



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA-HQ-OAR-2009-0234; FRL-9951-63-OAR]

RIN 2060-AS75

Mercury and Air Toxics Standards (MATS) Completion of Electronic Reporting Requirements

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to amend the electronic reporting requirements for the National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired electric utility steam generating units (also known as the Mercury and Air Toxics Standards (MATS)). This proposed rule would revise and streamline the electronic data reporting requirements of MATS (both for owners or operators of electric utility steam generating units (EGUs) who use performance stack testing and EGU owners or operators who use continuous monitoring to demonstrate compliance) and would increase data transparency. EGU owners or operators would use one familiar electronic reporting system, instead of two separate systems, reducing their burden. In addition, the public and regulatory authorities would have enhanced access to MATS data. Finally, no new continuous monitoring requirements are proposed by this

action. Overall, this proposed rule would serve to ease burden, increase MATS data flow and usage, make it easier for inspectors and auditors to assess compliance, and encourage wider use of continuous emissions monitoring systems (CEMS) for MATS compliance.

DATES: Comments must be received on or before [**INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER**].

ADDRESSES: Submit your comments, identified by Docket ID No.

EPA-HQ-OAR-2009-0234, to the Federal eRulemaking Portal:

<http://www.regulations.gov>. Follow the on-line instructions for submitting comments. Once submitted, comments cannot be edited or withdrawn. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the Web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and

general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

Instructions: All submissions must include the agency name and respective docket number or Regulatory Information Number for this proposed rulemaking. Direct your comments to Docket ID No. EPA-HQ-OAR-2009-0234. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be CBI or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov or email. (See section II.B. below for instructions on submitting information claimed as CBI.) The www.regulations.gov Web site is an ``anonymous access'' system, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you submit an electronic comment through www.regulations.gov, the 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 the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. If you send an email comment directly to the EPA without going through

<http://www.regulations.gov>, your email 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. Electronic files should avoid the use of special characters, any form of encryption and be free of any defects or viruses. For additional information about the EPA's public docket, visit the EPA Docket Center homepage at www.epa.gov/dockets.htm.

Docket: The EPA has established a docket for this proposed rulemaking under Docket ID No. EPA-HQ-OAR-2009-0234. All documents in the docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publically 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. Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy at the EPA Docket Center, EPA WJC West Building, Room Number 3334, 1301 Constitution Avenue, 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. Barrett Parker, Sector Policies and Programs Division, Office of Air Quality Planning and Standards (D243-05), Environmental Protection Agency, Research Triangle Park, NC 27711; telephone number: (919) 541-5635; email address: parker.barrett@epa.gov.

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I. Why is the EPA issuing this proposed rule?

The EPA is issuing this proposed rule to streamline the electronic data reporting requirements in MATS; to increase data transparency by making more of the MATS data available in Extensible Markup Language (XML) format; to amend the reporting and recordkeeping requirements associated with performance stack tests, particulate matter (PM) and hydrogen chloride (HCl) CEMS, and PM continuous parameter monitoring systems (CPMS); and to make minor clarifications and corrections to the mercury (Hg) and HCl monitoring provisions, which were brought to our attention following publication of the MATS Technical Correction Rule (see 81 FR 20172, April 6, 2016).

These proposed amendments would revise the recordkeeping and reporting requirements of MATS, in response to concerns raised by the regulated community. Section 63.10031 of the original MATS required affected EGU owners or operators to report MATS emissions and compliance information electronically using two data systems (see 77 FR 9304, February 16, 2012). Paragraph (a) of §63.10031 required those EGU owners or operators who demonstrate compliance by continuously monitoring Hg and/or HCl and/or hydrogen fluoride (HF) emissions to use the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool to submit monitoring plan information, quality assurance test results, and hourly emissions data in accordance with appendices A and B to subpart UUUUU of 40 CFR part 63. Paragraph

(f) of §63.10031 required performance stack test results, performance evaluations of Hg, HCl, HF, sulfur dioxide (SO₂), and PM CEMS, 30-boiler operating day rolling average values for certain parameters, notifications of compliance status, and semiannual compliance reports to be submitted to the EPA's WebFIRE database via the Compliance and Emissions Data Reporting Interface (CEDRI).

Subsequent to the publication of MATS, stakeholders suggested to the EPA that the electronic reporting burden of MATS could be significantly reduced if all of the required information were reported to one data system instead of two. The stakeholders also suggested that using one data system would benefit the EPA and the public in their review of MATS data, because the information would be reported in a consistent format. In view of these considerations, the stakeholders urged the EPA to consider amending the MATS rule to require all of the data to be reported through the ECMPS, a familiar data system that most EGU owners or operators have been using since 2009 to meet the electronic reporting requirements of the Acid Rain Program.

After careful consideration of the stakeholders' recommendations, the EPA concluded that the increased transparency of the emissions data and the reduction in reporting burden that could be achieved through the use of a

single data system are consistent with Agency priorities. As a result, late in 2014 the EPA decided to take the necessary steps to require all of the electronic reports required by MATS to be submitted through the ECMPS Client Tool. Those steps would include revising MATS, modifying the ECMPS Client Tool, creating a detailed set of reporting instructions, and beta testing the modified software. Recognizing that insufficient time was available to complete these tasks before the initial compliance date for MATS (April 16, 2015), the Agency embarked on a two-phased approach to complete them.

The first phase has been completed. The EPA published a final rule requiring EGU owners or operators to suspend temporarily (until April 16, 2017) the use of the CEDRI interface as the means of submitting the reports described in §63.10031(f) introductory text, (f)(1), (f)(2), and (f)(4). Instead, EGU owners or operators must use the ECMPS Client Tool to submit Portable Document Format (PDF) versions of these reports on an interim basis (see 80 FR 15510, March 24, 2015). The specific reports to be submitted in PDF format include: performance stack test reports which must contain enough information to assess compliance and to demonstrate that the testing was done properly (e.g., such information as would be provided by the Electronic Reporting Tool (ERT); relative accuracy test audit (RATA) reports for SO₂, HCl, HF, and Hg CEMS;

RATA reports for Hg sorbent trap monitoring systems; response correlation audit (RCA) and relative response audit (RRA) reports for PM CEMS; 30-boiler operating day rolling average reports for PM CEMS, PM CPMS, and approved hazardous air pollutants (HAP) metals CEMS; Notifications of Compliance Status; and semiannual compliance reports. Section 63.10031(f)(6) of the March 24, 2015, final rule requires each PDF version of a submitted interim report to include information that identifies the facility (name and address), the EGU(s) to which the report applies, the applicable rule citation, and other information. The rule further specifies that in the event that implementation of the single data system initiative cannot be completed by April 16, 2017, the electronic reporting of MATS data will revert to the original two systems approach on and after that date.

In the preamble to the March 24, 2015, final rule, the EPA outlined the second phase of the single data system initiative, which would be executed during the interim PDF reporting period. In phase two: (1) the Agency would publish a direct final rule, requiring MATS-affected sources to use the ECMPS Client Tool to submit all required reports in a structured XML format with specific data elements for each type of report; and (2) a detailed set of reporting instructions would be developed and

ECMPS would be modified accordingly, in order to receive and process the data.

The EPA has been working diligently to compile the required data elements, to develop reporting instructions, and to prepare program modifications; however, after considering the magnitude of the rule changes that would be required to execute phase two, coupled with the need to specify data elements to be reported electronically for PM CEMS, PM CPMS, and HCl CEMS, the EPA expects that some stakeholders will want to have an opportunity to review and provide comment on these proposed changes. Therefore, the EPA concluded that in this instance notice and comment rulemaking involving both a proposed rule and a final rule is a better approach than a direct final rulemaking.

II. General Information

A. Does this proposed rule apply to me?

Categories and entities potentially affected by this proposed action include:

Category	NAICS code ¹	Examples of potentially regulated entities
Industry	221112	Fossil fuel-fired EGUs.
Federal government	221122 ²	Fossil fuel-fired EGUs owned by the Federal government.
State/local/Tribal government	221122 ² 921150	Fossil fuel-fired EGUs owned by municipalities. Fossil fuel-fired EGUs in Indian country.

¹ North American Industry Classification System.

² Federal, state, or local government-owned and operated establishments are classified according to the activity in which

they are engaged.

This table is not intended to be exhaustive, but rather to provide a guide for readers regarding entities likely to be affected by this proposed action. To determine whether your facility, company, business, organization, etc., would be regulated by this proposed action, you should examine the applicability criteria in 40 CFR 63.9981. If you have any questions regarding the applicability of this proposed action to a particular entity, consult either the air permitting authority for the entity or your EPA Regional representative as listed in 40 CFR 63.13.

B. What should I consider as I prepare my comments for the EPA? Submitting CBI. Do not submit information containing CBI to the EPA through <http://www.regulations.gov> or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information on a disk or CD-ROM that you mail to the 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 comments that includes information claimed as CBI, you must submit a copy of the comments that does not contain the information claimed as CBI for inclusion in the public docket. If you submit a CD-ROM or disk that does not

contain CBI, mark the outside of the disk or CD-ROM clearly that it does not contain CBI. Information not marked as CBI will be included in the public docket and the EPA's electronic public docket without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. Send or deliver information identified as CBI only to the following address: OAQPS Document Control Officer (C404-02), U.S. Environmental Protection Agency, 109 T.W. Alexander Drive, Research Triangle Park, North Carolina 27711, and Attention Docket ID No. EPA-HQ-OAR-2009-0234.

C. What is the scope of these proposed amendments?

This proposed rule would extend the interim PDF reporting process described in §63.10031(f) from April 16, 2017, to December 31, 2017. In addition, this proposed rule would amend the reporting requirements in §63.10031 of the MATS regulation, and, for consistency with those changes, would amend related texts in §§63.10011, 63.10021, and 63.10032, and in Tables 3, 8, and 9 to 40 CFR part 63, subpart UUUUU. The recordkeeping and reporting sections of appendix B would be amended¹ and three new appendices would be added to the rule, i.e., appendices C, D,

¹ The EPA has recently published a technology-neutral performance specification and associated quality assurance (QA) test procedures for HCl monitors (see Performance Specification 18 (PS 18) and Quality Assurance Procedure 6 (Procedure 6) in 80 FR 38628, July 7, 2015). This proposed rule would add recordkeeping and electronic reporting requirements for sources electing to monitor HCl according to PS 18 and Procedure 6.

and E. The interim PDF format reporting period would be extended in order to finalize this proposed rule and to complete modifications to the ECMPS Client Tool, to develop reporting instructions, and to allow data acquisition and handling system vendors to adapt to the changes.

While the changes in this proposed rule will take time to implement, no significant impact on stakeholders is expected. The set of data elements for performance stack tests and continuous monitoring system (CMS) performance evaluations would remain unchanged; only the reporting format and mechanism would change. Rather than requiring submission of these data via CEDRI, EGU owners or operators would use the ECMPS Client Tool to report in XML format, generated either by using the ERT or by other appropriate means.

In addition to reporting the MATS data through the ECMPS Client Tool, EGU owners or operators would be required to use the ECMPS to report hourly data and quality assurance test results for PM CEMS and hourly response data for PM CPMS in XML format (if those compliance options were selected) and to provide quarterly, rather than semiannual, compliance reporting.

This proposed rule would reduce the excess emissions reporting requirements for all instrumental monitoring except PM CPMS. Instead of reporting only excess emissions, EGU owners or operators would be required to report all of the 30- (or 90-)

boiler operating day rolling average emission rates on a quarterly basis for EGUs that use CEMS or sorbent trap monitoring systems to demonstrate compliance with MATS. This represents a shift away from exception-only reporting to continuous compliance reporting.

As previously noted, new HCl CEMS reporting and recordkeeping requirements would be added to appendix B for the certification and QA tests required by PS 18 and QA Procedure 6. These proposed requirements are not expected to increase the burden because multiple compliance options are available for demonstrating compliance with HCl emission limits (e.g., HCl quarterly stack testing or HCl monitoring using Fourier Transform Infrared (FTIR) CEMS in accordance with PS 15, and SO₂ monitoring as a surrogate for HCl). Therefore, if EGU owners or operators anticipate that implementing PS 18 and Procedure 6 as a means of demonstrating compliance determination is too burdensome, other existing compliance determination approaches may be used.

D. What is the purpose of these proposed amendments?

These amendments are being proposed to revise and streamline the electronic reporting requirements of MATS; to increase transparency of MATS emissions data; to reduce the reporting burden via the use of a single reporting system; to amend the reporting requirements for PM CEMS, PM CPMS, Hg CEMS,

and Hg sorbent trap monitoring systems; to specify the recordkeeping and reporting requirements associated with the use of PS 18 and Procedure 6 for HCl CEMS; and to make minor clarifications and corrections to the HCl and Hg monitoring provisions.

E. What specific amendments to subpart UUUUU would be made by this proposed rule?

The proposed amendments are discussed in detail in the paragraphs below.

1. Proposed Revisions to Reporting Requirements in §63.10031.

The reporting section of MATS, i.e., §63.10031, would be amended as follows:

(a) ECMPs would be designated as the exclusive data system for MATS reporting.

(b) The interim PDF reporting process described in §63.10031(f) would end on December 31, 2017, to allow for an orderly transition away from the interim process at a calendar year boundary. Compliance with the emissions and operating limits during the interim period would be assessed based on the various PDF report submittals, Notifications of Compliance Status, and the data from Hg, HCl, HF, or SO₂ CEMS or Hg continuous sorbent trap monitoring reported through the ECMPs Client Tool (see §63.10031(e)(1)).

(c) Although the interim PDF reporting process described in §63.10031(f) would be discontinued as of December 31, 2017, in order to properly close out that process, PDF submittals would still be accepted for reports required under paragraph (f) introductory text, (f) (1), (f) (2), or (f) (4) if the deadlines for submitting those reports extend beyond that date. As an example, the last semiannual report to use the interim PDF reporting process would be the report covering the period July 1 to December 31, 2017; such a report would be due by January 31, 2018.

(d) Revised paragraph (f) (2) would require quarterly reporting of all 30- or 90-boiler operating day rolling average emission rates for units monitoring Hg, HCl, HF, and/or SO₂ emissions, and for units using emissions averaging, starting with a report covering the first quarter of 2018. This change would be consistent with the requirement in §63.10031(f) (2) of the current rule for quarterly reporting of 30-boiler operating day rolling averages for EGUs using PM CEMS, PM CPMS, and approved HAP metals CEMS.

(e) Until the interim reporting period ends on December 31, 2017, the 30-boiler operating day rolling averages for PM CEMS, PM CPMS, and approved HAP metals CEMS would continue to be reported quarterly in PDF format, in accordance with §63.10031(f) (2). Then, starting with the first quarter of 2018,

the 30- or 90-boiler operating day rolling averages for all parameters (including Hg, HF, HCl, and SO₂) would be reported in XML format in quarterly compliance reports, as discussed in section II.E.1.j of this preamble, below.

(f) Paragraphs (a)(1), (2), and (5) in revised §63.10031 of this proposed rule would clarify the electronic reporting requirements for the Hg, HCl, HF, SO₂, and auxiliary CMS.

Specifically:

(i) Paragraph (a)(1) would require the electronic reporting requirements of appendix A to be met if Hg CEMS or sorbent trap monitoring systems are used.

(ii) Paragraph (a)(2) would require the electronic reporting requirements of appendix B to be met, with one important qualification, if HCl or HF monitoring systems are used. Until January 1, 2018, if PS 18 in part 60, appendix B, is used to certify an HCl monitor and Procedure 6 in part 60, appendix F, is used for on-going QA of the monitor, EGU owners or operators would report temporarily only data that the existing programming of ECMPS is able to accommodate, i.e., hourly HCl emissions data and the results of daily calibration drift tests and RATAs; records would be kept of all of the other required certification and QA tests and supporting data. The reason for this temporary, limited reporting is that PS 18 and Procedure 6 were not published until July 7, 2015; therefore, it was not possible to

specify recordkeeping and reporting requirements for them in the original version of appendix B. Now that PS 18 and Procedure 6 have been finalized, this proposed rule would add the necessary recordkeeping and reporting requirements, and the interim reporting for HCl would be discontinued as of December 31, 2017 (for further discussion, see section II.E.4 of this preamble).

(iii) Paragraph (a)(5) would clarify the electronic reporting requirements for the SO₂ CEMS and the auxiliary monitoring systems.

(iv) Paragraph (f)(3) would be removed and reserved for consistency with the changes described in items (i) through (iii), immediately above.

(g) Paragraphs (b)(2) and (4) would be revised to remove references to postmark dates for submittal of semiannual compliance reports; these reports currently are, and would continue to be, submitted electronically through ECMPS in PDF format.

(h) The provision in paragraph (b)(5) which would allow affected EGU owners or operators to follow alternate submission schedules for semiannual compliance reports would be removed. The uniform submission schedule described in §63.10031(b)(1)-(4) would be required for all affected EGUs, so that compliance with this reporting requirement can easily be tracked.

(i) Revised paragraph (b) (5) would further require EGU owners or operators to discontinue submission of semiannual compliance reports when the interim PDF reporting period ends; the final semi-annual report would cover the period from July 1 through December 31, 2017.

(j) EGU owners or operators would submit quarterly compliance reports in lieu of the semiannual reports, starting with reports covering the first calendar quarter of 2018 (see §63.10031(g)). The quarterly compliance reports plus attachments would consolidate other reports that were originally required to be submitted separately on different time tracks, i.e., performance stack test results and quarterly reports of 30- and 90-boiler operating day rolling averages. The quarterly compliance reports would be due within 60 days after the end of each calendar quarter; we believe that this allows sufficient time to receive the results of tests performed at or near the end of the quarter. Each quarterly compliance report submitted would include the applicable data elements listed in sections 2 through 13 of proposed appendix E to subpart UUUUU of 40 CFR part 63.

The operator's MATS compliance strategy would determine which appendix E data elements would be included in each quarterly compliance report. If continuous emission monitoring is used to demonstrate compliance on a 30-boiler operating day

rolling average basis, the quarterly compliance report would include all of the 30-day averages calculated during the quarter. If emissions averaging is used, EGU owners or operators would report all of the 30- or 90-group boiler operating day weighted average emission rates (WAERs) calculated during the quarter. If periodic stack testing for compliance is performed (including 30-boiler operating day Hg Low Emitting Electric Utility Steam Generating Unit (LEE) tests), the EGU owner or operator would report a summary of each test completed during the calendar quarter and indicate whether the test has a special purpose (i.e., if it were to be used to establish LEE status or for emissions averaging).

Note that for all cases in which the EPA reference methods supported by the ERT are used to perform particular stack tests, the EGU owner or operator would be required to provide the data elements specific to the test method(s) used, in XML format, as an attachment to the compliance report. The data elements common to all tests and specific data elements for the various reference methods are listed in sections 17 through 21 of proposed appendix E. This information is already required by MATS, just in another format, and is essential for ensuring that performance tests are conducted properly; confirming the reported values; and developing emission factors, as well as other Agency purposes.

The quarterly compliance reports would retain and incorporate the following features of the semiannual compliance reports: (1) the date of the last boiler tune-up; (2) the date of the last burner inspection; (3) monthly fuel usage data; (4) malfunction information; (5) reporting of deviations; and (6) emergency bypass information.

The quarterly compliance reports move away from traditional excess emissions reporting for those EGU owners or operators who choose to use Hg, SO₂, HF, or HCl CEMS or sorbent trap monitoring systems to demonstrate compliance. Currently, those EGU owners or operators must provide the excess emissions and monitor downtime data described in §63.10(e)(3)(v) and (vi) in PDF format as part of their semiannual compliance reports. The information to be reported includes, among other things, identification of excess emissions periods, identification of periods when the monitoring was inoperative or out of control, the reasons for the excess emission and monitor downtime periods, the nature and cause of any malfunctions, corrective actions or preventative measures taken, description of repairs or adjustments to inoperative or out-of-control CMS, the total amount of EGU operating time in the reporting period, and the excess emissions and monitor downtime percentages. As explained above, the proposed amendments would, instead, require all of the 30- (or 90-) boiler operating day rolling averages or WAERs

to be included in the quarterly reports. Note, however, that some excess emissions information would still be included in the compliance reports. Specifically, the proposed revisions to §63.10031(d) would require reporting of the range of dates and the cause (if known) of each excess emission, as defined in §63.10042, and any corrective actions taken. For Hg, HCl, HF, PM, and SO₂ CEMS and for sorbent trap monitoring systems and PM CPMS, the percent monitor availability (PMA) at the end of the quarter and the lowest hourly PMA recorded during the quarter would also be reported. All CMS except for PM CPMS would be subject to these revised excess emissions reporting requirements, which would take effect in 2018. EGU owners or operators using PM CPMS would continue to report the information in §63.10(e)(v) and (vi) in PDF format, as an attachment to the quarterly compliance report.

Finally, if an EGU relies on paragraph (2) of the definition of startup given in §63.10042, the information in §63.10020(e), which is referenced in §63.10031(c)(5), would be reported quarterly in PDF format, as an attachment to the compliance report. Note that the EPA understands that reporting this startup data in PDF format is not as transparent and user-friendly as it could be; therefore, we solicit comment on whether this information should be made more transparent and user-friendly. If so, we request comment on possible techniques

to achieve those ends, e.g., by requiring the data to be submitted in XML format.

We believe that consolidating information in quarterly compliance reports as described above, rather than requiring separate submittals of stack test results, 30- (or 90-) boiler operating day rolling average compliance reports, and semiannual reports that come in separately at different times during the year, would greatly simplify reporting and make it easier for inspectors and auditors to assess compliance with the standards. Also, quarterly, as opposed to semiannual, reporting would be advantageous because it would shorten significantly the interval between the time that a deviation or excess emission occurs and the time that the regulatory authority is made aware of the deviation or excess emission. Draft reporting instructions for the quarterly compliance reports are provided in the rule docket and on the Clean Air Markets Division (CAMD) Web site, for consideration.

(k) The requirements in §63.10031(f)(1) and (6) to submit PDF reports of Hg, HCl, HF, and SO₂ RATAs, and RRAs and RCAs of PM CEMS would be discontinued for tests completed after December 31, 2017. For RATAs, RRAs and RCAs completed on or after January 1, 2018, the ECMPS Client Tool would be used to report the test results, as required under appendix A and/or B and/or C and/or 40 CFR part 75. The ECMPS Client Tool would also be used to

attach the XML and PDF files that contain the applicable data elements and other information from sections 17 through 22 of proposed appendix E, which provide details of the reference method(s) used for each test, along with the electronic test results.

(1) Note that one additional PDF submittal would be required prior to January 1, 2018, and several other PDF submittals would still be required on and after January 1, 2018. Specifically, the following information would have to be provided in PDF format:

(i) A detailed report of the PS 11 correlation test, if the EGU owner or operator elected to use a certified PM CEMS to monitor PM emissions continuously, and recording valid data from the CEMS had begun prior to January 1, 2018. This report is due no later than December 31, 2017;

(ii) Any Notifications of Compliance Status issued on or after January 1, 2018;

(iii) The excess emissions summary report described in §63.10(e)(3)(v) and (vi), if the EGU owner or operator elected to demonstrate compliance using a PM CPMS. As previously noted, this report would be submitted as an attachment to the quarterly compliance report.

(iv) For EGUs relying on paragraph (2) of the definition of startup given in §63.10042, the parametric data and other

information in §63.10020(e), for startup and shutdown incidents. This information is currently provided in PDF format as part of the semiannual compliance report. As previously noted, starting with a report covering the first quarter of 2018, the data would be submitted as an attachment to the quarterly compliance report.

(v) For each test described in sections 14.1 through 14.3 of proposed appendix E, section 22 of appendix E would require the EGU owner or operator to provide additional information that is ordinarily included in test reports, but is incompatible with electronic reporting, such as diagrams showing the location of the test site and the sampling points, laboratory calibrations of source sampling equipment, calibration gas cylinder certificates, stack testers' credentials, etc. For performance stack tests, this information would be provided as an attachment to the quarterly compliance report. For RATAs, RRAs, RCAs, and PM CEMS correlations, the information would be provided along with the electronic (XML) test summary required under appendix A, B, C, or part 75 for SO₂ RATAs.

(m) To accommodate the required PDF reports, the applicable data elements in §63.10031(f)(6)(i) through (xii) would be entered into the ECMPS Client Tool at the time of submission of each PDF file.

(n) Regarding performance stack test submittals, this proposed rule, as explained in item (j) above, would require a summary of the test results to be included in the quarterly compliance report, with detailed information about the reference method(s) used as an attachment to the quarterly report, in XML format. Similarly, the QA test submittals described in item (k) above would require an electronic summary of the test results to be generated, accompanied by a separate XML file that includes detailed information about the reference method(s) used. As proposed, the ECMPS Client Tool would be used to submit all of this information to the EPA, although ECMPS would not evaluate the detailed reference method information. Instead, those data would be transmitted directly to the Central Data Exchange where they could be further processed and evaluated. ECMPS would, however, perform electronic checking of the summarized RATA, RRA, and RCA results in a manner that is consistent with the way that QA test results are checked under the Acid Rain Program, and ECMPS would use the results of those evaluations for its assessment of the quality-assured status of the hourly Hg, HCl, HF, SO₂, or PM emissions data. In addition, ECMPS would perform basic checks of the information in the quarterly compliance reports, e.g., checking for completeness and proper formatting, but would leave compliance assessment to others. The EPA intends for these data submissions to work together in a complimentary

fashion to enable meaningful compliance determinations. It would be essential for any problems with the data that are identified by the reviewers to be communicated to all involved and resolved appropriately. For example, if, for a particular RATA, a review of the detailed reference method data shows that the reference method was not done properly, the RATA would be invalidated.

This would necessitate invalidation of the hourly emissions data until a valid RATA was performed and passed, which would require resubmission of one or more quarterly emissions reports, recalculation of 30-day compliance averages, and possibly resubmission of a quarterly compliance report.

(o) Note that the existing ERT can produce a single XML file that includes all of the detailed reference method information necessary for the stack test and QA test reports described above. Therefore, there are two ways that the XML file could be generated that meet the reference method data submission requirements in sections 17-21 of appendix E; either use the ERT itself or another program that provides the data in an appropriate XML file format. In view of this, we solicit comment on whether submitting the detailed reference method data to ECMPS will actually reduce the reporting burden on EGU owners or operators, or whether submitting the data directly to CEDRI would be preferable.

2. Proposed Revisions to Rule Texts Associated with Reporting Requirements in §63.10031.

The proposed revisions to §63.10031 necessitate changes to other sections of the rule to ensure that the rule is internally consistent. The affected rule sections are as follows:

(a) Revised §63.10011(e) would require Notifications of Compliance Status for the initial and subsequent compliance demonstrations to be submitted in accordance with §63.10030(e) and §63.10031(f) (4) and proposed §63.10031(h). This change is necessary to include all initial and subsequent compliance demonstration submissions. Both the interim reporting process described in §63.10031(f) (4) and the proposed on-going reporting requirement in §63.10031(h) require these Notifications to be submitted in PDF format, through ECMPS.

(b) Section 63.10011(g) (3), §63.10021(h) (3) and (i), and three sentences in Table 3 to subpart UUUUU of 40 CFR part 63 (in Items 3 and 4) would be revised to be consistent with proposed §63.10031(i). For EGU owners or operators relying on paragraph (2) of the definition of startup in §63.10042, §63.10031(i) would retain the requirement for the parametric data and other information referenced in §63.10031(c) (5) to be included in the semiannual compliance reports, in PDF format, for startup and shutdown incidents that occur during the interim reporting period. However, in view of the proposed phase-out of the

semiannual compliance reports, for startup and shutdown incidents that occur during each subsequent calendar quarter, starting with the first quarter of 2018, the information referenced in §63.10031(c)(5) would be provided as a PDF attachment to the quarterly compliance report, due within 60 days after the end of the quarter.

(c) References to the EPA's ERT and the CEDRI interface would be removed from §63.10021(f) and replaced with a general statement requiring all applicable notifications and reports to be submitted through ECMPS.

(d) The introductory text of §63.10032(a) would be amended to include references to the recordkeeping required under proposed appendices C (for PM CEMS), D (for PM CPMS), and E (for the quarterly compliance reports, reference method test data elements, and other information). Also, in view of the move away from semiannual compliance reporting to quarterly reporting, the term "semiannual compliance report" in paragraph (a)(1) would be replaced with the more generic term "compliance report."

(e) Table 8 to subpart UUUUU of 40 CFR part 63 would be revised to be consistent with the amendments to §63.10031 and the proposed addition of appendices C, D, and E.

(f) Finally, the recordkeeping requirement for excess emissions in the 28th row of Table 9 to subpart UUUUU of 40 CFR part 63, would be clarified.

3. Proposed Revisions to Appendix A.

This proposed rule would make two corrections to the Hg monitoring provisions of appendix A. First, in the MATS Technical Corrections rule package, which was published on April 6, 2016 (see 81 FR 20172, April 6, 2016), there is language in section 4.1.1.5.2 of appendix A describing an alternate way to calculate and interpret RATA results when Hg emissions are less than 50 percent of the standard. This language was inadvertently carried over from the proposed rule and conflicts with the alternate relative accuracy specification in Table A-1 of the final rule. In view of this, we propose to delete that language. Second, at least one monitor vendor expressed confusion over an apparent inconsistency of the Hg RATA acceptance criteria in Table A-2 versus that in Table A-1. The vendor sought clarification of when the main 20-percent relative accuracy (RA) specification must be used and when the alternate specification applies. In Table A-2, it appears that the 20-percent RA specification only applies when the average CMS value (C_{avg}) is \geq 2.5 micrograms per standard cubic meter ($\mu\text{g}/\text{scm}$) while the 20-percent RA specification in Table A-1 may be applied at any reference method concentration level and the alternate specification applies only when the average reference method value is $< 2.5 \mu\text{g}/\text{scm}$. We acknowledge this inconsistency and propose to amend Table A-2 be consistent with Table A-1 and to

clarify that the main RA specification may be applied at any concentration.

4. Proposed Revisions to Appendix B.

For affected sources desiring to continuously monitor HCl emissions, the original version of appendix B required the monitoring system to be certified according to PS 15 in appendix B to 40 CFR part 60. However, PS 15 applies only to FTIR monitoring systems; therefore, the use of other viable HCl monitoring technologies was excluded. In view of this, the EPA regarded the requirement to use PS 15 exclusively as a temporary measure, until a technology-neutral performance specification for HCl monitors could be developed and published. In section 3.1 of appendix B, the Agency stated its intention to publish such a PS in the near future together with appropriate on-going QA requirements and to amend appendix B to accommodate their use. The required PS, (PS 18 in 40 CFR part 60, appendix B), and the on-going QA test requirements (Procedure 6 in 40 CFR part 60, appendix F) were published on July 7, 2015 (see 80 FR 38628, July 7, 2015).

Now that technology-neutral certification and QA test requirements for HCl monitors have been promulgated, EGU owners or operators are free to use any viable HCl monitoring technology that can meet the PS. However, in order for ECMPS to accommodate all of the required tests, additional time must be

allotted for software development. In view of this, revised paragraph (a)(2) of §63.10031 would require only information that is compatible with the existing programming of ECMPS to be reported electronically through December 31, 2017; this includes hourly HCl emissions data and the results of daily calibration drift tests and RATAs. In the interim, EGU owners or operators would be required to keep records of all of the other certification and QA tests.

This proposed rule would revise the title to section 2.3 of appendix B by deleting the reference to FTIR-only monitoring systems. In addition, this proposed rule would amend the recordkeeping and reporting sections of appendix B (i.e., sections 10 and 11) by specifying the data elements that must be recorded and reported electronically for each of the tests required by PS 18 and Procedure 6. The proposed revisions make a clear distinction between the tests required for FTIR monitors that are following PS 15 and the test requirements of PS 18 and Procedure 6. Some of the tests in PS 18 and Procedure 6 are similar to tests for which ECMPS programming exists. For example, the "measurement error test" required for initial certification of the HCl monitor is structurally the same as a 40 CFR part 75 linearity check. However, other tests have no counterpart in 40 CFR part 75 CEMS requirements and will require special software development and reporting instructions. EGU

owners or operators would report RATAs of the HCl CEMS that are completed on and after January 1, 2018, and the applicable data elements in proposed appendix E in XML format for each test run, along with the electronic summary of results required under section 11 of appendix B. EGU owners or operators would also provide the information required in section 22 of proposed appendix E in PDF format for each RATA.

Because a technology-neutral PS for HCl CEMS was not available prior to April 16, 2015 (which was the compliance date for many of the existing EGUs), EGU owners or operators interested in monitoring HCl either had to use an FTIR system and follow PS 15 or implement another compliance option (e.g., quarterly emission testing) while awaiting publication of PS 18 and Procedure 6. In light of this, the EPA proposes to revise and restructure section 11.5.1 of appendix B to clarify when electronic reporting of hourly HCl emissions data begins. There are two possibilities. In the first case, the monitor would be used for the initial compliance demonstration. This could either apply to a certified FTIR monitor following PS 15 or to a certified monitor following PS 18, if the owner or operator of the EGU received an extension for the compliance date. In this case, EGU owners or operators would begin reporting hourly HCl emissions through ECMPS with the first operating hour of the initial compliance demonstration. In the second case, another

option, such as stack testing, would be used for the initial compliance demonstration and continuous monitoring would be implemented later on. In that case, EGU owners or operators would begin reporting hourly HCl emissions reporting through ECMPs with the first operating hour after successfully completing all required certification tests of the CEMS. In either case, the first required quarterly emissions report would be for the calendar quarter in which emissions reporting begins.

5. Proposed Addition of Appendix C.

A new appendix, i.e., appendix C, would be added to subpart UUUUU of part 63. Appendix C sets forth the continuous monitoring and reporting requirements for filterable PM. Appendix C is structurally similar to appendices A and B, but there are certain notable differences. Appendix C includes provisions for installation and certification of the PM CEMS, and for on-going QA of the data from the CEMS. The monitoring system would be certified according to PS 11 in 40 CFR part 60, appendix B, and for the on-going QA tests, Procedure 2 to 40 CFR part 60, appendix F would be required. The proposed frequencies for the QA tests and the rules for data validation are presented in Section 5 of appendix C. Note that in contrast with appendices A and B, the familiar QA operating quarter and grace period scheme would not apply to the on-going QA tests of the PM CEMS. Also, for technical reasons, the use of temporary like-

kind replacement PM analyzers and the conditional data validation provisions in §75.20(b)(3) would not be allowed. The proposed procedures for calculating the PM emission rates in units of the emission standard are found in section 6. These calculation methods are basically the same as those used for Hg monitoring systems and HCl and HF CEMS in appendices A and B. The proposed recordkeeping and reporting requirements are found in section 7. Proposed section 7.1 specifies that monitoring plan records and hourly records of operating parameters, PM concentration, diluent gas concentration, stack gas flow rate and moisture content, and PM emission rate must be kept. Sections 7.2.3 and 7.2.4, respectively, would require monitoring plan information and the results of certification, recertification, and QA tests to be reported electronically. Proposed section 7.2.5 requires quarterly electronic emissions reports to be submitted within 30 days after the end of each calendar quarter. All electronic reports would be submitted using the ECMPs Client Tool. However, electronic reporting of monitoring plan information, certification and on-going QA test results would not begin until January 1, 2018, to allow time for software development and beta testing. Until then, records of the required information and tests would be kept. For PM CEMS correlations, RRAs, and RCAs completed on and after January 1, 2018, the applicable reference method data elements in sections

17 through 21 of proposed appendix E would be reported in XML format for each test run, along with the electronic test summary required under section 7.2.4 of proposed appendix C. The information required in section 22 of proposed appendix E would also be provided in PDF format for each test. Reporting of hourly PM emissions data would begin either with the first operating hour after December 31, 2017, or the first operating hour after completion of the initial PM CEMS correlation test, whichever is later.

6. Proposed Addition of Appendix D.

A second new appendix, i.e., appendix D, would be added to subpart UUUUU of 40 CFR part 63. Appendix D sets forth the monitoring and reporting requirements for EGU owners or operators who elect to use a PM CPMS to demonstrate continuous compliance. Structurally, appendix D is similar to appendices A, B, and C, but it is much simpler. The criteria for system design and performance, the procedures for determining operating limits, data reduction, and compliance assessment, and certain recordkeeping requirements are not detailed in the appendix; rather, the applicable sections of the MATS rule are cross-referenced (see proposed sections 2.1 through 2.4, 3.1 introductory text, and section 3.1.1.1 of the appendix).

Proposed section 3.1.1.2 requires the ECMPMS Client Tool to be used to create and maintain an electronic monitoring plan.

The PM CPMS would be defined as a monitoring system with a unique system ID number. The monitoring plan would also include the current operating limit (with units of measure), the make, model, and serial number of the PM CPMS, the analytical principle of the monitoring system and monitor span and range information.

Operating parameter records would be required for each hour of operation of the affected EGUs, including the date and hour, the EGU or stack operating time, and a flag to identify exempt startup and shutdown hours. Hourly average PM CPMS output values would be reported for each hour in which a valid value of the output parameter is obtained, in units of milliamps, PM concentration, or other units of measure, including the instrument's digital signal output equivalent. A special code would be required to indicate operating hours in which valid data are not obtained. The percent monitor data availability would also be calculated according to §75.32.

Proposed sections 3.2.2 and 3.2.3, respectively, require notifications (to be provided in accordance with §63.10030) and electronic monitoring plan submittals at specified times. Proposed section 3.2.4 requires electronic quarterly reports to be submitted within 30 days after the end of each calendar quarter. Reporting of hourly responses from the PM CPMS would begin either with the first operating hour in the first calendar

quarter of 2018 or the first operating hour after completion of the initial stack test that establishes the operating limit, whichever is later. Each quarterly report would include a compliance certification with a statement by a responsible official that to the best of his or her knowledge, the report is true, accurate, and complete. In addition to the electronic quarterly reports, proposed section 3.2.5 requires the results of each performance stack test for PM that is used to establish an operating limit to be reported electronically in the relevant quarterly compliance report, in accordance with §63.10031(g). For PM tests completed on and after January 1, 2018, the data elements common to all tests in section 17 of proposed appendix E and the applicable reference method data elements (in sections 18 - 20) would be provided for each test run, in an XML report. This report would be submitted along with the quarterly compliance report. The additional information required in section 22 of proposed appendix E would also be reported for each test in PDF format as an attachment to the compliance report.

7. Proposed Addition of Appendix E.

A third new appendix, i.e., appendix E, would be added to subpart UUUUU of 40 CFR part 63. Sections 2 through 13 of proposed appendix E list the data elements that must be reported in XML format in the quarterly compliance reports that cover the

period beginning January 1, 2018, and are required under proposed §63.10031(g).

The MATS compliance strategy (e.g., whether the EGU owner or operator elects to perform periodic stack testing, continuous monitoring, or to use emissions averaging) would determine which data elements must be reported. As previously noted, draft reporting instructions for the quarterly compliance reports are found in the rule docket and on the CAMD Web site.

For each performance stack test that is completed on or after January 1, 2018 (including 30- or 90-boiler operating day Hg LEE tests), the data elements common to all tests in section 17 of proposed appendix E and the applicable reference method data elements (in sections 18 - 21) would be provided for each test run in an XML format. This report would be submitted along with the compliance report for the calendar quarter in which the test was completed.

For RATAs, PM CEMS correlations, RRAs, and RCAs that are completed on or after January 1, 2018, the data elements common to all tests in section 17 of proposed appendix E and the applicable reference method data elements (in sections 17 - 21) would be provided for each test run in an XML report. This report would be submitted along with the electronic test results reported under appendix A (for Hg system RATAs), appendix B (for HCl and HF system RATAs), appendix C (for correlation tests,

RRAs, and RCAs of a PM CEMS), and/or 40 CFR part 75 (for SO₂ system RATAs).

The information in section 22 of proposed appendix E would also be provided for each performance stack test, RATA, RRA, RCA, and PM CEMS correlation, in PDF format.

F. What are the incremental costs and benefits of this proposed action?

As mentioned below, while this proposed rulemaking would increase the frequency of compliance reports from semiannual to quarterly, the implementation of a single reporting system and consolidation of reporting would reduce the overall burden by at least 43,194 hours (per year) relative to the original rule. The estimated burden reduction would result in savings to regulated entities of \$4,229,162 in annualized capital or operation and maintenance costs.

III. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at <http://www2.epa.gov/laws-regulations/laws-and-executive-orders>.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was, therefore, not submitted to Office of Management and Budget (OMB) for review.

B. Paperwork Reduction Act (PRA)

The information collection activities in this proposed rule have been submitted for approval to the OMB under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 2137.06. You can find a copy of the ICR in the docket for this proposed rule, and it is briefly summarized here.

This action would not impose any additional information collection burden. Rather, it would reduce burden by requiring all of the essential data to be submitted to a single data system, rather than two systems, as was originally required. As previously discussed in this preamble, this proposed rule represents the second phase of a two-phased approach to achieve that objective. This action would streamline MATS reporting by consolidating a number of separate reports that are currently submitted on different time tracks into a single, quarterly compliance submittal. It would also increase data transparency and provide the public and regulatory authorities with access to more of the MATS data in XML format. No new continuous monitoring requirements would be imposed by this proposed action. Coal-fired EGUs that do not qualify for LEE status would

still be required to continuously monitor Hg emissions. The use of continuous monitoring would remain optional for all other parameters. The following is an example of how this proposed rule would streamline MATS reporting and reduce burden. Under the original rule, an owner or operator of a coal-fired EGU that elected: (1) to monitor PM and Hg continuously via CEMS; and (2) to perform quarterly HCl stack tests would have been required, for a typical calendar year, to submit four separate quarterly reports that include the 30-boiler operating day rolling averages for PM, four more quarterly stack test reports for HCl, two separate RATA reports for Hg and HCl, and two semiannual compliance reports, for a total of 12 reports. These reports would all have been submitted on different time tracks. In contrast, this proposed rule would require only six reports for the same compliance strategy, i.e., four quarterly compliance report submittals and two RATA reports; data giving details of the reference methods used for the stack tests and RATAs would be provided along with each of these reports. The 30-boiler operating day rolling PM averages would be included in the quarterly compliance reports, together with the summarized HCl stack test results.

Confidentiality: Any information submitted to the Agency for which a claim of confidentiality is made will be safeguarded according to the Agency policies set forth in title 40, chapter

1, part 2, subpart B - Confidentiality of Business Information (see 40 CFR part 2; 41 FR 36902, September 1, 1976; amended by 43 FR 40000, December 8, 1978; 43 FR 42251, September 20, 1978; 44 FR 17674, March 23, 1979).

Respondents/affected entities: The respondents are owners or operators of fossil fuel-fired EGUs. The United States Standard Industrial Classification code for respondents affected by the rule is 4911 (Electric Services). The corresponding North American Industry Classification System (NAICS) code is 221100 (Electric Power Generation, Transmission, and Distribution).

Respondent's obligation to respond: The respondents are obliged to respond to the applicable recordkeeping and reporting requirements of the MATS.

Estimated number of respondents: On average, over the next 3 years, approximately 1,252 existing respondents will be subject to the MATS emissions standards. It is estimated that an additional two respondents per year will also become subject. Therefore, the overall number of respondents expected in each of the next 3 years is 1,254.

Frequency of response: Respondents would be required to submit quarterly compliance reports using a single electronic data system (i.e., ECMPS). This represents a change from the requirement to report semiannual compliance reports. The total

annual response associated with this change would increase from 2,648 to 5,186. However, as illustrated in the example above, this increase in the number of annual responses would be offset to a great degree by requiring other reports that were originally required to be submitted separately to be incorporated into, or submitted together with, the quarterly compliance reports.

Total estimated burden: Although this proposed rulemaking increases the frequency of compliance reports from semiannual to quarterly, the implementation of a single reporting system and consolidation of reporting is estimated to reduce the overall burden by at least 43,194 hours (per year) relative to the original rule which required regulated entities to submit compliance data through 2 separate electronic systems in a piecemeal fashion. The estimated reduction in burden is based principally on the assumption that each quarterly compliance submittal required approximately 30 hours to prepare, which is 45 hours less than the original estimate for preparing a semiannual compliance report. Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The reduction in burden associated with this proposed rulemaking would result in savings to regulated

entities of \$4,229,162 in annualized capital or operation and maintenance costs.

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 the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

Submit your comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden to the EPA using the docket identified at the beginning of this proposed rule. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs via email to ORIA_submissions@omb.eop.gov, Attention: Desk Officer for the EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after receipt, OMB must receive comments no later than **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. The EPA will respond to any ICR-related comments in the final rule.

C. Regulatory Flexibility Act (RFA)

I certify that this proposed action will not have a significant economic impact on a substantial number of small

entities under the RFA. This action will not impose any requirements on small entities.

The RFA generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions. For purposes of assessing the impact of this final action on small entities, small entity is defined as: (1) A small business that is an electric utility producing 4 billion kilowatt-hours or less as defined by NAICS codes 221122 (fossil fuel-fired electric utility steam generating units) and 921150 (fossil fuel-fired electric utility steam generating units in Indian country); (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; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field. In determining whether a rule has a significant economic impact on a substantial number of small entities, the impact of concern is any significant adverse economic impact on small entities, since the primary purpose of the regulatory

flexibility analyses is to identify and address regulatory alternatives ``which minimize any significant economic impact of the rule on small entities.'' 5 U.S.C. 603 and 604. Thus, an agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule. This proposed rule will not impose any requirements on small entities, and no small entities are expected to incur annualized costs as a result of the amendments. We have determined that the amendments will not result in any ``significant'' adverse economic impact for small entities. These proposed amendments would not create any new requirements or burdens, and no costs to small entities would be associated with these proposed amendments.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local or tribal governments or the private sector.

E. Executive Order 13132: Federalism

This proposed action does not have federalism implications. It will not have substantial direct effects on the states, on

the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

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

This proposed action does not have tribal implications as specified in Executive Order 13175. The proposed amendments would impose no requirements on tribal governments. Thus, Executive Order 13175 does not apply to this proposed action.

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

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of "covered regulatory action" in section 2-202 of the Executive Order. This proposed action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This proposed action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

This rulemaking does not involve technical standards.

J. Executive Order 12898: Federal Actions to Address
Environmental Justice in Minority Populations and Low-Income
Populations

The EPA believes that this proposed action does **not** have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

List of Subjects in 40 CFR Part 63

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

Dated: August 23, 2016.

Gina McCarthy,
Administrator.

For the reasons stated in the preamble, EPA proposes to amend 40 CFR part 63 to read as follows:

**PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS
FOR SOURCE CATEGORIES**

1. The authority citation for part 63 continues to read as follows:

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

**Subpart UUUUU—National Emission Standards for Hazardous Air
Pollutants: Coal- and Oil-Fired Electric Utility Steam
Generating Units**

2. Section 63.10011 is amended by revising paragraph (g) (3) to read as follows:

**§63.10011 How do I demonstrate initial compliance with the
emissions limits and work practice standards?**

* * * * *

(g) * * *

(3) You must report the emissions data recorded during startup and shutdown. If you are relying on paragraph (2) of the definition of startup in §63.10042, then for startup and shutdown incidents that occur on or prior to December 31, 2017, you must also report the supplementary information referenced in §63.10031(c) (5) in the semiannual compliance report. For startup and shutdown incidents that occur on or after January 1, 2018, you must provide the information referenced in §63.10031(c) (5)

in PDF format as an attachment to the quarterly compliance reports, in accordance with §63.10031(i).

* * * * *

3. Section 63.10021 is amended by revising paragraphs (e) (9), (f), (h) (3), and (i) to read as follows:

§63.10021 How do I demonstrate continuous compliance with the emission limitations, operating limits, and work practice standards?

* * * * *

(e) * * *

(9) Until January 1, 2018, report the dates of the initial and subsequent tune-ups electronically, in PDF format, in your semiannual compliance reports, as specified in §63.10031(f) (4) and (6), and, if requested by the Administrator, in hard copy, as specified in §63.10031(f) (5). After December 31, 2017, report the date of all tune-ups electronically in your quarterly compliance reports, in accordance with §63.10031(g) and section 10 of appendix E to this subpart. The tune-up report date is the date when tune-up requirements in paragraphs (e) (6) and (7) of this section are completed.

(f) You must submit the applicable reports and notifications required under §63.10031(a) through (l) to the Administrator electronically, using EPA's Emissions Collection and Monitoring Plan System (ECMPS) Client Tool.

* * * * *

(h) * * *

(3) You must report the emissions data recorded during startup and shutdown. For startup and shutdown incidents that occur on or prior to December 31, 2017, you must also report the supplementary information in §63.10031(c)(5) in the semiannual compliance report. For startup and shutdown incidents that occur on and after January 1, 2018, the applicable information in §63.10031(c)(5) shall be provided quarterly, in PDF format, in accordance with §63.10031(i).

* * * * *

(i) You must provide reports concerning activities and periods of startup and shutdown that occur on or prior to December 31, 2017, in accordance with §63.10031(c)(5), in the semiannual compliance report. For startup and shutdown incidents that occur on and after January 1, 2018, the applicable information in §63.10031(c)(5) shall be provided quarterly, in PDF format, in accordance with §63.10031(i).

4. Section 63.10031 is amended by:

a. Revising paragraphs (a), (b), (c)(5)(iii), (d), (e), (f) introductory text, and (f)(1) and (2);

b. Removing and reserving paragraph (f)(3);

c. Revising paragraphs (f)(4), (f)(6) introductory text, (f)(6)(vii) and (xi), and (g); and

d. Adding paragraphs (h), (i), (j), (k), and (l).

The revisions and additions read as follows:

§63.10031 What reports must I submit and when?

(a) You must submit each report in this section that applies to you.

(1) If you are required to (or elect to) monitor Hg emissions continuously, you must meet the electronic reporting requirements of appendix A to this subpart.

(2) If you elect to monitor HCl and/or HF emissions continuously, you must meet the electronic reporting requirements of appendix B to this subpart. Notwithstanding this requirement, if you opt to certify your HCl monitor according to Performance Specification 18 in appendix B to part 60 of this chapter and to use Procedure 6 in appendix F to part 60 of this chapter for on-going QA of the monitor, then, on and prior to December 31, 2017, report only hourly HCl emissions data and the results of daily calibration drift tests and RATAs performed prior to that date; keep records of all of the other required certification and QA tests.

(3) If you elect to monitor filterable PM emissions continuously, you must meet the electronic reporting requirements of appendix C to this subpart. Electronic reporting of hourly PM emissions data shall begin with the later of: the first operating hour on or after January 1, 2018; or the first

operating hour after completion of the initial PM CEMS correlation test.

(4) If you elect to demonstrate continuous compliance using a PM CPMS, you must meet the electronic reporting requirements of appendix D to this subpart. Electronic reporting of the hourly PM CPMS output shall begin with the later of: the first operating hour on or after January 1, 2018; or the first operating hour after completion of the initial performance stack test that establishes the operating limit for the PM CPMS.

(5) If you elect to monitor SO₂ emission rate continuously as a surrogate for HCl, you must use the ECMPS Client Tool to submit the following information to EPA (except where it is already required to be reported or has been previously provided under the Acid Rain Program or another emissions reduction program that requires the use of part 75 of this chapter):

(i) Monitoring plan information for the SO₂ CEMS and for any additional monitoring systems that are required to convert SO₂ concentrations to units of the emission standard, in accordance with §§75.62 and 75.64(a)(4) of this chapter;

(ii) Certification, recertification, quality-assurance, and diagnostic test results for the SO₂ CEMS and for any additional monitoring systems that are required to convert SO₂ concentrations to units of the emission standard, in accordance with §75.64(a)(5) of this chapter; and

(iii) Quarterly electronic emissions reports. You must submit an electronic quarterly report within 30 days after the end of each calendar quarter, starting with a report for the calendar quarter in which the initial 30 boiler operating day performance test begins. Each report must include the following information:

(A) The applicable operating data specified in §75.57(b) of this chapter;

(B) An hourly data stream for the unadjusted SO₂ concentration (in ppm), and separate unadjusted hourly data streams for the other parameters needed to convert the SO₂ concentrations to units of the standard. (Note: If a default moisture value is used in the emission rate calculations, an hourly data stream is not required for moisture; rather, the default value must be reported in the electronic monitoring plan);

(C) An hourly SO₂ emission rate data stream, in units of the standard (i.e., lb/mmBtu or lb/MWh, as applicable), calculated according to §63.10007(e) and (f)(1), rounded to 3 significant figures, and expressed in scientific notation;

(D) The results of all required daily quality-assurance tests of the SO₂ monitor and the additional monitors used to convert SO₂ concentration to units of the standard, as specified in appendix B to part 75 of this chapter;

(E) A compliance certification, which includes a statement, based on reasonable inquiry of those persons with primary responsibility for ensuring that all SO₂ emissions from the affected EGUs under this subpart have been correctly and fully monitored, by a responsible official with that official's name, title, and signature, certifying that, to the best of his or her knowledge, the report is true, accurate, and complete. You must submit such a compliance certification statement in support of each quarterly report.

(b) You must submit semiannual compliance reports according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.9984 or, if applicable, the extended compliance date approved under §63.6(i)(4), and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your affected source in §63.9984.

(2) The first compliance report must be submitted electronically no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source

in §63.9984 or, if applicable, the extended compliance date approved under §63.6(i)(4).

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be submitted electronically no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) The final semiannual compliance report shall cover the reporting period from July 1, 2017 through December 31, 2017. Quarterly compliance reports shall be submitted thereafter, in accordance with paragraph (g) of this section, starting with a report covering the first calendar quarter of 2018.

(c) * * *

(5) * * *

(iii) If you choose to use CEMS for compliance purposes, include hourly average CEMS values and hourly average flow rates. Use units of milligrams per cubic meter for PM CEMS, micrograms per cubic meter for Hg CEMS, and ppmv for HCl, HF, or SO₂ CEMS. Use units of standard or actual cubic feet per hour on a wet basis for flow rates.

* * * * *

(d) (1) Prior to January 1, 2018, in the semiannual compliance reports described in paragraph (c) of this section, you must include in the report the excess emissions and monitor downtime information required in § 63.10(e)(3)(v) and (vi) for EGUs whose owners or operators rely on a CMS to comply with an emissions or operating limit.

(2) Beginning on January 1, 2018, if you own or operate an EGU that relies on a CMS to demonstrate compliance, except as otherwise provided in paragraph (d)(3) of this section, you must include in your quarterly compliance report the following information for any excess emission(s) that occurred during the calendar quarter; if there were no excess emissions, you must include a statement to that effect in the compliance report:

(i) The date (or, if applicable, the range of dates) on which each excess emission (as defined in §63.10042) occurred;

(ii) The cause of the excess emission (if known);

(iii) A description of any corrective actions taken; and

(iv) If there were any malfunctions or emergency bypass incidents during the reporting period, include the number, duration, and a brief description of each type of malfunction or bypass event that occurred and that caused (or may have caused) any applicable emissions limitation to be exceeded.

(3) If you rely on a PM CPMS to demonstrate compliance with an operating limit, you must continue to provide the information

in paragraph (d) (1) of this section as a quarterly PDF submittal, in accordance with paragraph (k) of this section.

(e) Each affected source that has obtained a Title V operating permit pursuant to part 70 or part 71 of this chapter must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a) (3) (iii) (A) or 40 CFR 71.6(a) (3) (iii) (A). If an affected source submits a semiannual compliance report pursuant paragraphs (c) and (d) of this section, or two quarterly compliance reports covering the appropriate calendar half pursuant to paragraph (g) of this section, along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a) (3) (iii) (A) or 40 CFR 71.6(a) (3) (iii) (A), and the compliance report(s) includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report(s) satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of the compliance report(s) does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(1) Prior to January 1, 2018, compliance with the emission limits and/or operating limits in this subpart shall be assessed based on information provided in the applicable reports and

notifications described in paragraphs (a), (f), and (j) of this section.

(2) On and after January 1, 2018, the interim PDF reporting period described in paragraph (f)(6) of this section shall be discontinued and compliance with the emissions and operating limits of this subpart shall be assessed based on information provided in:

(i) The information described in paragraphs (g), (i), and (k) of this section;

(ii) The applicable electronic reports required under paragraphs (a)(1) through (5) of this section; and

(iii) Notifications of Compliance Status, in accordance with paragraph (h) of this section.

(f) For each performance stack test completed prior to January 1, 2018 (including 30- boiler operating day Hg LEE demonstration tests), you must submit a PDF test report in accordance with paragraph (f)(6) of this section, no later than 60 days after the date on which the testing is completed.

(1) For each relative accuracy test audit (RATA) of an Hg, HCl, HF, or SO₂ monitoring system completed prior to January 1, 2018, and for each relative response audit (RRA) and each response correlation audit (RCA) of a PM CEMS completed prior to that date, you must submit a PDF test report in accordance with

paragraph (f) (6) of this section, no later than 60 days after the date on which the test is completed.

(2) If, for a particular EGU or a group of EGUs serving a common stack, you have elected to demonstrate compliance using a PM CEMS, an approved HAP metals CEMS, or a PM CPMS, you must submit quarterly PDF reports in accordance with paragraph (f) (6) of this section, which include all of the 30- boiler operating day rolling average emission rates derived from the CEMS data or the 30- boiler operating day rolling average responses derived from the PM CPMS data (as applicable). Each quarterly report is due within 60 days after the reporting periods ending on March 31st, June 30th, September 30th, and December 31st. Submission of these quarterly reports in PDF format shall end with the report that covers the fourth calendar quarter of 2017. Beginning with the first calendar quarter of 2018, the compliance averages shall no longer be reported separately, but shall be incorporated into the quarterly compliance reports described in paragraph (g) of this section. In addition to the compliance averages for PM CEMS, PM CPMS, and/or HAP metals CEMS, the quarterly compliance reports described in paragraph (g) of this section must also include the rolling average emission rates for Hg, HCl, HF, and/or SO₂, if you have elected to (or are required to) continuously monitor these pollutants. Further, if your EGU or common stack is in an averaging plan,

your quarterly compliance reports must identify all of the EGUs or common stacks in the plan and must document the 30- or 90-group boiler operating day rolling weighted average emission rates (WAERs) for the averaging group.

(3) [Reserved]

(4) You must submit semiannual compliance reports as required under paragraphs (b) through (d) of this section, ending with a report covering the semiannual period from July 1 through December 31, 2017, and Notifications of Compliance Status as required under §63.10030(e), in PDF format. Quarterly compliance reports shall be submitted in XML format thereafter, in accordance with paragraph (g) of this section, starting with a report covering the first calendar quarter of 2018.

* * * * *

(6) All reports and notifications described in paragraphs (f) introductory text, (f)(1), (f)(2), and (f)(4) of this section shall be submitted to the EPA in the specified format and at the specified frequency using the ECMPS Client Tool. Each PDF version of a performance stack test report, CEMS RATA report, RRA report, and RCA report must include sufficient information to assess compliance and to demonstrate that the reference method testing was done properly. The following data elements must be entered into the ECMPS Client Tool at the time of submission of each PDF file:

* * * * *

(vii) An indication of the type of PDF report or notification being submitted;

* * * * *

(xi) The date the performance test was conducted (if applicable) and the test number (if applicable);

* * * * *

(g) Starting with a report for the first calendar quarter of 2018, you must use the ECMPS Client Tool to submit quarterly electronic compliance reports. The compliance reports are due no later than 60 days after the end of each calendar quarter. Each compliance report shall include the applicable data elements in sections 2 through 13 of appendix E to this subpart. For each performance stack test in the compliance report, provided that the testing was conducted using a method (or methods) supported by the ERT and identified on the ERT website, you must submit an XML file that includes the applicable data elements in sections 17 through 21 of appendix B to this subpart and a PDF attachment that includes the information in section 22 of appendix E to this subpart (see https://www3.epa.gov/ttn/chief/ert/ert_info.pdf).

(h) On and after January 1, 2018, all required Notifications of Compliance Status shall be submitted in accordance with §63.9(h) (2) (ii), in PDF format, using the ECMPS

Client Tool. The applicable data elements in paragraphs (f)(6)(i) through (xii) of this section must be entered into ECMPs with each Notification.

(i) For startup and shutdown incidents that occur on or prior to December 31, 2017, you must include the information in §63.10031(c)(5) in PDF format, in the semiannual compliance report. For startup and shutdown event(s) that occur on or after January 1, 2018, you must use the ECMPs Client Tool to submit this information in PDF format, as an attachment to each quarterly compliance report starting with the report for the first calendar quarter of 2018. The applicable data elements in paragraphs (f)(6)(i) through (xii) of this section must be entered into ECMPs with each startup and shutdown report.

(j) If you elect to use a certified PM CEMS to monitor PM emissions continuously to demonstrate compliance with this subpart and have begun recording valid data from the PM CEMS prior to January 1, 2018, you must use the ECMPs Client Tool to submit a detailed report of your PS 11 correlation test in PDF format no later than December 31, 2017. The applicable data elements in paragraphs (f)(6)(i) through (xii) of this section must be entered into ECMPs with the PDF report.

(k) If you elect to demonstrate compliance using a PM CPMS, you must use the ECMPs Client Tool to submit the excess emissions summary report described in §63.10(e)(3)(v) and (vi)

in PDF format, as an attachment to the quarterly compliance report. The first report shall cover the period from January 1, 2018 through March 31, 2018. The applicable data elements in paragraphs (f)(6)(i) through (xii) of this section must be entered into ECMPS with each report submittal.

(1) You must meet the applicable reporting requirements of appendix E to this subpart.

5. Section 63.10032 is amended by revising paragraphs (a) introductory text and (a)(1) to read as follows:

§63.10032 What records must I keep?

(a) You must keep records according to paragraphs (a)(1) and (2) of this section. If you are required to (or elect to) continuously monitor Hg and/or HCl and/or HF and/or PM emissions, or if you elect to use a PM CPMS, you must keep the records required under appendix A and/or appendix B and/or appendix C and/or appendix D to this subpart. You must also keep records of all data elements and other information in appendix E to this subpart that apply to your compliance strategy.

(1) In accordance with §63.10(b)(2)(xiv), a copy of each initial notification or Notification of Compliance Status that you submitted (including all supporting documentation) and a copy of each compliance report that you submitted.

* * * * *

6. Table 3 to subpart UUUUU of part 63 is amended:

a. In entry "3", by revising the last sentence in paragraph

a.(1) and the last sentence in paragraph d.; and

b. In entry "4", in the fourth paragraph, by revising the last sentence.

The revisions read as follows:

TABLE 3 TO SUBPART UUUUU OF PART 63—WORK PRACTICE STANDARDS

* * * * *

If your EGU is . . .	You must meet the following . . .
* * *	* * * *
3.***	(a)* * * (1)* * * You must report the applicable information in §63.10031(c) (5) concerning startup periods that occur on or prior to December 31, 2017 in PDF format in the semiannual compliance report. For startup periods that occur on or after January 1, 2018, you must provide that information quarterly, in PDF format, according to §63.10031(i).
	* * * * *
	(d)* * * You must report the applicable information in §63.10031(c) (5) concerning startup periods that occur on or prior to December 31, 2017 in PDF format in the semiannual compliance report. For startup periods that occur on or after January 1, 2018, you must provide that information quarterly, in PDF format, according to §63.10031(i).

4. * * *	* * * *
	* * * You must report the applicable information in §63.10031(c) (5) concerning startup periods that occur on or prior to December 31, 2017 in PDF format in the semiannual compliance report. For startup periods that occur on or after January 1, 2018, you must provide that information quarterly, in PDF format, according to §63.10031(i).

7. Table 8 to subpart UUUUU of part 63 is revised to read as follows:

TABLE 8 TO SUBPART UUUUU OF PART 63—REPORTING REQUIREMENTS

In accordance with §63.10031, you must meet the following reporting requirements, as they apply to your compliance strategy:

You must submit the following reports . . .
1. The electronic reports required under §63.10031(a) (1), if you continuously monitor Hg emissions.
2. The electronic reports required under §63.10031(a) (2), if you continuously monitor HCl and/or HF emissions.
3. The electronic reports required under §63.10031(a) (3), if you continuously monitor PM emissions. Reporting of hourly PM emissions data using ECMPS shall begin with the first operating hour after: December 31, 2017 or the hour of completion of the initial PM CEMS correlation test, whichever is later.

4. The electronic reports required under §63.10031(a)(4), if you elect to use a PM CPMS. Reporting of hourly PM CPMS response data using ECMPS shall begin with the first operating hour after December 31, 2017 or the first operating hour after completion of the initial performance stack test that establishes the operating limit for the PM CPMS, whichever is later.

5. The electronic reports required under §63.10031(a)(5), if you continuously monitor SO₂ emissions.

6. Performance stack test reports (including 30-day Hg LEE test reports), in PDF format, according to the introductory text of §63.10031(f) and §63.10031(f)(6), for tests completed prior to January 1, 2018.

7. PDF reports for RATAs of Hg, and/or HCl, and/or HF, and/or SO₂ monitoring systems and for RRAs and RCAs of PM CEMS, according to §63.10031(f)(1) and (6), for tests completed prior to January 1, 2018.

8. Quarterly reports that include all 30- boiler operating day rolling averages in the reporting period for PM CEMS, approved HAP metals CEMS, and/or PM CPMS, in PDF format, according to §63.10031(f)(2) and (6). The final quarterly report in PDF format shall cover the fourth calendar quarter of 2017. Starting in the first quarter of 2018, all 30- day rolling averages for all parameters (including Hg, HCl, HF, and/or SO₂) must be reported in XML format in the quarterly compliance reports described in §63.10031(g). If your EGU or common stack is in an averaging plan, each quarterly compliance report must identify the EGUs in the plan and include all of the 30- or 90- group boiler operating day weighted average emission rates (WAERs) for the averaging group.

9. The semiannual compliance reports described in §63.10031(c) and (d), in PDF format, according to §63.10031(f)(4) and (6). The final semiannual compliance report shall cover the period from July 1, 2017 through December 31, 2017.

10. Notifications of compliance status, in PDF format, according to §63.10031(f)(4) and (6) until December

31, 2017, and according to §63.10031(h) thereafter.

11. Quarterly electronic compliance reports, containing the applicable data elements identified in sections 2 through 13 of appendix E to this subpart, in XML format, starting with a report for the first calendar quarter of 2018, in accordance with §63.10031(g). These reports are due within 60 days after the end of each calendar quarter.

12. Quarterly reports, in PDF format, starting with a report for the first calendar quarter of 2018, that include the applicable information referenced in §63.10031(c)(5) pertaining to startup and shutdown events (see §63.10031(i)). These reports shall be submitted as attachments to the quarterly compliance reports, and are due within 60 days after the end of each calendar quarter.

13. Reports, in XML format, that contain the applicable data elements and other information in sections 17 through 21 of appendix E to this subpart, for the following tests that are completed on and after January 1, 2018: performance stack tests (including 30- boiler operating day Hg LEE tests), Hg, HCl, HF, and SO₂ monitoring system RATAs, and correlation tests, RRAs and RCAs of PM CEMS. Reports associated with performance stack tests must be submitted along with the relevant quarterly compliance report. Reports associated with RATAs, correlation tests, RRAs, and RCAs must be submitted along with the electronic test results required under appendix A, B, or C to this part or part 75 of this chapter (as applicable), either prior to or concurrent with the relevant quarterly emissions report.

14. For each test described in section 14 of appendix E to this subpart, PDF reports that include additional information which is incompatible with electronic reporting, e.g., diagrams, laboratory calibration of sampling equipment, etc. (see section 22 of appendix E). For performance stack tests, this information must be submitted as an attachment to the relevant quarterly compliance report. For RATAs, PM CEMS correlation tests, RRAs, and RCAs, this information must be submitted along with the electronic test results required under appendix A, B, or C to this

<p>part or part 75 of this chapter (as applicable), either prior to or concurrent with the relevant quarterly emissions report.</p>
<p>15. The excess emissions summary report described in §63.10(e)(3)(v) and (vi), in PDF format, if you have elected to demonstrate compliance using a PM CPMS. Submit this information as part of the semiannual compliance report until January 1, 2018. Thereafter, submit the information in PDF format as an attachment to the quarterly compliance report.</p>
<p>16. If, prior to January 1, 2018, you have begun using a certified PM CEMS to demonstrate compliance with this subpart, you must use the ECMPs Client Tool to submit a PDF report of the existing PS 11 correlation test of the PM CEMS, no later than December 31, 2017.</p>

8. Table 9 to subpart UUUUU is amended by revising the entry “§63.10(c)(7)” to read as follows:

Table 9 to Subpart UUUUU of Part 63—Applicability of General Provisions to Subpart UUUUU

* * * * *

Citation	Subject	Applies to subpart UUUUU
* * * * *		
§63.10(c)(7)	Additional recordkeeping requirements for CMS – identifying exceedances and excess emissions	Yes. Applies only to EGU owners or operators who rely on PM CPMS for compliance demonstration purposes.
* * * * *		

9. Appendix A to subpart UUUUU is amended by:

- a. Revising section 4.1.1.5.2; and
- b. Revising the entry "RATA" in Table A-2.

The revisions read as follows:

Appendix A to Subpart UUUUU of Part 63 - Hg Monitoring

Provisions

* * * * *

4. Certification and Recertification Requirements

* * * * *

4.1.1.5.2 *Calculation of RATA Results.* Calculate the relative accuracy (RA) of the monitoring system, on a $\mu\text{g}/\text{scm}$ basis, as described in section 12 of Performance Specification (PS) 2 in appendix B to part 60 of this chapter (see Equations 2-3 through 2-6 of PS 2). For purposes of calculating the relative accuracy, ensure that the reference method and monitoring system data are on a consistent basis, either wet or dry. The CEMS must either meet the main performance specification or the alternative specification in Table A-1 of this appendix.

* * * * *

5. ONGOING QUALITY ASSURANCE (QA) AND DATA VALIDATION

* * * * *

Table A-2--On-Going QA Test Requirements for Hg CEMS

Perform this type of QA test....	At this frequency	With these qualifications and exceptions....	Acceptance criteria...
* * * * *			
RATA	Annual ⁴	<ul style="list-style-type: none"> • Test deadline may be extended for “non-QA operating quarters,” up to a maximum of 8 quarters from the quarter of the previous test. • 720 operating hour grace period available 	$\leq 20.0\% \text{ RA}$ <p style="text-align: center;">or</p> $ RM_{\text{avg}} - C_{\text{avg}} + CC \leq 0.5 \mu\text{g}/\text{scm}, \text{ if } RM_{\text{avg}} < 2.5 \mu\text{g}/\text{scm}.$

* * * * *

⁴ “Annual” means once every four QA operating quarters.

* * * * *

10. Appendix B to subpart UUUUU is amended by:

- a. Revising section 2.3;
- b. Revising sections 10.1.8.1.1, 10.1.8.1.2, and 10.1.8.1.3;
- c. Adding sections 10.1.8.1.4 through 10.1.8.1.12;
- d. Revising section 11.4.1;
- e. Adding sections 11.4.1.1 through 11.4.1.9;
- f. Revising section 11.4.2;
- g. Revising sections 11.4.3.11 and 11.4.3.12;
- h. Redesignating section 11.4.3.13 as 11.4.3.14;
- i. Adding a new section 11.4.3.13;
- j. Redesignating section 11.4.4 as 11.4.13;

k. Adding sections 11.4.4, 11.4.4.1 through 11.4.4.7, 11.4.5, 11.4.5.1, 11.4.5.1.1 through 11.4.5.1.9, 11.4.5.2, 11.4.5.2.1 through 11.4.5.2.4, 11.4.6, 11.4.6.1 through 11.4.6.8, 11.4.7, 11.4.7.1 through 11.4.7.12, 11.4.8, 11.4.8.1 through 11.4.8.15, 11.4.9, 11.4.9.1 through 11.4.9.5, 11.4.10, 11.4.10.1 through 11.4.10.8, 11.4.11, 11.4.11.1 through 11.4.11.7, 11.4.12, and 11.4.12.1 through 11.4.12.9; and

l. Revising section 11.5.1.

The revisions and additions read as follows:

APPENDIX B TO SUBPART UUUUU OF PART 63—HCL AND HF MONITORING PROVISIONS

* * * * *

2. Monitoring of HCl and/or HF Emissions

* * * * *

2.3 Monitoring System Equipment, Supplies, Definitions, and General Operation. The following provisions apply:

* * * * *

10. Recordkeeping Requirements

* * * * *

10.1.8.1.1 For each required 7-day and daily calibration drift test or daily calibration error test (including daily calibration transfer standard tests) of the HCl or HF CEMS, record the test date(s) and time(s), reference gas value(s), monitor response(s), and calculated calibration drift or

calibration error value(s). If you use the dynamic spiking option for the mid-level calibration drift check under PS-18, you must also record the measured concentration of the native HCl in the flue gas before and after the spike and the spiked gas dilution factor. When using an IP-CEMS under PS 18, you must also record the measured concentrations of the native HCl before and after introduction of each reference gas, the path lengths of the calibration cell and the stack optical path, the stack and calibration cell temperatures, the instrument line strength factor, and the calculated equivalent concentration of reference gas.

10.1.8.1.2 For the required gas audits of an FTIR HCl or HF CEMS that is following PS 15, record the date and time of each spiked and unspiked sample, the audit gas reference values and uncertainties. Keep records of all calculations and data analyses required under sections 9.1 and 12.1 of Performance Specification 15, and the results of those calculations and analyses.

10.1.8.1.3 For each required RATA of an HCl or HF CEMS, record the beginning and ending date and time of each test run, the reference method(s) used, and the reference method and HCl or HF CEMS run values. Keep records of stratification tests performed (if any), all the raw field data, relevant process

operating data, and the all calculations used to determine the relative accuracy.

10.1.8.1.4 For each required beam intensity test of an HCl IP-CEMS under PS 18, record the test date and time, the known attenuation value (%) used for the test, the concentration of the high-level reference gas used, the full-beam and attenuated beam intensity levels, the measured HCl concentrations at full-beam intensity and attenuated intensity and the percent difference between them, and the results of the test. For each required daily beam intensity check of an IP-CEMS under Procedure 6, record the beam intensity measured including the units of measure and the results of the check.

10.1.8.1.5 For each required measurement error test of an HCl monitor, record the date and time of each gas injection, the reference gas concentration (low, mid, or high) and the monitor response for each of the three injections at each of the three levels. Also record the average monitor response and the measurement error (ME) at each gas level and the related calculations. For measurement error tests conducted on IP-CEMS, also record the measured concentrations of the native HCl before and after introduction of each reference gas, the path lengths of the calibration cell and the stack optical path, the stack and calibration cell temperatures, the stack and calibration

cell pressures, the instrument line strength factor, and the calculated equivalent concentration of reference gas.

10.1.8.1.6 For each required level of detection (LOD) test of an HCl monitor performed in a controlled environment, record the test date, the concentrations of the reference gas and interference gases, the results of the seven (or more) consecutive measurements of HCl, the standard deviation, and the LOD value. For each required LOD test performed in the field, record the test date, the three measurements of the native source HCl concentration, the results of the three independent standard addition (SA) measurements known as standard addition response (SAR), the effective spike addition gas concentration (for IP-CEMS, the equivalent concentration of the reference gas), the resulting standard addition detection level (SADL) value and all related calculations. For extractive CEMS performing the SA using dynamic spiking, you must record the spiked gas dilution factor.

10.1.8.1.7 For each required measurement error/level of detection response time test of an HCl monitor, record the test date, the native HCl concentration of the flue gas, the reference gas value, the stable reference gas readings, the upscale/downscale start and end times, and the results of the upscale and downscale stages of the test.

10.1.8.1.8 For each required temperature or pressure measurement verification or audit of an IP-CEMS, keep records of the test date, the temperatures or pressures (as applicable) measured by the calibrated temperature or pressure reference device and the IP-CEMS, and the results of the test.

10.1.8.1.9 For each required interference test of an HCl monitor, record the date of the test, the HCl concentration of the reference gas used, the concentrations of the interference test gases, the baseline HCl and HCl responses for each interferent combination spiked, and the total percent interference as a function of span or HCl concentration. Also keep records to document the quantity and quality of gases, gas volume/rate, temperature, and pressure used to conduct the test.

10.1.8.1.10 For each quarterly relative accuracy audit (RAA) of an HCl monitor, record the beginning and ending date and time of each test run, the reference method used, the HCl concentrations measured by the reference method and CEMS for each test run, the average concentrations measured by the reference method and the CEMS, and the calculated relative accuracy(RA). Keep records of the raw field data, relevant process operating data, and the calculations used to determine the RA.

10.1.8.1.11 For each quarterly cylinder gas audit (CGA) of an HCl monitor, record the date and time of each injection, and

the reference gas concentration (zero, mid, or high) and the monitor response for each injection. Also record the average monitor response and the calculated measurement error (ME) at each gas level. For IP-CEMS, you must also record the measured concentrations of the native HCl before and after introduction of each reference gas, the path lengths of the calibration cell and the stack optical path, the stack and calibration cell temperatures, the stack and calibration cell pressures, the instrument line strength factor, and the calculated equivalent concentration of reference gas.

10.1.8.1.12 For each quarterly dynamic spiking audit (DSA) of an HCl monitor, record the date and time of the zero gas injection and each spike injection, the results of the zero gas injection, the gas concentrations (mid and high) and the dilution factors and the monitor response for each of the six upscale injections as well as the corresponding native HCl concentrations measured before and after each injection. Also record the average dynamic spiking error for each of the upscale gases, the calculated average DSA Accuracy at each upscale gas concentration, and all calculations leading to the DSA Accuracy.

* * * * *

11. Reporting Requirements

* * * * *

11.4.1 For each daily calibration drift (or calibration error) assessment (including daily calibration transfer standard tests), and for each 7-day calibration drift test of an HCl or HF monitor, report:

11.4.1.1 Facility ID information;

11.4.1.2 The monitoring component ID;

11.4.1.3 The instrument span and span scale;

11.4.1.4 For each gas injection, the date and time, the calibration gas level (zero, mid or other), the reference gas value (ppm), and the monitor response (ppm);

11.4.1.5 A flag to indicate whether dynamic spiking was used for the upscale value (extractive HCl monitors, only);

11.4.1.6 Calibration drift or calibration error (percent of span or reference gas, as applicable);

11.4.1.7 When using the dynamic spiking option, the measured concentration of native HCl before and after each mid-level spike and the spiked gas dilution factor;

11.4.1.8 When using an IP-CEMS, also report the measured concentration of native HCl before and after each upscale measurement, the path lengths of the calibration cell and the stack optical path, the stack and calibration cell temperatures, the stack and calibration cell pressures, the instrument line strength factor, and the equivalent concentration of the reference gas; and

11.4.1.9 Reason for test (for the 7-day CD test, only).

11.4.2 For each quarterly gas audit of an HCl or HF CEMS that is following PS 15, report:

* * * * *

11.4.3.11 Standard deviation, as specified in Equation 2-4 of Performance Specification 2 in appendix B to part 60 of this chapter. For HCl CEMS following PS 18, calculate the standard deviation according to section 12.6 of PS 18;

11.4.3.12 Confidence coefficient, as specified in Equation 2-5 of Performance Specification 2 in appendix B to part 60 of this chapter. For HCl CEMS following PS 18, calculate the confidence coefficient according to section 12.6 of PS 18;

11.4.3.13 T-value; and

11.4.3.14 Relative accuracy (RA). For FTIR monitoring systems following PS 15, calculate the RA using Equation 2-6 of Performance Specification 2 in appendix B to part 60 of this chapter or, if applicable, according to the alternative procedure for low emitters described in section 3.1.2.2 of this appendix. For HCl CEMS following PS 18, calculate the RA according to section 12.6 of PS 18. If applicable use a flag to indicate that the alternative RA specification for low emitters has been applied.

11.4.4 For each 3-level measurement error test of an HCl monitor, report:

11.4.4.1 Facility ID information;

11.4.4.2 Monitoring component ID;

11.4.4.3 Instrument span and span scale;

11.4.4.4 For each gas injection, the date and time, the calibration gas level (low, mid, or high), the reference gas value in ppm and the monitor response. When using an IP-CEMS, also report the measured concentration of native HCl before and after each injection, the path lengths of the calibration cell and the stack optical path, the stack and calibration cell temperatures, the stack and calibration cell pressures, the instrument line strength factor, and the equivalent concentration of the reference gas;

11.4.4.5 For extractive CEMS, the mean reference value and mean of measured values at each reference gas level (ppm). For IP-CEMS, the mean of the measured concentration minus the average measured native concentration minus the equivalent reference gas concentration (ppm), at each reference gas level--
-see Equation 6A in PS 18;

11.4.4.6 Measurement error (ME) at each reference gas level; and

11.4.4.7 Reason for test.

11.4.5 Beam intensity tests of an IP CEMS:

11.4.5.1 For the initial beam intensity test described in Performance Specification 18 in appendix B to part 60 of this chapter, report:

11.4.5.1.1 Facility ID information;

11.4.5.1.2 Date and time of the test;

11.4.5.1.3 Monitoring system ID;

11.4.5.1.4 Reason for test;

11.4.5.1.5 Attenuation value (%);

11.4.5.1.6 High level gas concentration (ppm);

11.4.5.1.7 Full and attenuated beam intensity levels, including units of measure;

11.4.5.1.8 Measured HCl concentrations at full and attenuated beam intensity (ppm); and

11.4.5.1.9 Percentage difference between the HCl concentrations.

11.4.5.2 For the daily beam intensity check described in Procedure 6 of appendix F to Part 60 of this chapter, report:

11.4.5.2.1 Facility ID information;

11.4.5.2.2 Date and time of the test;

11.4.5.2.3 Monitoring system ID;

11.4.5.2.4 The attenuated beam intensity level (limit) established in the initial test;

11.4.5.2.5 The beam intensity measured during the daily check; and

11.4.5.2.6 Results of the test (pass or fail).

11.4.6 For each temperature or pressure verification or audit of an HCl IP-CEMS, report:

11.4.6.1 Facility ID information;

11.4.6.2 Date and time of the test;

11.4.6.3 Monitoring system ID;

11.4.6.4 Type of verification (T or P);

11.4.6.5 Stack sensor measured value;

11.4.6.6 Reference device measured value;

11.4.6.7 Results of the test (pass or fail); and

11.4.6.8 Reason for test.

11.4.7 For each interference test of an HCl monitoring system, report:

11.4.7.1 Facility ID information;

11.4.7.2 Date of test;

11.4.7.3 Monitoring system ID;

11.4.7.4 HCl reference gas concentration;

11.4.7.5 Interference gas types;

11.4.7.6 Concentration of interference gas;

11.4.7.7 Interference free sample response;

11.4.7.8 Response with interference;

11.4.7.9 Total interference;

11.4.7.10 Results of the test (pass or fail);

11.4.7.11 Reason for test; and

11.4.7.12 A flag to indicate whether the test was performed: on this particular monitoring system; on one of multiple systems of the same type; or by the manufacturer on a system with components of the same make and model(s) as this system.

11.4.8 For each level of detection (LOD) test of an HCl monitor, report:

11.4.8.1 Facility ID information;

11.4.8.2 Date of test;

11.4.8.3 Reason for test;

11.4.8.4 Monitoring system ID;

11.4.8.5 A code to indicate whether the test was done in a controlled environment or in the field;

11.4.8.6 HCl reference gas concentration;

11.4.8.7 HCl responses with interference gas (7 repetitions);

11.4.8.8 Standard deviation of HCl responses;

11.4.8.9 Effective spike addition gas concentrations;

11.4.8.10 HCl concentration measured without spike;

11.4.8.11 HCl concentration measured with spike;

11.4.8.12 Dilution factor for spike;

11.4.8.13 The controlled environment LOD value (ppm or ppm-meters);

11.4.8.14 The field determined standard addition detection level (SADL in ppm or ppm-meters); and

11.4.8.15 Result of LDO/SADL test (pass/fail).

11.4.9 For each ME or LOD response time test of an HCl monitor, report:

11.4.9.1 Facility ID information;

11.4.9.2 Date of test;

11.4.9.3 Monitoring component ID;

11.4.9.4 The higher of the upscale or downscale tests, in minutes; and

11.4.9.5 Reason for test.

11.4.10 For each quarterly relative accuracy audit of an HCl monitor, report:

11.4.10.1 Facility ID information;

11.4.10.2 Monitoring system ID;

11.4.10.3 Begin and end time of each test run;

11.4.10.4 The reference method used;

11.4.10.5 The reference method (RM) and CEMS values for each test run, including the units of measure;

11.4.10.6 The mean RM and CEMS values for the three test runs;

11.4.10.7 The calculated relative accuracy (RA), percent; and

11.4.10.8 Reason for test.

11.4.11 For each quarterly cylinder gas audit of an HCl monitor, report:

11.4.11.1 Facility ID information;

11.4.11.2 Monitoring component ID;

11.4.11.3 Instrument span and span scale;

11.4.11.4 For each gas injection, the date and time, the reference gas level (zero, mid, or high), the reference gas value in ppm, and the monitor response. When using an IP-CEMS, also report the measured concentration of native HCl before and after each injection, the path lengths of the calibration cell and the stack optical path, the stack and calibration cell temperatures, the stack and calibration cell pressures, the instrument line strength factor, and the equivalent concentration of the reference gas;

11.4.11.5 For extractive CEMS, the mean reference gas value and mean monitor response at each reference gas level (ppm). For IP-CEMS, the mean of the measured concentration minus the average measured native concentration minus the equivalent reference gas concentration (ppm), at each reference gas level - see Equation 6A in PS 18;

11.4.11.6 Measurement error (ME) at each reference gas level; and

11.4.11.7 Reason for test.

11.4.12 For each quarterly dynamic spiking audit of an HCl monitor, report:

11.4.12.1 Facility ID information;

11.4.12.2 Monitoring component ID;

11.4.12.3 Instrument span and span scale;

11.4.12.4 For the zero gas injection, the date and time, and the monitor response (Note: The zero gas injection from a calibration drift check performed on the same day as the upscale spikes may be used for this purpose.);

11.4.12.5 Zero spike error;

11.4.12.6 For the upscale gas spiking, the date and time of each spike, the reference gas level (mid- or high-), the reference gas value (ppm), the dilution factor, the native HCl concentrations before and after each spike, and the monitor response for each gas spike;

11.4.12.7 Upscale spike error;

11.4.12.8 Dynamic spike accuracy (DSA) at the zero level and at each upscale gas level; and

11.4.12.9 Reason for test.

11.4.13 Reporting Requirements for Diluent Gas, Flow Rate, and Moisture Monitoring Systems. For the certification, recertification, diagnostic, and QA tests of stack gas flow rate, moisture, and diluent gas monitoring systems that are certified and quality-assured according to part 75 of this

chapter, report the information in section 10.1.8.2 of this appendix.

* * * * *

11.5.1 The owner or operator of any affected unit shall use the ECMPS Client Tool to submit electronic quarterly reports to the Administrator in an XML format specified by the Administrator, for each affected unit (or group of units monitored at a common stack). If the certified HCl or HF CEMS is used for the initial compliance demonstration, HCl or HF emissions reporting shall begin with the first operating hour of the 30 boiler operating day compliance demonstration period. Otherwise, HCl or HF emissions reporting shall begin with the first operating hour after successfully completing all required certification tests of the CEMS.

* * * * *

11. Add appendix C to subpart UUUUU to read as follows:

APPENDIX C TO SUBPART UUUUU OF PART 63—PM MONITORING PROVISIONS

1. General Provisions

1.1 Applicability. These monitoring provisions apply to the continuous measurement of filterable particulate matter (PM) emissions from affected EGUs under this subpart. A particulate matter continuous emission monitoring system (PM CEMS) is used together with other continuous monitoring systems and (as applicable) parametric measurement devices to quantify PM

emissions in units of the applicable standard (i.e., lb/mmBtu or lb/MWh).

1.2 Initial Certification and Recertification Procedures.

You, as the owner or operator of an affected EGU that uses a PM CEMS to demonstrate compliance with a filterable PM emissions limit in Table 1 or 2 to this subpart must comply with the initial certification and recertification procedures of Performance Specification 11 (PS 11) in appendix B to part 60 of this chapter.

1.3 Quality Assurance and Quality Control Requirements. You must meet the applicable quality assurance requirements of Procedure 2 in appendix F to part 60 of this chapter.

1.4 Missing Data Procedures. You must not substitute data for missing data from the PM CEMS. Any process operating hour for which quality-assured PM concentration data are not obtained is counted as an hour of monitoring system downtime.

1.5 Adjustments for Flow System Bias. When the PM emission rate is reported on a gross output basis, you must not adjust the data recorded by a stack gas flow rate monitor for bias, which may otherwise be required under §75.24 of this chapter.

2. Monitoring of PM Emissions

2.1 Monitoring System Installation Requirements. Flue gases from the affected EGUs under this subpart vent to the atmosphere through a variety of exhaust configurations including single

stacks, common stack configurations, and multiple stack configurations. For each of these configurations, §63.10010(a) specifies the appropriate location(s) at which to install continuous monitoring systems (CMS). These CMS installation provisions apply to the PM CEMS and to the other continuous monitoring systems and parametric monitoring devices that provide data for the PM emissions calculations in section 6 of this appendix.

2.2 Primary and Backup Monitoring Systems. In the electronic monitoring plan described in section 7 of this appendix, you must create and designate a primary monitoring system for PM and for each additional parameter (i.e., stack gas flow rate, CO₂ or O₂ concentration, stack gas moisture content, as applicable). The primary system must be used to report hourly PM concentration values when the system is able to provide quality-assured data, i.e., when the system is "in control." However, to increase data availability in the event of a primary monitoring system outage, you may install, operate, maintain, and calibrate a redundant backup monitoring system. A redundant backup system is one that is permanently installed at the unit or stack location, and is kept on "hot standby" in case the primary monitoring system is unable to provide quality-assured data. You must represent each redundant backup system as a unique monitoring system in the electronic monitoring plan. You

must certify each redundant backup monitoring system according to the applicable provisions in section 4 of this appendix. In addition, each redundant monitoring system must meet the applicable on-going QA requirements in section 5 of this appendix.

3. PM Emissions Measurement Methods

The following definitions, equipment specifications, procedures, and performance criteria are applicable

3.1 Definitions. All definitions specified in section 3 of PS 11 in appendix B to part 60 of this chapter and section 3 of Procedure 2 in appendix F to part 60 of this chapter are applicable to the measurement of filterable PM emissions from electric utility steam generating units under this subpart.

3.2 Continuous Monitoring Methods

3.2.1 Installation and Measurement Location. You must install the PM CEMS according to §63.10010 and section 2.4 of PS 11.

3.2.2 Units of Measure. For the purposes of this subpart, you shall report hourly PM concentrations in the following units of measure:

3.2.2.1 In both milligrams per actual cubic meter (mg/acm) and milligrams per wet standard cubic meter (mg/wscm) If the PM CEMS measures in units of mg/acm; or

3.2.2.2 Milligrams per wet standard cubic meter (mg/wscm), if the PM CEMS measures in mg/wscm; or

3.2.2.3 In both milligrams per dry standard cubic meter (mg/dscm) and milligrams per wet standard cubic meter (mg/wscm), if the PM CEMS measures in units of mg/dscm.

3.2.3 Other Necessary Data Collection. To convert hourly PM concentrations to the units of the applicable emissions standard (*i.e.*, lb/mmBtu or lb/MWh), you must collect additional data as described in sections 3.2.3.1 and 3.2.3.2 of this appendix. You must install, certify, operate, maintain, and quality-assure any stack gas flow rate, CO₂, O₂, or moisture monitoring systems needed for this purpose according to sections 4 and 5 of this appendix. The calculation methods for the emission limits described in sections 3.2.3.1 and 3.2.3.2 of this appendix are presented in section 6 of this appendix.

3.2.3.1 Heat Input-Based Emission Limits. To demonstrate compliance with a heat input-based PM emission limit in Table 2 to this subpart, you must provide the hourly stack gas CO₂ or O₂ concentration, along with a fuel-specific F_c factor or dry-basis F-factor and (if applicable) the stack gas moisture content, in order to convert measured PM concentrations values to the units of the standard.

3.2.3.2 Gross Output-Based Emission Limits. To demonstrate compliance with a gross output-based PM emission limit in Table

1 or Table 2 to this subpart, you must provide the hourly gross output, along with data from a certified stack gas flow rate monitor in order to convert measured PM concentrations values to units of the standard.

4. Certification and Recertification Requirements

4.1 Certification Requirements. You must certify your PM CEMS and the other continuous monitoring systems used to determine compliance with the applicable emissions standard before the PM CEMS can be used to provide data under this subpart. Redundant backup monitoring systems (if used) are subject to the same certification requirements as the primary systems.

4.1.1 PM CEMS. You must certify your PM CEMS according to PS 11 in appendix B to part 60 of this chapter. PM CEMS that have been installed and certified according to PS 11 as a result of another state or federal regulatory requirement or consent decree prior to the effective date of this subpart shall be considered certified for this subpart if you can demonstrate that your PM CEMS meets the PS 11 acceptance criteria based on the applicable emission standard in this subpart.

4.1.2 Flow Rate, Diluent Gas, and Moisture Monitoring Systems. You must certify your continuous monitoring systems that are used to convert PM concentrations to units of the standard (i.e., stack gas flow rate, diluent gas (CO₂ or O₂))

concentration, or moisture monitoring systems) in accordance with the applicable provisions in §75.20 of this chapter and appendix A to part 75 of this chapter.

4.1.3 Other Parametric Measurement Devices. If data from temperature or pressure measurement devices are required to convert hourly PM concentrations to standard conditions, you must install, calibrate, maintain, and operate these devices according to the manufacturers' instructions.

4.2 Recertification.

4.2.1 You must recertify your PM CEMS if it is either: moved to a different stack or duct; moved to a new location within the same stack or duct; modified or repaired in such a way that the existing correlation is altered or impacted; or replaced.

4.2.2 The flow rate, diluent gas, and moisture monitoring systems that are used to convert PM concentration to units of the emission standard are subject to the recertification provisions in §75.20(b) of this chapter.

4.3 Development of a New or Revised Correlation Curve. You must develop a new or revised correlation curve if:

4.3.1 A response correlation audit (RCA) is failed and the new or revised correlation is developed according to section 10.6 in Procedure 2 of appendix F to part 60 of this chapter; or

4.3.2 The events described in paragraph (1) or (2) in section 8.8 of PS 11 occur while the EGU is operating under normal conditions.

5. Ongoing Quality Assurance (QA) and Data Validation

5.1 PM CEMS.

5.1.1 Required QA Tests. Following initial certification, you must conduct periodic QA testing of each primary and (if applicable) redundant backup PM CEMS. The required QA tests and the performance specifications that must be met are found in Procedure 2 of appendix F to part 60 of this chapter.

5.1.2 Out-of-Control Periods. Your PM CEMS is considered to be out-of-control, and you may not report data from it as quality-assured, when the monitoring system malfunctions or when any acceptance criterion in PS 11 in appendix B to part 60 of this chapter or Procedure 2 in appendix F to part 60 of this chapter for the required QA tests is not met. Your PM CEMS is also considered to be out-of-control when a required QA test is not performed on schedule. When an out-of-control period occurs, you must take corrective actions (if necessary) and perform the appropriate follow-up calibrations and adjustments to bring the monitoring system back in-control. If the out-of-control period is triggered by a required QA test that is failed or not done on time, you must conduct the failed or late test and your PM CEMS must pass the test in order to end the out-of-control period.

You must count out-of-control periods of the PM CEMS as hours of monitoring system downtime.

5.1.3 RCA and RRA Acceptability. The results of your RRA or RCA are considered acceptable provided that the criteria in section 10.4(5) of Procedure 2 in appendix F to part 60 of this chapter are met for an RCA or section 10.4(6) of Procedure 2 in appendix F to part 60 of this chapter are met for an RRA.

5.2 Stack Gas Flow Rate, Diluent Gas, and Moisture Monitoring Systems. The on-going QA test requirements and data validation criteria for the primary and (if applicable) redundant backup stack gas flow rate, diluent gas, and moisture monitoring systems are specified in appendix B to part 75 of this chapter.

5.3 QA/QC Program Requirements. You must develop and implement a quality assurance / quality control (QA/QC) program for the PM CEMS and the other equipment that is used to provide data under this subpart. You may store your QA/QC plan electronically, provided that the information can be made available expeditiously in hard copy to auditors and inspectors.

5.3.1 General Requirements.

5.3.1.1 Preventive Maintenance. You must keep a written record of the procedures needed to maintain the PM CEMS and other equipment that is used to provide data under this subpart in proper operating condition, along with a schedule for those

procedures. At a minimum, you must include all procedures specified by the manufacturers of the equipment and, if applicable, additional or alternate procedures developed for the equipment.

5.3.1.2 Recordkeeping Requirements. You must keep a written record describing procedures that will be used to implement the recordkeeping and reporting requirements of this appendix.

5.3.1.3 Maintenance Records. You must keep a record of all testing, maintenance, or repair activities performed on the PM CEMS, and other equipment used to provide data under this subpart in a location and format suitable for inspection. You may use a maintenance log for this purpose. You must maintain the following records for each system or device: the date, time, and description of any testing, adjustment, repair, replacement, or preventive maintenance action performed, and records of any corrective actions taken. Additionally, you must record any adjustment that may significantly affect the ability of a monitoring system or measurement device to make accurate measurements, and you must keep a written explanation of the procedures used to make the adjustment(s).

5.3.2 Specific Requirements for the PM CEMS.

5.3.2.1 Daily, and Quarterly QA Assessments. You must keep a written record of the procedures used for daily assessments of the PM CEMS. You must also keep records of the procedures used

to perform quarterly ACA and SVA audits. You must document how the test results are calculated and evaluated.

5.3.2.2 Monitoring System Adjustments. You must document how each component of the PM CEMS will be adjusted to provide correct responses after routine maintenance, repairs, or corrective actions.

5.3.2.3 Correlation Tests, Annual and Triennial Audits. You must keep a written record of procedures used for the correlation tests, at least annual RRAs, and at least triennial RCAs of the PM CEMS. You must document how the test results are calculated and evaluated.

5.3.3 Specific Requirements for Diluent Gas, Stack Gas Flow Rate, and Moisture Monitoring Systems. The QA/QC program requirements for the stack gas flow rate, diluent gas, and moisture monitoring systems described in section 3.2.3 of this appendix are specified in section 1 of appendix B to part 75 of this chapter.

5.3.4 Requirements for Other Monitoring Equipment. If any other equipment is required to convert readings from the PM CEMS to standard conditions (e.g., devices to measure temperature and pressure), you must keep a written record of the calibrations and/or other procedures used to ensure that the devices provide accurate data.

5.3.5 You may store your QA / QC plan electronically, provided that you can make the information available expeditiously in hard copy to auditors or inspectors.

6. Data Reduction and Calculations

6.1 Data Reduction and Validation.

6.1.1 You must reduce the data from PM CEMS to hourly averages, in accordance with § 60.13(h) (2) of this chapter.

6.1.2 You must reduce all CEMS data from stack gas flow rate, CO₂, O₂, and moisture monitoring systems to hourly averages according to §75.10(d) (1) of this chapter.

6.1.3 You must reduce all other data from devices used to convert readings from the PM CEMS to standard conditions to hourly averages according to §63.8(g) (2) or §75.10(d) (1) of this chapter. This includes, but is not limited to, data from devices used to measure temperature and pressure, or, for cogeneration units that calculate gross output based on steam characteristics, devices to measure steam flow rate, steam pressure, and steam temperature.

6.1.4 Do not calculate the PM emission rate for any unit or stack operating hour in which valid data are not obtained for PM concentration or for a parameter used in the emissions calculations (*i.e.*, gross output, stack gas flow rate, stack temperature, stack pressure, stack gas moisture content, or diluent gas concentration, as applicable).

6.1.5 For the purposes of this appendix, part 75 substitute data values for stack gas flow rate, CO₂ concentration, O₂ concentration, and moisture content are not considered to be valid data.

6.1.6 Operating hours in which PM concentration is missing or invalid are hours of monitoring system downtime. The use of substitute data for PM concentration is not allowed.

6.1.7 You must exclude all data obtained during a boiler startup or shutdown operating hour (as defined in §63.10042) from the determination of the 30 boiler operating day rolling average PM emission rates.

6.2 Calculation of PM Emission Rates. You must use the calculation methods in sections 6.2.1 through 6.2.3 of this appendix to convert measured PM concentration values to the units of the applicable emission standard.

6.2.1 For each unit or stack operating hour, prior to converting the PM CEMS concentration to units of the emission standard, if your PM CEMS measures the PM concentration in units of mg/acm, you must convert the PM CEMS concentration value to units of mg/wscm, using one of the following equations:

$$C_h = C_a \left(\frac{460 + T_s}{P_s} \right) \left(\frac{P_{std}}{460 + T_{std}} \right) \quad (\text{Eq. C-1})$$

Or

$$C_h = C_a \left(\frac{460 + T_{CEMS}}{P_{CEMS}} \right) \left(\frac{P_{std}}{460 + T_{std}} \right) \quad (\text{Eq.C-2})$$

Where:

C_h = PM concentration (mg/wscm)

C_a = PM concentration (mg/acm)

T_s = Stack Temperature (°F)

T_{CEMS} = CEMS Measurement Temperature (°F)

P_{CEMS} = CEMS Measurement Pressure (in. Hg)

P_s = Stack Pressure (in. Hg)

T_{std} = Standard Temperature (68 °F)

P_{std} = Standard Pressure (29.92 in. Hg)

(Note: The hourly PM concentrations reported in ECMPS must be in units of mg/wscm. If your PM CEMS measures PM concentration in units of mg/m³ on a dry basis at standard conditions, you must apply a correction for the stack gas moisture content to convert it from mg/dscm to mg/wscm. Determine the moisture content according to section 6.2.2.4 of this appendix. To convert the dry basis concentration to wet basis, multiply it by $\left(\frac{100 - \%H_2O}{100} \right)$).

6.2.2 Heat Input-Based PM Emission Rates (Existing EGUs, Only). You must calculate hourly heat input-based PM emission rates, in units of lb/mmBtu, according to sections 6.2.2.1 and 6.2.2.2 of this appendix.

6.2.2.1 You must select an appropriate emission rate equation from among Equations 19-1 through 19-9 in appendix A-7 to part 60 of this chapter to convert the reported hourly PM concentration value to units of lb/mmBtu. Note that the Method 19 equations require the pollutant concentration to be expressed in units of lb/scf; therefore, you must first multiply the PM concentration by 6.24×10^{-8} to convert it from mg/wscm to lb/scf.

6.2.2.2 You must use the appropriate carbon-based or dry-basis F-factor listed in Table 19-2 of Method 19 in the emission rate equation that you have selected. However, if the appropriate F-factor is not in Table 19-2, you may use F-factors from section 3.3.5 or section 3.3.6 of appendix F to part 75 of this chapter.

6.2.2.3 If the hourly average O₂ concentration is above 14.0% O₂ (19.0% for an IGCC) or the hourly average CO₂ concentration is below 5.0% CO₂ (1.0% for an IGCC), you may calculate the PM emission rate using the applicable diluent cap value (as defined in §63.10042 and specified in §63.10007(f)(1), provided that the diluent gas monitor is not out-of-control).

6.2.2.4 If your selected Method 19 equation requires a correction for the stack gas moisture content, you may either use quality-assured hourly data from a certified part 75 moisture monitoring system, a fuel-specific default moisture

value from §75.11(b) of this chapter, or a site-specific default moisture value approved by the Administrator under §75.66 of this chapter.

6.2.2.5 You must calculate the 30-boiler operating day rolling average PM emission rates according to §63.10021(b).

6.2.3 Gross Output-Based PM Emission Rates.

6.2.3.1 For each unit or stack operating hour, you must use the following equation to calculate the gross output-based PM emission rate, in units of lb/MWh.

$$E_{heo} = 6.24 \times 10^{-8} \left(\frac{C_h Q_s}{MW} \right) \text{ (Eq. C-3)}$$

Where:

E_{heo} = Hourly gross output-based PM emission rate (lb/MWh)

C_h = PM concentration (mg/wscm)

Q_s = Unadjusted stack gas volumetric flow rate (scfh, wet basis)

MW = Gross output (megawatts)

6.24×10^{-8} = Conversion factor

6.2.3.2 You must calculate the 30-boiler operating day rolling average PM emission rates according to §63.10021(b).

7. Recordkeeping and Reporting

7.1 Recordkeeping Provisions. For the PM CEMS and the other necessary continuous monitoring systems and parameter measurement devices installed at each affected unit or common

stack, you must maintain a file of all measurements, data, reports, and other information required by this appendix in a form suitable for inspection, for 5 years from the date of each record, in accordance with § 63.10033. The file shall contain the applicable information in sections 7.1.1 through 7.1.11 of this appendix.

7.1.1 Monitoring Plan Records. For each EGU or group of EGUs monitored at a common stack, you must prepare and maintain a monitoring plan for the PM CEMS and the other CMS(s) needed to convert PM concentrations to units of the applicable emission standard.

7.1.1.1 Updates. If you make a replacement, modification, or change in a certified CMS that is used to provide data under this subpart (including a change in the automated data acquisition and handling system) or if you make a change to the flue gas handling system and that replacement, modification, or change affects information reported in the monitoring plan (e.g., a change to a serial number for a component of a monitoring system), you shall update the monitoring plan.

7.1.1.2 Contents of the Monitoring Plan. For the PM CEMS, your monitoring plan shall contain the applicable information in sections 7.1.1.2.1 and 7.1.1.2.2 of this appendix. For required stack gas flow rate, diluent gas, and moisture monitoring systems, your monitoring plan shall include the applicable

information required for those systems under §75.53 (g) and (h) of this chapter.

7.1.1.2.1 Electronic. Your electronic monitoring plan records must include the following information: unit or stack ID number(s); monitoring location(s); the monitoring methodologies used; monitoring system information, including (as applicable): unique system and component ID numbers; the make, model, and serial number of the monitoring equipment; the sample acquisition method; formulas used to calculate emissions; monitor span and range information, and appropriate default values. Your electronic monitoring plan shall be evaluated and submitted using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool provided by the Clean Air Markets Division (CAMD) in EPA's Office of Atmospheric Programs.

7.1.1.2.2 Hard Copy. You must keep records of the following items: schematics and/or blueprints showing the location of the PM monitoring system(s) and test ports; data flow diagrams; test protocols; and miscellaneous technical justifications.

7.1.2 Operating Parameter Records. You must record the following information for each operating hour of each EGU and also for each group of EGUs utilizing a monitored common stack, to the extent that these data are needed to convert PM concentration data to the units of the emission standard. For non-operating hours, you must record only the items in sections

7.1.2.1 and 7.1.2.2 of this appendix. If you elect to or are required to comply with a gross output-based PM standard, for any hour in which there is gross output greater than zero, you must record the items in sections 7.1.2.1 through 7.1.2.3 and (if applicable) 7.1.2.5 of this appendix; however, if there is heat input to the unit(s) but no gross output (e.g., at unit startup), you must record the items in sections 7.1.2.1, 7.1.2.2, and, if applicable, section 7.1.2.5 of this appendix. If you elect to comply with a heat input-based PM standard, you must record only the items in sections 7.1.2.1, 7.1.2.2, 7.1.2.4, and, if applicable, section 7.1.2.5 of this appendix.

7.1.2.1 The date and hour;

7.1.2.2 The unit or stack operating time (rounded up to the nearest fraction of an hour (in equal increments that can range from one hundredth to one quarter of an hour, at your option);

7.1.2.3 The hourly gross output (rounded to nearest MWe);

7.1.2.4 If applicable, the F_c factor or dry-basis F-factor used to calculate the heat input-based PM emission rate; and

7.1.2.5 If applicable, a flag to indicate that the hour is an exempt startup or shutdown hour.

7.1.3 PM Concentration Records. For each affected unit or common stack using a PM CEMS, you must record the following information for each unit or stack operating hour:

7.1.3.1 The date and hour;

7.1.3.2 Monitoring system and component identification codes for the PM CEMS, as provided in the electronic monitoring plan, if your CEMS provides a quality-assured value of PM concentration for the hour;

7.1.3.3 The hourly PM concentration, if a quality-assured value is obtained for the hour.

7.1.3.3.1 For all PM CEMS, record PM concentration in units of mg/wscm.

7.1.3.3.2 If your PM CEMS measures in units of mg/acm, also record the hourly PM concentration in units of mg/acm, and record the temperature and pressure values used in Equation C-1 or C-2 of this appendix to convert from mg/acm to mg/wscm.

7.1.3.3.3 If your PM CEMS measures in units of mg/dscm, also record the hourly PM concentration in units of mg/dscm, and record the moisture value used to convert from mg/dscm to mg/wscm (see section 7.1.6 of this appendix).

7.1.3.4 If applicable, the stack temperature ($^{\circ}$ F) and stack pressure (in. Hg) used to convert PM concentration from mg/acm to mg/wscm;

7.1.3.5 A special code, indicating whether or not a quality-assured PM concentration is obtained for the hour; and

7.1.3.6 Monitor data availability for PM concentration, as a percentage of unit or stack operating hours calculated according to §75.32 of this chapter.

7.1.4 Stack Gas Volumetric Flow Rate Records.

7.1.4.1 When a gross output-based PM emissions limit must be met, in units of lb/MWh, you must obtain hourly measurements of stack gas volumetric flow rate during EGU operation, in order to convert PM concentrations to units of the standard.

7.1.4.2 When hourly measurements of stack gas flow rate are needed, you must keep hourly records of the flow rates and related information, as specified in §75.57(c)(2) of this chapter.

7.1.5 Records of Diluent Gas (CO₂ or O₂) Concentration.

7.1.5.1 When a heat input-based PM emission limit must be met, in units of lb/mmBtu, you must obtain hourly measurements of CO₂ or O₂ concentration during EGU operation, in order to convert PM concentrations to units of the standard.

7.1.5.2 When hourly measurements of diluent gas concentration are needed, you must keep hourly CO₂ or O₂ concentration records, as specified in §75.57(g) of this chapter.

7.1.6 Records of Stack Gas Moisture Content.

7.1.6.1 When corrections for stack gas moisture content are needed to demonstrate compliance with the applicable PM emissions limit or to convert dry basis PM concentration measurements to wet basis:

7.1.6.1.1 If you use a continuous moisture monitoring system, you must keep hourly records of the stack gas moisture content and related information, as specified in §75.57(c)(3) of this chapter.

7.1.6.1.2 If you use a fuel-specific or approved site-specific default moisture value, you must represent it in the electronic monitoring plan required under section 7.1.1.2.1 of this appendix.

7.1.7 PM Emission Rate Records. For applicable PM emission limits in units of lb/mmBtu or lb/MWh, you must record the following information for each affected EGU or common stack:

7.1.7.1 The date and hour;

7.1.7.2 The hourly PM emissions rate (lb/mmBtu or lb/MWh, as applicable), calculated according to section 6.2.2 or 6.2.3 of this appendix, rounded to three significant figures, and expressed in scientific notation. You must calculate the PM emission rate only when valid values of PM concentration and all other required parameters required to convert PM concentration to the units of the standard are obtained for the hour;

7.1.7.3 An identification code for the formula used to derive the hourly PM emission rate from measurements of the PM concentration and other necessary parameters (i.e., either the appropriate equation from EPA Method 19, or Equation C-2 in section 6.2.3.1 of this appendix);

7.1.7.4 If applicable, a special code to indicate that the diluent cap has been used to calculate the PM emission rate; and

7.1.7.5 If applicable, a special code to indicate that the default gross output has been used to calculate the hourly PM emission rate.

7.1.7.6 A code indicating that the PM emission rate was not calculated for the hour, if valid data are not obtained for PM concentration and/or any of the other parameters in the PM emission rate equation. For the purposes of this appendix, substitute data values for stack gas flow rate, CO₂ concentration, O₂ concentration, and moisture content reported under part 75 of this chapter are not considered to be valid data. However, when the gross output (as defined in §63.10042) is reported for an operating hour with zero output, the default value is treated as quality-assured data.

7.1.8 Other Parametric Data. You must keep records of the parametric data (e.g., PM CEMS measurement temperature and pressure) used to convert the hourly PM concentrations to standard conditions.

7.1.9 Certification, Recertification, and Quality Assurance Test Records. For any PM CEMS used to provide data under this subpart, you must record the following certification, recertification, and quality-assurance information:

7.1.9.1 The test dates and times, reference values, monitor responses, monitor full scale value, and calculated results for the required 7-day drift tests and for the required daily zero and upscale calibration drift tests;

7.1.9.2 The test dates and times and results (pass or fail) of all daily system optics checks and daily sample volume checks of the PM CEMS (as applicable);

7.1.9.3 The test dates and times, reference values, monitor responses, and calculated results for all required quarterly ACAs;

7.1.9.4 The test dates and times, reference values, monitor responses, and calculated results for all required quarterly SVAs of extractive PM CEMS;

7.1.9.5 The test dates and times, reference method readings and corresponding PM CEMS responses (including the units of measure), and the calculated results for all PM CEMS correlation tests, RRAs and RCAs. For the correlation tests, you must indicate which model is used (i.e., linear, logarithmic, exponential, polynomial, or power) and record the correlation equation. For the RRAs and RCAs, the reference method readings and PM CEMS responses must be reported in the same units of measure as the PM CEMS correlation (i.e., either in mg/acm, mg/wscm, or mg/dcsm, as applicable);

7.1.9.6 The cycle time and sample delay time for PM CEMS that operate in batch sampling mode; and

7.1.9.7 Supporting information for all required PM CEMS correlation tests, RRAs, and RCAs, including records of all raw reference method and monitoring system data, the results of sample analyses to substantiate the reported test results, as well as records of sampling equipment calibrations, reference monitor calibrations, and analytical equipment calibrations.

7.1.10 For stack gas flow rate, diluent gas, and moisture monitoring systems, you must keep records of all certification, recertification, diagnostic, and on-going quality-assurance tests of these systems, as specified in §75.59(a) of this chapter.

7.1.11 For any temperature measurement device (e.g., RTD or thermocouple) or pressure measurement device used to convert PM concentrations to standard conditions, you must keep records of all calibrations and other checks performed to ensure that accurate data are obtained.

7.2 Reporting Requirements.

7.2.1 General Reporting Provisions. You must comply with the following requirements for reporting PM emissions from each affected EGU (or group of EGUs monitored at a common stack) under this subpart:

7.2.1.1 Notifications, in accordance with section 7.2.2 of this appendix;

7.2.1.2 Monitoring plan reporting, in accordance with section 7.2.3 of this appendix;

7.2.1.3 Certification, recertification, and QA test submittals, in accordance with section 7.2.4 of this appendix; and

7.2.1.4 Electronic quarterly report submittals, in accordance with section 7.2.5 of this appendix.

7.2.2 Notifications. You must provide notifications for each affected unit (or group of units monitored at a common stack) under this subpart in accordance with § 63.10030.

7.2.3 Monitoring Plan Reporting. For each affected unit (or group of units monitored at a common stack) under this subpart using PM CEMS to measure PM emissions, you must make electronic and hard copy monitoring plan submittals as follows:

7.2.3.1 You must submit the electronic and hard copy information in section 7.1.1.2 of this appendix pertaining to the PM monitoring system(s) at least 21 days prior to the date on which the Administrator specifies that electronic reporting of PM emissions data via ECMPS is required to begin, or the date on which the initial certification testing of your PM CEMS begins, whichever is later. Also you must submit the monitoring plan information in §75.53(g) of this chapter pertaining to the

required stack gas flow rate, diluent gas, and moisture monitoring system(s) within that same time frame, if those required records are not already in place.

7.2.3.2 Whenever an update of the monitoring plan is required, as provided in section 7.1.1.1 of this appendix, you must submit the updated information either prior to or concurrent with the relevant quarterly electronic emissions report.

7.2.3.3 You must make all electronic monitoring plan submittals and updates to the Administrator using the ECMPS Client Tool. Hard copy portions of the monitoring plan shall be kept on file according to section 7.1 of this appendix.

7.2.4 Certification, Recertification, and Quality-Assurance Test Reporting. Except for daily QA tests of the required monitoring systems (*i.e.*, calibration error or drift tests, sample volume checks, system optics checks, and flow monitor interference checks), you must submit the results of all required certification, recertification, and quality-assurance tests described in sections 7.1.9.1 through 7.1.9.7 and 7.1.10 of this appendix electronically (except for test results previously submitted, *e.g.*, under the Acid Rain Program), using the ECMPS Client Tool, either prior to or concurrent with the relevant quarterly electronic emissions report.

7.2.5 Quarterly Reports.

7.2.5.1 For each affected EGU (or group of EGUs monitored at a common stack), you must use the ECMPS Client Tool to submit electronic quarterly reports to the Administrator, in an XML format specified by the Administrator, starting with a report for the later of:

7.2.5.1.1 The first calendar quarter of 2018; or

7.2.5.1.2 The calendar quarter in which the initial PM CEMS correlation test is completed.

7.2.5.2 You must submit the electronic reports within 30 days following the end of each calendar quarter, except for EGUs that have been placed in long-term cold storage (as defined in §72.2 of this chapter).

7.2.5.3 Each of your electronic quarterly reports shall include the following information:

7.2.5.3.1 The date of report generation;

7.2.5.3.2 Facility identification information;

7.2.5.3.3 The information in sections 7.1.2 through 7.1.7 of this appendix, as applicable to the PM emission measurement methodology used and the units of the PM emission standard with which you have elected to comply; and

7.2.5.3.4 The results of all daily QA assessments, i.e., calibration drift checks and (if applicable) sample volume checks of the PM CEMS, calibration error tests of the other continuous monitoring systems that are used to convert PM

concentration to units of the standard, and (if applicable) flow monitor interference checks.

7.2.5.4 Compliance Certification. Based on your reasonable inquiry of those persons with primary responsibility for ensuring that all PM emissions from the affected unit(s) under this subpart have been correctly and fully monitored, you must submit a compliance certification in support of each electronic quarterly emissions monitoring report. Your compliance certification shall include a statement by a responsible official with that official's name, title, and signature, certifying that, to the best of his or her knowledge, the report is true, accurate, and complete.

12. Add appendix D to subpart UUUUU to read as follows:

APPENDIX D TO SUBPART UUUUU of Part 63---PM CPMS MONITORING PROVISIONS

1. General Provisions

1.1 Applicability. These monitoring provisions apply to the continuous monitoring of the output from a particulate matter continuous parametric monitoring system (PM CPMS), for the purpose of assessing continuous compliance with an applicable emissions limit in Table 1 or Table 2 to this subpart.

1.2 Summary of the Method. The output from an instrument capable of continuously measuring PM concentration is continuously recorded, either in milliamps, PM concentration, or

other units of measure. An operating limit for the PM CPMS is established initially, based on data recorded by the monitoring system during a performance stack test. The performance test is repeated annually and the operating limit is reassessed. In-between successive performance tests, the output from the PM CPMS serves as an indicator of continuous compliance with the applicable emissions limit.

2. Continuous Monitoring of the PM CPMS Output

2.1 System Design and Performance Criteria. The PM CPMS must meet the design and performance criteria specified in §§63.10010(h)(1)(i) through (iii) and 63.10023(b)(2)(iii) and (iv). In addition, an automated data acquisition and handling system (DAHS) is required to record the output from the PM CPMS and to generate the quarterly electronic data reports required under section 3.2.4 of this appendix.

2.2 Installation Requirements. Install the PM CPMS at an appropriate location in the stack or duct, in accordance with §63.10010(a).

2.3 Determination of Operating Limits.

2.3.1 In accordance with §63.10007(a)(3), §63.10011(b), §63.10023(a), and Table 6 to this subpart, you must determine an initial site-specific operating limit for your PM CPMS, using data recorded by the monitoring system during a performance stack test that demonstrates compliance with one of the

following emissions limits in Table 1 or Table 2 to this subpart: filterable PM; total non-Hg HAP metals; total HAP metals including Hg (liquid oil-fired units, only); individual non-Hg HAP metals; or individual HAP metals including Hg (liquid oil-fired units, only).

2.3.2 In accordance with §63.10005(d)(2)(i), you must perform the initial stack test no later than the applicable date in §63.9984(f), and according to §§63.10005(d)(2)(iii) and 63.10006(a), the performance test must be repeated annually to document compliance with the emissions limit and to reassess the operating limit.

2.3.3 Calculate the operating limits according to §63.10023(b)(1) for existing units, and §63.10023(b)(2) for new units.

2.4 Data Reduction and Compliance Assessment.

2.4.1 Reduce the output from the PM CPMS to hourly averages, in accordance with §63.8(g)(2) and (5).

2.4.2 To determine continuous compliance with the operating limit, you must calculate 30- boiler operating day rolling average values of the output from the PM CPMS, in accordance with §63.10010(h)(3) through (6), §63.10021(c), and Table 7 to this subpart.

2.4.3 In accordance with §63.10005(d)(2)(ii), §63.10022(a)(2), and Table 4 to this subpart, the 30- boiler

operating day rolling average PM CPMS output must be maintained at or below the operating limit. However, if exceedances of the operating limit should occur, you must follow the applicable procedures in §63.10021(c)(1) and (2).

3. Recordkeeping and Reporting

3.1 Recordkeeping Provisions. You must keep the applicable records required under §63.10032(b) and (c) for your PM CPMS. In addition, you must maintain a file of all measurements, data, reports, and other information required by this appendix in a form suitable for inspection, for 5 years from the date of each record, in accordance with §63.10033.

3.1.1 Monitoring Plan Records.

3.1.1.1 You must develop and maintain a site-specific monitoring plan for your PM CPMS, in accordance with §63.10000(d).

3.1.1.2 In addition to the site-specific monitoring plan required under §63.10000(d), you must use the ECMPMS Client Tool to prepare and maintain an electronic monitoring plan for your PM CPMS.

3.1.1.2.1 Contents of the Electronic Monitoring Plan. The electronic monitoring plan records must include the unit or stack ID number(s), monitoring location(s), the monitoring methodology used (i.e., PM CPMS), the current operating limit of the PM CPMS (including the units of measure), unique system and

component ID numbers, the make, model, and serial number of the PM CPMS, the analytical principle of the monitoring system, and monitor span and range information.

3.1.1.2.2 Electronic Monitoring Plan Updates. If you replace or make a change to a PM CPMS that is used to provide data under this subpart (including a change in the automated data acquisition and handling system) and the replacement or change affects information reported in the electronic monitoring plan (e.g., changes to the make, model and serial number when a PM CPMS is replaced), you must update the monitoring plan.

3.1.2 Operating Parameter Records. You must record the following information for each operating hour of each affected unit and for each group of units utilizing a common stack. For non-operating hours, record only the items in sections 3.1.2.1 and 3.1.2.2 of this appendix.

3.1.2.1 The date and hour;

3.1.2.2 The unit or stack operating time (rounded up to the nearest fraction of an hour (in equal increments that can range from one hundredth to one quarter of an hour, at the option of the owner or operator); and

3.1.2.3 If applicable, a flag to indicate that the hour is an exempt startup or shutdown hour.

3.1.3 PM CPMS Output Records. For each affected unit or common stack using a PM CPMS, you must record the following information for each unit or stack operating hour:

3.1.3.1 The date and hour;

3.1.3.2 Monitoring system and component identification codes for the PM CPMS, as provided in the electronic monitoring plan, for each operating hour in which the monitoring system is not out-of-control and a valid value of the output parameter is obtained;

3.1.3.3 The hourly average output from the PM CPMS, for each operating hour in which the monitoring system is not out-of-control and a valid value of the output parameter is obtained, either in milliamps, PM concentration, or other units of measure, as applicable;

3.1.3.4 A special code for each operating hour in which the PM CPMS is out-of-control and a valid value of the output parameter is not obtained; and

3.1.3.5 Percent monitor data availability (PMA) for the PM CPMS, calculated according to §75.32 of this chapter.

3.1.4 Records of PM CPMS Audits and Out-of-Control Periods. In accordance with §63.10010(h)(7), you must record, and make available upon request, the results of PM CPMS performance audits, as well as the dates of PM CPMS out-of-control periods

and the corrective actions taken to return the system to normal operation.

3.2 Reporting Requirements.

3.2.1 General Reporting Provisions. You must comply with the following requirements for reporting PM CPMS data from each affected EGU (or group of EGUs monitored at a common stack) under this subpart:

3.2.1.1 Notifications, in accordance with section 3.2.2 of this appendix;

3.2.1.2 Monitoring plan reporting, in accordance with section 3.2.3 of this appendix;

3.2.1.3 Report submittals, in accordance with sections 3.2.4 and 3.2.5 of this appendix.

3.2.2 Notifications. You must provide notifications for the affected unit (or group of units monitored at a common stack) in accordance with §63.10030.

3.2.3 Monitoring Plan Reporting. For each affected unit (or group of units monitored at a common stack) under this subpart using a PM CPMS you must make monitoring plan submittals as follows:

3.2.3.1 Submit the electronic monitoring plan information in section 3.1.1.2.1 of this appendix at least 21 days prior to the date on which the Administrator specifies that electronic reporting of hourly PM CPMS data via ECMPS is required to begin.

3.2.3.2 Whenever an update of the electronic monitoring plan is required, as provided in section 3.1.1.2.2 of this appendix, the updated information must be submitted either prior to or concurrent with the relevant quarterly electronic emissions report.

3.2.3.3 All electronic monitoring plan submittals and updates shall be made to the Administrator using the ECMPS Client Tool.

3.2.3.4 In accordance with §63.10000(d), you must submit the site-specific monitoring plan described in section 3.1.1.1 of this appendix to the Administrator, if requested.

3.2.4 Electronic Quarterly Reports.

3.2.4.1 For each affected EGU (or group of EGUs monitored at a common stack) that is subject to the provisions of this appendix, reporting of hourly responses from the PM CPMS will begin either with the first operating hour in the first quarter of 2018 or the first operating hour after completion of the initial stack test that establishes the operating limit, whichever is later. You must then use the ECMPS Client Tool to submit electronic quarterly reports to the Administrator, in an XML format specified by the Administrator, starting with a report for the later of:

3.2.4.1.1 The first calendar quarter of 2018; or

3.2.4.1.2 The calendar quarter in which the initial compliance demonstration begins.

3.2.4.2 The electronic quarterly reports must be submitted within 30 days following the end of each calendar quarter, except for units that have been placed in long-term cold storage (as defined in §72.2 of this chapter).

3.2.4.3 Each electronic quarterly report shall include the following information:

3.2.4.3.1 The date of report generation;

3.2.4.3.2 Facility identification information; and

3.2.4.3.3 The information in sections 3.1.2 and 3.1.3 of this appendix.

3.2.4.4 Compliance Certification. Based on reasonable inquiry of those persons with primary responsibility for ensuring that the output from the PM CPMS has been correctly and fully monitored, the owner or operator shall submit a compliance certification in support of each electronic quarterly report. The compliance certification shall include a statement by a responsible official with that official's name, title, and signature, certifying that, to the best of his or her knowledge, the report is true, accurate, and complete.

3.2.5 Performance Stack Test Results. You must use the ECMPMS Client Tool to report the results of all performance stack tests conducted to document compliance with the applicable

emissions limit in Table 1 or Table 2 to this subpart, as follows:

3.2.5.1 Report a summary of each test electronically, in XML format, in the relevant quarterly compliance report under §63.10031(g); and

3.2.5.2 Provide a complete stack test report in PDF format, in accordance with §63.10031(f) or (h), as applicable.

13. Add appendix E to subpart UUUUU to read as follows:

APPENDIX E TO SUBPART UUUUU to Part 63--DATA ELEMENTS

1.0 You must record the electronic data elements in this appendix that apply to your compliance strategy under this subpart. The applicable data elements in sections 2 through 13 of this appendix must be reported in the quarterly compliance reports required under §63.10031(g), in an XML format prescribed by the Administrator. For performance stack tests, RATAs, PM CEMS correlations, RRAs and RCAs, the applicable data elements in sections 17 through 21 of this appendix must be reported in an XML format prescribed by the Administrator, and the information in section 22 of this appendix must be reported in PDF format.

2.0 MATS Compliance Report Root Data Elements. You must record the following data elements and include them in each quarterly compliance report:

2.1 ORIS Code;

2.2 Facility Registry Identifier;

2.3 Title 40 part;

2.4 Applicable subpart;

2.5 Calendar Year;

2.6 Calendar Quarter; and

2.7 Compliance Indicator.

3.0 Performance Stack Test Summary. If you elect to demonstrate compliance using periodic performance stack testing (including 30- boiler operating day Hg LEE tests), record the following data elements for each test:

3.1 Parameter

3.2 Test Location ID;

3.3 Test Number;

3.4 Test Begin Date, Hour, and Minute;

3.5 Test End Date, Hour, and Minute;

3.6 Timing of Test;

3.7 Averaging Plan Indicator;

3.8 Averaging Group ID (if applicable);

3.9 Test Method Code;

3.10 Emission Limit, Including Units of Measure;

3.11 Average Pollutant Emission Rate;

3.12 LEE Indicator; and

3.13 LEE Basis (if applicable).

4.0 Operating limit Data (PM CPMS, only):

- 4.1 Parameter Type;
- 4.2 Operating Limit; and
- 4.3 Units of Measure.

5.0 Performance Test Run Data. For each run of the performance stack test, record the following data elements:

- 5.1 Run Number;
- 5.2 Run Begin Date, Hour, and Minute;
- 5.3 Run End Date, Hour, and Minute;
- 5.4 Pollutant Concentration and units of measure;
- 5.5 Emission Rate;
- 5.6 Total Sampling Time; and
- 5.7 Total Sample Volume.

6.0 Conversion Parameters. For the parameters that are used to convert the pollutant concentration to units of the emission standard (including, as applicable, CO₂ or O₂ concentration, stack gas flow rate, stack gas moisture content, F-factors, and gross output), record:

- 6.1 Parameter Type;
- 6.2 Parameter Source; and
- 6.3 Parameter Value, including Units of Measure.

7.0 QA Parameters: For key parameters that are used to quality-assure the reference method data (including, as applicable, filter temperature, % isokinetic, leak check

results, % breakthrough, % spike recovery, and relative deviation), record:

- 7.1 Parameter Type;
- 7.2 Parameter Value; and
- 7.3 Pass/Fail Status.

8.0 Averaging Group Configuration. If a particular EGU or common stack is included in an averaging plan, record the following data elements:

- 8.1 Parameter Being Averaged;
- 8.2 Averaging Group ID; and
- 8.3 Unit or Common Stack ID.

9.0 Compliance Averages. If you elect to (or are required to) demonstrate compliance using continuous monitoring system(s) on a 30- boiler operating day rolling average basis (or on a 30- or 90- group boiler operating day rolling weighted average emission rate (WAER) basis, if your monitored EGU or common stack is in an averaging plan), you must record the following data elements for each average emission rate (or, for units in an averaging plan, for each weighted average emission rate (WAER)):

- 9.1 Unit or Common Stack ID;
- 9.2 Averaging Group ID (if applicable);
- 9.3 Parameter Being Averaged;
- 9.4 Date;

9.5 Average Type;

9.6 Units of Measure; and

9.7 Average Value.

10.0 Unit Information. You must record the following data elements for each EGU:

10.1 Unit ID;

10.2 Unit Type;

10.3 Date of Last Tune-up;

10.4 Date of Last Burner Inspection;

10.5 Each Type of Fuel Used During Each Calendar Month;

10.5.1 Fuel Usage Begin Date;

10.5.2 Fuel Usage End Date;

10.5.3 Quantity of Fuel Consumed;

10.5.4 Units of Measure;

10.5.5 New Fuel Type Indicator;

10.5.6 Date of Performance Test Using the New Fuel (if applicable); and

10.5.7 Non-Waste Fuel Type (if applicable).

11.0 Malfunction Information (if applicable): If there was a malfunction of the process equipment or control equipment during the reporting period, record:

11.1 Event Begin Date and Hour;

11.2 Event End Date and Hour;

11.3 Malfunction Description; and

11.4 Corrective Action Description.

12.0 Deviations: If there were any deviations during the reporting period, record:

12.1 The nature of the deviation, i.e.:

12.1.1 Emission limit exceeded;

12.1.2 Operating limit exceeded;

12.1.3 Work practice standard not met;

12.1.4 Testing requirement not met; or

12.1.5 Monitoring requirement not met;

12.2 A description of the deviation, including the date (or range of dates), the cause (if known), and any corrective actions taken. For monitor downtime incidents, report the percent monitor data availability (PMA) at the end of the quarter and the lowest hourly PMA value recorded during the quarter.

13.0 Emergency Bypass Information. If your coal-fired EGU, solid oil-derived fuel-fired EGU, or IGCC is equipped with a main stack and a bypass stack (or bypass duct) configuration, and has qualified to use the LEE compliance option, you must report the following emergency bypass information annually, in the compliance report for the fourth calendar quarter of the year:

13.1 The total number of emergency bypass hours for the calendar year, expressed as a percentage of the EGU's annual operating hours;

13.2 A description of each emergency bypass event during the year, including the cause and corrective actions taken; and

13.3 Estimates of the emissions released during the emergency bypass events.

14.0 Reference Method Data Elements. For each of the following tests that is completed on and after January 1, 2018, you must record and report the applicable electronic data elements in sections 17 through 21 of this appendix, pertaining to the reference method(s) used for the test (see section 16 of this appendix).

14.1 Each quarterly, annual, or triennial performance stack test (including 30- boiler operating day Hg LEE tests);

14.2 Each relative accuracy test audit (RATA) of your Hg, HCl, HF, or SO₂ CEMS or each RATA of your Hg sorbent trap monitoring system; and

14.3 Each correlation test, relative response audit (RRA) and each response correlation audit (RCA) of your PM CEMS.

15.0 You must report the applicable data elements for each test described in section 14 of this appendix in an XML format prescribed by the Administrator.

15.1 For each performance stack test completed during a particular calendar quarter and contained in the quarterly compliance report, you must submit along with the quarterly compliance report, the data elements in section 17 of this appendix (which are common to all tests) and the data elements in sections 18 through 21 of this appendix that are associated with the reference method(s) used.

15.2 For each RATA, PM CEMS correlation, RRA, or RCA, when you use the ECMPMS Client Tool to report the test results as required under appendix A, B, or C to this subpart or, for SO₂ RATAs under part 75 of this chapter, you must submit along with the test results, the data elements in section 17 of this appendix and, for each test run, the data elements in sections 18 through 21 of this appendix that are associated with the reference method(s) used.

15.3 For each performance stack test, RATA, PM CEMS correlation, RRA, and RCA, you must also provide the information described in section 22 of this appendix in PDF format, either along with the quarterly compliance report (for performance stack tests) or together with the test results reported under appendix A, B, or C to this subpart or part 75 of this chapter (for RATAs, RRAs, RCAs, or PM CEMS correlations).

16.0 Applicable Reference Methods. One or more of the following EPA reference methods is needed for the tests

described in sections 14.1 through 14.3 of this appendix: Method 1, Method 2, Method 3A, Method 4, Method 5, Method 5D, Method 6C, Method 26, Method 26A, Method 29, and/or Method 30B.

16.1 Application of Methods 1 and 2. If you use periodic stack testing to comply with an output-based emissions limit, you must determine the stack gas flow rate during each performance test run in which Reference Method 5, 5D, 26, 26A, 29, or 30B is used, in order to convert the measured pollutant concentration to units of the standard. For Methods 5, 5D, 26A and 29, which require isokinetic sampling, the delta-P readings made with the pitot tube and manometer at the Method 1 traverse points, taken together with measurements of stack gas temperature, pressure, diluent gas concentration and moisture, provide the necessary data for the Method 2 flow rate calculations. Note that even if you elect to comply with a heat input-based standard, when Method 5, 5D, 26A, or 29 is used, you must still use Method 2 to determine the average stack gas velocity (v_s), which is needed for the percent isokinetic calculation. Methods 26 and 30B do not require isokinetic sampling; therefore, when either of these methods is used, if the stack gas flow rate is needed to comply with the applicable output-based emissions limit, you must make a separate Method 2 determination during each test run.

16.2 Application of Method 3A. If you elect to perform periodic stack testing to comply with a heat input-based emissions limit, measurement of the diluent gas (CO₂ or O₂) concentration is required for each test run in which Method 5, 5D, 26, 26A, 29, or 30B is used, in order to convert the measured pollutant concentration to units of the standard. Method 3A is the preferred CO₂ or O₂ test method, although Method 3B may be used instead. Diluent gas measurements are also needed for stack gas molecular weight determinations when using Method 2.

16.3 Application of Method 4. For performance stack tests, depending on which equation is used to convert pollutant concentration to units of the standard, measurement of the stack gas moisture content, using Method 4, may also be required for each test run. Method 4 moisture data are also needed for Method 2 calculations (to convert the measured flow rate from wet basis to dry basis) and for the RATA of an Hg CEMS that measures on a wet basis, when RM 30B is used. Other applications that may require Method 4 moisture determinations include RATAs of an SO₂ monitor (depending on the moisture basis (wet or dry) of the reference method and CEMS), and conversion of wet-basis pollutant concentrations to the units of a heat input-based emissions limit when certain Method 19 equations are used (e.g., Eq. 19-3, 19-4, or 19.8). When Reference Method 5, 5D, 26A, or

29 is used for the performance test, the Method 4 moisture determination may be made by using the water collected in the impingers together with data from the dry gas meter; alternatively, a separate Method 4 determination may be made. However, when Method 26 or 30B is used, Method 4 must be performed separately.

16.4 Applications of Methods 5 and 5D. Method 5 (or, if applicable 5D) must be used for the following applications: to demonstrate compliance with a filterable PM emissions limit or for the initial correlations, RRAs and RCAs of a PM CEMS.

16.5 Applications of Method 6C. If you elect to monitor SO₂ emissions from your coal-fired EGU as a surrogate for HCl, the SO₂ CEMS must be installed, certified, operated, and maintained according to 40 CFR part 75. Part 75 allows the use of Reference Methods 6, 6A, 6B, and 6C for the required RATAs of the SO₂ monitor. However, in practice, only the instrumental method (6C) is used.

16.6 Applications of Methods 26 and 26A. Method 26A may be used for quarterly HCl or HF stack testing, or for the RATA of an HCl or HF CEMS. Method 26 may be used for quarterly HCl or HF stack testing; however, for the RATAs of an HCl monitor that is following Performance Specification 18 and Procedure 6 in appendices B and F to part 60 of this chapter, Method 26 may only be used if approved upon request.

16.7 Applications of Method 29. Method 29 may be used for periodic performance stack tests to determine compliance with individual or total HAP metals emissions limits. For coal-fired EGUs, the total HAP emissions limits exclude Hg.

16.8 Applications of Method 30B. Method 30B is used for 30-boiler operating day Hg LEE tests and RATAs of Hg CEMS and sorbent trap monitoring systems, and may be used for quarterly Hg stack testing (oil-fired EGUs, only).

17.0 Data Elements Common to All Tests. You must report the following data elements for each performance stack test, RATA, CEMS correlation, RRA, and RCA:

- 17.1 Facility Name;
- 17.2 Facility Address;
- 17.3 Facility City;
- 17.4 Facility County;
- 17.5 Facility State;
- 17.6 Facility Zip Code;
- 17.7 Facility Point of Contact;
- 17.8 Facility Contact Phone Number;
- 17.9 Facility Contact e-mail;
- 17.10 EPA Facility Registration System Number (FRS);
- 17.11 Name of Test Company;
- 17.12 Test Company Address;
- 17.13 Test Company City;

- 17.14 Test Company State;
- 17.15 Test Company Zip Code;
- 17.16 Test Company Point of Contact;
- 17.17 Test Company Contact Phone Number;
- 17.18 Test Company Contact e-mail;
- 17.19 State Facility ID;
- 17.20 Sampling Location;
- 17.21 Test Number. For performance stack tests, this number must exactly match the test number assigned to the summarized test results in the relevant quarterly compliance report. For RATAs of Hg, HCl, HF, and SO₂ monitoring systems, PM CEMS correlations, RRAs and RCAs, this number must exactly match the test number assigned to the summarized electronic test results that are reported under appendix A, B, or C to this subpart or part 75 of this chapter (as applicable);
- 17.22 Test Method;
- 17.23 Process Parameter;
- 17.24 Duct Diameter (circular stack);
- 17.25 Equivalent Diameter of rectangular duct;
- 17.26 Area of Stack;
- 17.27 Number of Traverse Points;
- 17.28 Control Device Description;
- 17.29 Pollutant name;

17.30 Action on Process Material (e.g., burned);

17.31 Subpart;

17.32 SCC Code;

17.33 Project Number;

17.34 Emission Concentrations;

17.35 Percent O₂/CO₂ Correction;

17.36 Units of Process Parameter;

17.37 Quantity of Fuel;

17.38 Type of Fuel; and

17.39 BLD, DLL Flag for Detection Limit.

18.0 Data Elements for Methods 1 - 4. When Methods 1-4 are used, you must report the following data elements for each test run, specific to the method(s) used:

18.1 Run Number;

18.2 Run Date;

18.3 Clock Time Start;

18.4 Clock Time End;

18.5 Traverse Point;

18.6 Barometric Pressure;

18.7 Static Pressure;

18.8 Pitot Calibration;

18.9 % O₂;

18.10 % CO₂;

18.11 Pressure Reading at Each Traverse Point (ΔP);

- 18.12 Stack Temperature at Each Traverse Point;
- 18.13 Dry Basis F-Factor (F_d);
- 18.14 Wet Basis F-Factor (F_w);
- 18.15 Percent Moisture - Actual;
- 18.16 Dry Molecular Weight of Stack Gas;
- 18.17 Wet Molecular Weight of Stack Gas;
- 18.18 Stack Gas Velocity - fps;
- 18.19 Volumetric Flow Rate - scfm;
- 18.20 Pitot Tube ID;
- 18.21 Manometer Used;
- 18.22 Run Elapsed Time at Start (= 0);
- 18.23 Cumulative Elapsed Sampling Time;
- 18.24 Orifice Pressure - Actual;
- 18.25 Calibration Coefficient of Dry Gas Meter;
- 18.26 Dry Gas Meter Inlet Temperature at Each Traverse Point; and
- 18.27 Dry Gas Meter Outlet Temperature at Each Traverse Point.

19.0 Data Elements for Methods 5, 5D, 26, 26A, and 29. When Method 5 (or, if applicable, 5D), Method 26, Method 26A, or Method 29 is used, you must report the following data elements for each test run:

- 19.1 Pollutant (analyte);
- 19.2 Run Number;

- 19.3 Run Date;
- 19.4 Method;
- 19.5 Run Start Time;
- 19.6 Run End Time;
- 19.7 Area of Stack;
- 19.8 Process Parameter Run Data;
- 19.9 Barometric Pressure;
- 19.10 Static Pressure;
- 19.11 Pitot Calibration;
- 19.12 Volume or Weight of Moisture Collected;
- 19.13 %O₂;
- 19.14 %CO₂;
- 19.15 Pressure Reading at Each Traverse Point (ΔP);
- 19.16 Stack Temperature at Each Traverse Point;
- 19.17 Pump Vacuum;
- 19.18 Process Run ID;
- 19.19 Process Run Parameter ID;
- 19.20 Orifice Pressure (Actual) at Each Traverse Point;
- 19.21 Calibration Coefficient of Dry Gas Meter;
- 19.22 Nozzle Calibration;
- 19.23 Initial Volume of Dry Gas Meter;
- 19.24 Final Volume of Dry Gas Meter;
- 19.25 Dry Gas Meter Inlet Temperature at Each Traverse
Point;

19.26 Dry Gas Meter Outlet Temperature at Each Traverse Point;

19.27 Probe Temperature;

19.28 Filter/Oven Temperature;

19.29 Filter/Oven Exhaust Temperature;

19.30 Mass Collected - For Method 29, Report Both Front Half and Back Half. For Methods 26 and 26A, Report Total Mass of HCl in Sample; and

19.31 Units of Measurement - Mass.

20.0 Data Elements for Methods 6C and 3A. When Method 6C or 3A is used, you must report the following data elements for each test run:

20.1 Sampling Location;

20.2 Pollutant (analyte);

20.3 Run Number;

20.4 Run Date;

20.5 Method;

20.6 Run Start Time;

20.7 Run End Time;

20.8 Cylinder ID;

20.9 Gas Level (Zero, Low, Mid, High);

20.10 Date of Expiration;

20.11 Compound (Analyte);

20.12 Cylinder Gas Units of Measure;

- 20.13 %O₂,
- 20.14 %CO₂;
- 20.15 Calculated Average Wet Emission Concentration (C_{gasw});
- 20.16 Process Parameter Run Data;
- 20.17 Flow Rate (scfm);
- 20.18 Clock Time;
- 20.19 Units (ppm, %, etc.);
- 20.20 Calibration Span Concentration;
- 20.21 Calibration Zero-level Concentration;
- 20.22 Calibration Low-level Concentration;
- 20.23 Calibration Mid-level Concentration;
- 20.24 Calibration High-level Concentration;
- 20.25 Zero Gas Response;
- 20.26 Low Gas Response;
- 20.27 Mid Gas Response;
- 20.28 High Gas Response;
- 20.29 Span Zero Response;
- 20.30 Span High Response;
- 20.31 Pre-test Zero Response;
- 20.32 Pre-test Bias Response;
- 20.33 Post Zero Response;
- 20.34 Post Span Bias Response;
- 20.35 Raw Measured Concentration (C_{avg});
- 20.36 Raw Measurement Units;

- 20.37 Zero Gas Percent Error;
- 20.38 Low Gas Percent Error;
- 20.39 Mid Gas Percent Error;
- 20.40 High Gas Percent Error;
- 20.41 System Zero Level Calibration Error;
- 20.42 System High Level Calibration Error;
- 20.43 Pre-run Zero Bias;
- 20.44 Pre-run Zero Drift;
- 20.45 Pre-run High Level Bias, Percent;
- 20.46 Pre-run High Level Drift;
- 20.47 Post-run Zero Bias;
- 20.48 Post-run Zero Drift;
- 20.49 Post-run High Level Bias;
- 20.50 Post-run High Level drift;
- 20.51 Calculated Average Dry Emissions Concentration (C_{gas});
- 20.52 Measurement Units of C_{gas} (Dry); and
- 20.53 Measurement Units of C_{gas} (Wet).

21.0 Data Elements for Method 30B. When Method 30B is used, you must report the following data elements for each test run:

- 21.1 Sampling Location;
- 21.2 Pollutant (analyte);
- 21.3 Run Number;
- 21.4 Run Date;
- 21.5 Method;

- 21.6 Run Start Time;
- 21.7 Run End Time;
- 21.8 Process Parameter Run Data;
- 21.9 Area of Stack;
- 21.10 Barometric Pressure;
- 21.11 Static Pressure;
- 21.12 %O₂;
- 21.13 %CO₂;
- 21.14 Stack Gas Volumetric Flow Rate (dry, standard conditions);
- 21.15 Stack Gas Temperature;
- 21.16 Associated Process Run Rate;
- 21.17 Start Minutes (cumulative);
- 21.18 End Minutes (cumulative);
- 21.19 Actual Clock Time;
- 21.20 Meter Box A or B Correction Factor (Y);
- 21.21 Pre Leak Check Vacuum (in. Hg);
- 21.22 Post Leak Check Vacuum (in. Hg);
- 21.23 Pre Leak Rate;
- 21.24 Post Leak Rate;
- 21.25 Gas Sample Volume Units of Measure;
- 21.26 Hg Mass Units of Measure;
- 21.27 Dry Gas Meter Reading at Beginning of Sampling,
Sampling Train A or B;

21.28 Dry Gas Meter Reading at End of Sampling, Sampling Train A or B;

21.29 Dry Gas Meter Temperature (Train A or B);

21.30 Sampling Rate (Train A or B);

21.31 Pump Vacuum;

21.32 Sorbent Trap ID;

21.33 Mass of Spike on Field Recovery Traps;

21.34 Mass Collected on Section 1 (A or B); and

21.35 Mass Collected on Section 2 (A or B).

22.0 Other Information for Each Test. For each test, you must submit the following information in PDF format as a supplement to the XML reports required by this appendix: all information pertaining to the test that is ordinarily included in a comprehensive test report, but is incompatible with electronic reporting format, including, but not limited to diagrams showing the location of the test site and the sampling points, laboratory calibrations of source sampling equipment, calibration gas cylinder certificates, and stack testers' credentials. The applicable data elements in §63.10031(f)(6)(i) through (xii) must be entered into ECMPS with each submittal; the test number (see §63.10031(f)(6)(xi)) must be included and it must match the test number in section 17.21 of this appendix.