the final rule contains no regulatory requirements that might significantly or uniquely affect small governments. Therefore, the final rule is not subject to the requirements of section 203 of the UMRA.

E. Executive Order 13132: Federalism

Executive Order 13132 (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

The final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. The final rule will not impose substantial direct compliance costs on State or local governments because the regulations will not require any change in the emission control technology currently used to comply with the 1995 NSPS and emissions guidelines, and will not preempt State law. Thus, Executive Order 13132 does not apply to the final amendments.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

Executive Order 13175, (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications."

The final rule does not have tribal implications, as specified in Executive Order 13175. They will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as

specified in Executive Order 13175. EPA is not aware of any large MWC unit owned or operated by tribal government. Thus, Executive Order 13175 does not apply to the final rule.

G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks

Executive Order 13045 (62 FR 19885, April 23, 1997), applies to any rule that: (1) Is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives EPA considered.

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the regulation. The final amendments are not subject to Executive Order 13045 because they are based on technology performance and not on health and safety risks.

H. Executive Order 13211: Actions that Significantly

Affect Energy Supply, Distribution or Use

This rule is not a "significant energy action" as defined in Executive Order 13211 (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

Since there would be no change in energy consumption resulting from the final rule, EPA does not expect any price increase for any energy type. We also expect that there will be no impact on the import of foreign energy supplies, and no other adverse outcomes are expected to occur with regards to energy supplies. Therefore, EPA concludes that the final rule is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

I. National Technology Transfer Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Public Law No. 104-113; 15 U.S.C. 272 note) directs the EPA to use voluntary consensus standards in regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) developed or adopted by one or more voluntary consensus bodies. The NTTAA directs EPA to provide Congress, through annual reports to the Office of Management and Budget (OMB), with explanations when an



agency does not use available and applicable voluntary consensus standards.

The MWC NSPS and emission guidelines involve technical standards. The EPA cites the following methods in the NSPS and emission guidelines: Methods 1, 3, 3A, 3B, 5, 6, 6A or 6C, 7 or 7A, 7C, 7D, or 7E, 9, 10, 10A or 10B, 19, 22, 23, 26, 26A, and 29 of 40 CFR part 60, appendix A; Performance Specifications (PS) 1, 2, 3, 4, and 11 of 40 CFR part 60, appendix B; and appendix F to 40 CFR part 60.

In previous searches and review, which have been documented and placed in the docket, EPA identified four voluntary consensus standards that have already been incorporated by reference in 40 CFR 60.17. The voluntary consensus standard ASTM D6216 (1998), "Standard Practice for Opacity Monitor Manufacturers to Certify Conformance with Design and Performance Specifications," is an acceptable alternative for opacity monitor design specifications given in EPA's PS 1 (promulgated in March 1983). As a result, EPA incorporated ASTM D6216-98 by reference into PS 1 as the design specifications for opacity monitors in August 2000. (40 CFR part 60, appendix B.) The MWC NSPS and emission guidelines also incorporate by reference into 40 CFR part 60.17 ASME QRO-1-1994, "Standard for the Qualification and Certification of Resource Recovery Facility Operators" for operator qualification and certification; ASME PTC 4.1-1964

(reaffirmed 1991), "Power Test Codes: Test Code for Steam Generating Units," for steam or feedwater flow; and ASME Interim Supplement 19.5 (6th Edition, 1971), "Instruments and Apparatus: Application, Part II of Fluid Meters," for nozzle and orifice design.

In this search and review, EPA conducted searches to identify voluntary consensus standards in addition to EPA methods in the MWC NSPS and emission guidelines. No applicable voluntary consensus standards were identified for EPA Methods 7D, 9, 10A, 19, and 22; and PS 3 and 4A. The search for emissions measurement procedures identified 27 voluntary consensus standards potentially applicable to the final amendments. One of the 27 voluntary consensus standards identified in this search was not available at the time the review was conducted for the purposes of the amendments because the standard is under development by a voluntary consensus body: ASTM WK3159 (Begun in 2003), "Practice for Quality Assurance of Instrumental Monitoring Systems." The EPA determined that two of the remaining 26 standards identified for measuring emissions subject to the NSPS and emission guidelines were practical alternatives to EPA test methods for the purposes of the final amendments. EPA determined that 24 standards were not practical alternatives to EPA test methods, therefore, EPA does not intend to adopt these standards for this purpose. The

reasons for EPA's determinations are discussed in a memorandum in the docket.

EPA identified two voluntary consensus standards as alternatives to EPA test methods. ASME PTC 19-10-1981-Part 10, "Flue and Exhaust Gas Analyses" includes manual and instrumental methods of analyses for carbon monoxide, nitrogen oxides, oxygen, and sulfur dioxide. The manual methods of ASME PTC 19-10-1981-Part 10 for measuring the nitrogen oxide, oxygen, and sulfur dioxide content of exhaust gas are acceptable alternatives to Methods 3B, 6, 6A, 7, and 7C. The instrumental methods of ASME PTC 19-10-1981-Part 10 are not acceptable as a substitute for EPA Methods 3A, 6C, 7A, 7E, 10, and 10B. The instrumental methods are only general descriptions of procedures and are not true methods. Therefore, while some of the manual methods are acceptable alternatives to EPA methods, the instrumental methods are not.

The voluntary consensus standard ASTM D6784-02, "Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)," is an alternative to EPA Method 29 (portion for mercury only) as a method for measuring mercury. A full discussion of acceptable and unacceptable voluntary consensus standards is contained in a memorandum in the docket.

J. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing the final rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the final rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This final rule is not a major rule" as defined by 5 U.S.C. 804(2). The final rule amendments to the standards of performance for new stationary sources is effective [INSERT THE DATE 180 DAYS AFTER PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]. The final rule amendments to the emission guidelines for existing sources is effective on [INSERT THE DATE 60 DAYS AFTER PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

**List of Subjects in 40 CFR Part 60**

Environmental protection, Administrative practice and procedure, Air pollution control, Intergovernmental relations, Reporting and recordkeeping requirements.

---

Dated:

---

Stephen L. Johnson,  
Administrator

For the reasons stated in the preamble, title 40, chapter I, of the Code of Federal Regulations is amended as follows:

**PART 60—[AMENDED]**

1. The authority citation for part 60 continues to read as follows:

**Authority:** 42 U.S.C. 7401, et seq.

**Subpart Cb—[Amended]**

2. Revise §60.30b to read as follows:

§60.30b Scope and delegation of authority.

(a) This subpart contains emission guidelines and compliance schedules for the control of certain designated pollutants from certain municipal waste combustors in accordance with section 111(d) and section 129 of the Clean Air Act and subpart B of this part. The provisions in these emission guidelines apply instead of the provisions of §60.24(f) of subpart B of this part.

(b) The following authorities are retained by EPA:

(1) Approval of exemption claims in §60.32b(b) (1), (d), (e), (f) (1), (i) (1);

(2) Approval of a nitrogen oxides trading program under §60.33b(d) (2);

(3) Approval of major alternatives to test methods;

(4) Approval of major alternatives to monitoring;

(5) Waiver of recordkeeping; and

(6) Performance test and data reduction waivers under §608(b).

3. Amend §60.31b by adding the definitions of "EPA," "Semi-suspension refuse-derived fuel-fired combustor/wet refuse-derived fuel process conversion," and "Spreader stoker fixed floor refuse-derived fuel-fired combustor/100 percent coal capable" in alphabetical order to read as follows:

§60.31b Definitions.

EPA means the Administrator of the U.S. EPA or employee of the U.S. EPA who is delegated to perform the specified task.

\* \* \* \* \*

Semi-suspension refuse-derived fuel-fired combustor/wet refuse-derived fuel process conversion means a combustion unit that was converted from a wet refuse-derived fuel process to a dry refuse-derived fuel process, and because of constraints in the design of the system, includes a low furnace height (less than 60 feet between the grate and the roof) and a high waste capacity-to-undergrate air zone ratio (greater than 300 tons of waste per day (tpd) fuel per each undergrate air zone).

Spreader stoker fixed floor refuse-derived fuel-fired combustor/100 percent coal capable means a spreader stoker type combustor with a fixed floor grate design that

typically fires 100 percent refuse-derived fuel but is equipped to burn 100 percent coal instead of refuse-derived fuel to fulfill 100 percent steam or energy demand.

- 4. Amend §60.32b by:
  - a. Revising paragraph (b) (1);
  - b. Revising paragraph (d);
  - c. Revising paragraph (e);
  - d. Revising paragraph (f) (1);
  - e. Revising paragraph (i) (1); and
  - f. Adding paragraph (n) to read as follows:

§60.32b Designated facilities.

\* \* \* \* \*

(b) \* \* \*

(1) Notifies EPA of an exemption claim,

\* \* \* \* \*

(d) A qualifying small power production facility, as defined in section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy is not subject to this subpart if the owner or operator of the facility notifies EPA of this exemption and provides data documenting that the facility qualifies for this exemption.

(e) A qualifying cogeneration facility, as defined in



section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy and steam or forms of useful energy (such as heat) that are used for industrial, commercial, heating, or cooling purposes, is not subject to this subpart if the owner or operator of the facility notifies EPA of this exemption and provides data documenting that the facility qualifies for this exemption.

(f) \* \* \*

(1) Notifies EPA of an exemption claim, and

\* \* \* \* \*

(i) \* \* \*

(1) Notifies EPA of an exemption claim,

(n) Any affected facility meeting the applicability requirements under this section is not subject to subpart E of this part.

\* \* \* \* \*

5. Amend §60.33b by:

a. Revising paragraph (a);

b. Revising paragraph (c);

c. Removing table 1 from paragraph (d) introductory text and table 2 from paragraph (d)(1)(iii); and

d. Revising paragraph (d)(2) and (d)(3) introductory

text to read as follows:

§60.33b Emission guidelines for municipal waste combustor metals, acid gases, organics, and nitrogen oxides.

(a) The emission limits for municipal waste combustor metals are specified in paragraphs (a)(1) through (a)(3) of this section.

(1) For approval, a State plan shall include emission limits for particulate matter and opacity at least as protective as the emission limits for particulate matter and opacity specified in paragraphs (a)(1)(i) through (a)(1)(iii) of this section.

(i) Before April 28, 2009, the emission limit for particulate matter contained in the gases discharged to the atmosphere from a designated facility is 27 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. On and after April 28, 2009, the emission limit for particulate matter contained in the gases discharged to the atmosphere from a designated facility is 25 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.

(ii) [Reserved].

(iii) The emission limit for opacity exhibited by the gases discharged to the atmosphere from a designated facility is 10 percent (6-minute average).

(2) For approval, a State plan shall include emission limits for cadmium at least as protective as the emission

limits for cadmium specified in paragraphs (a) (2) (i) through (a) (2) (iv) of this section.

(i) Before April 28, 2009, the emission limit for cadmium contained in the gases discharged to the atmosphere from a designated facility is 40 micrograms per dry standard cubic meter, corrected to 7 percent oxygen. On and after April 28, 2009, the emission limit for cadmium contained in the gases discharged to the atmosphere from a designated facility is 35 micrograms per dry standard cubic meter, corrected to 7 percent oxygen.

(ii) [Reserved].

(3) For approval, a State plan shall include emission limits for mercury at least as protective as the emission limits specified in this paragraph. Before April 28, 2009, the emission limit for mercury contained in the gases discharged to the atmosphere from a designated facility is 80 micrograms per dry standard cubic meter or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent. On and after April 28, 2009, the emission limit for mercury contained in the gases discharged to the atmosphere from a designated facility is 50 micrograms per dry standard cubic meter or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen,

whichever is less stringent.

(4) For approval, a State plan shall include an emission limit for lead at least as protective as the emission limit for lead specified in this paragraph. Before April 28, 2009, the emission limit for lead contained in the gases discharged to the atmosphere from a designated facility is 440 micrograms per dry standard cubic meter, corrected to 7 percent oxygen. On and after April 28, 2009, the emission limit for lead contained in the gases discharged to the atmosphere from a designated facility is 400 micrograms per dry standard cubic meter, corrected to 7 percent oxygen.

\* \* \* \* \*

(c) The emission limits for municipal waste combustor organics, expressed as total mass dioxin/furan, are specified in paragraphs (c)(1) and (c)(2) of this section.

(1) For approval, a State plan shall include an emission limit for dioxin/furan contained in the gases discharged to the atmosphere from a designated facility at least as protective as the emission limit for dioxin/furan specified in paragraphs (c)(1)(i), (c)(1)(ii), and (c)(1)(iii) of this section, as applicable.

(i) Before April 28, 2009, the emission limit for designated facilities that employ an electrostatic precipitator-based emission control system is 60 nanograms

per dry standard cubic meter (total mass), corrected to 7 percent oxygen.

(ii) On and after April 28, 2009, the emission limit for designated facilities that employ an electrostatic precipitator-based emission control system is 35 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.

(iii) The emission limit for designated facilities that do not employ an electrostatic precipitator-based emission control system is 30 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.

(d) For approval, a State plan shall include emission limits for nitrogen oxides at least as protective as the emission limits listed in table 1 of this subpart for designated facilities. Table 1 provides emission limits for the nitrogen oxides concentration level for each type of designated facility.

(1) \* \* \*

(iii) To implement the emissions averaging plan, the average daily (24-hour) nitrogen oxides emission concentration level for gases discharged from the designated facilities being included in the emissions averaging plan must be no greater than the levels specified in table 2 of this subpart. Table 2 provides emission limits for the nitrogen oxides concentration level for each type of

designated facility.

\* \* \* \* \*

(2) A State plan may establish a program to allow owners or operators of municipal waste combustor plants to engage in trading of nitrogen oxides emission credits. A trading program must be approved by EPA before implementation.

(3) For approval, a State plan shall include emission limits for nitrogen oxides from fluidized bed combustors at least as protective as the emission limits listed in paragraphs (d) (3) (i) and (d) (3) (ii) of this section.

\* \* \* \* \*

6. Amend §60.34b by removing table 3 from paragraph (a) introductory text to read as follows:

(a) For approval, a State plan shall include emission limits for carbon monoxide at least as protective as the emission limits for carbon monoxide listed in table 3 of this subpart. Table 3 provides emission limits for the carbon monoxide concentration level for each type of designated facility.

\* \* \* \* \*

7. Amend §60.39b by:

- a. Revising paragraph (b);
- b. Revising paragraph (c) introductory text;
- c. Revising paragraph (c) (4) (iii) (B);

d. Revising paragraph (e); and

e. Adding paragraphs (g) and (h) to read as follows:

§60.39b Reporting and recordkeeping guidelines and compliance schedules.

\* \* \* \* \*

(b) Except as provided in paragraph (e) of this section, not later than December 19, 1996, each State in which a designated facility is located shall submit to EPA a plan to implement and enforce all provisions of this subpart except the revised April 28, 2009 emission limits in §60.33b(a), (c), and (d). Not later than April 28, 2007, each State in which a designated facility is located shall submit to EPA a plan to implement and enforce all provisions of this subpart, as amended on [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]. The submittal schedule specified in this paragraph is in accordance with section 129(b)(2) of the Clean Air Act and applies instead of the schedule provided in §60.23(a)(1) of subpart B of this part.

(c) For approval, a State plan that is submitted prior to [INSERT THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER] shall include the compliance schedules specified in paragraphs (c)(1) through (c)(5) of this section.

\* \* \* \* \*

(4) \* \* \*

(iii) \* \* \*

(B) The owner or operator of a designated facility may request that the Administrator waive the requirement specified in §60.54b(d) of subpart Eb of this part for chief facility operators, shift supervisors, and control room operators who have obtained provisional certification from the American Society of Mechanical Engineers on or before the initial date of State plan approval.

\* \* \* \* \*

(e) Not later than August 25, 1998, each State in which a designated facility is operating shall submit to EPA a plan to implement and enforce all provisions of this subpart specified in §60.33b(b) (3) and (d) (3) and the emission limit in paragraph (a) (4) that applies before April 28, 2009.

\* \* \* \* \*

(g) For approval, a revised State plan submitted not later than April 28, 2007 in accordance with paragraph (b) of this section, shall include compliance schedules for meeting the revised April 28, 2009 emission limits in §60.33b(a), (c), and (d) and the revised testing provisions in §60.38b(b).

(1) Compliance with the revised April 28, 2009 emission limits is required as expeditiously as practicable,



but no later than April 28, 2009, except as provided in paragraph (g)(2) of this section.

(2) The owner or operator of an affected facility who is planning an extensive emission control system upgrade may petition the Administrator for a longer compliance schedule and must demonstrate to the satisfaction of the Administrator the need for the additional time. If approved, the schedule may exceed the schedule in paragraph (g)(1) of this section, but cannot exceed [INSERT THE DATE 5 YEARS AFTER THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

(h) In the event no plan for implementing the emission guidelines is approved by EPA, all designated facilities meeting the applicability requirements under §60.32b shall be in compliance with all of the guidelines, including the revised April 28, 2009 emission limits in §60.33b(a), (b), (c), (d), and §60.34b(a), and the revised testing provisions in §60.38b(b), no later than [INSERT THE DATE 5 YEARS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

8. Add tables 1, 2, and 3 to the end of subpart Cb to read as follows:

**Table 1 to Subpart Cb of Part 60--Nitrogen Oxides  
Guidelines for Designated Facilities**

<b>Municipal waste</b>	<b>Before April</b>	<b>On and after April 28, 2009, nitrogen</b>
------------------------	---------------------	--

<b>combustor technology</b>	<b>28, 2009, nitrogen oxides emission limit (parts per million by volume)<sup>a</sup></b>	<b>oxides emission limit (parts per million by volume)<sup>a</sup></b>
Mass burn waterwall	205	205
Mass burn rotary waterwall	250	210
Refuse-derived fuel combustor	250	250
Fluidized bed combustor	180	180
Mass burn refractory combustors	no limit	no limit

<sup>a</sup> Corrected to 7 percent oxygen, dry basis.

**Table 2 to Subpart Cb of Part 60--Nitrogen Oxides Limits For Existing Designated Facilities Included in an Emissions Averaging Plan at a Municipal Waste Combustor Plant<sup>b</sup>**

<b>Municipal waste combustor technology</b>	<b>Before April 28, 2009, nitrogen oxides emission limit (parts per million by volume)<sup>b</sup></b>	<b>On and after April 28, 2009, nitrogen oxides emission limit (parts per million by volume)<sup>a</sup></b>
Mass burn waterwall	185	185
Mass burn rotary waterwall	220	190
Refuse-derived fuel combustor	230	230
Fluidized bed combustor	165	165

<sup>a</sup> Mass burn refractory municipal waste combustors and other MWC technologies not listed above may not be included in an emissions averaging plan.

<sup>b</sup> Corrected to 7 percent oxygen, dry basis.

**Table 3 to Subpart Cb of Part 60--Municipal Waste Combustor  
Operating Guidelines**

<b>Municipal waste combustor technology</b>	<b>Carbon monoxide emissions levels (parts per million by volume)<sup>a</sup></b>	<b>Averaging time (hrs)<sup>b</sup></b>
Mass burn waterwall	100	4
Mass burn refractory	100	4
Mass burn rotary refractory	100	24
Mass burn rotary waterwall	250	24
Modular starved air	50	4
Modular excess air	50	4
Refuse-derived fuel stoker	200	24
Fluidized bed, mixed fuel (wood/refuse-derived fuel)	200	24 <sup>c</sup>
Bubbling fluidized bed combustor	100	4
Circulating fluidized bed combustor	100	4
Pulverized coal/refuse- derived fuel mixed fuel-fired combustor	150	4
Spreader stoker coal/refuse- derived fuel mixed fuel-fired combustor	200	24
Semi-suspension refuse- derived fuel-fired combustor/wet refuse-derived fuel process conversion	250	24 <sup>c</sup>
Spreader stoker fixed floor refuse-derived fuel-fired combustor/100 percent coal capable	250	24 <sup>c</sup>

<sup>a</sup> Measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to 7

percent oxygen, dry basis. Calculated as an arithmetic average.

<sup>b</sup> Averaging times are 4-hour or 24-hour block averages.

<sup>c</sup> 24-hour block average, geometric mean.

**Subpart E—[Amended]**

9. Amend §60.50 by adding paragraphs (c), (d), and (e) to read as follows:

§60.50 Applicability and designation of affected facility.

\* \* \* \* \*

(c) Any facility covered by subpart Cb, Eb, AAAA, or BBBB of this part is not covered by this subpart.

(d) Any facility covered by an EPA approved State section 111(d)/129 plan implementing subpart Cb or BBBB of this part is not covered by this subpart.

(e) Any facility covered by subpart FFF or JJJ of part 62 (Federal section 111(d)/129 plan implementing subpart Cb or BBBB of this part) is not covered by this subpart.

**Subpart Eb—[Amended]**

10. Amend §60.50b by:

- a. Revising paragraph (a);
- b. Revising paragraph (b) (1);
- c. Revising paragraph (e);
- d. Revising paragraph (f);
- e. Revising paragraph (g) (1);
- f. Revising paragraph (j) (1);
- g. Revising paragraph (n); and

h. Adding paragraph (q) to read as follows:

§60.50b Applicability and delegation of authority.

(a) The affected facility to which this subpart applies is each municipal waste combustor unit with a combustion capacity greater than 250 tons per day of municipal solid waste for which construction, modification, or reconstruction is commenced after September 20, 1994.

(b) \* \* \*

(1) Notifies EPA of an exemption claim;

\* \* \* \* \*

(e) A qualifying small power production facility, as defined in section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy is not subject to this subpart if the owner or operator of the facility notifies EPA of this exemption and provides data documenting that the facility qualifies for this exemption.

(f) A qualifying cogeneration facility, as defined in section 3(18)(B) of the Federal Power Act (16 U.S.C. 796(18)(B)), that burns homogeneous waste (such as automotive tires or used oil, but not including refuse-derived fuel) for the production of electric energy and steam or forms of useful energy (such as heat) that are used for industrial, commercial, heating, or cooling purposes, is

not subject to this subpart if the owner or operator of the facility notifies EPA of this exemption and provides data documenting that the facility qualifies for this exemption.

(g) \* \* \*

(1) Notifies EPA of an exemption claim; and

\* \* \* \* \*

(j) \* \* \*

(1) Notifies EPA of an exemption claim;

\* \* \* \* \*

(n) The following authorities are retained by the Administrator of the U.S. EPA and are not transferred to a State:

(1) Approval of exemption claims in paragraphs (b), (e), (f), (g) and (j) of this section;

(2) Enforceability under Federal law of all Federally enforceable, as defined in §60.51b, limitations and conditions;

(3) Determination of compliance with the siting requirements as specified in §60.57b(a);

(4) Acceptance of relationship between carbon monoxide and oxygen as part of initial and annual performance tests as specified in §60.58b(b) (7);

(5) Approval of other monitoring systems used to obtain emissions data when data is not obtained by CEMS as specified in §60.58b(e) (14), (h) (12), (i) (11), and (n) (14),

and (p) (11) ;

(6) Approval of a site-specific monitoring plan for the continuous emission monitoring system specified in §60.58b(n) (13) and (o) of this section or the continuous automated sampling system specified in §60.58b(p) (10) and (q) of this section;

(7) Approval of major alternatives to test methods;

(8) Approval of major alternatives to monitoring;

(9) Waiver of recordkeeping; and

(10) Performance test and data reduction waivers under §608 (b) .

\* \* \* \* \*

11. Amend §60.51b by revising the definition of "Federally enforceable" and adding the definitions for "Administrator," "Continuous automated sampling system," and "EPA," in alphabetical order to read as follows:

§60.51b Definitions.

Administrator means:

(1) For approved and effective State Section 111(d)/129 plans, the Director of the State air pollution control agency, or employee of the State air pollution control agency that is delegated the authority to perform the specified task;

(2) For Federal Section 111(d)/129 plans, the Administrator of the EPA, an employee of the EPA, the

Director of the State air pollution control agency, or employee of the State air pollution control agency to whom the authority has been delegated by the Administrator of the EPA to perform the specified task; and

(3) For NSPS, the Administrator of the EPA, an employee of the EPA, the Director of the State air pollution control agency, or employee of the State air pollution control agency to whom the authority has been delegated by the Administrator of the EPA to perform the specified task.

\* \* \* \* \*

Continuous automated sampling system means the total equipment and procedures for automated sample collection and sample recovery/analysis to determine a pollutant concentration or emission rate by collecting a single or multiple integrated sample(s) of the pollutant (or diluent gas) for subsequent on- or off-site analysis; integrated sample(s) collected are representative of the emissions for the sample time as specified by the applicable requirement.

EPA means the Administrator of the U.S. EPA or employee of the U.S. EPA who is delegated to perform the specified task.

Federally enforceable means all limitations and conditions that are enforceable by EPA including the requirements of 40 CFR part 60, 40 CFR part 61, and 40 CFR part 63, requirements within any applicable State



implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

\* \* \* \* \*

12. Amend §60.52b by:

- a. Revising paragraph (a) introductory text;
- b. Revising paragraph (a) (1);
- c. Revising paragraph (a) (3);
- d. Revising paragraph (a) (4); and
- e. Revising paragraph (a) (5) to read as follows:

§60.52b Standards for municipal waste combustor metals, acid gases, organics, and nitrogen oxides.

(a) The limits for municipal waste combustor metals are specified in paragraphs (a) (1) through (a) (5) of this section.

(1) On and after the date on which the initial performance test is completed or is required to be completed under §60.8 of subpart A of this part, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from that affected facility any gases that contain particulate matter in excess of the limits specified in paragraph (a) (1) (i) or (a) (1) (ii) of this section.

(i) For affected facilities that commenced construction, modification, or reconstruction after September 20, 1994, and on or before December 19, 2005, the emission limit is 24 milligrams per dry standard cubic

meter, corrected to 7 percent oxygen.

(ii) For affected facilities that commenced construction, modification, or reconstruction after December 19, 2005, the emission limit is 20 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.

\* \* \* \* \*

(3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8 of subpart A of this part, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from that affected facility any gases that contain cadmium in excess of the limits specified in paragraph (a) (3) (i) or (a) (3) (ii) of this section.

(i) For affected facilities that commenced construction, modification, or reconstruction after September 20, 1994, and on or before December 19, 2005, the emission limit is 20 micrograms per dry standard cubic meter, corrected to 7 percent oxygen.

(ii) For affected facilities that commenced construction, modification, or reconstruction after December 19, 2005, the emission limit is 10 micrograms per dry standard cubic meter, corrected to 7 percent oxygen.

(4) On and after the date on which the initial performance test is completed or is required to be completed under §60.8 of subpart A of this part, no owner or operator

of an affected facility shall cause to be discharged into the atmosphere from the affected facility any gases that contain lead in excess of the limits specified in paragraph (a) (4) (i) or (a) (4) (ii) of this section.

(i) For affected facilities that commenced construction, modification, or reconstruction after September 20, 1994, and on or before December 19, 2005, the emission limit is 200 micrograms per dry standard cubic meter, corrected to 7 percent oxygen.

(ii) For affected facilities that commenced construction, modification, or reconstruction after December 19, 2005, the emission limit is 140 micrograms per dry standard cubic meter, corrected to 7 percent oxygen.

(5) On and after the date on which the initial performance test is completed or is required to be completed under §60.8 of subpart A of this part, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from the affected facility any gases that contain mercury in excess of the limits specified in paragraph (a) (5) (i) or (a) (5) (ii) of this section.

(i) For affected facilities that commenced construction, modification, or reconstruction after September 20, 1994 and on or before December 19, 2005, the emission limit is 80 micrograms per dry standard cubic meter or 15 percent of the potential mercury emission

concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent.

(ii) For affected facilities that commenced construction, modification, or reconstruction after December 19, 2005, the emission limit is 50 micrograms per dry standard cubic meter, or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent.

\* \* \* \* \*

13. Amend §60.53b by:

- a. Revising paragraph (b) (1);
- b. Revising paragraph (b) (2);
- c. Revising paragraph (c) (1);
- d. Revising paragraph (c) (2);
- e. Adding paragraph (d) to read as follows:

§60.53b Standards for municipal waste combustor operating practices.

\* \* \* \* \*

(b) \* \* \*

(1) During the annual dioxin/furan or mercury performance test and the 2 weeks preceding the annual dioxin/furan or mercury performance test, no municipal waste combustor unit load limit is applicable if the provisions of paragraph (b) (2) of this section are met.

(2) The municipal waste combustor unit load limit may

be waived in writing by the Administrator for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions. The municipal waste combustor unit load limit continues to apply, and remains enforceable, until and unless the Administrator grants the waiver.

(c) \* \* \*

(1) During the annual dioxin/furan or mercury performance test and the 2 weeks preceding the annual dioxin/furan or mercury performance test, no particulate matter control device temperature limitations are applicable if the provisions of paragraph (b) (2) of this section are met.

(2) The particulate matter control device temperature limits may be waived in writing by the Administrator for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions. The temperature limits continue to apply, and remain enforceable, until and unless the Administrator grants the waiver.

(d) Paragraph (m) (2) of §60.58b addresses treatment of

activated carbon injection rate during dioxin/furan or mercury testing.

14. Amend §60.54b by revising paragraph (c)(2) and adding paragraph (c)(3) to read as follows:

§60.54b Standards for municipal waste combustor operator training and certification.

\* \* \* \* \*

(c) \* \* \*

(2) If both the certified chief facility operator and certified shift supervisor are unavailable, a provisionally certified control room operator on site at the municipal waste combustion unit may fulfill the certified operator requirement. Depending on the length of time that a certified chief facility operator and certified shift supervisor are away, the owner or operator of the affected facility must meet one of three criteria:

(i) When the certified chief facility operator and certified shift supervisor are both off site for 12 hours or less, and no other certified operator is on site, the provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor.

(ii) When the certified chief facility operator and certified shift supervisor are off site for more than 12 hours, but for two weeks or less, and no other certified

operator is on site, the provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor without notice to, or approval by, the Administrator. However, the owner or operator of the affected facility must record the period when the certified chief facility operator and certified shift supervisor are off site and include that information in the annual report as specified under §60.59b(g) (5).

(iii) When the certified chief facility operator and certified shift supervisor are off site for more than two weeks, and no other certified operator is on site, the provisionally certified control room operator may perform the duties of the certified chief facility operator or certified shift supervisor without approval by the Administrator. However, the owner or operator of the affected facility must take two actions:

(A) Notify the Administrator in writing. In the notice, state what caused the absence and what actions are being taken by the owner or operator of the facility to ensure that a certified chief facility operator or certified shift supervisor is on site as expeditiously as practicable.

(B) Submit a status report and corrective action summary to the Administrator every four weeks following the initial notification. If the Administrator provides notice

that the status report or corrective action summary is disapproved, the municipal waste combustion unit may continue operation for 90 days, but then must cease operation. If corrective actions are taken in the 90-day period such that the Administrator withdraws the disapproval, municipal waste combustion unit operation may continue.

(3) A provisionally certified operator who is newly promoted or recently transferred to a shift supervisor position or a chief facility operator position at the municipal waste combustion unit may perform the duties of the certified chief facility operator or certified shift supervisor without notice to, or approval by, the Administrator for up to six months before taking the ASME QRO certification exam.

\* \* \* \* \*

15. Amend §60.57b by revising paragraphs (a) introductory text and (a) (6) to read as follows:

§60.57b Siting requirements.

(a) The owner or operator of an affected facility shall prepare a materials separation plan, as defined in §60.51b, for the affected facility and its service area, and shall comply with the requirements specified in paragraphs (a) (1) through (a) (10) of this section. The initial application is defined as representing a good faith



submittal as determined by EPA.

\* \* \* \* \*

(6) As required under §60.59b(a), the owner or operator shall submit to EPA a copy of the notification of the public meeting, a transcript of the public meeting, the document summarizing responses to public comments, and copies of both the preliminary and final draft materials separation plans on or before the time the facility's application for a construction permit is submitted under 40 CFR part 51, subpart I, or part 52, as applicable.

\* \* \* \* \*

16. Amend §60.58b by:

- a. Revising paragraph (a) (1) introductory text;
- b. Revising paragraph (a) (1) (iii);
- c. Revising paragraph (b) introductory text;
- d. Revising paragraph (b) (6) (i);
- e. Revising paragraph (b) (7);
- f. Revising paragraph (c) introductory text;
- g. Revising paragraph (c) (2);
- h. Revising paragraph (c) (3);
- i. Revising paragraph (c) (9);
- j. Revising paragraph (c) (10);
- k. Revising paragraph (c) (11);
- l. Revising paragraph (d) (1) (ii);
- m. Revising paragraph (d) (1) (vii);

- n. Revising paragraph (d) (2) (ii);
- o. Revising paragraph (d) (2) (iii);
- p. Revising paragraph (d) (2) (iv);
- q. Revising paragraph (d) (2) (ix);
- r. Revising paragraph (e) (7) introductory text;
- s. Revising paragraph (e) (12) introductory text;
- t. Revising paragraph (e) (12) (i) (A);
- u. Revising paragraph (e) (12) (i) (B);
- v. Revising paragraph (e) (14);
- w. Revising paragraph (f) (8);
- x. Revising paragraph (g) (2);
- y. Revising paragraph (g) (5) (i);
- z. Revising paragraph (g) (5) (ii);
- aa. Revising paragraph (g) (5) (iii);
- bb. Revising paragraph (g) (7);
- cc. Revising paragraph (h) (6) introductory text;
- dd. Revising paragraph (h) (10) (i) (B);
- ee. Revising paragraph (h) (12);
- ff. Revising paragraph (i) (3) (ii) introductory text;
- gg. Revising paragraph (i) (3) (ii) (B);
- hh. Revising paragraph (i) (8);
- ii. Revising paragraph (i) (9);
- jj. Revising paragraph (i) (10) introductory text;
- kk. Revising paragraph (i) (11);
- ll. Revising paragraph (m) introductory text;

- mm. Revising paragraph (m) (1) (ii);
- nn. Revising paragraph (m) (2);
- oo. Adding paragraph (b) (8);
- pp. Adding paragraph (d) (3);
- qq. Adding paragraph (d) (4);
- rr. Adding paragraph (g) (10);
- ss. Adding paragraph (m) (4);
- tt. Adding paragraph (n);
- uu. Adding paragraph (o);
- vv. Adding paragraph (p); and
- ww. Adding paragraph (q) to read as follows:

§60.58b Compliance and performance testing.

(a) \* \* \*

(1) Except as provided by §60.56b, the standards under this subpart apply at all times except during periods of startup, shutdown, and malfunction. Duration of startup, shutdown, or malfunction periods are limited to 3 hours per occurrence, except as provided in paragraph (a) (1) (iii) of this section. During periods of startup, shutdown, or malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 40 CFR 60.59b(d) (7).

\* \* \* \* \*

(iii) For the purpose of compliance with the carbon

monoxide emission limits in §60.53b(a), if a loss of boiler water level control (e.g., boiler waterwall tube failure) or a loss of combustion air control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence. During such periods of malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of §60.59b(d) (7).

\* \* \* \* \*

(b) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring the oxygen or carbon dioxide content of the flue gas at each location where carbon monoxide, sulfur dioxide, nitrogen oxides emissions, or particulate matter (if the owner or operator elects to continuously monitor emissions under paragraph (n) of this section) are monitored and record the output of the system and shall comply with the test procedures and test methods specified in paragraphs (b) (1) through (b) (8) of this section.

\* \* \* \* \*

(6) \* \* \*

(i) The fuel factor equation in Method 3B shall be

used to determine the relationship between oxygen and carbon dioxide at a sampling location. Method 3, 3A, or 3B, or as an alternative ASME PTC-19-10-1981-Part 10, as applicable, shall be used to determine the oxygen concentration at the same location as the carbon dioxide monitor.

\* \* \* \* \*

(7) The relationship between carbon dioxide and oxygen concentrations that is established in accordance with paragraph (b)(6) of this section shall be submitted to EPA as part of the initial performance test report and, if applicable, as part of the annual test report if the relationship is reestablished during the annual performance test.

(8) During a loss of boiler water level control or loss of combustion air control malfunction period as specified in paragraph (a)(1)(iii) of this section, a diluent cap of 14 percent for oxygen or 5 percent for carbon dioxide may be used in the emissions calculations for sulfur dioxide and nitrogen oxides.

(c) Except as provided in paragraph (c)(10) of this section, the procedures and test methods specified in paragraphs (c)(1) through (c)(11) of this section shall be used to determine compliance with the emission limits for particulate matter and opacity under §60.52b(a)(1) and (a)(2).

\* \* \* \* \*

(2) The EPA Reference Method 3, 3A or 3B, or as an alternative ASME PTC-19-10-1981-Part 10, as applicable, shall be used for gas analysis.

(3) EPA Reference Method 5 shall be used for determining compliance with the particulate matter emission limit. The minimum sample volume shall be 1.7 cubic meters. The probe and filter holder heating systems in the sample train shall be set to provide a gas temperature no greater than 160°C. An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 5 run.

\* \* \* \* \*

(9) Following the date that the initial performance test for particulate matter is completed or is required to be completed under §60.8 of subpart A of this part for an affected facility, the owner or operator shall conduct a performance test for particulate matter on a calendar year basis (no less than 9 calendar months and no more than 15 calendar months following the previous performance test; and must complete five performance tests in each 5-year calendar period).

(10) In place of particulate matter testing with EPA Reference Method 5, an owner or operator may elect to install, calibrate, maintain, and operate a continuous emission monitoring system for monitoring particulate matter

emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor particulate matter emissions instead of conducting performance testing using EPA Method 5 shall install, calibrate, maintain, and operate a continuous emission monitoring system and shall comply with the requirements specified in paragraphs (c) (10) (i) through (c) (10) (xiv) of this section. The owner or operator who elects to continuously monitor particulate matter emissions instead of conducting performance testing using EPA Method 5 is not required to complete performance testing for particulate matter as specified in paragraph (c) (9) of this section and is not required to continuously monitor opacity as specified in paragraph (c) (8) of this section.

(i) Notify the Administrator one month before starting use of the system.

(ii) Notify the Administrator one month before stopping use of the system.

(iii) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.

(iv) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8

of subpart A of this part or within 180 days of notification to the Administrator of use of the continuous monitoring system if the owner or operator was previously determining compliance by Method 5 performance tests, whichever is later.

(v) The owner or operator of an affected facility may request that compliance with the particulate matter 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 as specified in paragraph (b)(6) of this section.

(vi) The owner or operator of an affected facility shall conduct an initial performance test for particulate matter emissions as required under §60.8 of subpart A of this part. Compliance with the particulate matter emission limit shall be determined by using the continuous emission monitoring system specified in paragraph (c)(10) of this section to measure particulate matter and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19, section 12.4.1.

(vii) Compliance with the particulate matter emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using continuous emission monitoring system



outlet data.

(viii) After April 28, 2008, at a minimum, valid continuous monitoring system hourly averages shall be obtained as specified in paragraphs (c)(10)(viii)(A) and (c)(10)(viii)(B) for at least 90 percent of the operating hours per calendar quarter and 95 percent of the operating hours per calendar year that the affected facility is combusting municipal solid waste.

(A) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(B) Each particulate matter 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.

(ix) The 1-hour arithmetic averages required under paragraph (c)(10)(vii) of this section shall be expressed in milligrams per dry standard cubic meter corrected to 7 percent oxygen (dry basis) and shall be used to calculate the 24-hour daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.

(x) All valid continuous emission monitoring system data shall be used in calculating average emission concentrations even if the minimum continuous emission

monitoring system data requirements of paragraph

(c)(10)(viii) of this section are not met.

(xi) The continuous emission monitoring system shall be operated according to Performance Specification 11 in appendix B of this part.

(xii) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 11 in appendix B of this part, particulate matter and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (c)(10)(xii)(A) and (c)(10)(xii)(B) of this section.

(A) For particulate matter, EPA Reference Method 5 shall be used.

(B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, as applicable shall be used.

(xiii) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part.

(xiv) When particulate matter emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA

Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 90 percent of the hours per calendar quarter and 95 percent of the hours per calendar year that the affected facility is operated and combusting municipal solid waste.

(11) Following the date that the initial performance test for opacity is completed or is required to be completed under §60.8 of subpart A of this part for an affected facility, the owner or operator shall conduct a performance test for opacity on an annual basis (no less than 9 calendar months and no more than 15 calendar months following the previous performance test; and must complete five performance tests in each 5-year calendar period) using the test method specified in paragraph (c)(6) of this section.

(d) \* \* \*

(1) \* \* \*

(ii) The EPA Reference Method 3, 3A, or 3B, or as an alternative ASME PTC-19-10-1981-Part 10, as applicable, shall be used for flue gas analysis.

\* \* \* \* \*

(vii) Following the date of the initial performance test or the date on which the initial performance test is required to be completed under §60.8 of subpart A of this part, the owner or operator of an affected facility shall conduct a performance test for compliance with the emission

limits for cadmium and lead on a calendar year basis (no less than 9 calendar months and no more than 15 calendar months following the previous performance test; and must complete five performance tests in each 5-year calendar period).

\* \* \* \* \*

(2) \* \* \*

(ii) The EPA Reference Method 3, 3A, or 3B, or as an alternative ASME PTC-19-10-1981-Part 10, as applicable, shall be used for flue gas analysis.

(iii) The EPA Reference Method 29 or as an alternative ASTM D6784-02 shall be used to determine the mercury emission concentration. The minimum sample volume when using Method 29 as an alternative ASTM D6784-02 for mercury shall be 1.7 cubic meters.

(iv) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 29 or as an alternative ASTM D6784-02 test run for mercury required under paragraph (d)(2)(iii) of this section.

\* \* \* \* \*

(ix) Following the date that the initial performance test for mercury is completed or is required to be completed under §60.8 of subpart A of this part, the owner or operator of an affected facility shall conduct a performance test for mercury emissions on a calendar year basis (no less than 9

calendar months and no more than 15 calendar months from the previous performance test; and must complete five performance tests in each 5-year calendar period).

\* \* \* \* \*

(3) In place of cadmium and lead testing with EPA Reference Method 29 as an alternative ASTM D6784-02, an owner or operator may elect to install, calibrate, maintain, and operate a continuous emission monitoring system for monitoring cadmium and lead emissions discharged to the atmosphere and record the output of the system according to the provisions of paragraphs (n) and (o) of this section.

(4) In place of mercury testing with EPA Reference Method 29 or as an alternative ASTM D6784-02, an owner or operator may elect to install, calibrate, maintain, and operate a continuous emission monitoring system or a continuous automated sampling system for monitoring mercury emissions discharged to the atmosphere and record the output of the system according to the provisions of paragraphs (n) and (o) of this section, or paragraphs (p) and (q) of this section, as appropriate. The owner or operator who elects to continuously monitor mercury in place of mercury testing with EPA Reference Method 29 or as an alternative ASTM D6784-02 is not required to complete performance testing for mercury as specified in paragraph (d)(2)(ix) of this section.

(e) \* \* \*

(7) At a minimum, valid continuous monitoring system hourly averages shall be obtained as specified in paragraphs (e) (7) (i) and (e) (7) (ii) for 90 percent of the operating hours per calendar quarter and 95 percent of the operating days per calendar year that the affected facility is combusting municipal solid waste.

\* \* \* \* \*

(12) The continuous emission monitoring system shall be operated according to Performance Specification 2 in appendix B of this part. For sources that have actual inlet emissions less than 100 parts per million dry volume, the relative accuracy criterion for inlet sulfur dioxide continuous emission monitoring systems should be no greater than 20 percent of the mean value of the reference method test data in terms of the units of the emission standard, or 5 parts per million dry volume absolute value of the mean difference between the reference method and the continuous emission monitoring systems, whichever is greater.

(i) \* \* \*

(A) For sulfur dioxide, EPA Reference Method 6, 6A, or 6C, or as an alternative ASME PTC-19-10-1981-Part 10, shall be used.

(B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, or as an alternative ASME PTC-19-10-

1981-Part 10, as applicable, shall be used.

\* \* \* \* \*

(14) When sulfur dioxide emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and/or zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by EPA or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 90 percent of the hours per calendar quarter and 95 percent of the hours per calendar year that the affected facility is operated and combusting municipal solid waste.

(f) \* \* \*

(8) In place of hydrogen chloride testing with EPA Reference Method 26 or 26A, an owner or operator may elect to install, calibrate, maintain, and operate a continuous emission monitoring system for monitoring hydrogen chloride emissions discharged to the atmosphere and record the output of the system according to the provisions of paragraphs (n) and (o) of this section.

(g) \* \* \*

(2) The EPA Reference Method 3, 3A, or 3B, or as an alternative ASME PTC-19-10-1981-Part 10, as applicable, shall be used for flue gas analysis.

\* \* \* \* \*

(5) \* \* \*

(i) For affected facilities, performance tests shall be conducted on a calendar year basis (no less than 9 calendar months and no more than 15 calendar months following the previous performance test; and must complete five performance tests in each 5-year calendar period).

(ii) For the purpose of evaluating system performance to establish new operating parameter levels, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions, the owner or operator of an affected facility that qualifies for the performance testing schedule specified in paragraph (g) (5) (iii) of this section, may test one unit for dioxin/furan and apply the dioxin/furan operating parameters to similarly designed and equipped units on site by meeting the requirements specified in paragraphs (g) (5) (ii) (A) through (g) (5) (ii) (D) of this section.

(A) Follow the testing schedule established in paragraph (g) (5) (iii) of this section. For example, each year a different affected facility at the municipal waste combustor plant shall be tested, and the affected facilities at the plant shall be tested in sequence (e.g., unit 1, unit 2, unit 3, as applicable).



(B) Upon meeting the requirements in paragraph (g) (5) (iii) of this section for one affected facility, the owner or operator may elect to apply the average carbon mass feed rate and associated carbon injection system operating parameter levels for dioxin/furan as established in paragraph (m) of this section to similarly designed and equipped units on site.

(C) Upon testing each subsequent unit in accordance with the testing schedule established in paragraph (g) (5) (iii) of this section, the dioxin/furan and mercury emissions of the subsequent unit shall not exceed the dioxin/furan and mercury emissions measured in the most recent test of that unit prior to the revised operating parameter levels.

(D) The owner or operator of an affected facility that selects to follow the performance testing schedule specified in paragraph (g) (5) (iii) of this section and apply the carbon injection system operating parameters to similarly designed and equipped units on site shall follow the procedures specified in §60.59b(g) (4) for reporting.

(iii) Where all performance tests over a 2-year period indicate that dioxin/furan emissions are less than or equal to 7 nanograms per dry standard cubic meter (total mass) for all affected facilities located within a municipal waste combustor plant, the owner or operator of the municipal

waste combustor plant may elect to conduct annual performance tests for one affected facility (i.e., unit) per year at the municipal waste combustor plant. At a minimum, a performance test for dioxin/furan emissions shall be conducted on a calendar year basis (no less than 9 calendar months and no more than 15 months following the previous performance test; and must complete five performance tests in each 5-year calendar period) for one affected facility at the municipal waste combustor plant. Each year a different affected facility at the municipal waste combustor plant shall be tested, and the affected facilities at the plant shall be tested in sequence (e.g., unit 1, unit 2, unit 3, as applicable). If each annual performance test continues to indicate a dioxin/furan emission level less than or equal to 7 nanograms per dry standard cubic meter (total mass), the owner or operator may continue conducting a performance test on only one affected facility per calendar year. If any annual performance test indicates either a dioxin/furan emission level greater than 7 nanograms per dry standard cubic meter (total mass), performance tests shall thereafter be conducted annually on all affected facilities at the plant until and unless all annual performance tests for all affected facilities at the plant over a 2-year period indicate a dioxin/furan emission level less than or equal to 7 nanograms per dry standard cubic meter (total mass).

\* \* \* \* \*

(7) The owner or operator of an affected facility where activated carbon is used shall follow the procedures specified in paragraph (m) of this section for measuring and calculating the carbon usage rate.

\* \* \* \* \*

(10) In place of dioxin/furan sampling and testing with EPA Reference Method 23, an owner or operator may elect to sample dioxin/furan by installing, calibrating, maintaining, and operating a continuous automated sampling system for monitoring dioxin/furan emissions discharged to the atmosphere, recording the output of the system, and analyzing the sample using EPA Method 23. This option to use a continuous automated sampling system takes effect on the date a final performance specification applicable to dioxin/furan from monitors is published in the Federal Register or the date of approval of a site-specific monitoring plan. The owner or operator of an affected facility who elects to continuously sample dioxin/furan emissions instead of sampling and testing using EPA Method 23 shall install, calibrate, maintain, and operate a continuous automated sampling system and shall comply with the requirements specified in paragraphs (p) and (q) of this section.

(h) \* \* \*

(6) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in paragraphs (h) (6) (i) and (h) (6) (ii) of this section for 90 percent of the operating hours per calendar quarter and for 95 percent of the operating hours per calendar year that the affected facility is combusting municipal solid waste.

\* \* \* \* \*

(10) \* \* \*

(i) \* \* \*

(B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, or as an alternative ASME PTC-19-10-1981-Part 10, as applicable, shall be used.

\* \* \* \* \*

(12) When nitrogen oxides continuous emission data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by EPA or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 90 percent of the hours per calendar quarter and 95 percent of the hours per calendar year the unit is operated and combusting municipal solid waste.

(i) \* \* \*

(3) \* \* \*

(ii) During each relative accuracy test run of the

continuous emission monitoring system required by Performance Specification 4A in appendix B of this part, carbon monoxide and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (i)(3)(ii)(A) and (i)(3)(ii)(B) of this section. For affected facilities subject to the 100 parts per million dry volume carbon monoxide standard, the relative accuracy criterion of 5 parts per million dry volume is calculated as the absolute value of the mean difference between the reference method and continuous emission monitoring systems.

\* \* \* \* \*

(B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, or ASME PTC-19-10-1981-Part 10 (incorporated by reference, see §60.17 of subpart A of this part), as applicable, shall be used.

\* \* \* \* \*

(8) The maximum demonstrated municipal waste combustor unit load shall be determined during the initial performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit specified in §60.52b(c) is achieved. The maximum demonstrated municipal waste combustor unit load shall be the highest 4-hour arithmetic average load achieved during

four consecutive hours during the most recent test during which compliance with the dioxin/furan emission limit was achieved. If a subsequent dioxin/furan performance test is being performed on only one affected facility at the MWC plant, as provided in paragraph (g) (5) (iii) of this section, the owner or operator may elect to apply the same maximum municipal waste combustor unit load from the tested facility for all the similarly designed and operated affected facilities at the MWC plant.

(9) For each particulate matter control device employed at the affected facility, the maximum demonstrated particulate matter control device temperature shall be determined during the initial performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit specified in §60.52b(c) is achieved. The maximum demonstrated particulate matter control device temperature shall be the highest 4-hour arithmetic average temperature achieved at the particulate matter control device inlet during four consecutive hours during the most recent test during which compliance with the dioxin/furan limit was achieved. If a subsequent dioxin/furan performance test is being performed on only one affected facility at the MWC plant, as provided in paragraph (g) (5) (iii) of this section, the owner or operator may elect to apply the same maximum

particulate matter control device temperature from the tested facility for all the similarly designed and operated affected facilities at the MWC plant.

(10) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in paragraphs (i)(10)(i) and (i)(10)(ii) of this section for at least 90 percent of the operating hours per calendar quarter and 95 percent of the operating hours per calendar year that the affected facility is combusting municipal solid waste.

\* \* \* \* \*

(11) All valid continuous emission monitoring system data must be used in calculating the parameters specified under paragraph (i) of this section even if the minimum data requirements of paragraph (i)(10) of this section are not met. When carbon monoxide continuous emission data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by EPA or EPA Reference Method 10 to provide, as necessary, the minimum valid emission data.

\* \* \* \* \*

(m) The owner or operator of an affected facility where activated carbon injection is used to comply with the

mercury emission limit under §60.52b(a) (5), and/or the dioxin/furan emission limits under §60.52(b) (c), or the dioxin/furan emission level specified in paragraph (g) (5) (iii) of this section shall follow the procedures specified in paragraphs (m) (1) through (m) (4) of this section.

(1) \* \* \*

(ii) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance test for dioxin/furan emissions and each subsequent performance test for dioxin/furan emissions. If a subsequent dioxin/furan performance test is being performed on only one affected facility at the MWC plant, as provided in paragraph (g) (5) (iii) of this section, the owner or operator may elect to apply the same estimated average carbon mass feed rate from the tested facility for all the similarly designed and operated affected facilities at the MWC plant.

(2) During operation of the affected facility, the carbon injection system operating parameter(s) that are the primary indicator(s) of the carbon mass feed rate (e.g., screw feeder setting) shall be averaged over a block 8-hour period, and the 8-hour block average must equal or exceed the level(s) documented during the performance tests specified under paragraphs (m) (1) (i) and (m) (1) (ii) of this



section, except as specified in paragraphs (m) (2) (i) and (m) (2) (ii) of this section.

(i) During the annual dioxin/furan or mercury performance test and the 2 weeks preceding the annual dioxin/furan or mercury performance test, no limit is applicable for average mass carbon feed rate if the provisions of paragraph (m) (2) (ii) of this section are met.

(ii) The limit for average mass carbon feed rate may be waived in accordance with permission granted by the Administrator for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions.

\* \* \* \* \*

(4) Pneumatic injection pressure or other carbon injection system operational indicator shall be used to provide additional verification of proper carbon injection system operation. The operational indicator shall provide an instantaneous visual and/or audible alarm to alert the operator of a potential interruption in the carbon feed that would not normally be indicated by direct monitoring of carbon mass feed rate (e.g., continuous weight loss feeder) or monitoring of the carbon system operating parameter(s) that are the indicator(s) of carbon mass feed rate (e.g.,

screw feeder speed). The carbon injection system operational indicator used to provide additional verification of carbon injection system operation, including basis for selecting the indicator and operator response to the indicator alarm, shall be included in section (e) (6) of the site-specific operating manual required under §60.54b(e) of this subpart.

(n) In place of periodic manual testing of mercury, cadmium, lead, or hydrogen chloride with EPA Reference Method 26, 26A, 29, or as an alternative ASTM D6784-02 (as applicable), the owner or operator of an affected facility may elect to install, calibrate, maintain, and operate a continuous emission monitoring system for monitoring emissions discharged to the atmosphere and record the output of the system. The option to use a continuous emission monitoring system for mercury takes effect on the date of approval of the site-specific monitoring plan required in paragraph (n) (13) and (o) of this section. The option to use a continuous emission monitoring system for cadmium, lead, or hydrogen chloride takes effect on the date a final performance specification applicable to cadmium, lead, or hydrogen chloride monitor is published in the Federal Register or the date of approval of the site-specific monitoring plan required in paragraphs (n) (13) and (o) of this section. The owner or operator of an affected facility

who elects to continuously monitor emissions instead of conducting manual performance testing shall install, calibrate, maintain, and operate a continuous emission monitoring system and shall comply with the requirements specified in paragraphs (n)(1) through (n)(13) of this section.

(1) Notify the Administrator one month before starting use of the system.

(2) Notify the Administrator one month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of the continuous monitoring system if the owner or operator was previously determining compliance by Method 26, 26A, 29, or as an alternative ASTM D6784-02 (as applicable) performance tests, whichever is later.

(5) The owner or operator may request that compliance with the emission limits 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 as specified in paragraph (b) (6) of this section.

(6) The owner or operator shall conduct an initial performance test for emissions as required under §60.8 of subpart A of this part. Compliance with the emission limits shall be determined by using the continuous emission monitoring system specified in paragraph (n) of this section to measure emissions and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19, section 12.4.1.

(7) Compliance with the emission limits shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using continuous emission monitoring system outlet data.

(8) Beginning on April 28, 2008 for mercury and on the date two years after final performance specifications for cadmium, lead or hydrogen chloride monitors are published in the Federal Register or the date two years after approval of a site-specific monitoring plan, valid continuous monitoring system hourly averages shall be obtained as specified in paragraphs (n) (8) (i) and (n) (8) (ii) of this section for at least 90 percent of the operating hours per calendar quarter and 95 percent of the operating hours per calendar year that the affected facility is combusting municipal solid waste.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) Each 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.

(9) The 1-hour arithmetic averages required under paragraph (n)(7) of this section shall be expressed in micrograms per dry standard cubic meter for mercury, cadmium, lead and parts per million dry volume for hydrogen chloride corrected to 7 percent oxygen (dry basis) and shall be used to calculate the 24-hour daily arithmetic (block) average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.

(10) All valid continuous emission monitoring system data shall be used in calculating average emission concentrations even if the minimum continuous emission monitoring system data requirements of paragraph (n)(8) of this section are not met.

(11) The continuous emission monitoring system shall be operated according to the performance specifications in paragraphs (n)(11)(i) through (n)(11)(iii) of this section or the approved site-specific monitoring plan.

(i) For mercury, Performance Specification 12A in

appendix B of this part.

(ii) [Reserved]

(iii) [Reserved]

(12) During each relative accuracy test run of the continuous emission monitoring system required by the performance specifications in paragraph (n)(11) of this section, mercury, cadmium, lead, hydrogen chloride, and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (n)(12)(i) through (n)(12)(iii) of this section.

(i) For mercury, cadmium, and lead, EPA Reference Method 29 or as an alternative ASTM D6784-02 shall be used.

(ii) For hydrogen chloride, EPA Reference Method 26 or 26A shall be used.

(iii) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, as applicable shall be used.

(13) The owner or operator who elects to install, calibrate, maintain, and operate a continuous emission monitoring system for mercury, cadmium, lead, or hydrogen chloride must develop and implement a site-specific monitoring plan as specified in paragraph (o) of this section. The owner or operator who relies on a performance specification may refer to that document in addressing

applicable procedures and criteria.

(14) When emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, parametric monitoring data shall be obtained by using other monitoring systems as approved by EPA.

(o) The owner or operator who elects to install, calibrate, maintain, and operate a continuous emission monitoring system for mercury, cadmium, lead, or hydrogen chloride must develop and submit for approval by EPA, a site-specific mercury, cadmium, lead, or hydrogen chloride monitoring plan that addresses the elements and requirements in paragraphs (o)(1) through (o)(7) of this section.

(1) Installation of the continuous emission monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device).

(2) Performance and equipment specifications for the sample interface, the pollutant concentration analyzer, and the data collection and reduction system.

(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(4) Provisions for periods when the continuous

emission monitoring system is out of control as described in paragraphs (o) (4) (i) through (o) (4) (iii) of this section.

(i) A continuous emission monitoring system is out of control if either of the conditions in paragraphs (o) (4) (i) (A) or (o) (4) (ii) (B) of this section are met.

(A) The zero (low-level), mid-level (if applicable), or high-level calibration drift exceeds two times the applicable calibration drift specification in the applicable performance specification or in the relevant standard; or

(B) The continuous emission monitoring system fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit.

(ii) When the continuous emission monitoring system is out of control as defined in paragraph (o) (4) (i) of this section, the owner or operator of the affected source shall take the necessary corrective action and shall repeat all necessary tests that indicate that the system is out of control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this part. The end of the out-of-control period is



the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. During the period the continuous emission monitoring system is out of control, recorded data shall not be used in data averages and calculations or to meet any data availability requirements in paragraph (n)(8) of this section.

(iii) The owner or operator of a continuous emission monitoring system that is out of control as defined in paragraph (o)(4) of this section shall submit all information concerning out-of-control periods, including start and end dates and hours and descriptions of corrective actions taken in the annual or semiannual compliance reports required in §60.59b(g) or (h).

(5) Ongoing data quality assurance procedures for continuous emission monitoring systems as described in paragraphs (o)(5)(i) and (o)(5)(ii) of this section.

(i) Develop and implement a continuous emission monitoring system quality control program. As part of the quality control program, the owner or operator shall develop and submit to EPA for approval, upon request, a site-specific performance evaluation test plan for the continuous emission monitoring system performance evaluation required in paragraph (o)(5)(ii) of this section. In addition, each quality control program shall include, at a minimum, a

written protocol that describes procedures for each of the operations described in paragraphs (o) (7) (i) (A) through (o) (7) (i) (F) of this section.

(A) Initial and any subsequent calibration of the continuous emission monitoring system;

(B) Determination and adjustment of the calibration drift of the continuous emission monitoring system;

(C) Preventive maintenance of the continuous emission monitoring system, including spare parts inventory;

(D) Data recording, calculations, and reporting;

(E) Accuracy audit procedures, including sampling and analysis methods; and

(F) Program of corrective action for a malfunctioning continuous emission monitoring system.

(ii) The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external quality assurance program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data. The internal quality assurance program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of continuous emission monitoring system performance, for example, plans for relative accuracy testing using the

appropriate reference method in §60.58b(n)(12) of this section. The external quality assurance program shall include, at a minimum, systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

(6) Conduct a performance evaluation of each continuous emission monitoring system in accordance with the site-specific monitoring plan.

(7) Operate and maintain the continuous emission monitoring system in continuous operation according to the site-specific monitoring plan.

(p) In place of periodic manual testing of dioxin/furan or mercury with EPA Reference Method 23, 29, or as an alternative ASTM D6784-02 (as applicable), the owner or operator of an affected facility may elect to install, calibrate, maintain, and operate a continuous automated sampling system for determining emissions discharged to the atmosphere. This option takes effect on the date a final performance specification applicable to such continuous automated sampling systems is published in the Federal Register or the date of approval of a site-specific monitoring plan required in paragraphs (p)(10) and (q) of this section. The owner or operator of an affected facility

who elects to use a continuous automated sampling system to determine emissions instead of conducting manual performance testing shall install, calibrate, maintain, and operate the sampling system and conduct analyses in compliance with the requirements specified in paragraphs (p) (1) through (p) (12) of this section.

(1) Notify the Administrator one month before starting use of the system.

(2) Notify the Administrator one month before stopping use of the system.

(3) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of the continuous monitoring system if the owner or operator was previously determining compliance by manual performance testing using Method 23, 29, or as an alternative ASTM D6784-02 (as applicable), whichever is later.

(4) The owner or operator may request that compliance with the emission limits 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 as specified in paragraph (b) (6) of this section.

(5) The owner or operator shall conduct an initial performance test for emissions as required under §60.8 of subpart A of this part. Compliance with the emission limits shall be determined by using the continuous automated sampling system specified in paragraph (p) of this section to collect integrated samples and analyze emissions for the time period specified in paragraphs (p)(5)(i) and (ii) of this section.

(i) For dioxin/furan, the continuous automated sampling system shall collect an integrated sample over each 2-week period. The collected sample shall be analyzed using Method 23.

(ii) For mercury, the continuous automated sampling system shall collect an integrated sample over each 24-hour daily period and the sample shall be analyzed according to the applicable final performance specification or the approved site-specific monitoring plan required by paragraph (q) of this section.

(6) Compliance with the emission limits shall be determined based on 2-week emission concentrations for dioxin/furan and on the 24-hour daily emission concentrations for mercury using samples collected at the system outlet. The emission concentrations shall be expressed in nanograms per dry standard cubic meter (total mass) for dioxin/furan and micrograms per dry standard cubic

meter for mercury, corrected to 7 percent oxygen (dry basis).

(7) Beginning on the date two years after the respective final performance specification for continuous automated sampling systems for dioxin/furan or mercury is published in the Federal Register or two years after approval of a site-specific monitoring plan, the continuous automated sampling system must be operated and collect emissions for at least 90 percent of the operating hours per calendar quarter and 95 percent of the operating hours per calendar year that the affected facility is combusting municipal solid waste.

(8) All valid data shall be used in calculating emission concentrations.

(9) The continuous automated sampling system shall be operated according to the final performance specification in paragraphs (p) (9) (i) or (p) (9) (ii) of this section or the approved site-specific monitoring plan.

(i) [Reserved]

(ii) [Reserved]

(10) The owner or operator who elects to install, calibrate, maintain, and operate a continuous automated sampling system for dioxin/furan or mercury must develop and implement a site-specific monitoring plan as specified in paragraph (q) of this section. The owner or operator who

relies on a performance specification may refer to that document in addressing applicable procedures and criteria.

(11) When emissions data are not obtained because of continuous automated sampling system breakdowns, repairs, quality assurance checks, or adjustments, parametric monitoring data shall be obtained by using other monitoring systems as approved by EPA.

(q) The owner or operator who elects to install, calibrate, maintain, and operate a continuous automated sampling system for dioxin/furan or mercury must develop and submit for approval by EPA, a site-specific monitoring plan that has sufficient detail to assure the validity of the continuous automated sampling system data and that addresses the elements and requirements in paragraphs (q)(1) through (q)(7) of this section.

(1) Installation of the continuous automated sampling system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device).

(2) Performance and equipment specifications for the sample interface, the pollutant concentration analytical method, and the data collection system.

(3) Performance evaluation procedures and acceptance

criteria.

(4) Provisions for periods when the continuous automated sampling system is malfunctioning or is out of control as described in paragraphs (q) (4) (i) through (q) (4) (iii) of this section.

(i) The site-specific monitoring plan shall identify criteria for determining that the continuous automated sampling system is out of control. This shall include periods when the sampling system is not collecting a representative sample or is malfunctioning, or when the analytical method does not meet site-specific quality criteria established in paragraph (q) (5) of this section.

(ii) When the continuous automated sampling system is out of control as defined in paragraph (q) (4) (i) of this section, the owner or operator shall take the necessary corrective action and shall repeat all necessary tests that indicate that the system is out of control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are within the applicable limits. The out-of-control period includes all hours that the sampling system was not collecting a representative sample or was malfunctioning, or hours represented by a sample for which the analysis did not meet the relevant quality criteria. Emissions data obtained during an out-of-control period shall not be used in determining compliance



with the emission limits or to meet any data availability requirements in paragraph (p) (8) of this section.

(iii) The owner or operator of a continuous automated sampling system that is out of control as defined in paragraph (q) (4) of this section shall submit all information concerning out-of-control periods, including start and end dates and hours and descriptions of corrective actions taken in the annual or semiannual compliance reports required in §60.59b(g) or (h).

(5) Ongoing data quality assurance procedures for continuous automated sampling systems as described in paragraphs (q) (5) (i) and (q) (5) (ii) of this section.

(i) Develop and implement a continuous automated sampling system and analysis quality control program. As part of the quality control program, the owner or operator shall develop and submit to EPA for approval, upon request, a site-specific performance evaluation test plan for the continuous automated sampling system performance evaluation required in paragraph (q) (5) (ii) of this section. In addition, each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the operations described in paragraphs (q) (7) (i) (A) through (q) (7) (i) (F) of this section.

(A) Correct placement, installation of the continuous automated sampling system such that the system is collecting a representative sample of gas;

(B) Initial and subsequent calibration of flow such that the sample collection rate of the continuous automated sampling system is known and verifiable;

(C) Procedures to assure representative (e.g., proportional or isokinetic) sampling;

(D) Preventive maintenance of the continuous automated sampling system, including spare parts inventory and procedures for cleaning equipment, replacing sample collection media, or other servicing at the end of each sample collection period;

(E) Data recording and reporting, including an automated indicator and recording device to show when the continuous automated monitoring system is operating and collecting data and when it is not collecting data;

(F) Accuracy audit procedures for analytical methods;  
and

(G) Program of corrective action for a malfunctioning continuous automated sampling system.

(ii) The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external

quality assurance program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data. The internal quality assurance program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of continuous automated sampling system performance, for example, plans for relative accuracy testing using the appropriate reference method in 60.58b(p) (3), and an assessment of quality of analysis results. The external quality assurance program shall include, at a minimum, systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

(6) Conduct a performance evaluation of each continuous automated sampling system in accordance with the site-specific monitoring plan.

(7) Operate and maintain the continuous automated sampling system in continuous operation according to the site-specific monitoring plan.

16. Amend §60.59b by:

- a. Revising paragraph (d) (2) (i) introductory text;
- b. Revising paragraph (d) (2) (ii) introductory text;
- c. Revising paragraph (d) (3);
- d. Revising paragraph (d) (6) introductory text;

- e. Revising paragraph (d) (6) (iv);
- f. Revising paragraph (d) (6) (v);
- g. Revising paragraph (d) (7);
- h. Revising paragraph (d) (10);
- i. Revising paragraph (d) (12) introductory text;
- j. Revising paragraph (d) (14);
- k. Revising paragraph (g) introductory text;
- l. Revising paragraph (g) (1) (ii);
- m. Revising paragraph (g) (1) (iv);
- n. Revising paragraph (g) (1) (v);
- o. Revising paragraph (g) (4);
- p. Revising paragraph (h) (1);
- q. Adding paragraph (d) (2) (i) (E);
- r. Adding paragraph (d) (2) (ii) (E);
- s. Adding paragraph (d) (6) (vi);
- t. Adding paragraph (d) (6) (vii);
- u. Adding paragraph (d) (12) (iv);
- v. Adding paragraph (g) (5);
- w. Adding paragraph (m);
- x. Adding paragraph (n); and
- y. Adding paragraph (o) to read as follows:

§60.59b Reporting and recordkeeping requirements.

*	*	*	*	*
	(d)	*	*	*
	(2)	*	*	*

(i) The measurements specified in paragraphs (d) (2) (i) (A) through (d) (2) (i) (F) of this section shall be recorded and be available for submittal to the Administrator or review on site by an EPA or State inspector.

\* \* \* \* \*

(E) For owners and operators who elect to continuously monitor particulate matter, cadmium, lead, mercury, or hydrogen chloride emissions instead of conducting performance testing using EPA manual test methods, all 1-hour average particulate matter, cadmium, lead, mercury, or hydrogen chloride emission concentrations as specified under §60.58b(n).

(ii) The average concentrations and percent reductions, as applicable, specified in paragraphs (d) (2) (ii) (A) through (d) (2) (ii) (F) of this section shall be computed and recorded, and shall be available for submittal to the Administrator or review on-site by an EPA or State inspector.

\* \* \* \* \*

(E) For owners and operators who elect to continuously monitor particulate matter, cadmium, lead, mercury, or hydrogen chloride emissions instead of conducting performance testing using EPA manual test methods, all 24-hour daily arithmetic average particulate matter, cadmium, lead, mercury, or hydrogen chloride emission concentrations

as specified under §60.58b(n).

(F) For owners and operators who elect to use a continuous automated sampling system to monitor mercury or dioxin/furan instead of conducting performance testing using EPA manual test methods, all integrated 24-hour mercury concentrations or all integrated 2-week dioxin/furan concentrations as specified under §60.586(p).

(3) Identification of the calendar dates when any of the average emission concentrations, percent reductions, or operating parameters recorded under paragraphs (d)(2)(ii)(A) through (d)(2)(ii)(F) of this section, or the opacity levels recorded under paragraph (d)(2)(i)(A) of this section are above the applicable limits, with reasons for such exceedances and a description of corrective actions taken.

\* \* \* \* \*

(6) Identification of the calendar dates and times (hours) for which valid hourly data specified in paragraphs (d)(6)(i) through (d)(6)(vi) of this section have not been obtained, or continuous automated sampling systems were not operated as specified in paragraph (d)(6)(vii) of this section, including reasons for not obtaining the data and a description of corrective actions taken.

\* \* \* \* \*

(iv) Municipal waste combustor unit load data;

(v) Particulate matter control device temperature

data; and

(vi) For owners and operators who elect to continuously monitor particulate matter, cadmium, lead, mercury, or hydrogen chloride emissions instead of performance testing by EPA manual test methods, particulate matter, cadmium, lead, mercury, or hydrogen chloride emissions data.

(vii) For owners and operators who elect to use continuous automated sampling systems for dioxins/furans or mercury as allowed under §60.58b(p) and (q), dates and times when the sampling systems were not operating or were not collecting a valid sample.

(7) Identification of each occurrence that sulfur dioxide emissions data, nitrogen oxides emissions data, particulate matter emissions data, cadmium emissions data, lead emissions data, mercury emissions data, hydrogen chloride emissions data, or dioxin/furan emissions data (for owners and operators who elect to continuously monitor particulate matter, cadmium, lead, mercury, or hydrogen chloride, or who elect to use continuous automated sampling systems for dioxin/furan or mercury emissions, instead of conducting performance testing using EPA manual test methods) or operational data (i.e., carbon monoxide emissions, unit load, and particulate matter control device temperature) have been excluded from the calculation of

average emission concentrations or parameters, and the reasons for excluding the data.

\* \* \* \* \*

(10) An owner or operator who elects to continuously monitor emissions instead of performance testing by EPA manual methods must maintain records specified in paragraphs (10) (i) through (iii) of this section.

(i) For owners and operators who elect to continuously monitor particulate matter instead of conducting performance testing using EPA manual test methods), as required under appendix F of this part, procedure 2, the results of daily drift tests and quarterly accuracy determinations for particulate matter.

(ii) For owners and operators who elect to continuously monitor cadmium, lead, mercury, or hydrogen chloride instead of conducting EPA manual test methods, the results of all quality evaluations, such as daily drift tests and periodic accuracy determinations, specified in the approved site-specific performance evaluation test plan required by §60.58b(o) (5).

(iii) For owners and operators who elect to use continuous automated sampling systems for dioxin/furan or mercury, the results of all quality evaluations specified in the approved site-specific performance evaluation test plan required by §60.58b(q) (5).



\* \* \* \* \*

(12) The records specified in paragraphs (d) (12) (i) through (d) (12) (iv) of this section.

\* \* \* \* \*

(iv) Records of when a certified operator is temporarily off site. Include two main items:

(A) If the certified chief facility operator and certified shift supervisor are off site for more than 12 hours, but for 2 weeks or less, and no other certified operator is on site, record the dates that the certified chief facility operator and certified shift supervisor were off site.

(B) When all certified chief facility operators and certified shift supervisors are off site for more than 2 weeks and no other certified operator is on site, keep records of four items:

(1) Time of day that all certified persons are off site.

(2) The conditions that cause those people to be off site.

(3) The corrective actions taken by the owner or operator of the affected facility to ensure a certified chief facility operator or certified shift supervisor is on site as soon as practicable.

(4) Copies of the written reports submitted every 4

weeks that summarize the actions taken by the owner or operator of the affected facility to ensure that a certified chief facility operator or certified shift supervisor will be on site as soon as practicable.

\* \* \* \* \*

(14) For affected facilities that apply activated carbon, identification of the calendar dates when the average carbon mass feed rates recorded under paragraph (d) (4) (iii) of this section were less than either of the hourly carbon feed rates estimated during performance tests for mercury emissions and recorded under paragraphs (d) (4) (i) and (d) (4) (ii) of this section, respectively, with reasons for such feed rates and a description of corrective actions taken. For affected facilities that apply activated carbon, identification of the calendar dates when the average carbon mass feed rates recorded under paragraph (d) (4) (iii) of this section were less than either of the hourly carbon feed rates estimated during performance tests for dioxin/furan emissions and recorded under paragraphs (d) (4) (i) and (d) (4) (ii) of this section, respectively, with reasons for such feed rates and a description of corrective actions taken.

(g) Following the first year of municipal waste combustor operation, the owner or operator of an affected facility shall submit an annual report that includes the

information specified in paragraphs (g) (1) through (g) (5) of this section, as applicable, no later than February 1 of each year following the calendar year in which the data were collected (once the unit is subject to permitting requirements under title V of the Act, the owner or operator of an affected facility must submit these reports semiannually).

(1) \* \* \*

(ii) A list of the highest emission level recorded for sulfur dioxide, nitrogen oxides, carbon monoxide, particulate matter, cadmium, lead, mercury, hydrogen chloride, and dioxin/furan (for owners and operators who elect to continuously monitor particulate matter, cadmium, lead, mercury, hydrogen chloride, and dioxin/furan emissions instead of conducting performance testing using EPA manual test methods), municipal waste combustor unit load level, and particulate matter control device inlet temperature based on the data recorded under paragraphs (d) (2) (ii) (A) through (d) (2) (ii) (E) of this section.

\* \* \* \* \*

(iv) Periods when valid data were not obtained as described in paragraphs (g) (1) (iv) (A) through (g) (1) (iv) (C) of this section.

(A) The total number of hours per calendar quarter and hours per calendar year that valid data for sulfur dioxide,

nitrogen oxides, carbon monoxide, municipal waste combustor unit load, or particulate matter control device temperature data were not obtained based on the data recorded under paragraph (d)(6) of this section.

(B) For owners and operators who elect to continuously monitor particulate matter, cadmium, lead, mercury, and hydrogen chloride emissions instead of conducting performance testing using EPA manual test methods, the total number of hours per calendar quarter and hours per calendar year that valid data for particulate matter, cadmium, lead, mercury, and hydrogen chloride were not obtained based on the data recorded under paragraph (d)(6) of this section. For each continuously monitored pollutant or parameter, the hours of valid emissions data per calendar quarter and per calendar year expressed as a percent of the hours per calendar quarter or year that the affected facility was operating and combusting municipal solid waste.

(C) For owners and operators who elect to use continuous automated sampling systems for dioxin/furan or mercury, the total number of hours per calendar quarter and hours per calendar year that the sampling systems were not operating or were not collecting a valid sample based on the data recorded under paragraph (d)(6)(vii) of this section. Also, the number of hours during which the continuous automated sampling system was operating and collecting a

valid sample as a percent of hours per calendar quarter or year that the affected facility was operating and combusting municipal solid waste.

(v) Periods when valid data were excluded from the calculation of average emission concentrations or parameters as described in paragraphs (g) (1) (v) (A) through (g) (1) (v) (C) of this section.

(A) The total number of hours that data for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load, and particulate matter control device temperature were excluded from the calculation of average emission concentrations or parameters based on the data recorded under paragraph (d) (7) of this section.

(B) For owners and operators who elect to continuously monitor particulate matter, cadmium, lead, mercury, or hydrogen chloride emissions instead of conducting performance testing using EPA manual test methods, the total number of hours that data for particulate matter, cadmium, lead, mercury, or hydrogen chloride were excluded from the calculation of average emission concentrations or parameters based on the data recorded under paragraph (d) (7) of this section.

(C) For owners and operators who elect to use continuous automated sampling systems for dioxin/furan or mercury, the total number of hours that data for mercury and

dioxin/furan were excluded from the calculation of average emission concentrations or parameters based on the data recorded under paragraph (d) (7) of this section.

\* \* \* \* \*

(4) A notification of intent to begin the reduced dioxin/furan performance testing schedule specified in §60.58b(g) (5) (iii) of this section during the following calendar year and notification of intent to apply the average carbon mass feed rate and associated carbon injection system operating parameter levels as established in §60.58b(m) to similarly designed and equipped units on site.

(5) Documentation of periods when all certified chief facility operators and certified shift supervisors are off site for more than 12 hours.

(h) \* \* \*

(1) The semiannual report shall include information recorded under paragraph (d) (3) of this section for sulfur dioxide, nitrogen oxides, carbon monoxide, particulate matter, cadmium, lead, mercury, hydrogen chloride, dioxin/furan (for owners and operators who elect to continuously monitor particulate matter, cadmium, lead, mercury, or hydrogen chloride, or who elect to use continuous automated sampling systems for dioxin/furan or mercury emissions, instead of conducting performance testing

using EPA manual test methods) municipal waste combustor unit load level, particulate matter control device inlet temperature, and opacity.

\* \* \* \* \*

(m) Owners and operators who elect to continuously monitor particulate matter, cadmium, lead, mercury, or hydrogen chloride, or who elect to use continuous automated sampling systems for dioxin/furan or mercury emissions, instead of conducting performance testing using EPA manual test methods must notify the Administrator one month prior to starting or stopping use of the particulate matter, cadmium, lead, mercury, hydrogen chloride, and dioxin/furan continuous emission monitoring systems or continuous automated sampling systems.

(n) Additional recordkeeping and reporting requirements for affected facilities with continuous cadmium, lead, mercury, or hydrogen chloride monitoring systems. In addition to complying with the requirements specified in paragraphs (a) through (m) of this section, the owner or operator of an affected source who elects to install a continuous emission monitoring system for cadmium, lead, mercury, or hydrogen chloride as specified in §60.58b(n), shall maintain the records in paragraphs (n)(1) through (n)(10) of this section and report the information in paragraphs (n)(11) through (n)(12) of this section,

relevant to the continuous emission monitoring system:

(1) All required continuous emission monitoring measurements (including monitoring data recorded during unavoidable continuous emission monitoring system breakdowns and out-of-control periods);

(2) The date and time identifying each period during which the continuous emission monitoring system was inoperative except for zero (low-level) and high-level checks;

(3) The date and time identifying each period during which the continuous emission monitoring system was out of control, as defined in §60.58b(o)(4);

(4) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the standard, that occurs during startups, shutdowns, and malfunctions of the affected source;

(5) The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the standard, that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;

(6) The nature and cause of any malfunction (if known);



(7) The corrective action taken to correct any malfunction or preventive measures adopted to prevent further malfunctions;

(8) The nature of the repairs or adjustments to the continuous emission monitoring system that was inoperative or out of control;

(9) All procedures that are part of a quality control program developed and implemented for the continuous emission monitoring system under §60.58b(o);

(10) When more than one continuous emission monitoring system is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each continuous emission monitoring system.

(11) Submit to EPA for approval, the site-specific monitoring plan required by §60.58b(n)(13) and §60.58b(o), including the site-specific performance evaluation test plan for the continuous emission monitoring system required by §60.58(b)(o)(5). The owner or operator shall maintain copies of the site-specific monitoring plan on record for the life of the affected source to be made available for inspection, upon request, by the Administrator. If the site-specific monitoring plan is revised and approved, the owner or operator shall keep previous (i.e., superseded) versions of the plan on record to be made available for

inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan.

(12) Submit information concerning all out-of-control periods for each continuous emission monitoring system, including start and end dates and hours and descriptions of corrective actions taken, in the annual or semiannual reports required in paragraphs (g) or (h) of this section.

(o) Additional recordkeeping and reporting requirements for affected facilities with continuous automated sampling systems for dioxin/furan or mercury monitoring. In addition to complying with the requirements specified in paragraphs (a) through (m) of this section, the owner or operator of an affected source who elects to install a continuous automated sampling system for dioxin/furan or mercury, as specified in §60.58b(p), shall maintain the records in paragraphs (o)(1) through (o)(10) of this section and report the information in (o)(11) and (o)(12) of this section, relevant to the continuous automated sampling system:

(1) All required 24-hour integrated mercury concentration or 2-week integrated dioxin/furan concentration data (including any data obtained during unavoidable system breakdowns and out-of-control periods);

(2) The date and time identifying each period during which the continuous automated sampling system was

inoperative;

(3) The date and time identifying each period during which the continuous automated sampling system was out of control, as defined in §60.58b(q) (4);

(4) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the standard, that occurs during startups, shutdowns, and malfunctions of the affected source;

(5) The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the standard, that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;

(6) The nature and cause of any malfunction (if known);

(7) The corrective action taken to correct any malfunction or preventive measures adopted to prevent further malfunctions;

(8) The nature of the repairs or adjustments to the continuous automated sampling system that was inoperative or out of control;

(9) All procedures that are part of a quality control program developed and implemented for the continuous

automated sampling system under §60.58b(q);

(10) When more than one continuous automated sampling system is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each system.

(11) Submit to EPA for approval, the site-specific monitoring plan required by §60.58b(p) (11) and §60.58b(q) including the site-specific performance evaluation test plan for the continuous emission monitoring system required by §60.58(b) (q) (5). The owner or operator shall maintain copies of the site-specific monitoring plan on record for the life of the affected source to be made available for inspection, upon request, by the Administrator. If the site-specific monitoring plan is revised and approved, the owner or operator shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan.

(12) Submit information concerning all out-of-control periods for each continuous automated sampling system, including start and end dates and hours and descriptions of corrective actions taken in the annual or semiannual reports required in paragraphs (g) or (h) of this section.