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**Part IV**

## **Environmental Protection Agency**

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**40 CFR Part 60**

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

**ENVIRONMENTAL PROTECTION AGENCY****40 CFR Part 60**

[EPA-OAR-2005-0117; FRL-8008-1]

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:** Proposed rule.

**SUMMARY:** On December 19, 1995, EPA adopted new source performance standards (NSPS) and emission guidelines for large municipal waste combustion (MWC) units. The NSPS and emission guidelines were fully implemented by December 2000. Section 129 of the Clean Air Act (CAA) requires EPA to review, and if appropriate, revise the NSPS and emission guidelines every 5 years. In this action, EPA is proposing to revise the emission limits in the NSPS and emission guidelines to reflect the levels of performance actually achieved by the emission controls installed to meet the emission limits set forth in the December 19, 1995, NSPS and emission guidelines.

The MWC NSPS and emission guidelines apply to the combustion of non-hazardous municipal solid waste. Hazardous waste combustors (incinerators) are addressed by CAA section 112 standards.

**DATES:** *Comments.* Submit comments on or before February 6, 2006. Because of the need to resolve the issues raised in this action in a timely manner, EPA will not grant requests for extensions beyond this date.

*Public Hearing.* If anyone contacts EPA by December 30, 2005 requesting to speak at a public hearing, EPA will hold a public hearing on January 6, 2006. If you are interested in attending the public hearing, contact Ms. Pamela Garrett at (919) 541-7966 to verify that a hearing will be held.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-OAR-2005-0117, by one of the following methods:

*Agency Web Site:* <http://www.epa.gov/edocket/>. EDOCKET, EPA's electronic public docket and comment system, will be replaced by an enhanced Federal wide electronic docket management and comment system located at <http://www.regulations.gov>. When that occurs, you will be redirected to that site to

access the docket and submit comments. Follow the on-line instructions.

*E-mail:* Send your comments via electronic mail to [a-and-r-docket@epa.gov](mailto:a-and-r-docket@epa.gov), Attention Docket ID No. EPA-OAR-2005-0117.

*Facsimile:* Fax your comments to (202) 566-1741, Attention Docket ID No. EPA-OAR-2005-0117.

*Mail:* Send your comments to: EPA Docket Center (EPA/DC), EPA, Mailcode 6102T, 1200 Pennsylvania Ave., NW., Washington, DC 20460, Attention Docket ID No. EPA-OAR-2005-0117.

*Hand Delivery:* Deliver your comments to: EPA Docket Center (EPA/DC), EPA West Building, Room B108, 1301 Constitution Ave., NW., Washington, DC, 20460, Attention Docket ID No. EPA-OAR-2005-0117. Such deliveries are accepted only during the normal hours of operation (8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays), and special arrangements should be made for deliveries of boxed information.

*Instructions:* Direct your comments to Docket ID No. EPA-OAR-2005-0117. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through <http://www.regulations.gov> or e-mail. The <http://www.regulations.gov> Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through [www.regulations.gov](http://www.regulations.gov), your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

*Public Hearing:* If a public hearing is held, it will be held at EPA's Campus

located at 109 T.W. Alexander Drive in Research Triangle Park, NC, or an alternate site nearby. Persons interested in presenting oral testimony must contact Ms. Pam Garrett at (919) 541-7966 at least 2 days in advance of the hearing. If no one contacts Ms. Garrett in advance of the hearing with a request to present oral testimony at the hearing, we will cancel the hearing. The public hearing will provide interested parties the opportunity to present data, views, or arguments concerning the proposed action.

*Docket:* All documents in the docket are listed in the <http://www.regulations.gov> index. 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 at <http://www.regulations.gov> or in hard copy at the EPA Docket Center (EPA/DC), EPA West Building, Room B102, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 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, Combustion Group, Emission Standards Division (C439-01), U.S. EPA, Research Triangle Park, North Carolina 27711, (919) 541-5264, e-mail [stevenson.walt@epa.gov](mailto:stevenson.walt@epa.gov).

**SUPPLEMENTARY INFORMATION:**

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

- I. General Information
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- H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution or Use
- I. National Technology Transfer Advancement Act

**I. General Information**

*A. Do the proposed amendments apply to me?*

*Regulated Entities.* Categories and entities potentially affected by the proposed amendments 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 proposed rule. To determine whether your facility would be regulated by the proposed 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 proposed rule to a particular entity, contact the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

*B. What should I consider as I prepare my comments?*

1. *Submitting Confidential Business Information (CBI).* Do not submit information that you consider to be CBI electronically through EDOCKET, regulations.gov, or e-mail. Send or deliver information identified as CBI to only the following address: Mr. Walt Stevenson, c/o OAQPS Document Control Officer (Room C404-02), U.S. EPA, Research Triangle Park, NC 27711, Attention Docket ID No. OAR-2005-0117. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment

that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

If you have any questions about CBI or the procedures for claiming CBI, please consult the person identified in the **FOR FURTHER INFORMATION CONTACT** section.

2. *Tips for Preparing Your Comments.* When submitting comments, remember to:

(a) Identify the rulemaking by docket number and other identifying information (subject heading, **Federal Register** date and page number).

(b) Follow directions. The EPA may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.

(c) Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.

(d) Describe any assumptions and provide any technical information and/or data that you used.

(e) If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.

(f) Provide specific examples to illustrate your concerns, and suggest alternatives.

(g) Explain your views as clearly as possible, avoiding the use of profanity or personal threats.

(h) Make sure to submit your comments by the comment period deadline identified in the preceding section titled Dates.

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

*Worldwide Web (WWW).* In addition to being available in the docket, an electronic copy of this proposed rule is available on the WWW through the Technology Transfer Network Web site (TTN Web). Following signature, EPA posted a copy of the proposed 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.

**II. 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 CAA section 111(d) (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) and emission guidelines (subpart Cb) 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 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. Relative to a 1990 baseline, the emission guidelines reduced organic emissions (dioxin/furan) by more than 99 percent, metal emissions (cadmium, lead, and

mercury) by more than 93 percent, and acid gas emissions (hydrogen chloride and sulfur dioxide) by more than 91 percent.

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, and these proposed amendments reflect the changes EPA believes are appropriate.

**III. Summary of Proposed Amendments**

Following year 2000 compliance with the emission guidelines, EPA gathered information on the performance levels actually being achieved by large MWC units retrofitted to comply with the emission guidelines. Today's proposed amendments would revise the NSPS and emission guidelines based on the performance levels being achieved by large MWC units. The revisions discussed in the following text apply to both the NSPS and the emission guidelines, unless otherwise specified.

*A. Are revisions to the emission limits being proposed?*

Yes. The proposed amendments would revise many of the emission limits in both the NSPS and emission guidelines. Relative to the NSPS, the most significant changes would be in the lead and cadmium emission limits. Relative to the emission guidelines, the most significant changes would be in the dioxin/furan and lead emission limits. Also associated with the revised emissions limits, are proposed amendments to change the dimensions (units of measure) of the emission limits for cadmium, lead, and mercury from milligrams per dry standard cubic meter to micrograms per dry standard cubic meter (µg/dscm). EPA believes the proposed emission limits can be achieved with the same emission control technology currently used by large MWCs. EPA requests comment on achievability of the proposed limits and whether the proposed limits adequately consider emission variability. The proposed emission limits for the NSPS and emission guidelines are summarized in Table 1 of this preamble.

TABLE 1.— PROPOSED EMISSION LIMITS FOR LARGE MWC UNITS

Pollutant	Proposed emission limit for existing MWC units*	Proposed emission limit for new MWC units*
Dioxin/furan (CDD/CDF) .....	21 nanograms per dry standard cubic meter total mass basis.	13 nanograms per dry standard cubic meter total mass basis**
Cadmium (Cd) .....	31 micrograms per dry standard cubic meter .....	3.5 micrograms per dry standard cubic per dry meter.
Lead (Pb) .....	250 micrograms per dry standard cubic meter .....	84 micrograms per dry standard cubic meter.
Mercury (Hg) .....	80 micrograms per dry standard cubic meter or 85 percent reduction of mercury emissions**.	49 micrograms per dry standard cubic meter or 90 percent reduction of mercury emissions.
Particulate Matter (PM) .....	24 milligrams per dry standard cubic meter .....	9.5 milligrams per dry standard cubic meter.
Hydrogen chloride (HCl) .....	26 parts per million dry volume or 97 percent reduction of hydrogen chloride emissions.	25 parts per million dry volume or 98 percent reduction of hydrogen chloride emissions.
Sulfur dioxide (CO <sub>2</sub> ) .....	23 parts per million dry volume or 80 percent reduction of sulfur dioxide emissions.	19 parts per million dry volume or 90 percent reduction of sulfur dioxide emissions.
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**.

\*All emission limits are measured at 7 percent oxygen.  
 \*\*No change proposed.

*B. Are other amendments being proposed?*

The proposed amendments would also make the following changes based on information received during implementation of the MWC emission guidelines and would apply equally to the NSPS and emission guidelines, unless otherwise specified.

*Operating Practices*

- The proposed amendments would 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 could

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.

- The proposed amendments would add two additional classifications of MWC units to the emission guidelines and would add associated CO limits to assure good combustion practices. The two new classifications are "spreader stoker refuse-derived fuel (RDF)-fired/ 100 percent coal capable combustor" and "semi-suspension RDF-fired

combustor/wet RDF process conversion."

*Operating Parameters*

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

*Performance Testing and Monitoring*

- The proposed amendments would revise the annual mercury testing

requirements to 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.

- The proposed amendments would revise the reduced testing requirements for exceptionally well-operated MWC units. Exceptionally well-operated units are those with emissions significantly below the emission limits. Specifically, EPA proposes to lower the dioxin/furan criteria and add an associated mercury criteria to qualify for reduced testing.

- The proposed amendments would add flexibility to the annual compliance testing schedule so that a facility still tests once per calendar year, but no less than 9 months and no more than 15 months since the previous test. The revision would provide 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 requirements.

- The proposed amendments would allow the use of parametric monitoring limits from an exceptionally well-operated MWC unit (i.e., unit with emissions significantly below the emission limits) to be applied to all identical units at the same plant site without retesting.

- The proposed amendments would increase the continuous emission monitoring system (CEMS) data collection rates from 90 percent of operating time on a quarterly calendar basis to 95 percent of operating time on a quarterly calendar basis.

- The proposed amendments would revise the particulate matter compliance testing requirements to allow the optional use of a particulate matter CEMS in place of EPA Method 5.

#### *Other Amendments*

- The proposed amendments would clarify the meaning of the term "Administrator" in the regulations.

- Other details to fine tune the regulation are also proposed.

#### *C. Is an implementation schedule being proposed?*

Yes. Under the proposed emission guidelines, and consistent with CAA section 129, revised State plans containing the revised emission limits and other requirements in the proposed emission guidelines would be due within 1 year after promulgation of the revisions. That is, revised State plans would have to be submitted to EPA 1

year after the date by which EPA promulgates revised limits.

The proposed emission guidelines then allow MWC units up to 2 years from the date of approval of a State plan to comply. Consistent with CAA section 129, EPA, therefore, expects States to require compliance as expeditiously as practicable. Large MWC units have already installed the emission control equipment necessary to meet the proposed revised limits, and EPA, therefore, anticipates that most State plans will include compliance dates sooner than 3 years following promulgation of the final rule. In most cases, the only changes necessary are to review the revisions and adjust the emission monitoring and reporting accordingly.

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).

#### *D. Has EPA changed 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 the date of this proposal will be subject to more stringent emission limits than units on which construction or modification was completed prior to that date. Under the proposed amendments, units that commenced construction after September 20, 1994, and on or before December 19, 2005, or that are modified 6 months or more after the effective date of any final standards, would 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 would meet the revised emission limits that are being added to the subpart Eb NSPS.

The EPA is not aware of any MWC units that were modified or reconstructed after June 19, 1996 (effective date of the December 19, 1995 NSPS), therefore, EPA is proposing to simplify the applicability text for the NSPS to be MWC units that commenced construction, modification, or reconstruction after September 20, 1994. The EPA believes the use of one date is the most understandable format. The EPA requests comment on this approach and whether all dates referenced in CAA section 129 should remain in the revised NSPS, even if the dates have passed and have no utility.

#### **IV. Rationale for the Proposed Amendments**

##### *A. How were the proposed emission limits developed?*

The proposed emission limits are based on the performance of MACT. One set of emission limits is proposed for existing MWC units regulated under CAA section 111(d) emission guidelines, and another set of emission limits is proposed for new MWC units regulated under CAA section 111(b) NSPS. Both sets of limits were developed following the procedures discussed below.

As background, the current emission limits in the emission guidelines, as well as the proposed emission limits for the emission guidelines, are based on the application of either spray dryer/electrostatic precipitator/activated carbon injection/selective non-catalytic reduction technology (SD/ESP/ACI/SNCR) or spray dryer/fabric filter/activated carbon injection/selective non-catalytic reduction technology (SD/FF/ACI/SNCR). The current emission limits in the NSPS, as well as the proposed NSPS emission limits, are based on SD/FF/ACI/SNCR technology alone. In practice, and as allowed by the emission guidelines, existing MWC units have used a mix of SD/ESP/ACI/SNCR technology and SD/FF/ACI/SNCR technology to comply with the emission guidelines.

Following MACT compliance in December 2000, EPA obtained compliance test reports from all operating large MWC units (167 units at 66 plants) and used those data to evaluate MACT performance. When the MWC regulations were proposed in 1994, no MWC units were operating with the full set of controls, and significant engineering judgment was necessary in selecting the emission limits. The year 2000 compliance data show that the actual performance of the control technology that industry installed to meet the 1995 NSPS and

emission guidelines achieves reductions superior to the 1995 limits. The EPA used the MACT data in the compliance test reports to develop the emission limits contained in the proposed amendments. The EPA believes the proposed emission limits more accurately reflect actual MACT performance.

The first step in the analysis was to subdivide the database into two subgroups based on emission control technology. For the emission guidelines, the data were subcategorized to MWC units equipped with SD/ESP/ACI/SNCR. For the NSPS, data were subcategorized to MWC units equipped with SD/FF/ACI/SNCR. The data were subcategorized this way because the emission guidelines are based on SD/ESP/ACI/SNCR control and the NSPS are based on SD/FF/ACI/SNCR control. The remaining steps of the analysis were the same for both data sets.

Next, the data were screened. The screening was based on the expectation that similar MWC units at a single MWC plant should have similar emissions. That is, at an MWC plant, MWC units with the same configuration, firing waste from the same waste pit, and controlled with the same design of pollution control equipment, would be expected to have similar emissions. The test data for multiple MWC units at an MWC plant were compared to identify the difference between the test results. This was done for all MWC plants. Next, the mean and standard deviation of the differences were calculated for the entire MWC database. This mean and standard deviation were then used to screen test results for each MWC plant. If the test results from multiple MWC units at a specific MWC plant differed by more than the mean plus one standard deviation from the full dataset, the test data for that MWC plant were removed from analysis. This was repeated for each CAA section 129 pollutant. Less than 14 percent of the data were excluded during screening.

Next, a statistical analysis of the remaining database was conducted to identify the best fitting frequency distribution. After identifying the best fitting frequency distribution, an actually achievable emission limit was calculated (*i.e.*, the mean performance plus a variability factor). Where the analysis supported limits more stringent than the current limits, new limits are proposed. This procedure was followed in developing the proposed emission limits for the "stack test" pollutants (dioxin/furan, Cd, Pd, Hg, PM, and HCl).

For SO<sub>2</sub> and NO<sub>x</sub>, a different approach was used. For these pollutants, CEMS, rather than stack

tests, are used to determine compliance. CEMS can generate up to 8,760 hours of data per year and emissions variability must be carefully addressed in order to select an appropriate emission limit. Typically, EPA analyzes more than 1,000 hours of CEMS data per source in order to evaluate and address emissions variability when setting emission limits to be enforced by CEMS. To develop the proposed SO<sub>2</sub> and NO<sub>x</sub> limits, EPA used a two-step process. First, the mean performance level for SO<sub>2</sub> and NO<sub>x</sub> control was determined using the year 2000 MACT compliance data. Next, a variability factor was identified based on an analysis of SO<sub>2</sub> and NO<sub>x</sub> CEMS data from four MWC plants. The variability analysis was based on the evaluation of more than 2,400 hours of SO<sub>2</sub> CEMS data and 3,500 hours of NO<sub>x</sub> CEMS data. The variability factor was added to the mean performance level from the year 2000 MACT database to determine new emission limits. Where the analysis supported SO<sub>2</sub> and NO<sub>x</sub> limits more stringent than the current limits, new limits are proposed.

EPA requests comment on the data screening procedure used for this proposal and requests suggestions for alternative data screening procedures. EPA also requests comment on the appropriateness to screen out data. The data screening procedure for the proposal is presented in a data analysis memo contained in the docket for this rulemaking.

#### *B. How were the proposed operator stand-in provisions developed?*

Under the good combustion practices component of the regulations (§ 60.54b(c)(2)), a fully certified MWC plant supervisor or MWC shift supervisor must be on site during all periods of MWC operation, except those periods when a provisionally certified control room operator "stands in." A provisionally certified control room operator on site can stand in for the duration of the plant or shift supervisor's shift when the plant or shift supervisor must leave prior to the end of the shift. In implementing the MACT regulations in the late 1990s, a number of questions were raised on this issue. State regulators and MWC owners and operators questioned how long a certified plant or shift supervisor is allowed to be off site, and how long a provisionally certified control room operator is allowed to stand in. Questions were raised about what should be done if a plant supervisor became sick or was off for a week of training or vacation. The EPA examined the issue, and in 1998 issued an enforcement guidance memorandum to

reflect EPA's intent in developing the regulation. Under the enforcement guidance memorandum, a provisionally certified control room operator can stand in for a certified plant or shift supervisor when they are off site for (1) periods up to twelve hours without notifying EPA; (2) periods up to two weeks if EPA is notified; and (3) periods longer than two 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 control room shift supervisor is on site. These stand-in provisions were incorporated into the small MWC MACT regulations promulgated in 2000. The EPA is now proposing to amend the large MWC NSPS and emission guidelines to be consistent with this EPA enforcement guidance memorandum and the small MWC regulations.

The EPA is aware that later this year the American Society of Mechanical Engineers (ASME) is planning to publish updated Standards for the Qualification and Certification of Resource Recovery Facility Operators (QRO-1-1994). The MWC rules currently require MWC operators obtain this certification. A number of changes to QRO are planned by the ASME. At this time it appears the principal affect would be the need for EPA to revise the MWC rules to use the QRO term "operator certification" in place of the term "fully certified" as currently used in the MWC rules. If the ASME completes the QRO update by the time the MWC rules are finalized, the new QRO procedures will be incorporated into the final MWC rule.

#### *C. Why did EPA add two MWC combustor categories to the list of MWC combustor types?*

In the 1995 emission guidelines, EPA identified three distinct types of RDF-fired MWC units: (1) RDF stoker, (2) pulverized coal/RDF mixed fuel-fired combustor, and (3) spreader stoker coal/RDF mixed fuel-fired combustor. Recently, EPA has identified two additional types of RDF-fired MWC designs that do not fit within the three types of RDF combustors as defined in the regulations. Since none of the three previous subcategories of RDF municipal waste combustors correctly describe the design or operation of these particular units, EPA recognized a need to add combustor types that would adequately describe and set CO emission limits for these combustors.

The EPA is proposing to add definitions for "spreader stoker RDF-fired combustor/100 percent coal capable" and "semi-suspension RDF-

fired combustor/wet RDF process conversion." For these MWC technology types, the proposed amendments would add good combustion practice-based CO limits. A spreader/stoker RDF-fired combustor/100 percent coal capable combustor fires RDF into the combustion zone by a mechanism that throws the fuel onto the grate from above. Combustion takes place both in suspension and on the grate. Such a unit is capable of firing 100 percent coal as a replacement for RDF. A semi-suspension RDF-fired combustor/wet RDF process conversion means a combustion unit that was converted from wet RDF processing to dry RDF processing. For both of these technologies, CO emission limits are proposed based on levels achievable by good combustion practices.

*D. How were the additional carbon monoxide (CO) limits developed?*

First, EPA determined that both good combustion practices and MACT had been fully implemented at the two additional MWC types discussed above. Next, EPA obtained over 5,000 hours of CO CEMS data from each MWC type and conducted a statistical analysis of the data to identify the best fitting distribution. After identifying the best fitting distribution, EPA calculated a statistically achievable emission limit based on a 24-hour block average for each of the two MWC types. The new CO limits fall within the range of current good combustion practice-based CO limits for other MWC combustors that range from 50 to 250 parts per million (ppm).

*E. Is EPA proposing an averaging period for measuring activated carbon injection (ACI) rate?*

The proposed amendments would revise § 60.58b(m) to specify an 8-hour block average period for measuring the ACI rate. Section 60.58b(m) requires an owner or operator using ACI to select an ACI operating parameter that can be used to calculate ACI feed rate (e.g., screw feeder speed) during the mercury and dioxin/furan performance test. The current § 60.58b does not, however, indicate the averaging time to be used, and the performance test period can vary from test to test.

To select an averaging period, EPA examined the Hg test sampling period of twelve MWC units that use ACI. The test duration averaged about 7 hours. To establish consistency, a fixed 8-hour block averaging period is being proposed for ongoing measurement of the ACI system operating parameters used to calculate ACI feed rate.

*F. Are any other changes being considered for measuring ACI?*

The EPA is considering including in the final regulation a requirement to monitor the pneumatic injection pressure at the location where the activated carbon is injected into the flue gases in order to monitor ACI. This would quickly identify a clogged injection nozzle. If this were done, the same 8-hour block average would be used for measuring injection pressure. The EPA specifically requests comments on the reasonableness of such monitoring.

*G. How did EPA determine the amended performance testing and monitoring requirements?*

*Annual testing schedule.* While implementing the mandatory 12-month testing schedule under the current regulations, MWC owners and operators found the testing schedule difficult to comply with. The current schedule does not provide flexibility to accommodate unscheduled MWC outages, local weather conditions, and other unexpected conditions. After an outage, bringing the MWC units back on line, rescheduling the test, notifying the regulatory agencies, and preparing for the test can cause delays and prevent testing within the specified 12-month period. Inclement weather can cause similar problems. To accommodate the need for flexibility while retaining an annual test schedule, EPA proposes to revise the testing schedule to once per calendar year, with no less than 9 months and no more than 15 months between tests.

*Optimization Parameters.* The proposed amendments would revise the testing requirements to allow the use of optimized parametric monitoring data from the most recently tested MWC unit to be applied to all similar MWC units on site. The use of this approach would be limited to exceptionally well-run MWC units where dioxin/furan and Hg tests show levels less than one half the dioxin/furan and Hg standards.

*Optimization Testing.* The proposed amendments would revise the operating parameter requirements for the annual testing to waive parameters during Hg testing. The use of this approach would provide the same flexibility in Hg testing as currently allowed for dioxin/furan testing. The standards presently allow the operating parameters to be waived during the dioxin/furan performance test and during the two weeks preceding the performance test (§ 60.53b(b) and (c)). Such flexibility is needed in cases where the owner or operator wishes to use the performance

test to establish different site-specific maximum or minimum values for their operating parameters for Hg control. Waiving the operating parameters associated with dioxin/furan control (i.e., load level and temperature at the control device inlet) during these times allows the source to optimize the performance of the controls and to perform the tests necessary to show that the emission limits are met while operating under the revised parameter values. The EPA requests comments on whether other parameters need such flexibility. If you suggest additional flexibility, identify the parameters and explain why the flexibility is needed.

*Reduced Testing for Well-operated MWC Units.* The EPA is proposing to amend the NSPS and emission guidelines provisions that allow reduced frequency for testing of exceptionally well-operated MWC units. Well-operated MWC units are those with emissions significantly below the emission limits. Currently, reduced testing is allowed if dioxin/furan emission levels have been repeatedly shown to be less than half of the emission limit. The proposed amendments would require both dioxin/furan and mercury emissions to both be less than half the emission limit to qualify for reduced testing. By amending the requirements to qualify for reduced testing, we are providing an incentive for MWC owners or operators to optimize an MWC unit's carbon injection system and other operating parameters for exceptional reduction of both mercury and dioxin/furan emissions.

*CEMS Data Availability.* The proposed amendments would increase the CEMS data collection requirement from 90 percent of the operating days per calendar quarter to 95 percent of the operating days per calendar quarter. The EPA obtained year 2003 CEMS data from a large MWC plant. That data included CEMS information on six parameters for each of three MWC units at the plant (SO<sub>2</sub>, NO<sub>x</sub>, opacity, flue gas temperature at scrubber discharge, CO, and HCl). Overall, the data contained 72 calendar quarters of CEMS data (3 combustion units x 4 calendar quarters x 6 parameters). All CEMS produced more than 99 percent data availability for all calendar quarters for all parameters monitored. As demonstrated by the data, well-designed and operated CEMS reliably collect data at rates higher than required in current regulations; thus, the proposed amendments would increase the data availability requirement to reflect current operating practices and performance.

*PM CEMS.* The proposed amendments would allow the use of PM CEMS as an alternative to PM performance testing by EPA Method 5. Owners or operators who choose to rely on PM CEMS would be able to discontinue their annual Method 5 test. The proposed amendments incorporate the use of PS-11 for PM CEMS and PS-11 QA Procedure 2 to ensure that PM CEMS are installed and operated properly and produce good quality monitoring data.

An owner or operator of an MWC unit who wishes to use PM CEMS would be required to notify EPA one month before starting use of PM CEMS and one month before stopping use of the PM CEMS. Additionally, EPA requests comment on the appropriateness of dropping the opacity monitoring requirements for MWC units that use PM CEMS.

The PM emissions limits are based on data from infrequent (normally annual) stack tests and have been enforced by stack test. The change to use of PM CEMS for measurement and enforcement of the same emission limits must be carefully considered in relation to an appropriate averaging period for data reduction. The EPA considered this issue and concluded the use of a 24-hr block average was appropriate to address PM emissions variability and EPA has included the use of a 24-hour block average in the proposed rule. The 24-hour block average would be calculated following procedures in Method 19.

PM CEMS have been applied successfully at various sources including fossil fueled power plants and MWC units in Germany.

*Other CEMS.* The EPA considered proposing the use of HCl CEMS, Hg CEMS, and multi-metal CEMS as alternatives to the existing ways of demonstrating compliance with the HCl, Hg, Cd, and Pb emissions limits. Although the proposed rule does not include such monitoring provisions, EPA is considering development of PS and including such provisions in the final rule as an optional test method. The EPA has not included such provisions in the proposed rules because it appears the current practice of continuous monitoring of SO<sub>2</sub> and PM in combination with the continuous monitoring of operating parameters (boiler load, fuel gas temperature and ACI rate) give a good indication of acid gas, metals and organic emissions from MWC units. The EPA specifically requests comment on the reasonableness of including optional provisions for use of HCl CEMS, Hg CEMS, and multi-metal CEMS in the final rule.

Relative to HCl monitoring, EPA is aware that State agencies, such as those

in Michigan, Massachusetts, and Pennsylvania, already require the use of HCl CEMS for MWC units in their jurisdictions. The EPA is also aware that PS for HCl CEMS have been developed by the Northeast States for Coordinated Air Use Management (NESCAUM) and the Commonwealth of Pennsylvania. In response, EPA will consider such actions as a request by Michigan, Massachusetts, and Pennsylvania to use HCl CEMS as an alternate test method for determining compliance with the HCl emission limits in both the NSPS and emission guidelines for large MWC units located in the states of Michigan, Massachusetts, and Pennsylvania. The EPA will address this request in the final rule.

The EPA has proposed PS-13 for HCl CEMS and believes that PS can serve as the basis for PS for HCl CEMS use at MWC units. In addition to the procedures used in proposed PS-13 for HCl for initial accuracy determination using the relative accuracy test, a comparison against a referenced method, EPA is taking comment on an alternate initial accuracy determination procedure, similar to the one in section 11 of PS-15 using the dynamic or analyte spiking procedure.

Relative to the use of Hg CEMS, the EPA believes that PS-12A for fossil fuel-fired boilers can provide the basis for using Hg CEMS at MWC units. The EPA is aware of the use of Hg CEMS use at MWC units in Germany. Six sites employ Hg CEMS; three MWC units, one hazardous waste combustor, one sewage sludge combustor, and one sewage sludge/coal-fired power plant.

EPA believes multi-metals CEMS can be used in many applications, including MWC units. The EPA has monitored side-by-side evaluations of multi-metals CEMS with Method 29 at industrial waste incinerators and found good correlation. The EPA was also approved to the use multi-metals CEMS as an alternative monitoring method at a hazardous waste combustor. The EPA believes it is possible to adapt proposed PS-10 or other EPA performance specifications to allow the use of multi-metal CEMS at MWC units. In addition to the procedures used in proposed PS-10 for initial accuracy determination using the relative accuracy test, a comparison against a reference method, EPA is taking comment on an alternate initial accuracy determination procedure, similar to the one in section 11 of PS-15 using the dynamic or analyte spiking procedure.

Whether or not EPA includes provisions for use of HCl, Hg, or multi-metal CEMS in the final NSPS and emission guidelines, at any time, an

owner or operator of an MWC unit may apply for approval of these monitoring methods in lieu of specified monitoring requirements. Such requests are authorized according to the general provisions of part 60 at 40 CFR 60.13(i).

The EPA is also aware of the use of semi-continuous or CEMS for dioxin/furan as alternatives to the existing ways of showing compliance with the dioxin/furan emissions limits. One semi-continuous dioxin/furan sampling system is the Adsorption Method for Sampling of Dioxins and Furans (AMESA), which operates like an automated Method 23 sampler and yields average dioxin and furan emissions over a specified period from 14 to 30 days. Again, the proposed rule does not include provisions for such monitoring, but EPA is considering including such provisions in the final regulations as an optional test method for measuring dioxin/furan emissions. The EPA specifically requests comments on the reasonableness of including provisions for this type of dioxin/furan monitoring.

The EPA continues to be interested in dioxin/furan monitoring technologies, as evidenced by the upcoming Environmental Technology Verification testing program scheduled for summer 2005. During that two-week program, at least four dioxin/furan monitoring technologies will be evaluated, one of which was successfully tested in December 2004 at a MWC unit.

MWC unit owners and operators should note that the use of HCl, Hg, multi-metal, and dioxin/furan CEMS technology may allow the discontinuation of various parametric monitoring including flue gas, temperature, MWC load, and ACI rate.

#### *H. How did EPA determine the other amendments?*

*Administrator.* The NSPS and emission guidelines refer to both "Administrator" and "EPA Administrator." Because both terms are used in the regulation and neither has been defined, it has been unclear to personnel implementing CAA section 111(d)/129 plans whether Administrator was to be construed broadly to include the Administrator of the U.S. EPA and all of his/her designees, including the Administrator of a State Air Pollution Control Agency consistent with the definition in the General Provisions, or was intended to refer only to the Administrator of the U.S. EPA. To clarify the intent, the text has been revised to "EPA" to refer to the EPA Administrator where appropriate. The term "Administrator" now refers to the appropriate representative (e.g., Director

of a State Air Pollution Control Agency for section 111(d)/129 State plans and EPA Administrator (or delegate) for section 111(d)/129 Federal plans). Definitions for the terms “EPA” and “Administrator” are included in the proposed rule.

*I. How was the implementation schedule developed?*

A consent decree issued by the U.S. District Court for the District of Columbia requires EPA to promulgate any revisions of the emission guidelines or NSPS for large MWC units that result from this technical review by April 28, 2006. (*See Sierra Club v. Whitman*, No. 01–1537 (D.D.C.) Consent decree file entered on May 22, 2003.) Consistent with CAA section 129, EPA is proposing that revisions to State plans be submitted to EPA one year following adoption of the revisions (approximately April 28, 2007). Dates in this preamble discussion and in the proposed rule are estimated and will depend on the date of publication of the final rule in the **Federal Register**.

Next, EPA chose to provide up to two additional years for MWC units to implement the revised guidelines (i.e., units must be in compliance by the date two years after the date specified for submitting State plans). Thus, final compliance would occur on or before April 28, 2009 (approximately). As proposed, while revised State plans must specify compliance no later than three years following adoption of the final rule (a compliance date of approximately April 28, 2009), consistent with CAA section 129, EPA expects States to require compliance as expeditiously as practical, and EPA anticipates that many States will submit revised State plans that include earlier compliance dates. The proposed emission limits can be achieved using the same air pollution control technology that served as the basis of the current emission limits.

The EPA requests comment on an alternate compliance schedule, as follows. That schedule would be to allow the same one year for State plan submittal (approximately April 28, 2007), but allow only one additional year for MWC units to achieve final compliance (approximately April 28, 2008), with the option that a State can request a longer compliance date for specific MWC units, but in no case longer than four years after the date by which revised State plans are due (the maximum allowed by CAA section 129). In requesting a longer site-specific schedule, a State would have to provide a demonstration why additional time is needed and how much additional time is needed. Again, EPA requests comment on this alternative schedule.

**V. Impacts of the Proposed Amendments for Existing Units**

The EPA projects the proposed amendments will have no additional impacts to air, water, or energy since the proposed 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 no additional cost or 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. 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. EPA requests comment on the projections that revising the emission limits as proposed here will not lead to any changes in MWC operations, costs, or emissions. For example, we seek information on whether MWC operations could change (and the resultant impacts on costs and emissions) to ensure that an adequate variability margin (some times called a

compliance margin) remains with the proposed limits.

**VI. Did EPA consider requiring MWC units equipped with electrostatic precipitator (ESP)-based scrubbing systems to replace the ESP with a fabric filter?**

Yes. The EPA considered the option of requiring the MWC owner or operator of MWC units equipped with ESP-based scrubbing systems to replace the ESP with a fabric filter. The EPA conducted an analysis of impacts resulting from the implementation of such an option. The analysis identified 21 MWC units with ESP-based scrubbing systems. All other MWC units are currently equipped with fabric filter-based scrubbing systems. As shown in Table 2 of this preamble, ESP replacement at the 21 identified MWC units would reduce MWC emissions by about 130 tons per year (tpy). The analysis determined that the annualized cost of ESP replacement at these units would be about \$14.5 million per year. If this cost is evenly assigned to the emissions reductions listed in Table 2 of this preamble, the cost of these emission reductions would exceed \$100,000 per ton removed. The EPA has recently completed other rulemakings that have achieved considerable reductions of fine particulate matter (PM 2.5). Because of EPA’s interest in reducing such emissions, the reductions in PM 2.5 emissions resulting from replacing ESPs with fabric filters were also calculated. The PM 2.5 reduction would be about 8 tpy. If all costs associated with ESP replacement were assigned to PM 2.5 reductions, the cost of these additional reductions in PM 2.5 emissions would be about \$900,000 per ton removed. After considering the above factors in relation to recent EPA rules, EPA concluded that the cost-reduction ratio for ESP replacement was excessive, and decided not to require ESP replacement. For a more detailed discussion of the analysis, see the Docket.

TABLE 2.—EMISSION REDUCTION AND COST FOR 21 MWC UNITS WITH ESP-BASED SCRUBBING SYSTEMS

Pollutant	Current emissions (with ESP based control system), tpy	Emissions of fabric filter option (with FF-based control system), tpy	Potential emission reduction, tpy
Dioxin/furan (CDD/CDF) .....	2.6 E–4	1.6E–4	1.0E–4
Cd .....	0.20	0.03	0.17
Pb .....	2.7	0.30	2.4
Hg .....	0.70	0.20	0.50
PM .....	210	80	130
PM 2.5 .....	60	44	16
Capital Cost (million, 2002 \$) .....	NA	119	NA
Total Annual Cost (million, \$ per year, 2002 \$) .....	NA	14.5	NA

## VII. How do the proposed amendments relate to section 112(c)(6) of the Clean Air Act?

Section 112(c)(6) of the CAA requires EPA to identify categories of sources of seven specified pollutants to assure that sources accounting for not less than 90 percent of the aggregate emissions of each such pollutant are subject to standards under CAA section 112(d)(2) or 112(d)(4). The EPA has identified municipal waste combustors as a source category that emits five of the seven CAA section 112(c)(6) pollutants: Hg, dioxin, furans, polycyclic organic matter (POM), and polychlorinated biphenols (PCBs). (The POM emitted by MWC units is composed of 16 polycyclic aromatic hydrocarbons (PAH) and extractable organic matters (EOM).) In the **Federal Register** notice *Source Category Listing for Section 112(d)(2) Rulemaking Pursuant to Section 112(c)(6) Requirements*, 63 FR 17838, 17849, Table 2 (1998), EPA identified municipal waste combustors as a source category “subject to regulation” for purposes of CAA section 112(c)(6) with respect to the CAA section 112(c)(6) pollutants that MWC units emit. MWC units are solid waste incineration units currently regulated under CAA section 129. For purposes of CAA section 112(c)(6), EPA has determined that standards promulgated under CAA section 129 are substantively equivalent to those promulgated under CAA section 112(d). See *Id.* at 17845; see also 62 FR 33625, 33632 (1997). As discussed in more detail below, the CAA section 129 standards effectively control emissions of the five identified CAA section 112(c)(6) pollutants. Further, since CAA section 129(h)(2) precludes EPA from regulating these substantial sources of the five identified CAA section 112(c)(6) pollutants under CAA section 112(d), EPA cannot further regulate these emissions under that CAA section. As a result, EPA considers emissions of these five pollutants from MWC units “subject to standards” for purposes of CAA section 112(c)(6).

As required by the statute, the CAA section 129 MWC standards include numeric emission limitations for the nine pollutants specified in that section. The combination of good combustion practices (GCP) and add-on air pollution control equipment (spray dryer, fabric filter or ESP, ACI, and selective non-catalytic reduction) effectively reduces emissions of the pollutants for which emission limits are required under CAA section 129: Hg, dioxin, furans, Cd, Pb, PM, SO<sub>2</sub>, HCl, and NO<sub>x</sub>. Thus, the NSPS and emissions guidelines specifically require reduction in emissions of three

of the CAA section 112(c)(6) pollutants: Hg, dioxin, and furans. As explained below, the air pollution controls necessary to comply with the requirements of the MWC NSPS and emission guidelines also effectively reduce emissions of the following CAA section 112(c)(6) pollutants that are emitted from MWC units: POM and PCBs.

Although the CAA section 129 MWC standards do not have separate, specific emissions standards for PCBs and POM, emissions of these two CAA section 112(c)(6) pollutants are effectively controlled by the same control measures used to comply with the numerical emissions limits for the enumerated CAA section 129 pollutants. Specifically, as byproducts of combustion, the formation of PCBs and POM is effectively reduced by the combustion and post-combustion practices required to comply with the CAA section 129 standards. Any PCBs and POM that do form during combustion are captured by the combination of spray dryer, PM control, and ACI system, which are necessary post-combustion MWC controls. The combination of spray dryer, PM control, and ACI greatly reduces emissions of these organic pollutants, as well as reducing Hg emissions. The fact that POM and PCBs are effectively controlled by the application of MACT is confirmed by POM and PCB emission tests conducted at one large MWC with MACT controls which showed non-detectable levels of POM and PCBs. Based on post-MACT compliance tests at all 167 large MWC units, the MWC MACT regulations reduced Hg emissions by 95 percent and dioxin/furan emissions by greater than 99 percent from pre-MACT levels. In light of the fact that the MACT controls also effectively reduce emissions of POM and PCBs, it is, therefore, reasonable to conclude that POM and PCB emissions are substantially reduced at all 167 large MWC units. Thus, while the proposed rule does not identify specific limits for POM and PCB, they are for the reasons noted above nonetheless “subject to regulation” for purposes of section 112(c)(6) of the CAA.

## VIII. 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 this a “significant regulatory action” within the meaning of the Executive Order. The EPA has submitted this 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. The information collection request has been assigned OMB Control Number 2060–0210 (EPA ICR No. 1506.10).

The proposed 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 during the development of the NSPS and emission guidelines. 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*

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedures Act or any other statute unless the agency certifies that the proposed amendments will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small government organizations, and small government jurisdictions.

For purposes of assessing the impacts of the proposed amendments 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 proposed amendments on small entities, I certify that this action would not have a significant economic impact on a substantial number of small entities. The proposed amendments will not impose any requirements on any entities because it does not impose any additional regulatory requirements.

Nevertheless, we continue to be interested in the potential impacts of the proposed rule on small entities and welcome comments on issues related to such impacts.

#### 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 proposed 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 EPA 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 develop 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.

The EPA has determined that the proposed amendments do 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. Thus, the proposed amendments are not subject to the requirements of section 202 and 205 of the UMRA. In addition, EPA has determined that the proposed amendments contain no regulatory requirements that might significantly or uniquely affect small governments. Therefore, the proposed amendments are 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."

Under section 6 of Executive Order 13132, EPA may not issue a regulation that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. Also, EPA may not issue a regulation that has federalism implications and that preempts State law, unless EPA consults with State and local officials early in the process of developing the proposed regulation.

The proposed amendments do not have federalism implications. They 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 proposed amendments will not impose substantial direct compliance costs on State or local governments because the proposed 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 proposed 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." "Policies that have Tribal implications" is defined in the Executive Order to include regulations that have "substantial direct effects on relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes."

The proposed amendments do 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. The EPA is not aware of any large MWC unit owned or operated by Indian Tribal government. Thus, Executive Order 13175 does not apply to the proposed amendments.

*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 proposed amendments are not subject to Executive Order 13045 because they are based on technology performance and not on health and safety risks. Also, the proposed amendments are not "economically significant."

*H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution or Use*

Executive Order 13211 (66 FR 28355, May 22, 2001) provides that agencies shall prepare and submit to the Administrator of the Office of Information and Regulatory Affairs, OMB, a Statement of Energy Effects for certain actions identified as "significant energy actions." Section 4(b) of Executive Order 13211 defines "significant energy actions" as "\* \* \* any action by an agency (normally published in the **Federal Register**) that promulgates or is expected to lead to the promulgation of a final rule or regulation, including notices of inquiry, advance notices of proposed rulemaking, and notices of proposed rulemaking: (1)(i) That is a significant regulatory action under Executive Order 12866 or any successor order, and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) that is designated by the Administrator of the Office of Information and Regulatory Affairs as a

significant energy action \* \* \*." The proposed amendments are not considered to be a "significant regulatory action" under Executive Order 12866. They also are 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 proposed amendments, EPA does not expect any price increase for any energy type. We also expect that there would 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 proposed amendments are 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 and procurement 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, 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 of 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. (See 40 CFR part 60, appendix B.) The MWC NSPS and emissions 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 proposed 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 proposed 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 were practical alternatives to EPA test methods for the purposes of the proposed amendments. The 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. The two acceptable monitoring methods are discussed below.

The EPA identified two voluntary consensus standards as acceptable 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 acceptable alternative to EPA Method 29 (portion for mercury only) as a method for measuring mercury. A full discussion of acceptable and not acceptable voluntary consensus standards is contained in a memorandum in the docket.

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

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

Dated: December 7, 2005.

**Stephen L. Johnson,**  
*Administrator.*

For the reasons stated in the preamble, title 40, chapter I, of the Code of Federal Regulations is proposed to be 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 A—[Amended]**

2. Section 60.17 is amended by revising paragraph (a)(76) and adding paragraph (h)(4) to read as follows:

**§ 60.17 Incorporations by reference.**

\* \* \* \* \*

(a) \* \* \*

(76) ASTM D6784–02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), IBR approved for appendix B to part 60, Performance Specification 12A, section 8.6.2., § 60.58b(d)(2)(iii) and 60.58b(d)(2)(iv).

\* \* \* \* \*

(h) \* \* \*

(4) ASME PTC 19–10–1981-Part 10, Flue and Exhaust Gas Analyses, IBR approved for § 60.58b(b)(i), § 60.58b(c)(2), § 60.58b(d)(1)(ii),

§ 60.58b(d)(2)(ii), § 60.58b(e)(12)(i)(A), § 60.58b(e)(12)(i)(B), § 60.58b(g)(2), § 60.58b(h)(10)(i)(A), § 60.58b(h)(10)(i)(B), and § 60.58b(i)(3)(ii)(B).

\* \* \* \* \*

**Subpart Cb—[Amended]**

3. 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 shall be 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); and

(3) Approval of other monitoring systems used to obtain emissions data when data are not obtained by continuous emissions monitoring systems as specified in § 60.58b(e)(14), (h)(12), and (i)(11), as specified in § 60.38b.

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

**§ 60.31b Definitions.**

\* \* \* \* \*

*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 refuse-derived fuel-fired combustor/100 percent coal capable* means a spreader stoker refuse-derived fuel-fired combustor 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.

5. Amend § 60.32b by:  
a. Revising paragraph (b)(1);  
b. Revising paragraph (d);  
c. Revising paragraph (e);  
d. Revising paragraph (f)(1); and  
e. Revising paragraph (i)(1) 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,

\* \* \* \* \*

6. Amend § 60.33b by:  
a. Revising paragraph (a);  
b. Revising paragraph (b);  
c. Revising paragraph (c);  
d. Removing tables 1 and 2; and  
e. 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 24 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 31 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 (a)(3). 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.

(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 250 micrograms per dry standard cubic meter, corrected to 7 percent oxygen.

(b) The emission limits for municipal waste combustor acid gases, expressed as sulfur dioxide and hydrogen chloride, are specified in paragraphs (b)(1) through (b)(3) of this section.

(1) [Reserved]

(2) [Reserved]

(3) For approval, a State shall include emission limits for sulfur dioxide and hydrogen chloride at least as protective as the emission limits specified in paragraphs (b)(3)(i) and (b)(3)(ii) of this section.

(i) Before April 28, 2009, the emission limit for sulfur dioxide contained in the gases discharged to the atmosphere from a designated facility is 29 parts per million by volume or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. On and after April 28, 2009, the emission limit for sulfur dioxide contained in the gases discharged to the atmosphere from a designated facility is 23 parts per million by volume or 20 percent of the potential sulfur dioxide emission concentration (80-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. Compliance with this emission limit is based on a 24-hour daily geometric mean.

(ii) Before April 28, 2009, the emission limit for hydrogen chloride contained in the gases discharged to the atmosphere from a designated facility is 29 parts per million by volume or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. On and after April 28, 2009, the emission limit for hydrogen chloride contained in the gases discharged to the atmosphere from a designated facility is 26 parts per million by volume or 3 percent of the potential sulfur dioxide emission concentration (97-percent reduction by weight or volume), corrected to 7

percent oxygen (dry basis), whichever is less stringent.

(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) Before April 28, 2009, 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.

(iii) On and after April 28, 2009, the emission limit for designated facilities is 21 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.

(2) [Reserved]

(d) \* \* \*

(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.

\* \* \* \* \*

#### § 60.34b [Amended]

6a. Amend § 60.34b by removing table 3.

7. Add tables 1, 2, and 3 to subpart Cb to read as follows:

TABLE 1 TO SUBPART CB OF PART 60.—NITROGEN OXIDES GUIDELINES FOR DESIGNATED FACILITIES

Municipal waste combustor technology	Before April 28, 2009, nitrogen oxides emission limit (parts per million by volume) <sup>a</sup>	On and after April 28, 2009, nitrogen oxides emission limit (parts per million by volume) <sup>a</sup>
Mass burn waterwall	205	205
Mass burn rotary waterwall	250	158
Refuse-derived fuel combustor	250	219
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>

Municipal waste combustor technology	Before April 28, 2009, nitrogen oxides emission limit (parts per million by volume) <sup>b</sup>	On and after April 28, 2009, nitrogen oxides emission limit (parts per million by volume) <sup>a</sup>
Mass burn waterwall	185	185
Mass burn rotary waterwall	220	142
Refuse-derived fuel combustor	230	197
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

Municipal waste combustor technology	Carbon monoxide emissions level (parts per million by volume) <sup>a</sup>	Averaging time (hrs) <sup>b</sup>
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	<sup>c</sup> 24
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	<sup>c</sup> 24
Spreader stoker refuse-derived fuel-fired combustor/100 percent coal capable	250	<sup>c</sup> 24

<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.

8. Revise § 60.36b to read as follows:

**§ 60.36b Emission guidelines for municipal waste combustor fugitive ash emissions.**

For approval, a State plan shall include requirements for municipal waste combustor fugitive ash emissions at least as protective as those

requirements listed in § 60.55b of subpart Eb of this part.

9. Amend § 60.38b by revising paragraph (b) to read as follows:

**§ 60.38b Compliance and performance testing.**

\* \* \* \* \*

(b) For approval, a State plan shall include the alternative performance testing schedule for dioxin/furan specified in § 60.58b(g)(5)(iii) of subpart Eb of this part, as applicable, for those designated facilities that achieve both a dioxin/furan emission level less than or equal to 10 nanograms per dry standard

cubic meter total mass, corrected to 7 percent oxygen and a mercury emission level less than or equal to 40 micrograms per dry standard cubic meter total mass, corrected to 7 percent oxygen.

\* \* \* \* \*

10. 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) 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 those specified under § 60.33b (a)(4), (b)(3), and (d)(3). 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 [DATE FINAL RULE IS PUBLISHED IN THE **Federal Register**]. The compliance schedule specified in this paragraph is in accordance with section 129(b)(2) of the Clean Air Act and applies instead of the compliance schedule provided in § 60.23(a)(1) of subpart B of this part.

(c) For approval, a State plan that is required to be submitted by December 19, 1996 and is submitted prior to December 19, 2005 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 (a)(4), (b)(3), and (d)(3).

\* \* \* \* \*

(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), (b), (c), (d), and § 60.34b(a), and the revised testing provisions in § 60.38b(b). Compliance with the revised April 28, 2009 emission limits shall be required as expeditiously as practicable, but no later than April 28, 2009.

(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 [DATE 5 YEARS AFTER DATE FINAL RULE IS PUBLISHED IN THE **Federal Register**].

**Subpart Eb—[Amended]**

11. 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); and
- g. Revising paragraph (n) 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 shall be retained by the Administrator of the U.S. EPA and 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); and

(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), and (i)(11).

\* \* \* \* \*

12. Amend § 60.51b by revising the definition of “Federally enforceable” and adding the definitions for “Administrator” 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.

\* \* \* \* \*

EPA means the Administrator of the EPA or employee of the EPA that 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.

\* \* \* \* \*

13. 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);

e. Revising paragraph (a)(5);

f. Revising paragraph (b) introductory text;

g. Revising paragraph (b)(1); and

h. Revising paragraph (c) introductory text 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 9.5 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 3.5 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 84 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 49 micrograms per dry standard cubic meter, or 10 percent of the potential mercury emission concentration (90-

percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent.

(b) The limits for municipal waste combustor acid gases are specified in paragraphs (b)(1) and (b)(2) 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 sulfur dioxide in excess of the limits specified in paragraph (b)(1)(i) or (b)(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 30 parts per million by volume or 20 percent of the potential sulfur dioxide emission concentration (80-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. The averaging time is specified in § 60.58b(e).

(ii) For affected facilities that commenced construction, modification, or reconstruction after December 19, 2005, the emission limit is 19 parts per million by volume or 10 percent of the potential sulfur dioxide emission concentration (90-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. The averaging time is specified in § 60.58b(e).

\* \* \* \* \*

(c) The limits for municipal waste combustor organics are specified in paragraphs (c)(1) and (c)(2) of this section.

\* \* \* \* \*

14. Amend § 60.53b by:  
a. Revising paragraph (b)(1);  
b. Revising paragraph (b)(2);  
c. Revising paragraph (c)(1); and  
d. Revising paragraph (c)(2) 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.

(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.

15. Amend § 60.54b by revising paragraph (c)(2) 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 without notice to, or approval by, the Administrator.

(ii) When 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, 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 2 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 notice to, or 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 4 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.

\* \* \* \* \*

16. Amend § 60.55b by revising paragraph (a) to read as follows:

**§ 60.55b Standards for municipal waste combustor fugitive ash emissions.**

(a) 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 to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period), as determined by EPA Reference Method 22 (40 CFR part 60, appendix A) observations as specified in § 60.58b(k), except as provided in paragraphs (b) and (c) of this section.

\* \* \* \* \*

17. 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.

\* \* \* \* \*

- 18. Amend § 60.58b by:
  - a. Revising paragraphs (b) introductory text, (b)(6)(i), and (b)(7);
  - b. Revising paragraphs (c) introductory text, (c)(2), (c)(3), (c)(9), and (c)(11);
  - c. Revising paragraphs (d)(1)(ii), (d)(1)(vii), (d)(2)(ii), (d)(2)(iii), (d)(2)(iv), and (d)(2)(ix);
  - d. Revising paragraphs (e)(7) introductory text, (e)(12)(i)(A), (e)(12)(i)(B), and (e)(14);
  - e. Revising paragraphs (g)(2), (g)(5)(i), (g)(5)(iii), and (g)(7);
  - f. Revising paragraphs (h)(6) introductory text, (h)(10)(i)(B), and (h)(12);
  - g. Revising paragraphs (i)(3)(ii)(B), (i)(10) introductory text, and (i)(11);
  - h. Revising paragraph (m)(2); and
  - i. Adding paragraphs (c)(10) and (g)(5)(ii) to read as follows:

**§ 60.58b Compliance and performance testing.**

\* \* \* \* \*

(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 particulate matter emissions under paragraph (c)(10) 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)(7) 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 ASME PTC-19-10-1981—Part 10 (incorporated by reference, see § 60.17 of subpart A of this part), 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 or the director of a State air pollution control agency, if so delegated by 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.

(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 ASME PTC-19-10-1981—Part 10 (incorporated by reference, see § 60.17 of subpart A of this part), 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 months and no more than 15 calendar months following the previous performance test).

(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.

(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 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) 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) of this section for 75 percent of the operating hours per day for 95 percent of the operating days per calendar quarter 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 75 percent of the hours per day that the affected facility is operated and combusting municipal solid waste

for 95 percent of the days per calendar quarter 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) using the test method specified in paragraph (c)(6) of this section.

(d) \* \* \*

(1) \* \* \*

(ii) The 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 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).

\* \* \* \* \*

(2) \* \* \*

(ii) The 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 for flue gas analysis.

(iii) The EPA Reference Method 29 or ASTM D6784-02 (incorporated by reference, see § 60.17 of subpart A of this part), shall be used to determine the mercury emission concentration. The minimum sample volume when using Method 29 for mercury shall be 1.7 cubic meters.

(iv) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 29 or ASTM D6784-02 (incorporated by reference, see § 60.17 of subpart A of this part), 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 12 calendar months from the previous performance test), unless the owner or operator follows the testing schedule specified in paragraph (g)(5)(iii) 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) of this section for 75 percent of the operating hours per day for 95 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.

\* \* \* \* \*

(12) \* \* \*

(i) \* \* \*

(A) For sulfur dioxide, EPA Reference Method 6, 6A, or 6C, or ASTM D6784-02 (incorporated by reference, see § 60.17 of subpart A of this part), shall be used.

(B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, or ASTM D6784-02 (incorporated by reference, see § 60.17 of subpart A of this part), 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 75 percent of the hours per day that the affected facility is operated and combusting municipal solid waste for 95 percent of the days per calendar quarter that the affected facility is operated and combusting municipal solid waste.

\* \* \* \* \*

(g) \* \* \*

(2) The EPA Reference Method 3, 3A, or 3B, or ASTM D6784-02 (incorporated by reference, see § 60.17 of subpart A of this part), 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.)

(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 and apply the 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 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 both dioxin/furan emissions are less than or equal to 7 nanograms per dry standard cubic meter (total mass) and that mercury emissions are less than or equal to 25 micrograms per dry standard cubic meter 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 and

mercury 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) 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 both a dioxin/furan emission level less than or equal to 7 nanograms per dry standard cubic meter (total mass) and a mercury emission level less than or equal to 25 micrograms per dry standard cubic meter, 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) or a mercury emission level greater than 25 micrograms per dry standard cubic meter, 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) and mercury emission level less than or equal to 25 micrograms per dry standard cubic meter.

(7) The owner or operator of an affected facility where activated carbon is used to comply with the dioxin/furan and mercury emission limits specified in § 60.52b(c) or the dioxin/furan and mercury emission limits specified in paragraph (g)(5)(iii) of this section shall follow the procedures specified in paragraph (m) of this section for measuring and calculating the carbon usage rate.

(h) 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 75 percent of the operating hours per day for 95 percent of the operating days per calendar quarter 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 ASME PTC-19-10-1981-Part 10

(incorporated by reference, see § 60.17 of subpart A of this part), as applicable, shall be used.

(12) When nitrogen oxides continuous 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 using other monitoring systems as approved by EPA or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 75 percent of the hours per day for 95 percent of the days per calendar quarter the unit is operated and combusting municipal solid waste.

(i) (3) (ii)

(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.

(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 75 percent of the operating hours per day for 95 percent of the operating days per calendar quarter 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) (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 mercury performance test and the 2 weeks preceding the annual mercury performance test, no limit is applicable for average mass carbon feed rate.

(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.

19. Amend § 60.59b by:

- a. Revising paragraph (d)(2)(i) introductory text;
- b. Revising (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)(12) introductory text;
- i. Revising paragraph (g) introductory text;
- j. Revising paragraph (g)(1)(ii);
- k. Revising paragraph (g)(1)(iv);
- l. Revising paragraph (g)(1)(v);
- m. Revising paragraph (g)(4);
- n. Revising paragraph (h)(1);
- o. Adding paragraph (d)(2)(i)(E);
- p. Adding paragraph (d)(2)(ii)(E);
- q. Adding paragraph (d)(6)(vi);
- r. Adding paragraph (d)(10);
- s. Adding paragraph (d)(12)(iv);
- t. Adding paragraph (g)(5); and
- u. Adding paragraph (m) 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)(E) of this section shall be recorded and be available for submittal to the Administrator or review onsite by an EPA or State inspector.

(E) For owners and operators who elect to continuously monitor particulate matter emissions instead of conducting performance testing using EPA Method 5, all 1-hour average particulate matter emission concentrations as specified under § 60.58b(d)(10).

(ii) The average concentrations and percent reductions, as applicable, specified in paragraphs (d)(2)(ii)(A)

through (d)(2)(ii)(E) 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 emissions instead of conducting performance testing using EPA Method 5, all 24-hour daily arithmetic average particulate matter emission concentrations as specified under § 60.58b(d)(10).

(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)(E) 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 for which the minimum number of hours of any of the data specified in paragraphs (d)(6)(i) through (d)(6)(vi) of this section have not been obtained including reasons for not obtaining sufficient 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 emissions instead of performance testing by EPA Method 5, particulate matter emissions data.

(7) Identification of each occurrence that sulfur dioxide emissions data, nitrogen oxides emissions data, particulate matter emissions data (for owners and operators who elect to continuously monitor particulate matter emissions instead of conducting performance testing using EPA Method 5) 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) The results of daily drift tests and quarterly accuracy determinations for particulate matter continuous emission monitoring systems (for owners and operators who elect to continuously monitor particulate matter emissions instead of conducting performance testing using EPA Method 5), as

required under appendix F of this part, procedure 2.

\* \* \* \* \*

(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.

\* \* \* \* \*

(g) Following the first year of municipal 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 (for owners and operators who elect to continuously monitor particulate matter emissions instead of conducting performance testing using EPA Method 5), 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) The total number of days that the minimum number of hours of data for sulfur dioxide, nitrogen oxides, carbon monoxide, particulate matter (for owners and operators who elect to continuously monitor particulate matter emissions instead of conducting performance testing using EPA Method 5), municipal waste combustor unit load, and particulate matter control device temperature data were not obtained based on the data recorded under paragraph (d)(6) of this section.

(v) The total number of hours that data for sulfur dioxide, nitrogen oxides, carbon monoxide, particulate matter (for owners and operators who elect to continuously monitor particulate matter emissions instead of conducting performance testing using EPA Method 5), 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.

\* \* \* \* \*

(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 (for owners and operators who elect to continuously monitor particulate matter emissions instead of conducting performance testing using EPA Method 5), 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 emissions instead of conducting performance testing using EPA Method 5 must notify the Administrator one month prior to starting or stopping use

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of the particulate matter continuous  
emission monitoring system.

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